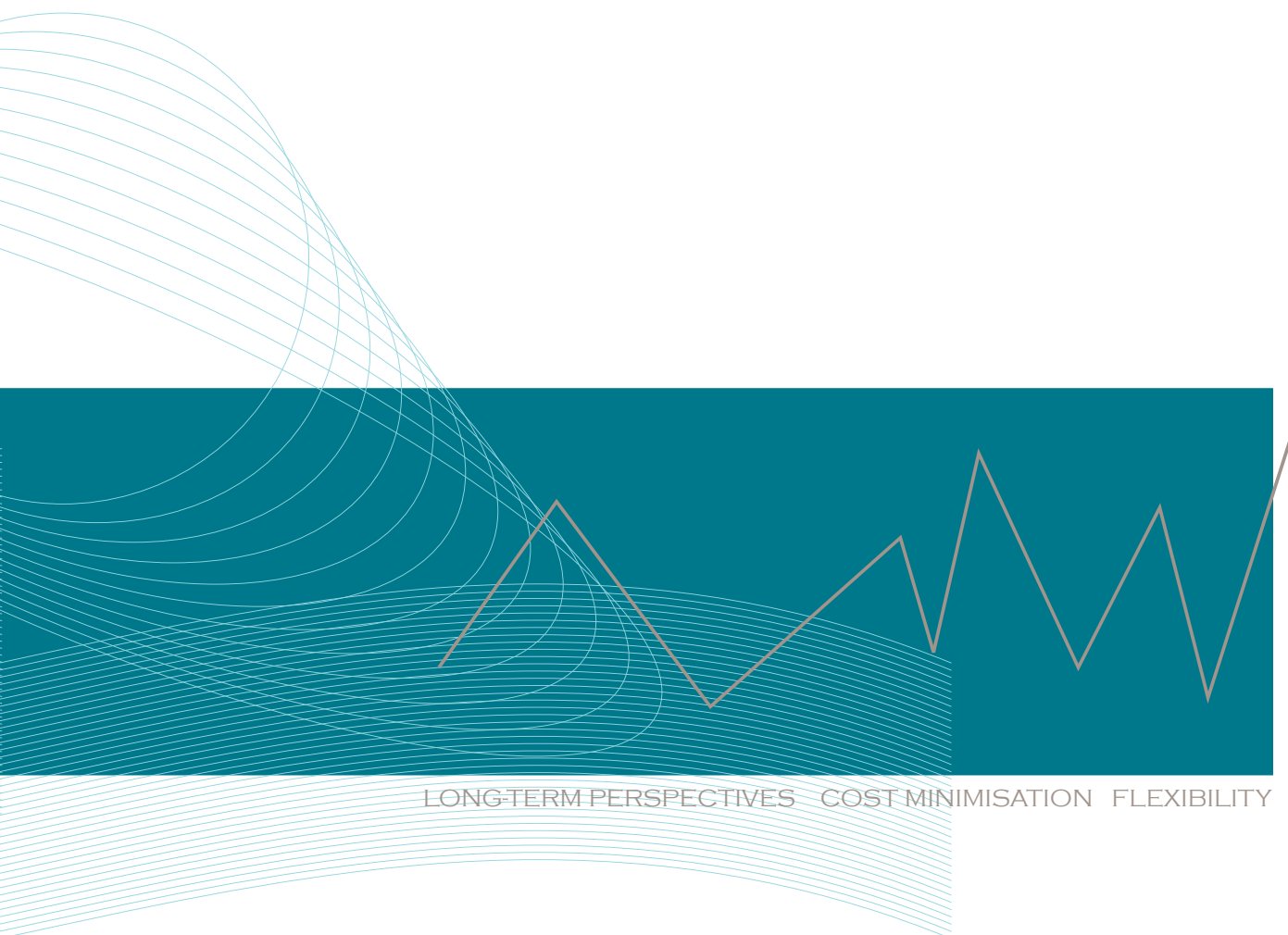


2016

# GUIDELINES FOR CENTRAL GOVERNMENT DEBT MANAGEMENT 2016

Decision taken at the Cabinet meeting  
November 12 2015



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# Summary

## *Direction of debt policy*

The guideline decision for 2016 means a slight extension of the maturity of the central government debt. The maturity of the nominal krona debt is extended by three months and the maturity of the foreign currency debt by four and a half months (measured as duration). The reason why this steering is aiming at a slightly longer maturity than before is that the difference in cost between short-term and long-term borrowing has decreased. By extending the debt, the risks can be reduced at a low or no cost.

The degree of flexibility in maturity steering is increased by widening the maturity interval for the nominal krona debt from 0.5 years to 1 year and by a maturity interval of 1 year replacing the previous maturity benchmark for the foreign currency debt. This more flexible steering makes it possible to avoid unnecessary transaction costs and is justified on purely operational grounds. The decisions on the changes in maturities and how to steer them match the proposals made by the National Debt Office.

The steering of the composition of the central government debt between the three different types of debt is retained unchanged.

## *The maturity of the debt is to be steered towards:*

- Foreign currency debt: duration 0–1 years
- Inflation-linked krona debt: duration 6–9 years
- Nominal krona debt:
  - Instruments with a maturity of up to 12 years: duration 2.6–3.6 years
  - Instruments with a maturity of more than 12 years: long-term benchmark for the outstanding volume of SEK 70 billion

## *The composition of the debt is to be steered towards:*

- Foreign currency debt: A reduction of up to SEK 30 billion per year
- Inflation-linked krona debt: 20 per cent

- The nominal krona debt is to make up the remaining share.

## *Extended maturity of the central government debt*

The maturity of the central government debt is one of several factors that affect the expected cost and risk in the debt. The National Debt Office's proposed Guidelines for central government debt management regarding 2016 analyse how the maturity of the central government debt affects the expected cost of central government borrowing. The analysis indicates that it will continue to be advantageous to keep the maturity of the debt relatively short. But the cost advantage of short-term borrowing is smaller than before, and this justifies a slightly longer maturity in the central government debt. A longer maturity means that the risks in the debt decrease. The assessment is that the extension can be made at a low or no cost. The extension of the maturity of the nominal krona debt will be attained by making less use of swaps. At present, interest rate swaps are used to actively shorten the maturity of this debt. The underlying borrowing and the policy for it are not affected by this extension.

## *Wider maturity intervals*

The maturity interval for the nominal krona debt with instruments with a maturity of up to twelve years is widened from 0.5 years to 1 year. At the same time, a maturity interval is introduced for the foreign currency debt, and its width is also 1 year. This replaces the previous maturity benchmark.

The reason for these changes is to strengthen the conditions for appropriate issue planning. By increasing the flexibility of maturity steering, unnecessary transaction costs can be avoided. The wider intervals are justified on purely operational grounds. The National Debt Office plans its borrowing so that the maturity of the debt is normally kept in the middle of each interval.

*Basis for the guideline decision*

The basis for the Government's guideline decision is the objective of central government debt policy adopted by the Riksdag (the Swedish Parliament), Chapter 5, Section 5 of the Budget Act (2011:203). This objective means that the cost of the debt in the long-term is to be minimised while taking risk in the management of the debt into account. The management of the debt shall be conducted within the framework of monetary policy requirements.

A further consideration is the size of the debt and its expected development. In general, a low central government debt and strong government finances mean that the scope for risk-taking increases in return for lower expected costs. At the end of 2014 the unconsolidated central government debt was SEK 1 394 billion (36 per cent of GDP). Forecasts by the Government, the National Financial Management Authority and the National Institute of Economic Research indicate that the corresponding debt will be between SEK 1 363 and 1 550 billion (28 and 32 per cent of GDP) at the end of 2019. The forecasts thus indicate that, as a share of GDP, the central government debt will be slightly lower in 2019 than it is today. However, the forecasts are associated with risks of a weaker development. The scope for risk-taking is therefore judged to be largely the same as before. In an international comparison it can be noted that for Sweden the 'Maastricht debt' was 44 per cent of GDP at the end of 2014, while the corresponding share was 87 per cent for the EU as a whole and 92 per cent for the euro area.

In exceptional cases the Swedish krona exchange rate can also be taken into account, as can the absolute level of interest rates and the situation in loan markets. In recent years term premiums, i.e. the compensation investors demand to invest in government securities with longer maturities, have decreased. Term premiums are expected to be low for the foreseeable future. This also results in an adjustment in the trade-off between the expected cost saving and the increased risk resulting from shorter borrowing. By extending the maturity of the central government debt, the risks can be reduced at a low or no cost.

*Costs of the debt*

The costs of central government debt are primarily affected by the size of the debt and the

interest rate levels when the debt instruments are issued. Part of the central government debt is exposed to foreign currency, so exchange rate movements also affect the costs of the debt. The costs of the inflation-linked debt are affected in a corresponding way by the development of the CPI.

In the Budget Bill for 2016 interest costs of the central government debt are calculated at SEK 12.5 billion for 2015. The assessment made is that market interest rates will rise in coming years, which means that these interest costs will rise gradually. At the end of 2019 the interest costs are expected to be SEK 33.5 billion.

*Risks in the management of the central government debt*

At a general level the risk in the management of the central government debt is defined as its contribution to variations in the size of the budget balance and the central government debt. A lower debt results in lower costs, which contributes to lower risk since the variation in its costs decreases (both expressed in kronor and in relation to central government finances in general). A lower central government debt initially also makes it easier for central government to borrow large sums in a crisis situation without a sharp rise in interest rates.

There is no single measure that describes the overall risk in the management of the debt. Instead different types of risk are reported, the most important being the interest rate refixing risk, the refinancing risk, the financing risk and the counterparty risk. The Government's guidelines and the Debt Office's strategies for borrowing and market maintenance limit the risks in the management of the debt in several different ways. However, strong and sustainable central government finances are the best insurance against both refinancing risks and financing risks.

*Division of responsibilities and process*

Responsibility for attaining the objective of central government debt policy is divided between the Government and the National Debt Office. The Government sets the overall level of risk in the annual guideline decisions while the Debt Office is responsible for borrowing and management being conducted within the framework of the guidelines and in accordance with the objective.

The guideline decision has to be taken by the Government no later than 15 November each year. This decision is based, in part, on the National Debt Office's proposed guidelines. The Riksbank is given the opportunity to state an opinion in connection with the preparation of the proposed guidelines from the National Debt Office.

The Government makes a report on the attainment of the objective to the Riksdag in an evaluation communication every other year. In the intervening years the Government presents a preliminary evaluation of the management of the central government debt in the Budget Bill.

# 1 Decision on guidelines for central government debt management in 2016

**Summary:** The guideline decision for the management of the central government debt in 2016 means a slight extension of the maturity of the central government debt. The degree of flexibility in maturity steering is increased by widening the maturity interval for the nominal krona debt from 0.5 years to 1 year and by a maturity interval of one year replacing the previous maturity benchmark for the foreign currency debt. The maturity steering of the nominal krona debt is divided into instruments with outstanding maturities of less than and more than 12 years. For instruments with up to twelve years to maturity the duration is to be 2.6–3.6 years, which means an increase from 2.6–3.1 years. For instruments with outstanding maturities of more than 12 years, the long-term benchmark for the outstanding volume of SEK 70 billion is retained. For the foreign currency debt the duration is to be 0–1 year. This interval replaces the previous maturity benchmark of 0.125 years.

The steering of the composition of the central government debt is retained unchanged. The share of inflation-linked krona debt is to be steered towards 20 per cent in the long term. The foreign currency debt is to decrease by no more than SEK 30 billion per year, excluding changes in the krona exchange rate. At the end of 2014 the share of foreign currency debt was 15 per cent. The remainder of the central government debt (currently around 65 per cent) is to consist of nominal krona debt.

The process for implementing and evaluating central government debt policy has been applied since 1998. Since then a large number of decisions have been taken and they have led to the current steering of debt management and the present composition of the central government debt. A large volume of analyses and discussions underlie these decisions.

The guidelines for 2016–2019 are set out below; the decisions for 2017–2019 are to be regarded as preliminary. In the cases where individual points in the guidelines differ from the Debt Office's proposal or from earlier guideline decisions this is stated. In order to provide an overview of the regulations that govern the management of the central government debt, the relevant parts of the Budget Act (2011:203) and the Ordinance (2007:1447) containing Instructions for the National Debt Office are presented here.

## 1.1 The objective for the management of central government debt

1. The central government debt shall be managed in such a way as to minimise the cost of the debt in the long-term while taking risk in its management into account. The management of the debt shall be conducted within the framework of monetary policy requirements. *Budget Act (2011:203)*.

## 1.2 The task of the Debt Office and the purpose of borrowing

2. The task of the Debt Office is to raise and manage loans for the central government in accordance with the Budget Act. *Ordinance (2007:1447) containing Instructions for the National Debt Office.*
3. Under the Budget Act the Debt Office may raise loans for the central government to:
  1. finance current deficits in the central government budget and other expenditure based on decisions of the Riksdag (the Swedish Parliament);
  2. provide credits and perform guarantees decided by the Riksdag;
  3. amortise, redeem and buy back central government loans;
  4. meet the need for central government loans at different maturities in consultation with the Riksbank; and
  5. satisfy the Riksbank's need for foreign currency reserves.

## 1.3 The guidelines process

4. The Debt Office shall submit proposed guidelines for central government debt management to the Government no later than 1 October each year. *Ordinance containing Instructions for the National Debt Office.*
5. The Government shall give the Riksbank the opportunity to comment on the Debt Office's proposed guidelines. *Budget Act.*
6. The Government shall adopt guidelines for the Debt Office's management of the central government debt by 15 November each year. *Budget Act.*
7. The Debt Office shall submit information for the evaluation of the management of the central government debt to the Government no later than 22 February each year. *Ordinance containing Instructions for the National Debt Office.*
8. The Government shall evaluate the management of the central government debt every other year. The evaluation shall be presented to the Riksdag no later than 25 April. *Budget Act.*
9. The Debt Office shall establish principles for the implementation of the guidelines for central government debt management established by the Government. *Ordinance containing Instructions for the National Debt Office.*

The Government's decision	Debt Office proposal	Comment
10. The Debt Office shall establish internal guidelines based on the Government's guidelines. The decisions shall concern the use of the position mandate, the foreign currency distribution in the foreign currency debt and principles for market and debt maintenance.	In line with the Government's decision.	The Debt Office will no longer set deviation intervals around the maturity benchmarks for individual types of debt. As of 2016 the Government will use deviation intervals to steer the maturity of all types of debt; see section 3.5.

## 1.4 Composition of central government debt – debt shares

The Government's decision	Debt Office proposal	Comment
<p>11. The share of <i>inflation-linked krona debt</i> is to be 20 per cent of the central government debt in the long term.</p> <p>The shares of the debt types in the central government debt are to be calculated as nominal amounts at the present exchange rate including accrued compensation for inflation.</p>	In line with the Government's decision.	Corresponds to current guideline.
<p>12. The foreign currency exposure of the central government debt shall decrease. The decrease is to be no more than SEK 30 billion per year.</p> <p>The exposure shall be calculated in a way that excludes changes in the SEK exchange rate.</p>	In line with the Government's decision.	Corresponds to current guideline.
<p>13. The Debt Office is to set a benchmark for the distribution of the foreign currency debt among different currencies.</p>	In line with the Government's decision.	Corresponds to current guideline.
<p>14. In addition to inflation-linked krona debt and foreign currency debt, central government debt is to be composed of <i>nominal krona debt</i>.</p>	In line with the Government's decision.	Corresponds to current guideline.

## 1.5 Maturity of the central government debt

The Government's decision	Debt Office proposal	Comment
<p>15. The maturity of the nominal krona debt for instruments with maturities of up to twelve years is to be between 2.6 and 3.6 years.</p>	In line with the Government's decision.	The maturity is extended by widening the interval from 2.6–3.1 to 2.6–3.6 years; see sections 3.3 and 3.4.
<p>16. For nominal krona instruments with maturities of more than twelve years, the long-term benchmark for the outstanding volume is to be SEK 70 billion.</p>	In line with the Government's decision.	Corresponds to current guideline.
<p>17. The maturity of the inflation-linked krona debt is to be between 6 and 9 years.</p>	In line with the Government's decision.	Corresponds to current guideline.



18. The maturity of the foreign currency debt is to be between 0 and 1 year.	In line with the Government's decision.	The maturity is extended by replacing the previous maturity benchmark of 0.125 years with the maturity interval of 0–1 years; see sections 3.3 and 3.4.
19. The maturity of the types of debt may deviate temporarily from the maturities given in points 15, 17 and 18.	In line with the Government's decision.	Corresponds to current guideline.
20. Maturity is to be measured as duration.	In line with the Government's decision.	Corresponds to current guideline.

## 1.6 Cost and risk

The Government's decision	Debt Office proposal	Comment
21. The trade-off between expected cost and risk is primarily to be made through the choice of the composition and maturity of the central government debt.	In line with the Government's decision.	Corresponds to current guideline.
22. The main cost measure is to be the average issue yield.	In line with the Government's decision.	Corresponds to current guideline.
23. The main risk measure is to be the average issue yield risk.	In line with the Government's decision.	Corresponds to current guideline.
24. The Debt Office is to take account of refinancing risks in the management of central government debt.	In line with the Government's decision	Corresponds to current guideline.
25. Borrowing shall be conducted in such a way as to ensure a broad investor base and diversification in a range of funding currencies in order to maintain good borrowing preparedness.	In line with the Government's decision	Corresponds to current guideline.
26. Positions are not to be included in the calculation of debt shares and maturities.	In line with the Government's decision	Corresponds to current guideline.
27. When taking positions, market values are to be used as the measure of the costs and risks in the management of the debt.	In line with the Government's decision	Corresponds to current guideline.

## 1.7 Market and debt maintenance

The Government's decision	Debt Office proposal	Comment
28. The Debt Office is to contribute, through market and debt maintenance, to the effective functioning of the government securities market in order to achieve the long-term cost minimisation objective while taking account of risk.	In line with the Government's decision.	Corresponds to current guideline.
29. The Debt Office is to adopt principles for market and debt maintenance.	In line with the Government's decision.	Corresponds to current guideline.

## 1.8 Position-taking

The Government's decision	Debt Office proposal	Comment
<p>30. The Debt Office may take positions in <i>foreign currency</i> and the <i>krona exchange rate</i>.</p> <p>Positions in foreign currency may only be taken using derivative instruments.</p> <p>Positions may not be taken in the Swedish fixed income market.</p> <p>Positions refer to transactions that are intended to reduce the costs of the central government debt taking account of risk and that are not motivated by underlying borrowing or investment requirements.</p> <p>Positions may only be taken in markets that permit the management of market risk through liquid and otherwise well-developed derivatives and that are potentially a borrowing currency in the context of debt management.</p>	In line with the Government's decision.	Corresponds to current guideline.
<p>31. Positions in <i>foreign currency</i> are limited to SEK 300 million, measured as daily Value-at-Risk with a 95 per cent probability.</p> <p>The Debt Office is to decide how much of this scope may be used at most in its ongoing management.</p>	In line with the Government's decision.	Corresponds to current guideline.

<p>32. Positions in the <i>krona exchange rate</i> may not exceed a maximum of SEK 7.5 billion. When the positions are built up or wound down, this is to be done gradually and announced in advance.</p> <p>The Debt Office is to decide how much of this volume may be used at most in ongoing management in connection with exchanges between the krona and other currencies. This volume shall be of a limited size and the positions do not need to be announced in advance.</p>	<p>In line with the Government's decision.</p>	<p>Corresponds to current guideline.</p>
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### 1.9 Borrowing in the retail market

The Government's decision	Debt Office proposal	Comment
<p>33. The Debt Office is to contribute through retail market borrowing to reducing the costs of central government debt compared with equivalent borrowing in the institutional market.</p>	<p>In line with the Government's decision.</p>	<p>Corresponds to current guideline.</p>

### 1.10 Borrowing to meet the need for central government loans

The Government's decision	Debt Office proposal	Comment
<p>34. The possibility of raising loans to meet the need for central government loans under Chapter 5, Section 1 of the Budget Act may only be used if required on account of threats to the functioning of the financial market.</p> <p>The Debt Office may have outstanding loans with a maximum nominal value of SEK 200 billion for this purpose.</p> <p>35. Investment of funds raised through loans to meet the need for central government loans should be guided by the principles set out in the Government Support to Credit Institutions Act (2008:814).</p>	<p>In line with the Government's decision.</p> <p>In line with the Government's decision.</p>	<p>Corresponds to current guideline.</p> <p>Corresponds to current guideline.</p>

### 1.11 Management of funds etc.

36. The Debt Office shall place its funds, to the extent that they are not needed for payments, in an account at the Riksbank, a bank or a credit market company, or in government securities or other debt instruments with a low credit risk. Deposits may be made abroad and in foreign currency. *Ordinance containing Instructions for the National Debt Office.*
37. The Debt Office is to cover the deficits that occur in the Government central account. *Ordinance containing Instructions for the National Debt Office.*
38. The management of exchanges between Swedish and foreign currency (currency exchanges) shall be predictable and transparent. *Ordinance containing Instructions for the National Debt Office.*

### 1.12 Consultation and collaboration

39. The Debt Office is to consult with the Riksbank on matters concerning the components of its borrowing operations that may be assumed to be of major importance for monetary policy. *Ordinance containing Instructions for the National Debt Office.*
40. The Debt Office is to collaborate with the National Institute of Economic Research and the National Financial Management Authority on matters concerning the Debt Office's forecasts of the central government borrowing requirement. *Ordinance containing Instructions for the National Debt Office.*
41. The Debt Office should obtain the Riksbank's views on how the funds borrowed to meet the need for central government loans under the Budget Act are to be invested.

### 1.13 Evaluation

42. Evaluation of the management of the central government debt is to be carried out in qualitative terms in the light of the knowledge available at the time of the decision. Where possible, the evaluation shall also include quantitative measures. The evaluation shall cover five-year periods.
43. The evaluation of the operational management shall include borrowing and management of the different types of debt, market and debt maintenance measures and management of currency exchanges.
44. The realised cost difference between inflation-linked and nominal borrowing is to be reported for inflation-linked borrowing.
45. The cost saving compared with alternative borrowing is to be reported for retail market borrowing.
46. Positions within a position-taking mandate given are to be recorded continuously in income on an ongoing basis, and evaluated in terms of market values.

## 2 Basis for the Government's guidelines

**Summary:** The basis for the Government's decision on the guidelines is that the central government debt is to be managed in such a way as to minimise the long-term cost of the debt while taking account of the risk in its management. The management of the debt shall be conducted within the framework of monetary policy requirements.

A further consideration is the size of the debt and its expected development. At the end of 2014 the unconsolidated central government debt was SEK 1 394 billion (36 per cent of GDP). Forecasts indicate that at the end of 2019 the corresponding debt will be between SEK 1 363 and 1 550 billion (28 and 32 per cent of GDP). The size and expected development of the central government debt do not affect the Government's view of the scope for risk-taking in the management of the central government debt. However, the low term premiums noted in recent years and expected to continue in the foreseeable future shift the trade-off between cost and risk in such a way as to justify a slightly longer maturity of the central government debt.

The steering of the management of the central government debt is based on the statutory objective for debt policy. In its annual guideline decisions the Government steers the trade-off between cost and risk at a general level. The trade-off is mainly made by choosing the maturity of the central government debt. If a shorter maturity is chosen, the average cost is expected to be lower, while the risk in management rises (and the other way round). This is because it is assumed that the slope of the yield curve is positive over time while short-term interest rates vary more. So, when the interest rate on a greater part of the debt is refixed in every period, the variation in the total interest rate costs for the debt increases. In general, strong government finances and a low central government debt mean that the scope for risk-taking increases in return for lower expected costs. In exceptional cases the absolute level of interest rates can also be taken into account, as can the situation in loan markets and the Swedish krona exchange rate.

In order to reduce the cost of the central government debt the Debt Office is able to take decisions on deviations from the benchmarks within the mandates it has been given. Derivatives are used for these deviations, which are defined as positions. These positions are evaluated separately and must not be taken in the Swedish fixed income market.

### 2.1 Central government debt

#### *Development from a historical perspective*

The central government debt has arisen because, historically, the central government budget has shown larger deficits than surpluses. Budget deficits are financed by new borrowing, while budget surpluses are used to amortise the existing debt. The central government debt is very much affected by the development of the economy and by decisions on economic policy. In some years one-time events also affect the development of the debt. Examples are sales of shares in state-owned companies and on-lending to the Riksbank.

**Figure 1. Unconsolidated central government debt**

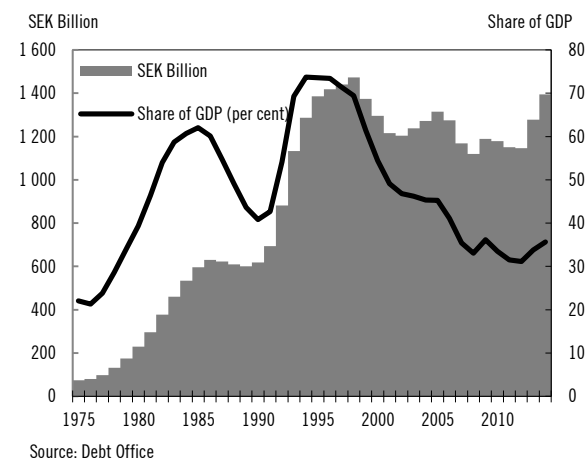


Figure 1 shows the development of unconsolidated central government debt since 1975.<sup>1</sup> Since 1975 the central government debt has increased sharply as a share of GDP in two periods. Between 1976 and 1985 the central government debt increased as a share of GDP from 22 to 65 per cent and between 1990 and 1995 it increased from 43 to 77 per cent. Since the mid-1990s central government debt has decreased gradually as a share of GDP, reaching 36 per cent at the end of 2014. As shown in the figure, the central government debt increased between 2009 and 2013. A large part of the debt increase these years is explained by borrowing by the Debt Office in foreign currency on behalf of the Riksbank. On-lending to the Riksbank corresponded to SEK 100 billion in each of these years and was carried out following a request by the Riksbank, in order to strengthen the currency reserve. At the end of 2014 on-lending on behalf of the Riksbank amounted to SEK 227 billion (corresponding to 16 per cent of the unconsolidated central government debt). Since this on-lending is a receivable for the state, it does not affect the steering of the central government debt.

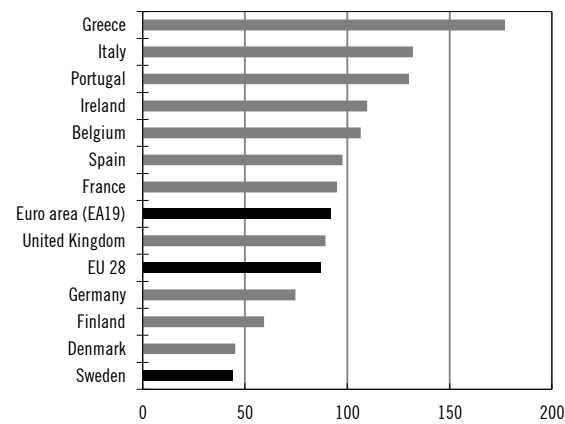
#### *Comparison from an international perspective*

In EU contexts the 'Maastricht debt' is used in comparing the public debt of these countries. This measure of debt refers to the consolidated gross debt of the whole of the general government sector, which, for Sweden, means that the central government debt and the local government sector's capital market debts are added together while the National Swedish Pension Funds' holdings of government securities are deducted. The reason why this broader measure of debt is used in EU contexts is that the public sector is organised in different ways in different countries. The Maastricht debt thus makes it possible to increase comparability between countries.

<sup>1</sup> The Budget Bill chiefly reports the consolidated central government debt. The difference between the consolidated and unconsolidated debt is made up of government agency holdings of government securities (SEK 48 billion at the end of 2014).

For Sweden the Maastricht debt was 44 per cent of GDP at the end of 2014. At the same point in time the corresponding share for the EU as a whole was 87 per cent and for the euro area it was 92 per cent.

**Figure 2. Maastricht debt in 2014 as a share of GDP**



Source: Eurostat, 21 of April 2015

#### *Future development of the central government debt*

The future development of the central government debt is strongly dependent on economic developments in Sweden, which are, in turn, dependent on international developments. A large share of Swedish production is exported. Economic policy decisions and also, in some cases, one-time events are of great importance for the development of the central government debt. So, it goes without saying that it is difficult to forecast the development of the central government debt over a number of years. Several forecasts of the development of the central government debt are therefore presented below. In addition to the Government, the National Financial Management Authority (ESV), the National Institute of Economic Research (NIER) and the Debt Office make forecasts of public finances. These forecasts have different purposes. The forecasting methods and time horizons also differ.

The Government's forecasts are an important part of the political process since they form the basis for Riksdag decisions on taxes and expenditure. The Government's forecast has been taken from the Budget Bill for 2016 (Govt Bill 2015/16:1).

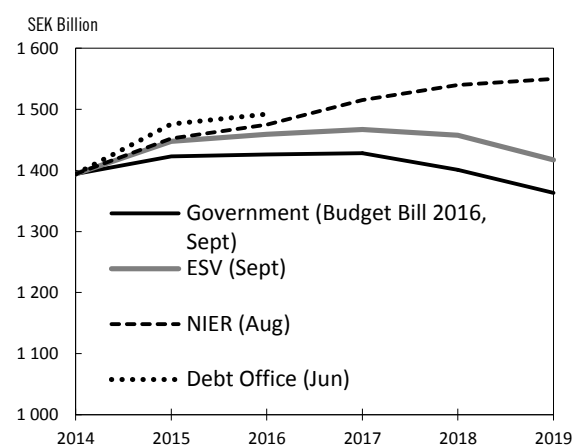
NIER forecasts focus on the development of the real economy in national accounts terms. NIER forecasts also estimate the development of the consolidated central government debt.<sup>2</sup> The NIER forecast has been taken from the publication *The Swedish Economy [Konjunkturläget]* in August 2015.

The National Financial Management Authority's forecasts provide supporting information for decisions and discussions in fiscal policy. Its forecasts are based on decisions taken and legislative proposals as well as, in some cases, measures announced by the Government and the Riksdag. The National Financial Management Authority's forecast has been taken from the publication *Forecast of the central government budget and public finances [Prognos Statens budget och de offentliga finanserna]* in September 2015. Both the Government's and the National Financial Management Authority's forecasts are based on impact assessments given proposed or unchanged regulations and on a particular development of the macro economy. One difference is that the Government has made a standard assumption of sales income of SEK 5 billion per year.

The Debt Office's forecasts are made in cash terms and form the basis for the agency's issue planning. By presenting a plan showing the loan instruments in which issues will be made in the present and coming year, this helps to make central government debt policy more predictable for market players. The Debt Office's forecast has been taken from the publication *Central Government Borrowing. Forecast and analysis [Statsuppläning Prognos och analys] 2015:2* from June 2015.

Figure 3 presents the forecasts made by the various agencies of the unconsolidated central government debt until the end of the calculation period in 2019.

**Figure 3. Forecasts of the unconsolidated central government debt**



Source: Government, ESV, NIER, Debt Office

The forecasts show a range for the unconsolidated central government debt at the end of 2019 of between SEK 1 363 and 1 550 billion (28 and 32 per cent of GDP). This can be compared with the fact that at the end of 2014 the debt was SEK 1 394 billion, or 36 per cent of GDP. On-lending to the Riksbank, which was SEK 227 billion at the end of 2014, is included in the forecasts.

#### *Prospects for the development of the Swedish economy according to the Budget Bill for 2016*

The development of the Swedish economy is of great importance for central government finances and therefore for the development of the central government debt. The Budget Bill for 2016 expects the situation of the Swedish economy to improve, see Table 1.

**Tabell 1. GDP forecast according to the Budget Bill for 2016**

	2014	2015	2016	2017	2018	2019
GDP <sup>1</sup>	2.4	2.6	2.5	2.8	2.5	2.0

Fixed prices, reference year 2014

Source: Budget Bill for 2015 (Govt Bill 2015/16:1)

A gradual strengthening of the international economy will increase demand for Swedish exports, and this is, in turn, expected to contribute to higher investments in business, lower unemployment and rising resource use. However, the forecast is uncertain and there is still a greater risk of a weaker development.

In the euro area, which is Sweden's most important export market, the recovery is expected to be slow, even though the economic prospects have brightened in 2015. The

<sup>2</sup> The National Financial Management Authority's forecast of government agencies' holdings of government securities has been used to calculate the unconsolidated central government debt. The unconsolidated central government debt is about SEK 50 billion higher than the consolidated central government debt.

expansive monetary policy of the European Central Bank (ECB) has contributed to a weakening of the euro in relation to most currencies, and this has stimulated exports. But high public debt, unemployment and poorer economic conditions in many countries are keeping demand back.

In the United States, the development of the economy is expected to be strong in the coming years. Household consumption is expected to rise as a result of continued high employment growth, low interest rates and a low oil price. Investments are being stimulated by high profits and high confidence among businesses that the development of the economy is going to be good.

Growth in China was weak at the start of 2015. The previous export-led growth has slowed down and growth is now being driven by domestic consumption instead. In the coming years this is expected to lead to lower but more balanced GDP growth than before. The recent turbulence in financial markets in China contributes to greater uncertainty about growth prospects.

In Sweden growth in recent years has been held back by weak international demand. In contrast, there has been relatively strong growth of household consumption. In 2016 demand for Swedish exports is expected to rise, strengthening their contribution to GDP growth. Public consumption is expected to contribute to a relatively large part of GDP growth in both 2015 and 2016.

Forecasts of economic growth are uncertain and this uncertainty increases with the length of the forecasting horizon. The risk of poorer growth is assessed as being greater than the chances of better growth. Some of the risks in the forecast are set out below.

There is a considerable risk that economic growth in the euro area will be weaker than expected. Debt is still high in many countries, which means that there is a considerable need for savings. There is also a risk of setbacks for the countries that have had support programmes to deal with their public finances. A negative development in Greece is expected to have limited spill-over effects, but could still create turbulence in financial markets. If the geopolitical conflicts in the world deteriorate seriously, in parts of the Middle East for instance, this can impact on the whole of the

world economy. Another risk is a more severe than expected slowdown in growth in China.

High values of financial assets increase the risk of a hasty price correction. The uncertainty surrounding monetary policy in the US and the euro area also contributes to this. If there is an unexpected tightening of monetary policy, capital markets may be destabilised, especially in emerging economies.

Macroeconomic growth can also be affected by extreme weather conditions such as abnormal winter temperatures, drought and floods.

In Sweden high household debt and the development of house prices are a risk in the forecast. A large fall in house prices risks reducing household consumption, which would, in turn, lead to lower employment and lower GDP growth. However, a fall in house prices is not assessed as a threat to the stability of the financial system. In recent years a number of measures have been taken to strengthen the robustness of the financial system.

Economic growth may also be stronger than assumed in the forecast. The effects of a lower oil price may have been underestimated, monetary policy may become more expansive than expected and confidence among businesses and households may grow more strongly than assumed in the forecast. In Sweden high household savings make it possible for private consumption to be higher than assumed in the forecast.

### *Conclusion*

The forecasts of the unconsolidated central government debt indicate that in 2019 the debt will be slightly lower as a share of GDP than it is today. However, the forecasts are associated with risks of a weaker development. The scope for risk-taking in the management of the central government debt is therefore judged to be largely the same as before.

## **2.2 Loan markets**

### *The yield curve slope*

The slope of the yield curve affects the trade-off between cost and risk. When the yield curve has a steep positive slope, the cost saving from borrowing at shorter maturities increases (and the other way round). However, borrowing at

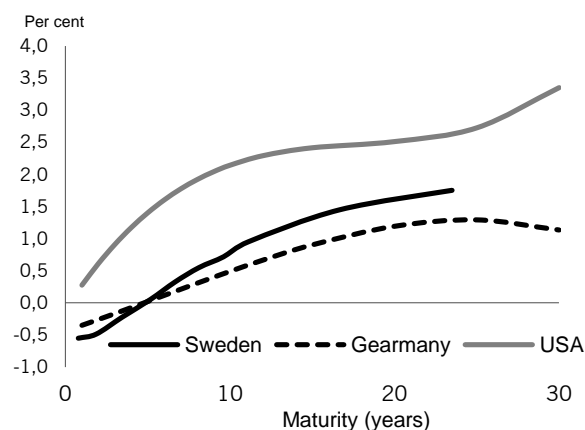


shorter maturities means that an interest rate rise has a quicker impact on interest costs since the debt is refinanced more often. This increases the risk of variations in interest costs.

Historically the yield curve generally has a positive slope, i.e. long interest rates are higher than short interest rates. This is explained both by market players expecting, on average, that interest rates will rise (the expectations hypothesis) and on market players wanting compensation for binding money if it turns out that they are wrong or if they want to reinvest the funds before the bond matures (term premium). In this year's proposed guidelines the Debt Office has analysed the term premiums. The analysis shows that term premiums have fallen almost to zero and that they are expected to be low for the foreseeable future. This means that the cost advantage of short-term borrowing has decreased compared with before (see section 3.3).

Figure 4 shows the yield curve for Swedish, German and US government securities on 30 September 2015. As is seen, the Swedish yield curve is flat at the short end and lower than the German for maturities up to five years.

**Figure 4. Yield curve for Swedish, German and US government securities, 30 Sep, 2015.**



The Debt Office may not take positions in the Swedish fixed income market. The reason is to avoid concerns that the Debt Office could exploit information about its own future actions to take positions actively.

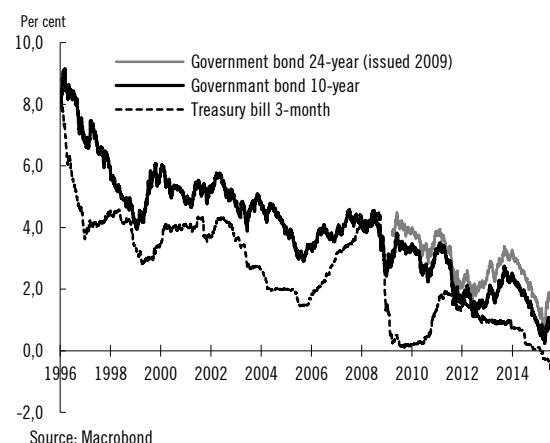
*The yield curve level*

The yield curve level is not normally of importance for the choice of maturity. Considering that increases and decreases in the interest rate offset each other in the long run,

the gain from having a long-term debt when interest rates rise is reduced by a loss that can be said to arise when interest rates fall again. However, in certain extraordinary cases, the interest rate level has affected the steering of maturities. This happened, for example, in spring 2009 when, the Government made it possible for the Debt Office to issue a 30-year bond, partly with the aim of locking in low interest rates.

In the past year the Riksbank has gradually reduced the repo rate from 0.75 per cent in July 2014 to -0.35 per cent in July 2015. The Riksbank has also bought government bonds in the secondary market. In 2014 and at the start of 2015 the interest rate on Swedish government bonds fell chiefly because investors had adjusted their expectations to the repo rate being low for a long period of time. As a result of stronger cyclical signals in the Swedish economy, interest rates on Swedish government bonds rose slightly in the spring and then fell slightly again in the summer and autumn.

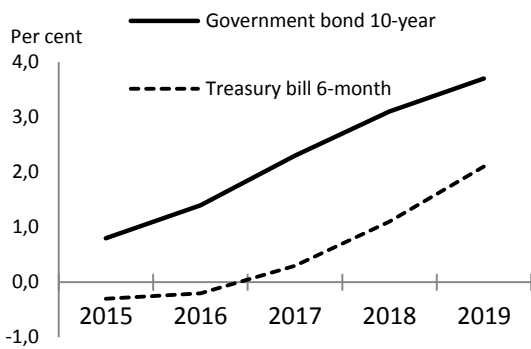
**Figure 5. Swedish government interest rate as of 1996**



*Government forecast of interest rate developments*

In the Budget Bill for 2016 the Government expects interest rates to rise gradually during the forecast horizon up until the end of 2019. The average annual rate for T-bills with a maturity of six months is expected to rise from -0.3 per cent in 2015 to 2.1 per cent in 2019. The average annual rate for government bonds with a maturity of ten years is expected to rise from 0.8 per cent to 3.7 per cent in the same period, see figure 6.

**Figure 6. Government forecast of Swedish government interest rate, annual average 2015–2019**



Source: Budget Bill for 2016 (Govt Bill 2015/16:1)

### Conclusion

In recent years term premiums have fallen, and they are expected to be low for the foreseeable future. The trade-off between the expected cost saving from short-term borrowing in relation to the increased risk this entails has therefore shifted slightly, see section 3.3.

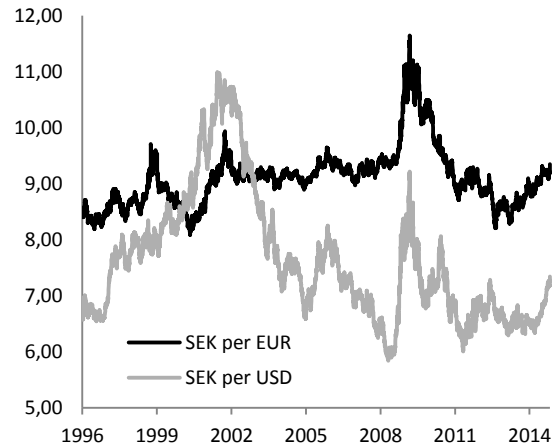
## 2.3 The Swedish krona

The size of the currency debt expressed in Swedish kronor is affected by the value of the Swedish krona in relation to currencies against which the currency debt has exposure. In exceptional cases the guidelines for debt management have been affected by the expected development of the Swedish krona. The last time this happened was in May 2009 when the krona was judged to be severely undervalued in connection with the financial crisis. The mandate for positions in the krona exchange rate was raised at that time from SEK 15 billion to SEK 50 billion.

### *The historical development of the Swedish krona*

The krona weakened sharply during the financial crisis in 2008 and 2009, when investors moved into the major currencies. Thereafter the krona strengthened as financial markets stabilised and the signals about economic developments became more positive. Since 2011 the krona has weakened slightly against the euro. In the latter part of 2014 and in spring 2015 the US dollar strengthened considerably, resulting in a weaker krona exchange rate against the US dollar.

**Figure 7. Development of the krona as of 1996**

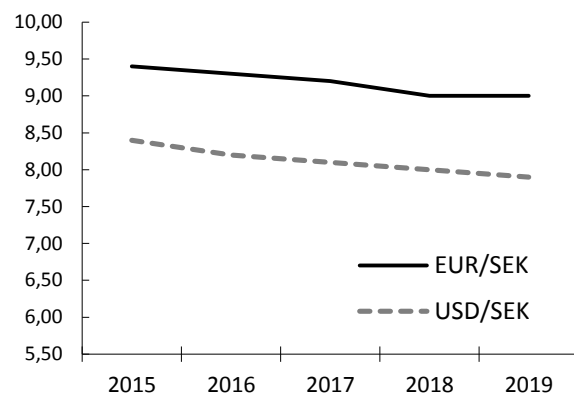


Source: Macrobond/Riksbank

### *Government forecast of the development of the krona*

In the Budget Bill for 2016 the Government expects the krona to strengthen slightly against the euro and US dollar during the forecasting horizon up until the end of 2019. The annual average EUR/SEK exchange rate is estimated at 9.40 in 2015 and at 9.00 in 2019. Correspondingly, in the same period the krona is expected to strengthen slightly against the US dollar from an estimated annual average of 8.40 to 7.90, see figure 8.

**Figure 8. Government forecast of the krona exchange rate, annual average 2015–2019**



Source: Budget Bill for 2016 (Govt Bill 2015/16:1)

### Conclusion

Assessments of the development of the krona do not affect this year's guidelines. Within the framework of the position-taking mandates assigned to it the Debt Office has, as in the past, to take account of expectations regarding the development of the krona in order to reduce the cost of the central government debt.

## **2.4 The Riksbank's comments on the Debt Office's proposal**

Under the Budget Act (Chapter 5, Section 6), the Government shall give the Riksbank the opportunity to comment on the Debt Office's proposed guidelines for the management of the central government debt. The opinion from the Riksbank states that, with the clarification given below, the Riksbank considers that the proposals presented by the Debt Office in its guidelines for the management of the central government debt in 2016-2019 are compatible with the requirements set by monetary policy.

The purchases of government bonds made by the Riksbank are intended to bring down bond interest rates for various maturities. The Riksbank achieves this by reducing the supply of government bonds available in the market. The Debt Office's proposal to extend the maturity of the nominal krona debt could, in principle, affect the monetary policy being conducted if the extension takes place by increasing borrowing in long maturities where the Riksbank has bought bonds. The Riksbank notes that the proposed extension of maturity is relatively modest. Nonetheless, it should be made clear that the extension of the maturity of the nominal krona debt will take place solely by reducing the use of swaps.

## 3 Reasons for the Government's decision

### 3.1 Trade-off between cost and risk in debt management

The steering of the management of the central government debt is based on the objective for debt policy adopted by the Riksdag. In the guidelines the Government establishes that the trade-off between cost and risk is primarily to be made through the choice of the composition and maturity of the central government debt (point 21). The guidelines state that the main cost and risk measure is the average issue yield (points 22 and 23).

#### *The size and expected development of the central government debt*

In the trade-off between cost and risk, account is taken of the size and expected development of the central government debt. In general, strong government finances and a low central government debt increase the scope for risk-taking in return for lower expected costs. In exceptional cases the absolute level of interest rates can also affect the guidelines, as can the situation in loan markets and the Swedish krona exchange rate.

At the end of 2014 the unconsolidated central government debt was SEK 1 394 billion, which corresponded to 36 per cent of GDP. This debt included on-lending of SEK 227 billion to the Riksbank. Forecasts from the Government, the National Financial Management Authority and the National Institute of Economic Research indicate that at the end of 2019 the central government debt will be between SEK 1 363 and 1 550 billion (including on-lending to the Riksbank). As a share of GDP this corresponds to 28 and 32 per cent respectively. In

combination with the risks with which the forecasts are associated, the scope for risk-taking in the management of the central government debt is judged to be unchanged.

#### *Costs of the central government debt*

The costs of central government debt are primarily affected by the size of the debt and the interest rate levels when the debt instruments are issued. Exchange rate movements also affect the cost of the debt since part of the debt is exposed to foreign currencies. Similarly the costs of the inflation-linked debt are affected by the development of the CPI.

Market interest rates have been low since the financial crisis in 2008–2009. Sweden's central government finances have displayed relatively good strength, and this has contributed, along with the low global level of interest rates, to the fall in central government borrowing costs to record low levels. For 2014 the interest on the central government debt in cost terms was SEK 16 billion and in the Budget Bill for 2016 the corresponding interest costs are estimated at SEK 12.5 billion for 2015. For years 2016–2019 the interest costs are expected to rise successively and reach SEK 33.5 billion at the end of the period. The increase is mainly due to expectations of higher market interest rates.

#### *Risks in the management of the central government debt*

The risk in the central government debt is defined at a general level as its contribution to variations in the budget balance and the central government debt. A lower central government debt, which results in lower costs, contributes to a lower risk since the variation in the costs

(expressed in kronor) decreases. A lower central government debt initially also makes it easier for central government to borrow large sums in a crisis situation without a sharp rise in interest rates.

There is no single measure that describes the overall risk in the management of the debt. Instead different types of risk are reported, the most important being the interest rate refixing risk, the refinancing risk, the financing risk and the counterparty risk.

The general measures of both cost and risk are based on the average issue yield. The issue yield means the interest rate (or yield) at which the Debt Office borrowed at the time of the issue. The average issue yield is calculated by weighing together all the individual issue yields with their outstanding volumes.

The interest rate refixing risk means the risk that the interest rate on the debt will rise rapidly if market interest rates move upwards. The greater the share of the debt that consists of short and adjustable loans, the more sensitive is the debt to changes in market interest rates. Short borrowing is generally cheaper than long borrowing, which means that a trade-off must be made between expected cost and risk. In recent years term premiums, i.e. the compensation investors demand to invest in government securities with longer maturities, have decreased. Term premiums are expected to be low for the foreseeable future. This results in an adjustment in the trade-off between the expected cost saving and the increased risk resulting from shorter borrowing (see section 3.3). The adjustment means a slight extension in the maturity of the debt. The assessment is that the extension can be made at a low cost or no cost at all.

The refinancing risk refers to the risk that it will turn out to be difficult or expensive to replace maturing loans with new ones. In general, the refinancing risk appears at the same time as the need for new borrowing rises sharply (financing risk). The refinancing risk reflects the time remaining to maturity, i.e. when the debt needs to be refinanced. The guidelines state that the Debt Office is to take account of refinancing risks in the management of the central government debt (point 24) and that the agency is to ensure good borrowing preparedness in foreign currencies (point 25).

The refinancing risk is taken into account in several different ways in the Debt Office's

strategies for borrowing and market maintenance. This is done by, for example, ensuring infrastructure, an investor base and liquidity in the loan market. The bulk of the borrowing is done in government bonds that are spread over several loans with different maturity dates. The borrowing is spread continuously across small, regularly held auctions. A large part of the borrowing is carried out in the 10-year government bond, where the investor base is largest. Since 2009 the Debt Office also has nominal krona borrowing at longer maturities than twelve years, which means that the dates when the debt reaches maturity are spread over a longer period of time. Moreover, the Debt Office's borrowing in foreign currency reduces the refinancing risk and the financing risk since the channel to the international capital markets is kept open. The international capital market makes it possible to borrow large volumes in a short space of time.

In its annual evaluation of the management of the central government debt the Debt Office has to report on how the requirements concerning refinancing risks have been met. Finally, it should be mentioned that strong and sustainable central government finances are the most important factors in limiting the refinancing risk and the financing risk in the central government debt.

### **3.2 The steering of the composition of the central government debt is retained unchanged**

The Government sees no reason to alter the steering of the composition of the central government debt. The share of inflation-linked krona debt is to be steered towards 20 per cent in the long term. At the end of 2014 the foreign currency debt's share of the central government debt was around 15 per cent. In the guideline decision for 2015 it was decided that foreign currency exposure in the central government debt is to decrease by no more

than SEK 30 billion per year<sup>3</sup>, and this also applies until further notice. The decision to reduce the currency exposure means a decrease in the probability of variations in costs, and thereby in risk, as the currency risk in the debt declines. The remainder of the central government debt (currently around 65 per cent) is to consist of nominal krona debt.

### 3.3 Extended maturity of the central government debt

#### *Nominal krona debt*

The steering of the nominal krona debt is divided into instruments with outstanding maturities of less than and more than 12 years.

For instruments that have outstanding maturities of more than 12 years the steering is unchanged, which means that the long-term benchmark for the outstanding volume is to be SEK 70 billion (point 16).

For instruments with outstanding maturities of up to 12 years, the maturity (the duration<sup>4</sup>) is to be between 2.6 and 3.6 years (point 15). This means that the middle of the maturity interval is extended by three months, as the maturity interval for 2015 is between 2.6 and 3.1 years<sup>5</sup>, and that the interval is made 0.5 years wider (see section 3.4). The reason for the change is that the cost advantage of short-term borrowing is smaller than in the past. By extending maturity slightly, the risks in the debt can be reduced at a low or no cost.

The decision is based on the Debt Office's analysis of term premiums in the proposed guidelines for the management of the central government debt in 2016–2019

(Fi2015/04585/FPM). Historically the yield curve has generally had a positive slope, which means that long interest rates have been higher than short interest rates. One explanation of this is that market players expect, on average, that interest rates will rise (the expectations hypothesis). Another explanation is that market players want compensation for binding money if it turns out that they are wrong or if they want to reinvest the funds in another asset before the bond matures (term premium). It is difficult to measure how much of the difference between long and short interest rates consists of expectation of higher interest rates and of term premiums respectively, as neither component can be observed separately. The term premium can be estimated by estimating expectations of future interest rates and then deducting them from the actual difference in interest rates for different maturities. The Debt Office has studied calculations of ten-year term premiums for US government bonds that have matured in the past decades.<sup>6</sup> With the aid of questionnaire surveys and models the Debt Office has estimated the term premium in the Swedish government securities market.<sup>7</sup> Broadly speaking, this has confirmed the picture from the US government securities market, Swedish maturity premiums also seem to have fallen over time and appear to be close to zero at present. But term premiums can vary sharply over time and it is not possible to rule out the premium rising again. However, there are restraining factors, such as changes in the behaviour of market players that indicate that term premiums can be expected to be low for the foreseeable future. One example of such factors is a greater degree of matching of assets and liabilities on the part of insurance companies. The Debt Office

<sup>3</sup> The exposure shall be calculated in a way that excludes changes in the SEK exchange rate.

<sup>4</sup> Duration is calculated as the weighted average of the period until each cashflow (coupons and final payments) where the weights are determined by the market value of each cashflow.

<sup>5</sup> On 12 March 2015 the maturity interval was increased by 0.3 years, from 2.3–2.8 years. The reason for the increase was to restore the steering to the same level of risk as in the guideline decision for 2015. The background to the change was that duration became distinctly longer when market interest rates fell in late autumn 2014 and at the start of 2015.

<sup>6</sup> Tobias Adrian, Richard K. Crump and Emanuel Moench, "Pricing the Term Structure with Linear Regression", *Journal of Financial Economics* 110 (1), October 2013, pp 110-138.

<sup>7</sup> The questionnaire surveys were carried out by Prospera on behalf of the Riksbank. Some sixty market actors were asked what they thought about the interest rate on a five-year government bond in 3, 6, 12, 24 and 60 months' time. The Debt Office has used two interest rate models: one developed at the Federal Reserve Bank of New York and one based on Francis X. Diebold and Canlin Li, "Forecasting the term structure of government bond yields", *Journal of Econometrics* 130 (2), February 2006, pp 337-364.

uses interest rate swaps to shorten the maturity of the central government debt. The Debt Office intends to reach the slightly longer maturity of the nominal krona debt that follows from this year's guideline decision by reducing its use of swaps. The Debt Office has not received any indications that these transactions, or transactions not carried out, would be of crucial importance for swap interest rates or the liquidity of the swap market. Continued analysis will show whether a further extension of the maturity is justified over and above what is decided in the guidelines for 2016. The extension is to take place in small steps since a substantial extension could lead to a disturbance of the balance between supply and demand that would make long-term interest rates rise. There is also uncertainty about how long-lasting the decrease in the risk premium will be.

#### *Foreign currency debt*

For the foreign currency debt the maturity interval is to be 0–1 year. This means that steering will aim at a slightly longer maturity than before (four and a half months longer), compared with the previous benchmark of 0.125 years. The extension of maturity can be achieved by reducing the use of derivatives. Compared with current practice, when every issue is routinely swapped to short rates, the maturity will be made more dependent on times and volumes in bond issuance. This change can be made without any market effects arising since the Debt Office is a small actor in foreign markets.

The relatively short interest rate refixing period for the foreign currency debt is deemed to still be appropriate in terms of cost and risk. The foreign currency debt is spread across several currencies and makes up a small share of the central government debt (at present around 15 per cent).

#### *Inflation-linked krona debt*

The maturity interval for the inflation-linked krona debt is to be 6–9 years, which is the same as before. Inflation-linked bonds reduce the risk in the central government debt since they help to increase the diversification of the debt portfolio. By issuing inflation-linked bonds, the Debt Office also reaches a broader investor base. In situations when the borrowing requirement is

large, inflation-linked bonds can reduce pressure on the market for nominal bonds.

### **3.4 Wider maturity interval**

The maturity interval for the nominal krona debt with instruments with a maturity of up to twelve years is widened from 2.6–3.1 years to 2.6–3.6 years. For the foreign currency debt the previous maturity benchmark of 0.125 years is replaced with a maturity interval of 0–1 years.

The reason for these changes is to strengthen the conditions for appropriate issue planning. Increasing the flexibility of maturity steering makes it possible to avoid unnecessary transaction costs. An interval provides more scope to adjust borrowing if the borrowing requirement were to deviate from the forecast or if conditions on the swap market, for instance, change. Another reason is that the maturity of the debt is no longer deemed to be as strongly linked to its cost (section 3.3). This means that there is no reason to steer maturity as tightly as before. Having a wider maturity interval also improves the possibilities of promoting, in the same way as for the inflation-linked krona debt, a market that is liquid and functions well in other respects in order to attract a broad investor base.

A further reason originates from the guideline decision for 2015, which established that duration would replace average interest rate refixing period as the measure of maturity. Duration, as a measure, is affected by interest rate fluctuations, which means that maturity shifts when there are strong movements of the market interest rate.<sup>8</sup>

The wider intervals are justified on purely operational grounds. The Debt Office plans its borrowing so that the maturity of the debt is normally kept in the middle of each interval. It should be emphasised that the intention of the wider intervals is not to adapt the maturity of the central government debt on the basis of assessments of future interest rates. That type of

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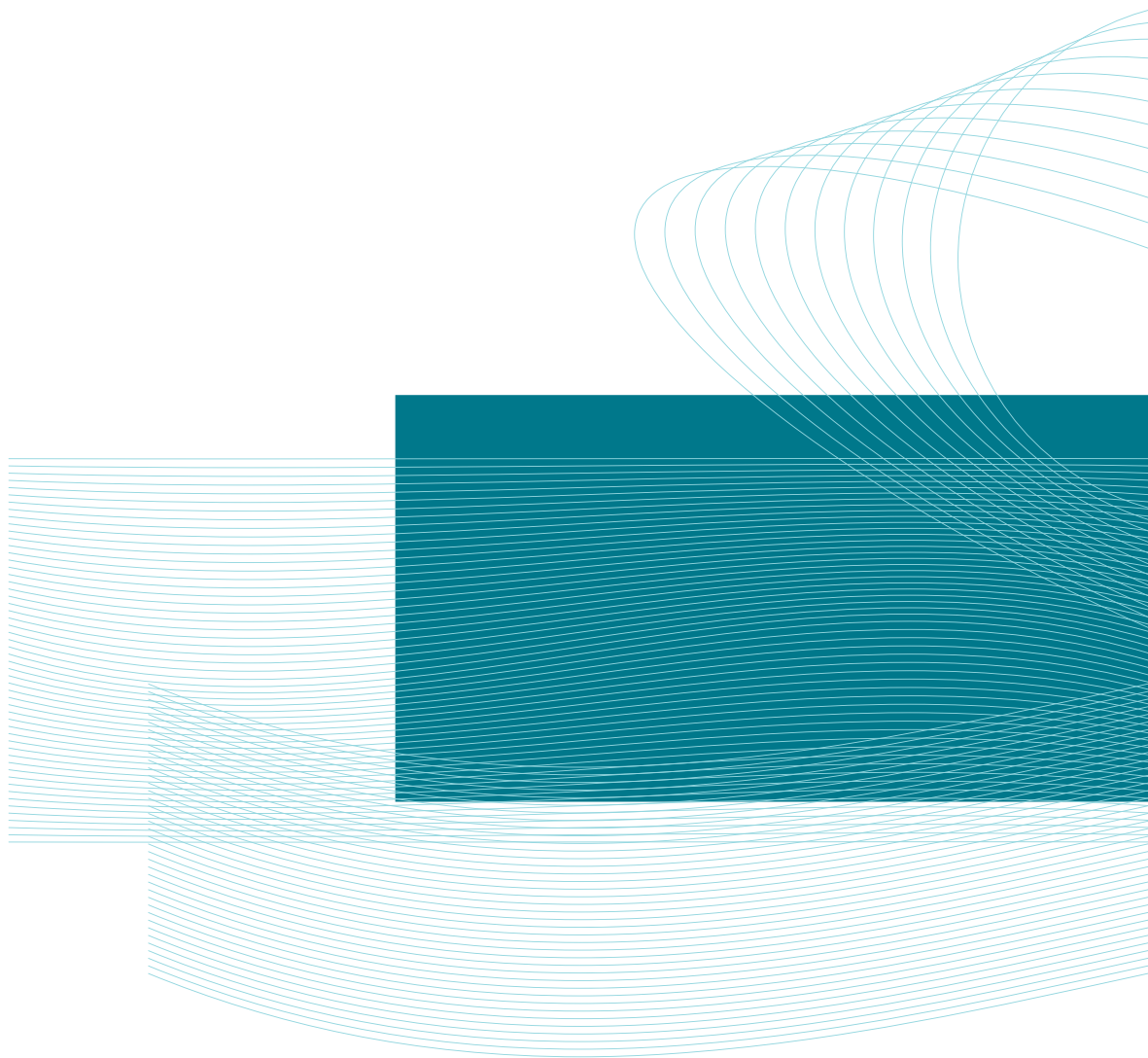
<sup>8</sup>See footnote 4 and section 3.3 of Guidelines for the Management of the Central Government Debt 2015.

market positioning is always carried out outside regular management of the central government debt in accordance with the provisions laid down in the guidelines (points 30–32).

### **3.5 The Debt Office's internal guidelines**

The guidelines state that the Debt Office shall establish internal guidelines based on the Government's guidelines (point 10). The previous wording that the Debt Office's internal guidelines shall concern "deviation intervals for the maturity benchmarks decided by the Government for each type of debt" is removed since the Government sets maturity intervals for all types of debt as of 2016.





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