

# Central government debt management

Proposed guidelines 2015-2018



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# Summary

In this report the Swedish National Debt Office presents proposed guidelines for 2015–2018. For the period from 2016 up to and including 2018 the proposals are preliminary. The objective is to manage the debt in such a way as to minimise the costs of the debt in the long-term while taking risk in its management into account. Debt management is to take place within the framework of monetary policy requirements.

With this year's proposed guidelines the Debt Office concludes its analysis of recent years concerning whether there are reasons to have foreign currency exposure in the strategic portfolio. The Debt Office has not found sufficient support to show that there is an expected cost saving from having foreign currency exposure at the same time as the variation in cost, and thereby risk, increases. The conclusion is therefore that there is no reason to have foreign currency exposure in the strategic portfolio.

The Debt Office therefore proposes that the direction in the coming years should be to gradually wind down foreign currency exposure in the central government debt. As a consequence of this the Debt Office proposes a change in the steering of the foreign currency debt.

The proposal made is that, instead of steering the foreign currency debt by setting a debt share, the Government should steer the debt in terms of a sum, stated in Swedish kronor, by which foreign currency exposure is to decrease each year. The Debt Office proposes a decrease in foreign currency exposure of not more than SEK 30 billion per year in the coming years.

The rate of the decrease may be altered depending on what decision is taken on the proposal on hedging the foreign currency reserve of the Riksbank (Swedish central bank) by entering forward contracts with the Debt Office. That proposal is included in the inquiry report on *The Riksbank's financial independence and balance sheet* (SOU 2013:9) published in January 2013.

In addition the Debt Office proposes new principles for calculating shares and maturities. The proposal is to replace the present maturity measure of the average interest rate refixing period with the measure of duration and to measure shares in nominal amounts instead of, as at present, using the measure of the consolidated cash flow of the central government debt. The purpose of changing calculation principles is to simplify reporting and make it more transparent.

One consequence of the change of principles is that the Debt Office proposes new benchmarks for maturity and the inflation-linked share. However, this proposal does not entail any change in practice compared with the present composition and maturities.

The Debt Office also proposes a clarification of the guidelines concerning evaluation by adding that it is to cover five-year periods.

Finally the Debt Office proposes supplementing the guidelines with a point clarifying that borrowing is to be conducted in such a way that the Debt Office also maintains good borrowing preparedness.

# Proposed guidelines 2015–2018

Here the Debt Office presents proposed guidelines for central government debt management during 2015–2018. For the period from 2016 up to and including 2018 the proposals are for preliminary guidelines. In the cases where changes are proposed to the guidelines, the current wording is given in the left column and the proposed new wording in the right column. In order to provide an overview of the regulations that govern 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 have also been included.

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

 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).

#### 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 central government in accordance with the Budget Act (2011:203). Ordinance (2007:1447) containing Instructions for the National Debt Office.
- 3. Under the Budget Act (2011:203) the Debt Office may raise loans for central government in order to:
  - 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.

#### 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 (2007:1447) 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 (2011:203).
- 6. The Government shall adopt guidelines for the Debt Office's management of the central government debt no later than 15 November each year. Budget Act (2011:203).
- 7. The Debt Office shall submit information for the evaluation of the management of central government debt to the Government no later than 22 February each year. Ordinance (2007:1447) 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 (2011:203).
- The Debt Office shall establish principles for the implementation of the guidelines for central government debt management adopted by the Government. Ordinance (2007:1447) containing Instructions for the National Debt Office.
- 10. The Debt Office shall establish internal guidelines based on the Government's guidelines. The decisions shall concern deviation ranges for the maturity benchmarks decided by the Government for each type of debt, the use of the position mandate, the foreign currency distribution in the foreign currency debt and principles for market and debt maintenance.

#### Composition of central government debt - debt shares

#### Present wording

## 11. The share of inflation-linked krona debt in the central government debt is to be 25 per cent in the long term.

#### Proposed wording

11. The share of inflation-linked krona debt in the central government debt is to be 20 per cent in the long term.

The shares of the debt types in the central government debt are to be calculated as nominal amounts at the current exchange rate including accrued compensation for inflation.

12. The share of foreign currency debt is to be 15 per cent 12. The foreign currency exposure in the central government of central government debt.

The control range around the benchmark is to be ±2 percentage points.

If the foreign currency share moves outside the control range, the share of foreign currency debt is to be returned to the benchmark or to inside the range if the deviation is due to currency movements.

debt is to decrease. The decrease is to be not more than SEK 30 billion per year.

The exposure is to be calculated in a way that excludes changes in the SEK exchange rate.

- 13. The Debt Office is to set a benchmark for the distribution of the foreign currency debt across different currencies.
- 14. In addition to inflation-linked krona debt and foreign currency debt, central government debt is to be composed of nominal krona debt.

#### Maturity of the central government debt

#### Present wording

## 15. The maturity of the nominal krona debt for instruments with maturities of up to twelve years is to be between 2.7 and 3.2 years.

## Proposed wording

- 15. The maturity of the nominal krona debt for instruments with maturities of up to twelve years is to be between 2.3 and 2.8 years.
- 16. For nominal krona instruments with maturities of over twelve years, the long-term benchmark for the outstanding volume is to be SEK 70 billion.

#### Present wording

# Proposed wording

- 17. The maturity of the inflation-linked krona debt is to be between 7 and 10 years.
- 17. The maturity of the inflation-linked krona debt is to be between 6 and 9 years.
- 18. The maturity of the foreign currency debt is to be 0.125 years.
- 19. The maturity of the types of debt may deviate temporarily from the maturities given in points 15, 17 and 18.
  - 20. Maturity is to be measured as duration.

#### Cost and risk

- 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.
- 22. The main cost measure is to be the average issue yield.
- 23. The main risk measure is to be the average issue yield risk.
- 24. The Debt Office is to take account of refinancing risks in the management of the central government debt.
  - 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.

#### Present wording

#### Proposed wording

- 24. The shares of the types of central government debt are to be calculated using a measure that takes account of all cash flows in the debt, i.e. including future coupon payments and expected compensation for inflation.
- [The point is removed and moved to point 11.]
- 25. The maturity is to be measured by an average interest rate refixing period that includes all the cash flows including expected compensation for inflation. Cash flows are not to be discounted.

[The point is removed and moved to point 20.]

- 26. Positions are not to be included in the calculation of debt shares and maturities.
- 27. When taking positions, market values are to be used as the measure of the costs and risks in the management.

#### Market and debt maintenance

- 28. The Debt Office is to contribute, through market and debt maintenance, to the efficient functioning of the government securities market in order to achieve the long-term cost minimisation objective while taking account of risk.
- 29. The Debt Office is to adopt principles for market and debt maintenance.

#### Position-taking

30. The Debt Office may take positions in foreign currency and the krona exchange rate.

Positions in foreign currency may only be taken using derivative instruments.

Positions may not be taken in the Swedish fixed income market.

Positions refer to transactions that are intended to reduce the costs of the central government debt while taking account of risk and that are not motivated by underlying borrowing or investment requirements.

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.

- 31. Positions in foreign currency are limited to SEK 300 million, measured as daily Value-at-Risk at 95 per cent probability.
  - The Debt Office is to decide how much of this scope may be used at most in its ongoing management.
- 32. Positions in the krona exchange rate 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.

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.

#### Borrowing in the retail market

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.

## Borrowing to meet the need for central government loans

- 34. The possibility of raising loans to meet the need for central government loans under Chapter 5, Section 1 of the Budget Act (2011:203) may only be used if required on account of threats to the functioning of the financial market.
  - The Debt Office may have outstanding loans with a maximum nominal value of SEK 200 billion for this purpose.
- 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).

#### Management of funds etc.

- 36. The agency 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 (2007:1447) containing Instructions for the National Debt Office.
- 37. The Debt Office shall cover the deficits that occur in the Government central account. Ordinance (2007:1447) 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 (2007:1447) containing Instructions for the National Debt Office.

#### Consultation and collaboration

- 39. The Debt Office shall consult with the Riksbank on matters concerning the parts of its borrowing operations that may be assumed to be of major importance for monetary policy. Ordinance (2007:1447) containing Instructions for the National Debt Office.
- 40. The Debt Office shall collaborate with the National Institute of Economic Research and the National Financial Management Authority on matters concerning the agency's forecasts of the central government borrowing requirement. Ordinance (2007:1447) containing Instructions for the National Debt Office.
- 41. The Debt Office should obtain the Riksbank's views on how to invest the funds borrowed to meet the need for central government loans under the Act (1988:1387) on Central Government Borrowing and Debt Management.

#### **Evaluation**

#### Present wording

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 is also to include quantitative measures.

#### Proposed wording

42. Evaluation of the management of the central government 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 is also to include quantitative measures.

The evaluation is to cover five-year periods.

- 43. The evaluation of the operational management should include borrowing and the 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. The result of positions within a given position-taking mandate is to be recorded continuously and evaluated in terms of market values.

# Reasons for the changes proposed

This section gives the background to the changes proposed to the guidelines. The Debt Office proposes a gradual decrease in foreign currency exposure in the central government debt. The Debt Office also proposes new principles for calculating shares and maturities. In addition, a clarification is proposed regarding the period of time for evaluation of the management of the central government debt. Finally, the Debt Office proposes a new guideline making it clear that borrowing is to be conducted in such a way that the Debt Office maintains good borrowing preparedness.

# Decrease in foreign currency exposure

In its past two proposed guidelines the Debt Office has analysed the question of whether there are reasons to have foreign currency exposure in the strategic portfolio from the perspective of cost and risk. With this year's proposed guidelines the Debt Office concludes that analysis.

The overall conclusion is that foreign currency exposure is not expected to lead to systematically lower risk or reduced cost. The Debt Office therefore proposes that the direction in the coming years should be to gradually wind down foreign currency exposure in the central government debt. As a consequence of this the Debt Office proposes a change in the steering of the foreign currency debt.

This conclusion applies to the *exposure* of the debt in foreign currency and not to its *funding*. In other words, the proposal to decrease foreign currency exposure does not affect the Debt Office's possibility of borrowing in foreign currency.

As described by the Debt Office in previous proposed guidelines it is important for central government to have effective access to the international capital market in order to reduce the financing risk. Foreign currency loans are the loan instrument in which central government has most possibility of borrowing large sums in a short time. This argument is not affected by the following analysis which only deals with the question of whether there are reasons to have foreign currency exposure in the strategic portfolio.

### Background

Two years ago the Debt Office drew the conclusion that it is not possible to demonstrate that a fixed share of foreign currency exposure

reduces risk in terms of cost variation in the strategic portfolio.

Last year the Debt Office continued its analysis of the foreign currency debt and presented a framework concerning the possibility of reducing the expected cost with foreign currency exposure in the strategic portfolio.

However, the Debt Office did not take a position on whether there are reasons to believe in an expected cost saving with foreign currency exposure and whether it is, in that case, sufficiently large in relation to the increased risk resulting from foreign currency exposure.

Last year the Debt Office described how the uncovered interest rate parity condition is a natural starting point for the analysis of any cost advantages of foreign currency exposure.

This condition implies that if the interest rate is lower for a particular foreign currency than the interest rate in kronor, the Swedish krona is expected to depreciate corresponding to the interest rate differential. Given that these expectations are correct on average over time, it follows that it will cost the same on average in the long-term to borrow in all currencies (including Swedish kronor).

It is expected systematic long-term deviations from the uncovered interest rate parity condition that could provide a basis for having foreign currency exposure in the strategic portfolio from a cost perspective.

#### Carry strategy in the strategic portfolio

In the economic literature, empirical studies have shown that the uncovered interest rate parity condition does not hold. It has even turned out that, on average, low interest rate currencies, which should appreciate according to theory, have instead tended to depreciate.<sup>1</sup>

Strategies that try to take advantage of this phenomenon, known as 'carry strategies', can be described as borrowing in low interest rate currencies and investing the money borrowed in high interest rate currencies. Typically carry strategies make use of a large selection of currencies. The strategies are also dynamic so that the currencies included vary over time.

Last year the Debt Office described how a carry strategy in the strategic portfolio should be limited to Swedish kronor as an investment currency (high interest currency). The Debt Office made the assessment that if there was an expected cost saving with such a more limited strategy, the cost saving would probably be lower and the risk higher than for the type of carry strategies studied in the literature.

This year the Debt Office has studied this empirically on the basis of historical data. The conclusion is that it is difficult to substantiate expected cost advantages of foreign currency exposure that are sufficiently clear and systematic. This is illustrated in figures 1–3 below, which show the annual cost saving in 1993–2013 for a carry strategy in which exposure in Swedish kronor was exchanged for exposure in three different currencies.

Figure 1 Cost saving for euro

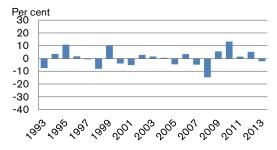
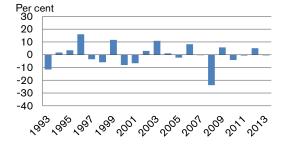
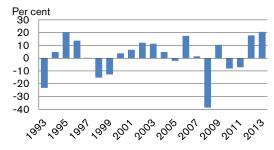


Figure 2 Cost saving for Swiss franc



<sup>&</sup>lt;sup>1</sup> See for example Froot & Thaler (1990) and Engels (1996).

Figure 3 Cost saving for Japanese yen



For the whole period the average cost saving was around zero per cent for the strategies where exposure in Swedish kronor was exchanged for euro or Swiss franc exposure. For the strategy with exposure in Japanese yen the average cost saving was just under two per cent.

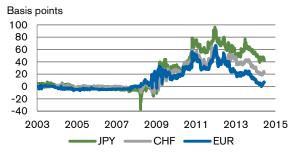
The finding for all three strategies is that the long-term average is strongly dependent on the outcome for individual years. The reason is that the variation in the annual cost saving is large. This is particularly true of the Japanese yen strategy, where the average can be both negative and positive depending entirely on the period studied.

This type of uncertainty makes it difficult to find sufficiently strong proof using historical data to show that there is a long-term, systematic expected cost saving from foreign currency exposure.

#### Basis swap spreads

A further factor that should be mentioned since it affects the cost of creating foreign currency exposure is what is called the 'basis swap spread'. Historically this has been around zero but it became significantly positive for several currencies in autumn 2008 as a result of the financial crisis, see figure 4 below.

Figure 4 Basis swap spreads



A positive basis swap spread means a cost advantage when the Debt Office makes use of

basis swaps to create foreign currency exposure. In recent years there has been a normalisation and the spreads have fallen again. Therefore this phenomenon does not affect the assessment that there is no expected cost saving with foreign currency exposure.

#### **Conclusions**

The Debt Office has not found sufficient support to show that there is an expected cost saving from having foreign currency exposure. The conclusion of the analysis carried out in recent years is therefore that foreign currency exposure in the central government debt should be gradually wound down since it is not expected to lead to lower risk or reduced cost. The Debt Office therefore proposes that the direction in the coming four-year period, which these proposed guidelines cover, should be to gradually wind down foreign currency exposure in the central government debt.

In the past two years the Debt Office has chosen to wait to propose changes of the foreign currency share in order to await a decision in the question of hedging the foreign currency reserve of the Riksbank by entering forward contracts with the Debt Office. That proposal is included in the inquiry report on *The Riksbank's financial independence and balance sheet (SOU 2013:9)* published in January 2013. If the proposal made is implemented, the Debt Office would receive foreign currency assets in the form of forward claims on the Riksbank, which would sharply decrease foreign currency exposure in the central government debt.

At the start of the year the foreign currency debt was about SEK 35 billion larger than the part of the foreign currency reserve that is not loan-financed via the Debt Office. This means that there is already scope to start a decrease of foreign currency exposure in the central government debt now. Once a decision has been made in this matter, it will influence what rate of change is suitable in the future.

#### Rate of decrease of foreign currency exposure

One starting point in identifying a suitable rate of decrease of foreign currency exposure is to start from the rate obtained by letting the present foreign currency exposure mature. This gives a sum of about SEK 20 billion per year over the coming four-year period.

This is also a suitable rate if the foreign currency debt is not to become much smaller in the next few years than the size of the foreign currency reserve (the part of it that is not loan-financed via the Debt Office). If it becomes much smaller and the proposal for hedging the foreign currency reserve is put into effect, the foreign currency debt would need to be increased again, leading to unnecessary fluctuations in the size of the foreign currency debt.

Figure 5 Development of foreign currency debt at original exchange rate<sup>2</sup>

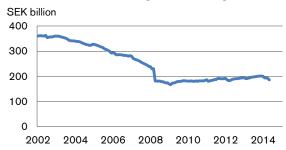


Figure 5 above shows the historical development of the size of foreign currency debt. An annual decrease of SEK 20 billion is not large from a historical perspective. The amount is accommodated readily within the control range of ±2 percentage points within which the foreign currency share is allowed to fluctuate today measured using present share measures.

Nor is an annual decrease of SEK 20 billion assessed as having an effect on the SEK exchange rate. The amount can, for example, be compared with the winding down of the SEK position in 2010–2011 when SEK approx. 50 billion was sold spread over a period of less than one year.

In practice the decrease in the foreign currency exposure would take place by the Debt Office continually making exchanges from Swedish kronor to foreign currencies. Spreading the decrease over several years reduces the risk that the exchanges are carried out at unfavourable points in time with respect to the SEK exchange rate.

#### Steering the foreign currency debt

At present the foreign currency debt is steered in terms of a share set at 15 per cent of the central government debt. This steering has been carried out in a portfolio perspective in which there is a

<sup>&</sup>lt;sup>2</sup> Using this measure the foreign currency debt is valued at the exchange rate that applied when each transaction was made.

trade-off between cost and risk. However, steering through debt shares has disadvantages now that the direction proposed is to decrease the size of the foreign currency debt.

If the decrease is expressed as a smaller share, it actually has the consequence that the size of the central government debt has an impact on the actual size of the decrease. For example, if the central government debt were to increase, the Debt Office would need to create synthetic currency exposure using derivatives, and that would be counter-productive.

The steering is more effective if it is, instead, expressed in terms of a sum in Swedish kronor by which the foreign currency exposure is to decrease each year. This then gives a direct control of the size of the change in absolute terms. This is the same model for steering as in the period when the foreign currency debt was amortised to reach the share of 15 per cent.

The Debt Office therefore proposes that the steering of the foreign currency debt be shifted from a fixed share to being expressed instead in terms of how much the foreign currency exposure is to decrease each year, expressed in Swedish kronor.

A decrease of the order of SEK 20 billion corresponds to the decrease in foreign currency exposure that would result from maturing derivatives, i.e. without the Debt Office taking active measures to any great extent. A decrease of this order of magnitude is not judged to have any impact on the exchange rate either.

A decision concerning the proposal on hedging the foreign currency reserve of the Riksbank may however result in the reconsideration of this rate.

The purpose of the steering is to gradually decrease exposure in foreign currency. If the Swedish krona weakens, this exposure may increase when measured at the current exchange rate even though the underlying stocks of each currency have decreased. If the rate of decrease is measured in terms of the current exchange rate, this may make it necessary to carry out transactions in order to parry temporary exchange rate movements, which would not be appropriate.

The Debt Office therefore proposes measuring the exposure in a way that excludes changes in the SEK exchange rate as far as is practically reasonable. The Debt Office should decide the purely technical details of the measurement. One conceivable measure is the foreign currency debt at its original exchange rate as shown in figure 5.

In addition to changes in the SEK exchange rate there are other, more technical reasons that make it difficult, in practice, to steer foreign currency exposure exactly on a calendar year basis. Scope should therefore be provided for a degree of flexibility in this steering by stating in the guideline for currency exposure the maximum amount by which this exposure may decrease per year. The Debt Office proposes setting this ceiling at SEK 30 billion. Doing so creates scope to avoid transactions whose sole purpose is to fine-tune the exposure. In practice the Debt Office will plan to make the decrease of the order of SEK 20 billion per year.

Against this background the Debt Office proposes changing point 12 of the guidelines to:

"The foreign currency exposure in the central government debt is to decrease. The decrease is to be not more than SEK 30 billion per year.

The exposure is to be calculated in a way that excludes changes in the SEK exchange rate."

# 2 New principles for calculating shares and maturities

The Debt Office proposes the following change of the guidelines for the shares and maturities of the central government debt:

- The share of inflation-linked krona debt in the central government debt is to be 20 per cent in the long term.
- The maturity of the nominal krona debt for instruments with maturities of up to twelve years is to be between 2.3 and 2.8 years.
- The maturity of the inflation-linked krona debt is to be between 6 and 9 years.

The new benchmarks are a consequence of the new principles proposed by the Debt Office for calculating maturities and shares. The proposal does not entail any change in practice compared with the present composition and maturities. The purpose of changing calculation principles is to simplify reporting and make it more transparent.

For the nominal krona debt the Debt Office also proposes adjusting the maturity as a result of decreased foreign currency exposure. The maturity of the foreign currency debt is 0.125 years, which is much shorter than that of the krona debt. If part of the foreign currency exposure is moved over to Swedish kronor, the maturity of the krona debt needs to be shortened in order to maintain the maturity of the central government debt at the same overall level.

#### **Background**

At present maturities are given in terms of the average interest rate refixing period (ARP). The ARP is calculated as the average of the time to every cash flow weighted by the size of the cash flow, without any present value discounting. This measure was introduced in the guidelines for 2006, replacing the maturity measure of duration.

The reason why the Debt Office left duration is because that measure is affected by market interest rates, which made steering more difficult. Since maturity was being steered at that time towards an exact decimal value, there was not the flexibility offered by the present guidelines in the form of a maturity range.

In order to weight the maturities of different instruments and in order to calculate shares, a measure was introduced that is based on undiscounted cash flows according to the same principle as for maturities. The measure is called the consolidated cash flow (CCF). The CCF is the sum of all known cash flows arising from the debt, without present value discounting.<sup>3</sup>

Experience has shown that the measures ARP and CCF have certain disadvantages, particularly regarding transparency. The measures are unique to the Debt Office and relatively complicated, which makes it difficult to get an intuitive feel for the development of shares and maturities. Detailed information about all the instruments included in the central government debt is needed to calculate shares according to the present metrics. In practice it is therefore impossible for an outsider to, for example, analyse how these shares are affected by a particular strategy.

Another disadvantage is that types of debt with long maturities take a disproportionately large share since all future payments are summed without being discounted. A short maturity T-bill is

Against this background the Debt Office proposes replacing the ARP with the measure duration and the CCF with the nominal amount.

#### Duration as a maturity measure

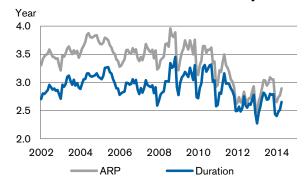
The Debt Office proposes that what was previously point 25 of the guidelines be moved to the section on Maturity of the central government debt and be made point 20 of the new guidelines<sup>4</sup>. The wording proposed is:

"Maturity is to be measured as duration."

Duration is an accepted measure that uses present value discounting to calculate the average maturity. One disadvantage of duration is, as mentioned above, that the measure is affected by movements in the market interest rate. If interest rates rise, the duration of the debt becomes shorter and vice versa.

The assessment made by the Debt Office is that this variation is no greater than can be handled with a control range of the same size as in the current guidelines. If interest rates rise or fall sharply over a long period, the Debt Office can propose in its coming proposed guidelines that the Government adjust the range. It is also worth noting that the interest rate effect on maturity is small compared with the variations that arise as a result of seasonal changes in the size of the central government debt, see figure 6.

Figure 6 Maturity of nominal krona debt for maturities shorter than 12 years



At present the difference between the maturity measures is 0.25 years. In addition there is the effect of foreign currency exposure at a floating

therefore given much less weight than a long bond with the same nominal amount.

<sup>&</sup>lt;sup>3</sup> Cash flows in the inflation-linked debt are indexed by an inflation rate of 2 per cent since the future inflation rate is unknown. For the foreign currency debt the exchange rate is assumed to remain at the present level.

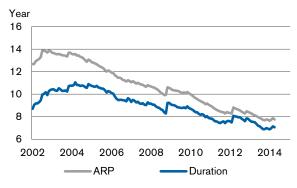
<sup>&</sup>lt;sup>4</sup> Note that as a result of the new points 20 and 25 and the removal of the old points 24 and 25, there is a shift in numbering compared with the previous guidelines as of point 21.

interest rate being moved to floating interest rate exposure in Swedish kronor. According to the Debt Office's proposal the foreign currency exposure is to decrease by SEK 20 billion in 2015. That corresponds to a decrease of 0.1 years in the maturity of the nominal krona debt.

For the technical reasons described above the benchmark for the maturity of the nominal krona debt needs to be adjusted downwards by about 0.35 years if the central government debt is to retain the same maturity as today. The Debt Office therefore proposes altering the control range to 2.3–2.8 years.

For the inflation-linked debt the difference between the two measures is greater, at present just under one year. This is because the inflation-linked debt has long maturity and is therefore affected more by the discounting of cash flows. The Debt Office proposes changing the control range from the present 7–10 years to 6–9 years.

Figure 7 Maturity of the inflation-linked debt



The maturity of the foreign currency debt is so short that the difference between the measures is negligible. Therefore no change is proposed in the benchmark for the maturity of the foreign currency debt.

#### Nominal amounts for calculating shares

The Debt Office proposes moving what used to be point 24 of the guidelines to point 11 under the section Composition of the central government debt – debt shares. The following new wording is proposed:

"The shares of the debt types in the central government debt are to be calculated as nominal amounts at the current exchange rate including accrued compensation for inflation."

All other reporting of the central government debt takes place in nominal amounts. Planned borrowing in various types of debt is also communicated in terms of nominal amounts. Expressing the shares of foreign currency debt and inflation-linked debt as nominal amounts means greater transparency and makes the reporting more uniform. As a positive side-effect, system management and reporting will also be simpler.

As regards the foreign currency debt the Debt Office proposes changing the steering from a share to a benchmark for decreasing exposure, see section 1 on foreign currency exposure above. This means that a benchmark for the share of foreign currency debt is no longer needed. For the share of inflation-linked debt a new benchmark of 20 per cent of the debt expressed as a nominal amount is proposed. This level corresponds to the present benchmark in CCF terms.

Figure 8 below shows the historical development of the share of inflation-linked debt according to the present and the proposed measure.

Figure 8 Share of inflation-linked debt



## 3 Clarification about evaluation

Earlier texts setting out the reasons for the Government's decisions on the guidelines state that the evaluation of the management of the central government debt shall cover a five-year period. The Debt Office sees a value in this also being stated in the guidelines. The Debt Office therefore proposes a clarification concerning evaluation through a supplement to point 42 of the guidelines:

<sup>&</sup>lt;sup>5</sup> The nominal amount for the inflation-linked debt is given including compensation for inflation. For the foreign currency debt, the figure is the nominal amount at the current exchange rate. In the monthly reporting of the central government debt this measure is called "D Central government debt including on-lending and money market assets".

"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 is also to include quantitative measures.

The evaluation is to cover five-year periods."

# 4 New guideline on borrowing preparedness

As mentioned above, the decrease in the foreign currency exposure in the debt does not entail a limitation of the possibility of borrowing in foreign currency. In its latest proposed guidelines the Debt Office has described the importance of ensuring that central government has effective access to the international capital market. This reduces the financing risk since foreign currency loans are the loan instrument in which the central government has most possibility of borrowing large sums in a short time.

In order to clarify that the Debt Office is to ensure that this borrowing preparedness is in place, it is proposed that the guidelines be supplemented with the following point under the heading Cost and risk:

"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."



