RIKSGÄLDEN
SWEDISH NATIONAL DEBT OFFICE

2026-09-25

Central government debt management

Proposed guidelines 2027

Reg.no 2026/284

The Debt Office’s assignment

One of the Swedish National Debt Office’s primary duties is to borrow money on behalf of the central government and manage the central government debt. The objective is to minimise the cost over the long term while taking account of risk. The central government debt shall be managed within the framework of monetary policy requirements.

At the general level, debt management is governed by the Swedish Budget Act and the Ordinance Containing Instructions for the Swedish National Debt Office. These statutes set out, for example, the permitted purposes of central government borrowing and the objective of the debt management. In addition, the Swedish Government adopts guidelines for this management, which govern matters including the composition and maturity of the debt.

The Government adopts new guidelines each year no later than 15 November. This decision is taken after the Debt Office has submitted proposed guidelines on which the Riksbank has been given the opportunity to deliver an opinion.

The operational role of the Debt Office thereafter includes borrowing the money required, in accordance with the framework set up, to finance deficits in the central government budget and replace loans that mature.

After the end of the year, the Debt Office submits a report with a basis for evaluation of its debt management to the Government in February. The Government then presents an evaluation to the Riksdag (the Swedish Parliament) in April every two years.

The proposed guidelines and the basis for evaluation are published on riksgalden.se.

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Summary

The Debt Office proposes unchanged target values for composition of the central government debt, but clearer maturity steering. The proposal entails replacing the former maturity interval with a target value and a deviation interval. We also propose that the guidelines on taking positions in foreign currency and interest rates and in the krona exchange rate be removed, but that we retain a reduced mandate to take positions in foreign currencies and interest rates for borrowing preparedness.

An updated analysis of the expected cost and risk of the central government debt justifies unchanged target values for its composition. However, the Debt Office proposes editorial changes to the guidelines to adapt them to current conditions, with the central government debt primarily to consist of nominal krona debt, and the strategic currency exposure to be zero.

Regarding term to maturity of the central government debt, the Debt Office proposes altered steering from solely a maturity interval to a target value with a deviation interval. The proposal entails a clearer link between the Government's guidelines on the debt's term to maturity and the Debt Office's planning of borrowings but does not involve any change to our strategy.

The Debt Office justifies the target value and deviation interval each individually. We justify the target value by analysing the significance of term to maturity in the trade-off between cost and risk in the long term. We propose that the target value for term to maturity be 4.75 years, which is the same as the middle of the former interval. The deviation interval is chiefly to address varying borrowing requirements and forecasting uncertainties, enabling predictability in the bond offering. Our analysis justifies a deviation interval of ± 1.0 year, which is slightly narrower than the former maturity interval.

Finally, the Debt Office proposes that the section on taking positions in foreign currencies and interest rates and in the krona exchange rate be removed. Since the strategic currency exposure of the central government debt will be zero going forward, taking currency positions in order to reduce the cost of the debt is no longer justifiable. However, we propose that the Debt Office retain a reduced mandate to take positions in foreign currencies and interest rates as part of maintaining good borrowing preparedness.

Proposed guidelines 2027

The Debt Office hereby proposes guidelines for central government debt management for 2027. The guidelines are decided annually but are designed to apply until further notice. Where the proposal involves changes in steering in relation to the adopted guidelines currently in place, we present the changes in bold type in the opening text of the guideline point. Relevant parts of the Budget Act (2011:203), the Ordinance Containing Instructions for the National Debt Office (2023:909), and the Sveriges Riksbank Act (2022:1568) are also included to provide an overview of the framework. We explain the grounds for the proposed changes further on in the report.

Objective for the management of central government debt

1. Central government debt shall be managed so as to minimise the long-term cost of the debt while taking the risk associated with its management into account. Debt management shall be conducted within the framework of the requirements of monetary policy (Chapter 5, Section 5 of the Budget Act).

The Debt Office's task and purposes of the borrowing

2. The Debt Office shall provide loans to and accept funds on account from, primarily, central government agencies (Section 3 of the National Debt Office Instructions Ordinance).

3. 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,
    - provide credits and fulfil guarantees decided on by the Riksdag,
    - amortise, redeem and purchase central government loans,
    - meet the need for government securities at different maturities in consultation with the Riksbank.

(Chapter 5, Section 1 of the Budget Act)

The Debt Office shall raise loans for central government to meet the Riksbank's need for borrowing in order to

- fulfil its obligations in relation to the International Monetary Fund, and
- fund the foreign currency reserve.

(Chapter 6, Section 4 and Chapter 10, Section 4 of the Sveriges Riksbank Act [2022:1568])

Guidelines process

4. The Debt Office shall submit proposed guidelines for central government debt management to the Government Offices by 1 October each year (Section 30 of the Ordinance containing Instructions for the National Debt Office).

5. The Government shall give the Riksbank the opportunity to state an opinion on the Debt Office's proposed guidelines (Chapter 5, Section 6 of the Budget Act).

6. The Government shall adopt guidelines for the Debt Office's management of the central government debt by 15 November each year (Chapter 5, Section 6 of the Budget Act).

7. The Debt Office shall submit information for the evaluation of the management of the central government debt to the Government by 22 February each year (Section 30 of the Ordinance containing Instructions for the National Debt Office).

8. The Government shall evaluate the management of the central government debt every two years. The evaluation shall be presented to the Riksdag by 25 April (Chapter 5, Section 7 of the Budget Act).

9. The Debt Office shall adopt principles for the implementation of the guidelines for central government debt management adopted by the Government (Section 41 of the Ordinance containing Instructions for the National Debt Office).

10. The Debt Office is to adopt internal guidelines based on the Government's guidelines. These decisions are to concern the use of the mandate for position taking, the term to maturity of individual debt types, the currency distribution of the foreign currency debt, and principles for market support and debt maintenance.

Cost and risk

11. The trade-off between expected cost and risk is to be made primarily through the choice of the composition and term to maturity of the central government debt.

12. The main measure of cost is to be the average issue yield. The cost is to be calculated using the valuation principle of amortised cost taking accrued inflation and exchange rate changes into account.

13. The main measure of risk is to be the variation of the average issue yield.

14. The Debt Office is to take account of refinancing risks in the management of the central government debt, including by issuing instruments with at least ten years to maturity.

15. **Proposed new wording:** Borrowing is to be conducted in a way that ensures a broad investor base and diversification in a range of funding currencies in order to maintain good borrowing preparedness.

    In order to contribute to maintaining good borrowing preparedness, the Debt Office may take positions in foreign currency. Positions may only be taken using standardised derivative instruments in potential funding currencies and not refer to the Swedish fixed income market or the krona exchange rate. Positions shall be valued at market price. Risk shall be measured as daily Value-at-Risk (VaR) at a 95 per cent probability and an appropriate risk level shall be adopted by the Debt Office.

    Present wording: Borrowing is to be conducted in a way that ensures a broad investor base and diversification in a range of funding currencies in order to maintain good borrowing preparedness.

16. The Debt Office is to contribute, through its market support and debt maintenance, to the effective functioning of the government securities market in order to achieve the objective of long-term cost minimisation while taking account of risk.

17. Positions are not to be included when calculating debt composition and term to maturity.

18. **Point is removed:** When taking positions, market values are to be used as the measure of the costs and risks in the management of the debt.

Composition of central government debt

18. **New point:** The central government debt shall consist mainly of nominal krona debt.

19. The outstanding stock of inflation-linked krona debt is to be gradually reduced. The debt type is to be calculated as a nominal amount excluding accrued inflation compensation. At the end of 2029, the inflation-linked debt is to reach a target level of approximately SEK 80 billion.

20. **Proposed new wording:** The target value for the foreign currency exposure of the central government debt shall be zero. The foreign currency exposure may, however, vary as a result of the Debt Office making currency exchanges.

    Present wording: The foreign currency exposure of the central government debt is to be gradually phased out and attain the target value of zero as of 2027. The foreign currency exposure may, however, vary as a result of the Debt Office making currency exchanges in accordance with point 33.

21. **Point is removed:** In addition to inflation-linked krona debt and foreign currency debt, the central government debt is to consist of nominal krona debt.

Term to maturity of central government debt

21. **Renumbered from 22, proposed new wording:** The target value for the term to maturity of the central government debt shall be 4.75 years with a deviation interval of ± 1 year.

    Present wording of point 22: The term to maturity of the central government debt is to be between 3.5 and 6 years.

22. **Renumbered from 23, proposed new wording:** The Debt Office is to determine a term-to-maturity interval for the nominal krona debt and the inflation-linked krona debt.

    Present wording of point 23: The Debt Office is to determine a term-to-maturity interval for the nominal krona debt, the inflation-linked krona debt, and the foreign currency debt.

23. **Renumbered from 24, proposed new wording:** The term to maturity of the central government debt may deviate temporarily from the deviation interval stated in point 21.

    Present wording of point 24: The term to maturity of the central government debt may deviate temporarily from the maturity interval stated in point 22.

24. **Renumbered from 25:** Term to maturity is to be measured as average time to refixing.

Heading is removed: Position taking

25. **Point is removed:** 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, or to reduce the risks for the central government debt while taking account of cost, 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 derivative instruments that are also potentially a borrowing currency in the context of debt management.

26. **Point is removed:** Positions in foreign currency are limited to SEK 300 million, measured as daily Value-at-Risk at a 95 per cent probability.

The Debt Office shall decide how much of this scope may be used at most in day-to-day debt management.

27. **Point is removed:** Positions in the krona exchange rate are limited to a maximum of SEK 7.5 billion. When the positions are built up or phased out, 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 its day-to-day debt management in connection with exchanges between the krona and other currencies. This volume is to be of limited size, and the positions do not need to be announced in advance.

Borrowing to meet need for government loans

25. **Renumbered from 29:** The possibility of raising loans to meet the need for government loans under Chapter 5, section 1 of the Budget Act may only be used if necessary in the event of a threat 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.

26. **Renumbered from 30:** Investment of funds raised through loans to meet the need for government loans should be guided by the principles set out in the Preventive Government Support to Credit Institutions Act (2015:1017) and concerning the Stability Fund.

Management of funds, etc.

27. **Renumbered from 31:** The Debt Office shall place its funds, to the extent that they are not needed for outgoing 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. Investments may be made abroad and in foreign currency (section 22 of the Ordinance containing Instructions for the National Debt Office).

28. **Renumbered from 32:** The agency shall cover the deficits that occur in the government central account (section 24 of the Ordinance containing Instructions for the National Debt Office).

29. **Renumbered from 33:** The agency's management of exchanges between Swedish and foreign currency (currency exchanges) is to be predictable and transparent (section 23 of the Ordinance containing Instructions for the National Debt Office).

Consultation and collaboration

30. **Renumbered from 34:** The Debt Office shall consult with the Riksbank on matters concerning the components of its borrowing operations that may be assumed to be of significant importance for monetary policy (section 29 of the Ordinance containing Instructions for the National Debt Office).

31. **Renumbered from 35:** The Debt Office shall collaborate with the National Financial Management Authority and the National Institute of Economic Research on matters concerning the Debt Office's forecasts of the central government borrowing requirement (section 28 of the Ordinance containing Instructions for the National Debt Office).

32. **Renumbered from 36:** The Debt Office should obtain the Riksbank's views on how the funds borrowed to meet the need for central government loans are to be invested.

Evaluation

33. **Renumbered from 37:** Evaluation of the management of the central government debt is to be performed in qualitative terms in light of the knowledge available at the time of the decision. The evaluation is also essentially to include quantitative measures. The evaluation is to cover five-year periods.

    The evaluation shall be based on the Debt Office's analysis in the proposed guidelines and its documentation for, and the Agency for Financial and Public Management's evaluation of, central government borrowings and debt management.

    In the Debt Office's proposed guidelines, it shall also be made clear how the proposed changes to the guidelines are to be evaluated. The Debt Office is also to analyse how composition and term to maturity have developed. Analytical approaches should be selected, maintained or replaced in respect of continuity over time.

34. **Renumbered from 38:** The Government's decision on guidelines for central government debt management, not least the guidelines for debt composition and term to maturity, shall be evaluated according to the objective of central government debt management.

35. **Renumbered from 39:** The Debt Office's decisions on operational management of central government borrowing are to be evaluated according to the objective of central government debt management and the Government's guidelines for the debt's composition (points 18–20), the debt's term to maturity (point 21), refinancing risks (point 14), borrowing preparedness (point 15), and market support and debt maintenance (point 16).

36. **Renumbered from 40, proposed new wording:** Gains and losses from positions taken to contribute to borrowing preparedness shall be continually recorded, and evaluation shall be in terms of market value.

    Present wording of point 40: Gains and losses in a given position-taking mandate are to be recorded continuously and evaluated in terms of market values.

37. **Renumbered from 41, proposed new wording:** The phasing out of the foreign currency exposure of the central government debt is to be evaluated in relation to a steady pace of reduction over the 2023–2026 period. The fact that the evaluation is conducted in relation to a steady pace of reduction is not a determinant of the actual reduction pace on which the Debt Office decides. The evaluation is to follow the same principles that apply for positions (point 36). Only transactions that are carried out for the purposes of phasing out the foreign currency exposure of the central government debt are to be included in the evaluation.

    Present wording of point 41: The phasing out of the foreign currency exposure of the central government debt is to be evaluated in relation to a steady pace of reduction over the 2023–2026 period. The fact that the evaluation is conducted in relation to a steady pace of reduction is not a determinant of the actual reduction pace on which the Debt Office decides. The evaluation is to follow the same principles that apply for positions within the position-taking mandate (point 36). Only transactions that are carried out for the purposes of phasing out the foreign currency exposure of the central government debt are to be included in the evaluation.

Conditions for debt management

The size of the central government debt is an important consideration in how it should be managed. The scenario here indicates a sustained increase in the central government debt, which will serve as input for the analyses presented in the following chapters. Other factors that have a bearing on the conduct of debt management are those that influence the level of additional return required by investors, in the form of liquidity and maturity premia, in order to buy different types of government securities.

The objective of central government debt management is to minimise long-term cost while taking account of risk. In the guidelines, a trade-off between cost and risk is determined based on long-term structural factors. One such factor is the size of the central government debt, the development of which has a bearing both on how the Government's guidelines and the Debt Office's borrowing strategies are devised. The decision on the term to maturity and the composition of the debt is based on a trade-off between cost and risk, and that trade-off can be affected both by the size of the debt and how fast it is expected to increase or decrease.

Another important input in the choice of term to maturity is the term premium, which we describe below as still slightly positive. Liquidity in the government securities market is also an important factor to consider in debt management, as poor liquidity causes higher liquidity premia and thus higher costs. As shown below, market liquidity has improved as debt has grown, at the same time as the Riksbank has gone from buying to selling government securities.

Scenario indicates growing central government debt ahead

The Debt Office calculates the scenario for the development of central government debt up to 2030 based on a two-part analysis. The first two years are based on the forecast in the Debt Office's latest Central Government Borrowing Report (2026:1). For the years 2028–2030, the calculations are based primarily on the National Institute of Economic Research's latest Fiscal Sustainability Report (2026) and their projection of how public finances are affected by defence spending, given that active budget-strengthening measures are taken.

Defence expansion and Ukraine support have a major impact

The first years of the scenario are shaped by the Budget Bill for 2026, in particular the loan-financed expansion of defence and support for Ukraine. Beyond 2027, the scenario is determined largely by the borrowing facility of SEK 300 billion for defence expansion, as well as the pace at which defence spending is gradually

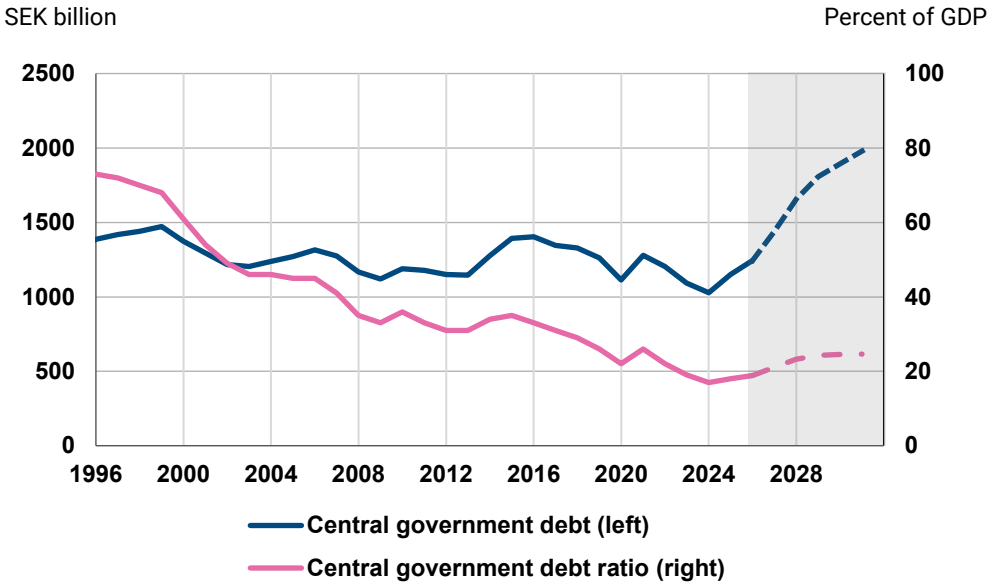
shifted to being funded through budget-enhancing measures rather than borrowings. In the National Institute of Economic Research's projection, the transition will be gradual so that public sector net lending will be in balance in 2035, in line with the published parliamentary agreement on the fiscal policy framework. However, the increase occurs mainly at the start of the period, and already in 2030 net lending will stand at around -0.5 per cent of GDP, compared with around -2 per cent in 2026.

All in all, this provides a rising path for central government debt up to 2030, regardless of choice of measure, see figure 1. Measured in kronor, the debt rises to approximately SEK 2,000 billion by 2030, while it increases to approximately 25 per cent as a share of GDP over the same horizon.

It should be emphasised that long-term scenarios are uncertain. A great deal can happen even in a short space of time, as has been particularly evident in recent years, with both a war in our immediate vicinity and a pandemic. One factor that makes this scenario relevant, however, is the broad political support for both defence expansion and support for Ukraine, which are the two items that will be the main drivers of the debt increase over the coming years. Most of the debt increase will also take place in the next few years.

It therefore appears probable that the debt measured in kronor will increase clearly in the coming years, even though economic developments could turn out both worse and better than expected, and that defence funding could proceed both faster and slower than in the scenario.

Figure 1 Central government debt, outcome and scenario



Sources: The Debt Office and Statistics Sweden.

A well-functioning market and a broader investor base

An important part of the analysis of the market's functioning and of the investor base is the ongoing increase in the volume of tradeable nominal bonds, see figure 2. Combined with a number of other factors such as regulations and yield levels, this is an important factor in the market's functioning.[1]

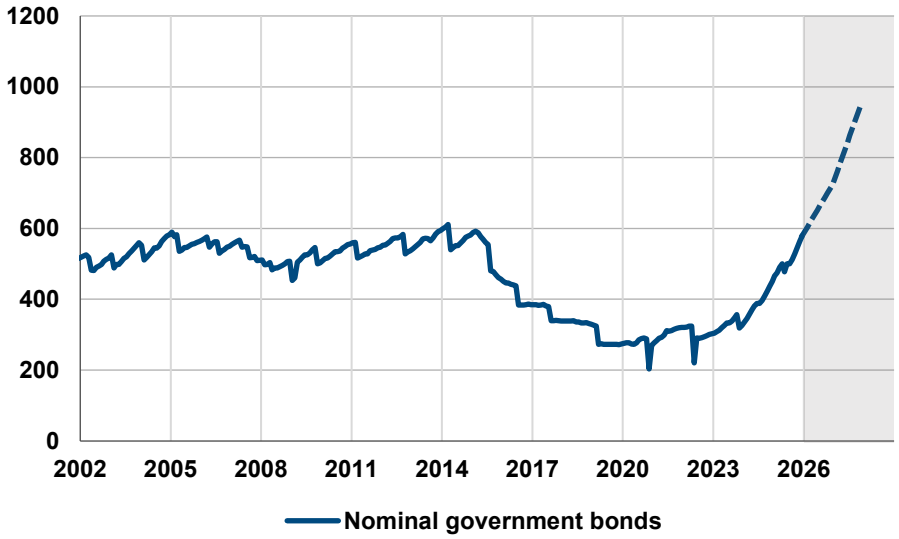
For many years until 2015, the tradeable volume was relatively constant, mainly because total debt varied relatively little. In connection with the Riksbank, from 2015, gradually purchasing around half of the volume of outstanding nominal bonds over several years, the tradeable volume fell from around SEK 600 billion to around SEK 300 billion. This equals a reduced share from 15 to 5 per cent of GDP. As the Riksbank started selling the bonds, the tradeable volume increased again. In recent years, this has occurred at the same time as the Debt Office has issued increasingly large volumes of bonds due to deficits in the central government budget.

However, a larger budget deficit due to defence expansion and support for Ukraine, and increased bond issuance volumes, have not made Swedish government securities more expensive in relation to other comparable countries. From the beginning of 2025 to the summer of 2026, the Swedish ten-year yield has risen less than that of Germany, causing a more negative interest rate differential between the countries.

[1] For a more detailed review, see for example the report of the Financial Stability Committee (2023), "*Obligationsmarknaden – en kartläggning*" (The bond market – an analysis).

Figure 2 Outstanding volume nominal bonds (not green) excluding Riksbank holdings

SEK billion



Note: The dotted line showing forecast is interpolated between observations for each end of year.

Sources: The Debt Office and Statistics Sweden.

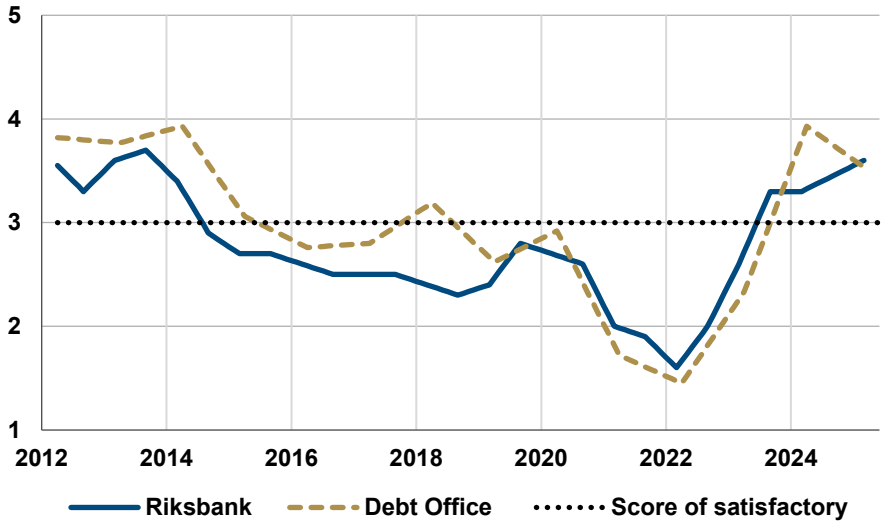
Although the tradeable volume of bonds is not the only factor that determines how well the market functions, similarities can be seen with how market participants have judged liquidity over time, see figure 3 .

The years when the Riksbank's holdings were at their highest coincided with an unsatisfactory liquidity rating, although survey responses point to a clear improvement in recent years. In their responses, participants highlight the increased volume of bonds as an important contributing factor. Although it is difficult to both assess and measure the effect, these developments have probably led to a drop in the liquidity premium (the additional compensation in the form of a higher yield sought by investors when they deem a financial instrument to be more difficult to buy and sell). Given the central government debt scenario, increased supply could continue to support market liquidity.

The investor base has also been affected by the Riksbank's actions, particularly foreign investors – a factor we have highlighted in our proposed guidelines from previous years. This has continued over the past year, and the Financial Market Statistics show that the foreign investor group now owns approximately 30 per cent of total debt. Swedish banks, as well as insurance and pension companies have also continued to increase their shares.

Figure 3 Perceived liquidity in the secondary market for nominal government bonds, surveys

Score



Sources: The Debt Office and the Riksbank.

Term premium remains slightly positive

A risk for which investors in government securities require additional return is term-to-maturity risk. For the central government, loans with longer maturities entail reduced risk in terms of cost variation for central government debt. At the same time, term premia have historically been positive, leading to the Debt Office having paid an expected additional cost for borrowing in longer maturities.

To calculate the Swedish term premium, the Debt Office uses what is known as the ACM model developed by the Federal Reserve, see figure 4.[2] The model's calculations are based on data for swap rates with maturities of between one and ten years from August 1995 to June 2026. When the term premium is positive, the Debt Office is expected to pay a higher cost for borrowing in longer maturities.

An update of these calculations shows that the term premium over the past year can be described as essentially unchanged, with the average having been just over 0.5 per cent. It is therefore distinctly higher than the negative values seen during the years of low interest rates, but at the same time clearly lower than prior to the financial crisis of 2008.

[2] Tobias Adrian, Richard K. Crump and Emanuel Moench, "Pricing the Term Structure with Linear Regressions", Journal of Financial Economics 110 (1), October 2013, pp 110–138

Figure 4 Swedish ten-year term premium

Per cent

Note: The term premium, which is presented on a monthly basis, applies to Swedish ten-year swap rates. The period extends from August 1995 to June 2026.

Source: The Debt Office.

Debt composition and term to maturity

The Debt Office proposes that steering of the central government debt's term to maturity be clarified in the guidelines. The proposal entails replacing the former steering interval with a target value and a deviation interval that is slightly narrower than previously. This provides clearer term-to-maturity steering, although the Debt Office already aims for the proposed target value in its operational management. We do not propose any changes to the target values for debt composition.

The Government determines the overall balance between cost and risk in central government debt management by deciding on target values for the composition and term to maturity of the debt, following a proposal by the Debt Office. As a recurring section of the proposed guidelines, we present an analysis of the expected cost and risk of the central government debt at different terms to maturity and compositions. A detailed analytical basis enables assessing whether choice of composition and term to maturity is in accordance with the objective of minimising costs taking account of risk.

In terms of the central government debt composition, the Debt Office suggested in the proposed guidelines for 2025 that outstanding inflation-linked debt should decrease. In this year's proposed guidelines, we update the previous analysis of whether inflation-linked bonds can reduce cost or risk in central government debt. The updated analysis does not change the previous decision. We therefore propose an unchanged target value for inflation-linked debt.

According to another previous decision, the strategic currency exposure in the debt is to be phased out and attain the target value of zero as of 2027. This means that from next year, the central government debt will consist primarily of nominal and inflation-linked debt in Swedish kronor.

Regarding term to maturity of the central government debt, the Debt Office proposes altered steering from solely an interval to a target value with a deviation interval. In last year's proposed guidelines, the Debt Office clarified to the Government that, in the borrowing plan, we aim for the middle of the interval, which corresponds to 4.75 years. Steering towards that specific target value is now formalised and is included in guideline point 21.

The Debt Office justifies the target value and deviation interval each individually. We justify the target value by analysing the significance of term to maturity for the trade-off between cost and risk in the long term. The deviation interval, on the other hand, shall primarily address variations in borrowing requirements and forecasting

uncertainties in the short term. Our analysis justifies a deviation interval of ± 1.0 year, which is slightly narrower than the previous interval.

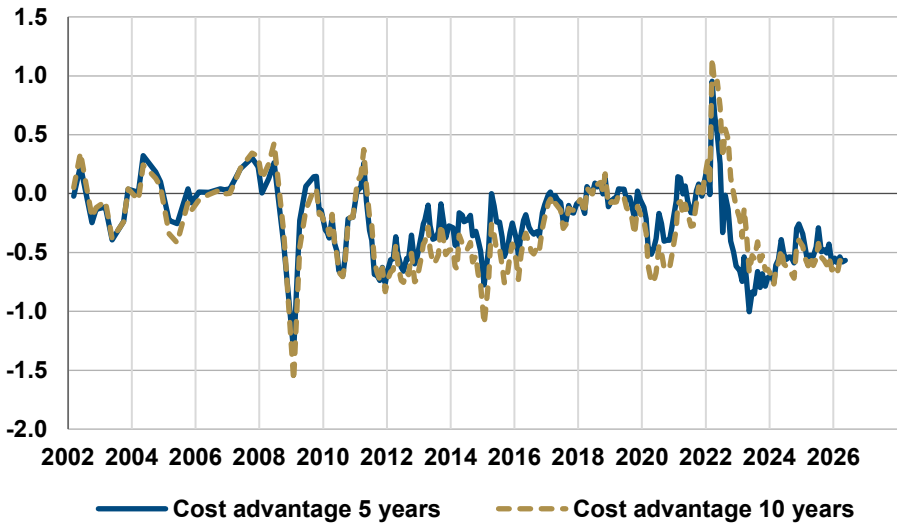
Unchanged target values for composition

In previous proposed guidelines, the Debt Office has found that there is no persistent cost advantage for inflation-linked borrowing compared to nominal borrowing. As we update the analysis in this year's proposed guidelines, we draw the same conclusion.

The analysis is based on what is known as the break-even inflation rate (BEI), which is calculated by comparing the yield on a nominal government bond with the yield on an inflation-linked bond with the same maturity. We then measure the cost advantage for inflation-linked bonds as the difference between BEI and measures of inflation expectations over the same period. The measured cost advantage thus indicates whether any difference in borrowing costs can be expected from a forward-looking perspective (known as the ex-ante perspective).

Figure 5 Expected savings from borrowing in inflation-linked compared with nominal bonds

Per cent



Note: "Cost advantage 5 years" and "Cost advantage 10 years" show the expected savings for inflation-linked borrowing over five- and ten-year periods, respectively. A positive value means that inflation-linked borrowing can be expected to be cheaper than nominal borrowing. The cost advantage over five years is based on inflation expectations from surveys conducted by Origo Group on behalf of the Riksbank. To calculate the cost advantage over ten years, we extrapolate inflation expectations from five to ten years based on an annual autocorrelation. For more information on the extrapolation, see Andrey Ermolov (2021).[3] The series in the chart show figures at the time of publication of inflation expectations (quarterly through October 2006, and monthly thereafter). The period extends from March 2002 to May 2026.

[3] Andrey Ermolov (2021), When and Where Is It Cheaper to Issue Inflation-Linked Debt?. The Review of Asset Pricing Studies 11, p. 610–65.

Sources: The Debt Office and Origo Group.

Figure 5 shows that expected savings were negative in 2022 and have since been around -0.5 per cent, both on a five- and ten-year horizon. This progression has been driven primarily by a rapid decline in BEI, while inflation expectations have been more stable.

To illustrate how inflation-linked debt affects both cost and risk, we compare two hypothetical government debt portfolios with each other, with one portfolio consisting of a larger proportion of inflation-linked debt.

We construct a hypothetical "Target value" portfolio, which broadly represents the Debt Office's current strategy in terms of distribution between long and short maturities. The portfolio's maturity is 4.75 years, which is the midpoint of the current maturity interval, which is also the proposed target value. We achieve the portfolio's composition through issuing a large proportion of ten-year bonds and a smaller proportion of bonds with maturities of five and two years. It also includes instruments with a maturity of one year (corresponding to treasury bills and other short-term borrowing) and inflation-linked bonds. The analysis excludes ultra-long bonds. However, account is taken of their impact on the maturity of total debt by designing the hypothetical portfolio with an average maturity of 3.75 years, which would be equivalent to 4.75 years if ultra-long borrowing were included.[4] We then construct a new hypothetical "Inflation-linked" portfolio. The "Inflation-linked" and the "Target value" portfolios have the same maturity and are therefore identical except that the share of inflation-linked bonds is higher in the former. The composition of the two portfolios is shown in table 1 below.

Table 1 Composition of hypothetical portfolios

Per cent and year

Portfolio	Nom 1 year	Nom 2 years	Nom 5 years	Nom 10 years	Inflation-linked 10 years	Maturity (model)	Maturity (total)
Target value	21.2%	3%	7%	58.8%	10%	3.75	4.75
Inflation-linked	21.2%	3%	7%	44.8%	24%	3.75	4.75

[4] The Debt Office has three ultra-long bonds outstanding, which are excluded in the simulation analysis, partly because they represent a relatively small share of the debt in terms of nominal amount, and partly because they are not part of the regular borrowing strategy. Since they are already present in the portfolio, they do not contribute to any cost variation over the time horizon analysed here. If instead we were to issue new instruments in the ultra-long bonds and at the same time increase short-term borrowing to keep term to maturity constant, interest rate refixing risk would increase. A condition of the analysis is that the bonds exist in the portfolio but that no new volumes are issued.

Note: The rows show hypothetical portfolios that are achieved through issuing one-year, two-year, five-year and ten-year nominal bonds as well as ten-year inflation-linked bonds. Maturity is interest rate refixing period and expressed in years. Maturity (model) is maturity for the hypothetical portfolios made up of different combinations of bonds with a maturity of up to ten years. The Debt Office also currently has three ultra-long bonds, the maturities of which were 25, 30, and 50 years at introduction. If we add the ultra-long bonds, the maturity lengthens as shown in the Maturity (total) column. The target value portfolio has, for example, a maturity of 3.75 years according to the model and a corresponding 4.75 years when taking the ultra-long bonds into account.

Source: The Debt Office.

We then simulate 10,000 different paths for interest rates and inflation ten years ahead starting at the end of 2025. The analysis is an update from the previous year, and for further details on how we model interest rates and inflation we refer to the proposed guidelines for 2026 or the focus report “Framework for analysing cost and risk for central government debt – A simulation analysis”.

Using simulated interest rates and inflation, we calculate cost and risk for each portfolio. We assume that the central government debt is in a state of equilibrium, with the size of the debt being constant. In reality, the Debt Office does not borrow evenly over time, but this simplified assumption shows how choice of portfolio affects cost and risk without us having to make any assumptions about future central government debt. The simplified model does not, for example, capture the effect of the central government debt increasing in the manner described in the long-term scenario. We will return to the effect of an increased borrowing requirement and greater debt further on in the analysis.

Table 2 Cost and risk for hypothetical portfolios with different compositions

Per cent of central government debt

Cost	Target value	Inflation-linked
Average interest cost	1.89	1.89
Additional interest cost in unfavourable scenarios (measure of risk)	1.15	1.26
Total interest cost in unfavourable scenarios	3.04	3.15

Note: The average annual cost is based on 10,000 simulations between 2026 and 2035. Bonds with a maturity greater than 10 years are excluded in the table. Unfavourable scenarios refer to the 500 simulations with the highest cost. In these scenarios, the cost exceeds the 95th percentile of 10,000 simulations. The second row captures risk as cost variation and shows an additional cost in the simulated scenarios with high cost compared with the cost on average. The third row – the sum of the first and second rows – shows the cost in unfavourable scenarios.

Source: The Debt Office.

Table 2 shows that the “Inflation-linked” portfolio gives a higher cost in unfavourable scenarios than that provided by the “Target value” portfolio, while the average cost is the same for both portfolios. Inflation-linked bonds appear to be riskier in the portfolio simulations, but not more expensive on average, as they did when we measured expected cost advantage (see figure 5). This is because the

time series model that we use in the simulations predicts that inflation will be low in the next few years, while inflation expectations according to surveys show a faster decline towards 2 per cent. The updated analysis of debt composition does not prompt any changes to the guidelines.

Target value for term to maturity proposed to be 4.75 years

The Debt Office clarified in last year's proposed guidelines that we aim for the middle of the current maturity interval, which corresponds to 4.75 years. This year we propose altered steering from solely an interval to a target value with a deviation interval. The introduction of a target value provides a clearer link between the Government's maturity guidelines and our planning of borrowings. Our overall assessment which – as in previous years – is based on a trade-off between cost and risk, is that the target value for term to maturity should be 4.75 years

To analyse choice of maturity, we construct three hypothetical portfolios with different terms to maturity. The exact distribution is shown in table 3 and cost estimates in table 4. A short term to maturity has historically led to a lower average cost than a longer term to maturity. This is because short-term interest rates are usually lower than long-term interest rates over the same period. At the same time, a short maturity is associated with higher risk, measured as variation in interest cost, since the interest rate on the debt is refixed more frequently and short rates are usually more volatile than long rates.

Table 3 Composition of hypothetical portfolios with different maturities

Per cent and year

	Nom 1 year	Nom 2 years	Nom 5 years	Nom 10 years	Inflation -linked 10 years	Maturity (model)	Maturity (total)
Short	39.2%	3.0%	7.0%	40.8%	10.0%	2.94	3.99
Target value	21.2%	3.0%	7.0%	58.8%	10.0%	3.75	4.75
Long	3.7%	3.0%	7.0%	76.3%	10.0%	4.54	5.49

Note: The rows show hypothetical portfolios that are achieved through issuing one-year, two-year, five-year and ten-year nominal bonds as well as ten-year inflation-linked bonds. Maturity is interest rate refixing period and expressed in years. Maturity (model) is maturity for the hypothetical portfolios made up of different combinations of bonds with a maturity of up to ten years. The Debt Office also currently has three ultra-long bonds, the maturities of which were 25, 30, and 50 years at introduction. If we add the ultra-long bonds, the maturity lengthens as shown in the Maturity (total) column. The target value portfolio has, for example, a maturity of 3.75 years according to the model and a corresponding 4.75 years when taking the ultra-long bonds into account.

Source: The Debt Office.

Table 4 Cost and risk for hypothetical portfolios with different maturities

Per cent of central government debt

Cost	Short	Target value	Long
Average cost	1.81	1.89	1.97
Additional cost in unfavourable scenarios (measure of risk)	1.32	1.15	0.99
Total cost in unfavourable scenarios	3.13	3.04	2.96

Note: Average cost is the average annual cost based on 10,000 simulations between 2026 and 2035. Long bonds with a maturity greater than 10 years are excluded in the table. Unfavourable scenarios refer to the 500 simulations with the highest cost. In these scenarios, the cost exceeds the 95th percentile of 10,000 simulations.

Source: The Debt Office.

The results in table 4 confirm the notion that shorter maturities are associated with lower cost but higher risk. The difference between maturities is, however, small both in regard to average cost and risk (measured as additional cost in unfavourable scenarios). The difference between the “Short” and “Long” portfolios for cost and risk is approximately 0.2 and 0.3 percentage points, respectively.

The results from the portfolio simulations are consistent with the estimate of the ten-year term premium that we presented in the section on term premia. Both the ACM model that estimates the term premium and the portfolio simulations capture the expected cost difference between different maturities and show a higher expected cost on a longer maturity. What the portfolio simulations demonstrate is that a portfolio with a longer maturity also entails reduced risk.

Given the uncertainty of the model, the Debt Office’s assessment is that the differences between the alternatives are so small that they do not give reason to change the target value. Neither does the analysis of term premia. The size of the central government debt is also a factor to consider when choosing term to maturity. A larger debt brings with it higher interest cost and higher risk in the form of greater variation in interest cost (expressed in kronor). One of the conditions in this year’s proposed guidelines is a scenario in which we assess that the borrowing requirement increases. The scenario however implies that central government debt will remain low, particularly measured as a share of GDP. The progression toward greater central government debt in the scenario therefore does not justify an altered target value for the maturity.

Interest rate sensitivity increases as debt varies

The simulation analysis above assumes that the size of the central government debt is constant. Here, we study how interest rate sensitivity is affected if the debt instead grows in line with the presented scenario. While this would mean an increase in interest rate sensitivity, our assessment based on the outcome of the study is that the effect is not so great as to justify an altered target value for the maturity.

Interest rate sensitivity in central government debt management is affected partly by volatility in the interest rates, and partly by the size of loans that may be subject to new interest rates. The volume of loans that may be subject to new interest rates consists in turn of both existing loans that are maturing, and of the net borrowing requirement arising from budget deficits. While the maturity structure of existing loans is known to the Debt Office, the assessment of the central government's future budget balance is based on forecasts.

The risk that arises when existing loans mature and become subject to interest rate refixing is called refinancing risk. This risk is of lesser importance when the debt is small. Financing risk is instead linked to the risk of new borrowing to finance budget deficits. This risk is of lesser importance if the budget is in balance. As the debt is now expected to grow, it will be more important to consider both financing and refinancing risks, which the Agency for Financial and Public Management also highlights in its latest evaluation.[5]

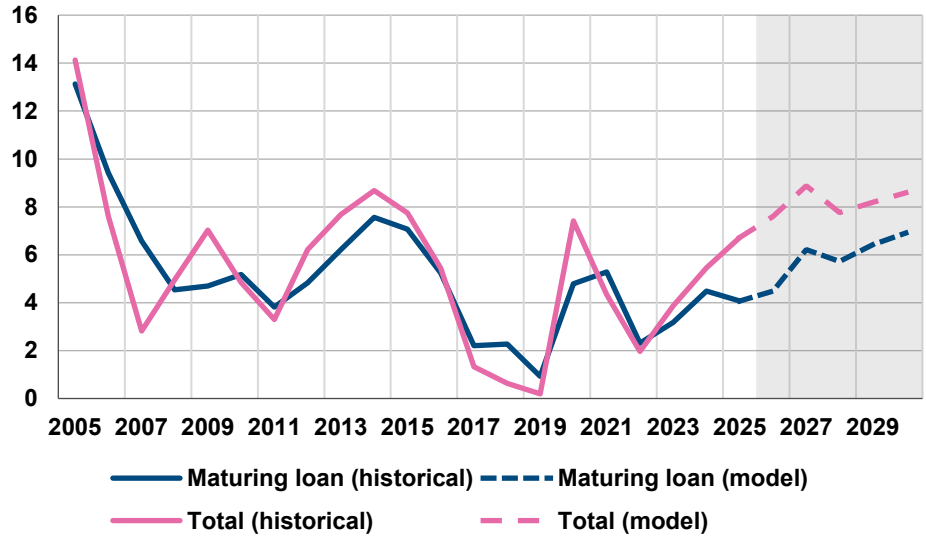
Figure 6 below shows the amount of maturing loans within one year, as a share of GDP. The chart also shows the total borrowing amount including the net borrowing requirement. Up to and including 2025, the chart shows the Debt Office's earlier forecasts and after 2025 the progression is model-based. An important assumption in the model is that the net borrowing requirement is assumed to be positive and increase ahead, which leads to the total borrowing requirement being higher than the amount arising solely from maturing loans.

We assess the total borrowing requirement to be between 7 and 9 per cent as a share of GDP going forward. This level is higher than in recent years, but in line with the level from the early 2000s.

[5] STK 2026:6, Utvärdering av statens upplåning och skuldförvaltning 2021–2025 *(Evaluation of central government borrowing and debt management 2021–2025).*

Figure 6 Progression of planned borrowing requirements for the coming year

Per cent of GDP



Note: The chart shows maturing loans within the next 12 months and the total borrowing requirement for the next 12 months, which consists of both maturity and net borrowing requirement. Both time series are expressed as a share of GDP. The frequency of the data is annual. The historical total borrowing requirement is based on the Debt Office's forecast of the net borrowing requirement and is not the actual outcome. As of 2026, values are based on a static distribution simulation model, which is described on page 26.

Source: The Debt Office.

Using a simplified calculation, we can illustrate the interest rate sensitivity generated by this borrowing requirement. A total borrowing requirement of 8 per cent of GDP means an increase in interest cost within the coming year of SEK 5.2 billion, provided that the interest rate increases by 1 percentage point and nominal GDP is SEK 6,500 billion. Although the expected rise in the borrowing requirement brings heightened interest rate sensitivity, the Debt Office does not consider that this in itself justifies an altered target value for maturity this year.

Slightly narrower deviation interval for term to maturity

In addition to the target value for term to maturity, the Debt Office proposes a deviation interval. The proposal is that the deviation interval for term to maturity be set at ±1 year, which gives thresholds of 3.75 and 5.75 years. This gives a slightly narrower interval than currently. The interval is primarily justified by a varying borrowing requirement and forecasting uncertainties.

A varying borrowing requirement causes both the total central government debt and its distribution over different maturities to change daily. The latter arises because the Debt Office does not change long-term borrowing in the short term which affects term to maturity of the central government debt. This variation would persist even if the forecasts were accurate. In addition, if the outcome deviates

from forecasts, the variation in maturity could be even greater. We also offset such deviations by adjusting short-term borrowing.

The deviation interval is to manage these variations – both variations that are within the Debt Office's control, and those that are not. An interval thus provides flexibility in the borrowing plan and is essential in enabling the Debt Office to act predictably and transparently, which is expected to lead to cost-effective management of central government debt.

Method for simulations of maturity

To quantify the deviation interval, we perform simulations. We calculate the future primary borrowing requirement based both on the long-term scenario, presented in the section on conditions, and a time series model. In the time series model, monthly fluctuations in the scenario follow historical patterns, while the long-term scenario determines the level. We make forecasts for the borrowing requirement two years ahead. Just as in reality, the forecasts also deviate from the outcome in the simulations. Deviations between forecast and outcome are based on historical forecast deviations.[6]

The next step is the borrowing plan, in which the borrowing requirement is distributed over different instruments. The method is simplified compared with the Debt Office's actual work and focuses on the most important risk factors and key components of maturity steering. In the simulations, borrowing is planned such that short-term borrowing constitutes 20 per cent of the debt at the end of the forecast horizon, while the remaining 80 per cent is long-term. New long-term borrowings are distributed over maturities of ten, five and two years. The plan is revised every six months.

We use two different methods to illustrate how maturity is affected by different trade-offs in the borrowing plan. The first method prioritises predictability and keeps the distribution between ten-, five- and two-year bonds constant.[7] The second method adjusts the weights in order to bring the maturity to the target value at the end of the forecast period. For a more detailed description of the simulation model, please refer to the appendix on page 36.

It is important to emphasise that these two methods represent ideal types. In practice, the Debt Office combines both methods and makes trade-offs between maintaining the desired maturity and acting predictably. Which method is predominant depends on the circumstances each time borrowings are planned. The simulations are primarily aimed at analysing the consequences of changes in

[6] Historical forecasting errors are calculated in relation to GDP and future forecasting errors are scaled up in relation to GDP forecasts. The forecasting errors have a standard deviation of 190 billion expressed in 2026 GDP.

[7] The constant distribution means that, over time, short-term borrowing is to account for 20 per cent of the debt. The remaining borrowing requirement is allocated to two-, five-and ten-year nominal bonds in the amount of 10, 20 and 70 per cent, respectively.

the most important parts of the strategy, rather than capturing all the trade-offs that are made in reality.[8]

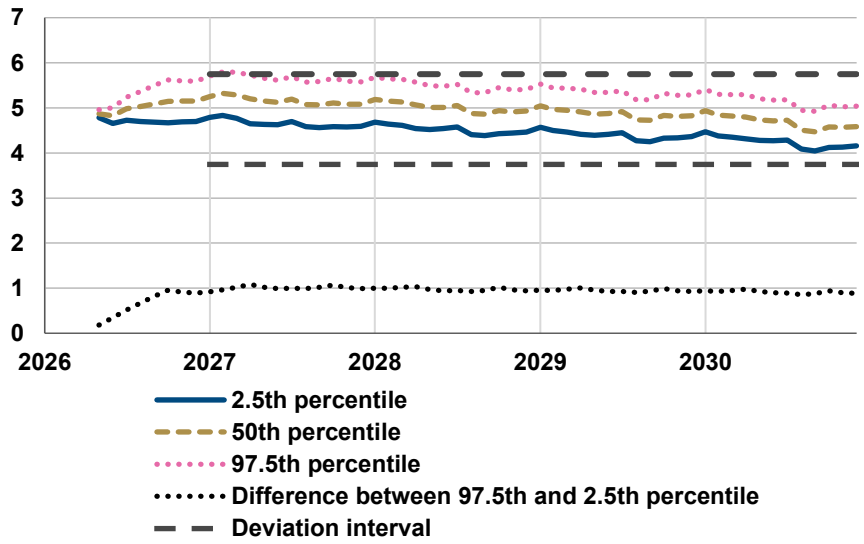
Simulation results provide support for a narrower deviation interval

As described above, we evaluate two different methods – one provides predictability in the distribution of issuance volumes for different maturities (static distribution) while the second entails a more stable term to maturity over time (variable distribution). We then justify the deviation interval by analysing how likely it is that maturity will deviate from the set thresholds for each method. These probabilities are then to be weighed against other considerations in the borrowing plan.

First, we present the simulation result for static distribution. Figure 7 shows the maturity of the 97.5th and 2.5th percentiles of all simulations given a varying borrowing requirement and forecasting uncertainties. This means that maturity is not expected to fall outside these percentiles with a 95 per cent probability. Term to maturity increases initially and then decreases. The initial increase is due to a rising borrowing requirement and to the borrowing method using static distribution in which we do not adjust the weights. In the 97.5th percentile, maturity falls above the limit of the current interval at the beginning of the period.

Figure 7 Maturity progression for static distribution with a deviation interval

Year



Note: ATR at the end of the month for the period from May 2026 to December 2030.

Source: The Debt Office.

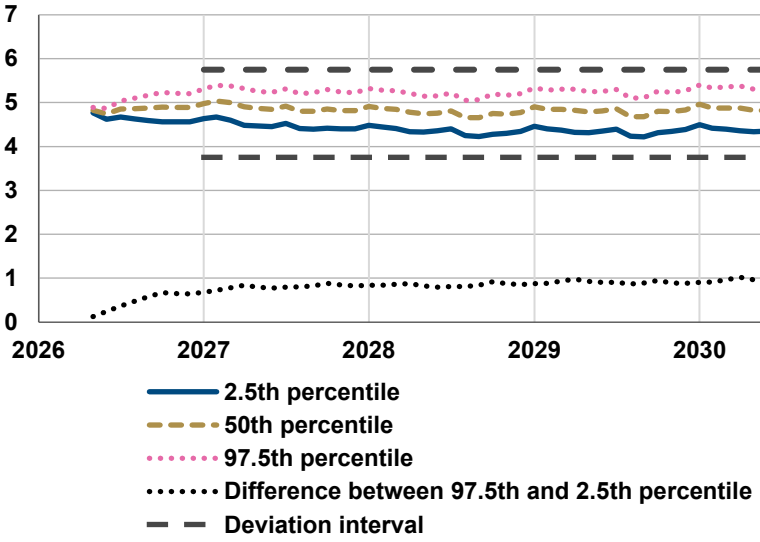
Figure 8 shows the maturity for the variable distribution. Unlike the borrowing method with constant distribution, both the 97.5th and 2.5th percentile fall within

[8] A more detailed description of the Debt Office's borrowing strategy is provided in its borrowing strategy documents. https://www.riksgalden.se/en/our-operations/central-government-borrowing/strategy-and-policy/borrowing-strategy/

the current interval over the entire period. However, this borrowing method means that the distribution of issuance volumes varies and that the Debt Office will act less predictably. The method justifies, as expected, a narrower deviation interval.

Figure 8 Maturity progression for a variable distribution with a deviation interval

Year



Note: ATR at the end of the month for the period from May 2026 to December 2030.

Source: The Debt Office.

Table 5 Probability of term to maturity falling outside the deviation interval

Per cent

Deviation interval	Borrowing method	2027	2028	2029	2030
±0.75 years	static	26	12	4	3
	variable	1	0	1	2
±1 year	static	5	2	0	0
	variable	0	0	0	0
±1.25 years	static	0	0	0	0
	variable	0	0	0	0

Note: All deviation intervals are centred around the 4.75-year target value. Probabilities are expressed as a percentage and rounded to the nearest integer.

Source: The Debt Office.

Table 5 shows that the probability of the maturity falling outside the thresholds is low, irrespective of interval width for the borrowing method with variable distribution. For the borrowing method with static distribution, the probability of deviations is high in the narrowest interval. The probability is close to zero for the widest interval. In the middle interval, the probability of deviations amounts to a maximum of 5 per cent, which we consider to be an acceptable risk. The middle interval provides scope for the Debt Office to act predictably while the probability of deviations is low. Based on these figures, we propose a deviation interval of ± 1 year, which corresponds to thresholds of between 3.75 and 5.75 years.

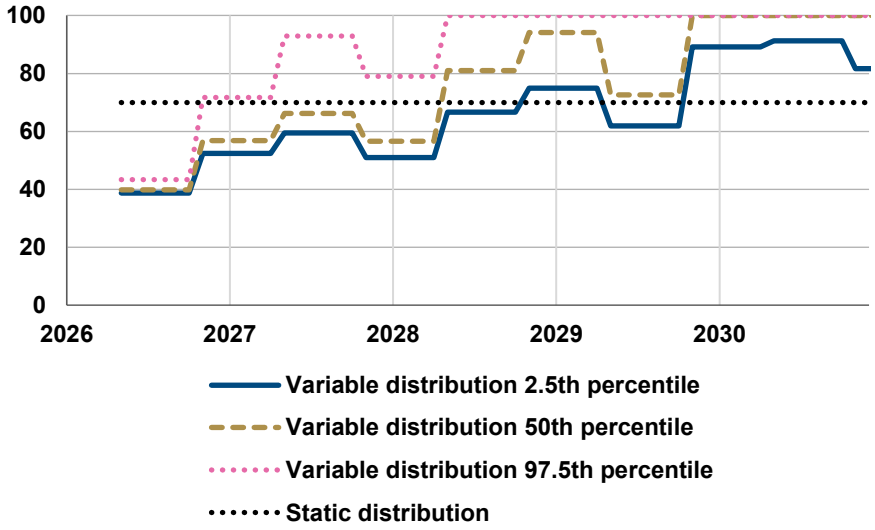
A deviation interval provides scope to act predictably

The borrowing method with variable distribution keeps the term to maturity closer to the target value, although this requires a greater adjustment in the distribution between the different maturities. Figure 9 shows that the proportion of ten-year bonds varies from approximately 40 per cent initially to 100 per cent in the final stage.

As a rule, it is not desirable for all borrowings to be issued in ten-year bonds, as this provides no scope at all for any borrowing in two- and five-year bonds. By regularly issuing two- and five-year bonds, the Debt Office contributes to maintaining a well-priced yield curve and a liquid secondary market. This makes for lower liquidity premia. If the Debt Office did not issue these bonds over time, this could lead to higher liquidity premia and thus higher borrowing costs for the central government. Although term to maturity can be kept closer to the target value with the variable distribution, it is however not desirable to adjust the distribution in the borrowings excessively.

Figure 9 Weights for ten-year bonds in variable and static distribution

Per cent



Note: The chart shows weights for ten-year bonds in the simulations. For static distribution, allocation is kept constant at 70 per cent. For variable distribution, the chart shows the 2.5th, 50th and 97.5th percentiles of the simulations on each occasion planning borrowings, i.e. every six months.

Source: The Debt Office.

The static distribution method always allocates 70 per cent to ten-year bonds, 20 per cent to five-year bonds, and 10 per cent to two-year bonds. This method prioritises predictability and gives the Debt Office limited scope to steer term to maturity.

All in all, the Debt Office proposes altered maturity steering to a target value of 4.75 years with a deviation interval of ± 1 year, which gives thresholds of 3.75 and 5.75 years. The proposed deviation interval is thus narrower than the former interval.

Our assessment is that the interval is wide enough for the Debt Office to continue to act transparently and predictably in the borrowing plan, in accordance with the stated borrowing strategies. It is hoped that investors will buy government securities without requiring additional return due to bond supplying uncertainty. Ultimately, this results in lower borrowing costs for the central government.

Altered position-taking mandates

The Debt Office proposes that the guidelines in the section on position taking be removed. Since the strategic currency exposure of the central government debt will be zero going forward, taking positions in order to reduce the cost of the debt is no longer justifiable. However, the Debt Office should have a more limited mandate to regularly take positions in foreign currencies and interest rates for borrowing preparedness.

In the strategic, long-term management of central government debt, the Debt Office aims for the target values for debt composition and term to maturity. The debt portfolio is compiled to provide the best balance between cost and risk over time. In addition, the Debt Office may, within given risk mandates, decide to temporarily tactically deviate from the long-term strategy; i.e. take positions.

Position-taking means that the Debt Office attempts to take advantage of exchange rates or foreign market interest rates progressing in a certain direction. If progression is as hoped, this will result in a gain (cost saving), while if it heads the other way, the result will instead be a loss (additional cost). However, it is generally difficult to forecast exchange rates or market rates, both in the short and long term, as they are affected by numerous different factors. This means that, during different time periods, positions can result in either substantial cost savings or substantial additional cost.

The Debt Office has previously argued that position-taking can reduce the cost of central government debt in two different ways. One is that described above – attempting to take advantage of market fluctuations. The second is an increased market focus that can contribute to operational debt management. This involves maintaining system support and expertise in instruments, risk management and markets that are needed when the Debt Office raises loans in foreign currency. At the same time, positions involve taking on risk, and the guidelines have therefore been aimed at limiting the losses that can arise from position taking.

The Government's guidelines for central government debt management thus set out that the Debt Office may take positions in foreign currencies and interest rates as well as in the krona exchange rate. The definition of positions in the guidelines is transactions that are not justified by the underlying borrowing or investment need, but that are aimed at reducing the cost or risk of central government debt. The Debt Office may only take positions using derivative instruments and only in well-functioning markets where it is potentially possible to borrow within the debt management framework. Positions are evaluated separately and may not be taken in the Swedish fixed income market. Furthermore, the guidelines specify a risk limit of SEK 300 million measured as daily Value-at-Risk (VaR) at a 95 per cent

probability for positions in foreign currency and maximum exposure equalling SEK 7.5 billion for positions in the krona exchange rate.

In this year's proposed guidelines, the Debt Office suggests that the guidelines on taking positions be removed. Instead, we propose adding to the guideline on borrowing preparedness, stating that the Debt Office may take positions in foreign currencies and interest rates to maintain good borrowing preparedness.

Reduced mandate for positions in foreign currencies

The Debt Office proposes that the guidelines on taking positions in foreign currencies and interest rates be removed (points 26–27). Instead, we suggest an addendum on more restrictive position-taking in the guideline setting out that good borrowing preparedness in several currencies shall be maintained (point 15). The purpose of the reduced position-taking mandate going forward will then be preparedness rather than cost minimisation.

The Debt Office has been actively taking positions in its management of foreign currency debt since 1992. For this purpose, a target value portfolio was adopted by the board. The Debt Office took positions by means of deviating, within specified limits, from the debt composition, in terms of currency and maturity, provided by the target value portfolio. By measuring the outcome (in market value terms) of these deviations, we could also use the target value portfolio as a basis for evaluating position taking.

In the Debt Office's proposed guidelines for 2007, we suggested a new percentage control system, whereby the Government would set target values for each debt type. The transition to percentage control also prompted a review of how steering position-taking and the mandate should be devised. The guidelines subsequently introduced Value-at-Risk (VaR) for steering risk associated with position-taking in foreign currency.

The original design of the position-taking was thus based on a composition of the central government debt in which strategic currency exposure represented a substantial proportion. The conditions have subsequently changed and foreign currency borrowing is now only a minor part of borrowings and is always hedged. In line with the altered conditions, the Debt Office has also reduced the scope of its positioning activities. We therefore no longer deem extensive position-taking in foreign currency to be relevant.

However, such position-taking still helps to maintain expertise and knowledge about instruments, risk management and markets, and also system support for instruments and risk management. This is useful in day-to-day debt management, in which managing interest-rate and currency risk is important in areas such as issuing foreign currency bonds, short-term borrowing through Euro Commercial Paper (ECP) and managing currency exposures.

Current risk limits are not utilised

Table 6 shows the VaR limits for position taking as set out in the Government's guidelines. The limits are then further limited in the Debt Office's Finance Policy, in which they amount to daily VaR of SEK 220 million. Out of the adopted risk mandate, the Director General of the Debt Office has delegated SEK 16.5 million in daily VaR to the operational activities. Risk management is based on limits that are set according to daily VaR at a 95 per cent probability. To gain a better understanding of the implications of these limits, the table also shows monthly and annual values.

The table shows that full utilisation of the limit, of SEK 300 million, which is allocated in the Government's guidelines, implies that one year out of twenty may incur a loss of SEK 4.8 billion or more. Although this may seem substantial given current conditions, it should be seen in proportion to the original conditions. The strategic foreign currency exposure was SEK 435 billion in 1998. This is equivalent – if account is only taken of interest-rate risk – to VaR of approximately SEK 1,200 million.[9] The allocated VaR limit thus constituted a limited part of the risk exposure compared to the historical size of total foreign currency exposure.

Table 6 VaR limits for position-taking in foreign currency

SEK million

Frequency	Government guidelines	The Board of the Debt Office: Finance policy	Debt Office Director General
VaR (day)	300	220	16.5
VaR (month)	1,375	1,008	76
VaR (year)	4,762	3,492	262

Note: The calculations are based on expected return being zero. The columns show the current VaR limits that are regulated at different levels.

Source: The Debt Office.

The limits decided by the Board of the Debt Office in the Finance Policy, and which are further delegated by the Debt Office Director General, imply that one year out of twenty may incur losses greater than SEK 3,492 million and SEK 262 million, respectively. Out of the VaR limit assigned to the Debt Office in the guidelines, risk utilisation amounted to 0.8 per cent on average over the past five years. Risk utilisation of the VaR limit delegated by the Debt Office Director General was on average 15 per cent over the same period. The Debt Office thus conducts current position-taking activities to a limited extent with low risk utilisation. The current limits were thus more appropriate when a larger share of the debt consisted of strategic foreign currency exposure.

[9] The calculation is based on borrowing being in euro with an average term to maturity of five years.

Low risk utilisation suffices for preparedness

In order to contribute to good borrowing preparedness, it suffices to conduct operations to approximately the same extent as currently, which means relatively low risk utilisation. We therefore consider that a specific VaR limit in the Government's guidelines is not necessary; rather, it suffices for the Board of the Debt Office to set a VaR limit in the same way as previously. That limit should be on a par with the current VaR limit delegated by the Debt Office Director General of SEK 16.5 million or lower.

No positions in Swedish kronor against other currencies

According to current guidelines, the Debt Office has a separate mandate to take positions in Swedish kronor against other currencies to a maximum of SEK 7.5 billion (point 28). The Debt Office's proposal is that the mandate be removed.

In the past, mandates for krona positions have been SEK 50 billion at most. That was in the spring of 2009 when the Government decided to expand it after the Debt Office proposed taking a large position. The reason was that the krona was considered to be unjustifiably weak. It is thus possible for the Government to decide on special mandates on specific occasions. After the SEK 50 billion position was closed with a gain, the mandate was lowered again, first to SEK 15 billion for 2012 and then to the current level for 2013.

Exposure to exchange rate fluctuations can, as mentioned earlier, be created both by taking temporary, tactical positions or by holding a certain strategic currency exposure in the central government debt over time. For the strategic currency exposure, the Debt Office has presented extensive analyses in the proposed guidelines for 2015, 2021 and 2023. The conclusions are that exchange rates are volatile and that long-term exposure thus entails heightened variation in the cost of the central government debt, while not contributing to reducing the cost systematically over time. This led a decision to phase out the strategic currency exposure by 2027.

The conclusion of the analysis is also relevant to some extent for position-taking in the krona exchange rate. The analysis implies that the underlying currency premium is neither stable nor sufficiently predictable to enable reliable use with a view to reducing the cost of the central government debt. The conditions for position-taking will also change in that the strategic currency exposure is to be zero from next year. Position-taking would then be a peculiar activity without any real link to strategic debt management.

Overall grounds for the proposed changes

Since the strategic currency exposure of central government debt is to be zero going forward, taking positions in order to reduce the cost of the debt is no longer justifiable, either in foreign currencies and interest rates, or in the krona exchange rate. Conditions for taking positions have changed over time, and the operations

are no longer an appropriate part of debt management. However, maintaining a limited part of position-taking in foreign currencies and interest rates is justified for operational preparedness.

Gains and losses from positions taken will continue to be recorded and evaluated in terms of market values, even though the main purpose of this activity is preparedness. The Debt Office also proposes continued steering with daily VaR at a 95 per cent probability, but that the decision on how much may be used in the day-to-day debt management be transferred to the Board of the Debt Office. The number of currencies included in the current mandate remains in place as they have historically been funding currencies. With this design, the Debt Office can maintain good borrowing preparedness with sustained low risk utilisation.

Appendix: Framework for simulating the debt's average term to maturity

This appendix describes the simulation framework used by the Debt Office to analyse the width of the deviation interval. The purpose of the simulations is to calculate a probability of term to maturity falling outside a deviation interval given how the borrowing plan method is specified.

Simulations of total borrowing requirement

Each month, *t*, we simulate the total requirement for borrowings (tlb_t) which consists of primary borrowing requirement (plb_t), interest expense ($interest_t$), maturing debt ($mature_t$) according to Equation 1:

$$tlb_t = plb_t + interest_t + mature_t.$$

Equation 1

The primary borrowing requirement (plb_t) is calculated using the annual borrowing requirement presented in the section on conditions (${plb_{year}}^{Scenario}$), combined with a time series model at a monthly frequency.

The time series model is a Vector Autogressive Model (VAR) consisting of two monthly time series: GDP growth in currency prices (g_t^N) and primary borrowing requirement in relation to GDP (plb_t^{gdp}) and monthly indicators.[10] After estimating the VAR model, we make forecasts for g_t^N and plb_t^{gdp}. Using the forecast GDP growth ($\widehat{g_t^N}$), we reconstruct GDP at level ($\widehat{GDP_t^N}$). We can then calculate the total borrowing requirement in kronor (${plb_t}^{SEK}$) as the product of the forecasts ($\widehat{plb_t^{gdp}} * \widehat{GDP_t^N}$). The weighted plb_t amount is then given by multiplying the borrowing requirement in kronor (${plb_t}^{SEK}$) by a scale factor:

$$plb_t = {plb_t}^{SEK} * \frac{{plb_{year}}^{Scenario}}{{plb_{year}}^{SEK}}.$$

Equation 2

Where ${plb_{year}}^{Scenario}$ is the annual total borrowing requirement given by the scenario and ${plb_{year}}^{SEK}$ is the sum of ${plb_t}^{SEK}$ for each year (${plb_{year}}^{SEK} =$

[10] We construct g_t^N by distributing quarterly values over months using an indicator series and Denton's method. The method ensures that the monthly values sum up exactly to the original quarterly values. At the same time, the series is adapted so that it tracks the indicator's movement pattern as far as possible. This is achieved by minimising differences in growth rate between the estimated series and the indicator series. The indicator series is based on Statistics Sweden's GDP indicator and is then converted from inflation-linked to nominal growth using the CPI. The final indicator series is obtained by approximating the monthly growth rate based on the original year-to-year growth.

$\sum_{t \in year} plb_t^{SEK}$). The time series model is thus used for monthly variations in the scenario to track the historical patterns, and that these variations grow with GDP. The long-term scenario then determines the level of the total borrowing requirement.

Interest expense ($interest_t$) is the sum of the coupon payments for all outstanding bonds as well as monthly interest on the short-term borrowing. We begin the simulations with a debt stock that mirrors the current level of central government debt. The coupon payments for existing bonds are therefore the same as in the actual central government debt (ex 2.5% in 1067).[11] The coupon rate for newly introduced bonds and the short-term borrowing is set at 4 per cent. The level of interest expense ahead depends chiefly on the borrowing need.

Maturing volume ($mature_t$) consists of the volume that is maturing and that must be refinanced each month. This amount initially depends on the original debt stock but is continuously affected by the borrowing plan. The borrowing plan is described in the next section.

Borrowing plan

The approach for the borrowing plan in the simulations is simplified compared with how the Debt Offices plans borrowings in reality. The aim of the analysis is to model the key risk factors and to outline the most important aspects of maturity steering.

The first step in the borrowing plan is to determine how much we are to borrow and the second step is how the borrowing requirement is distributed among different instruments.

In order to determine how much we are to borrow, we need to make forecasts of the borrowing requirement. Forecasts are made, just like in reality, every six months (May and November) and have a two-year horizon. We must also take account of the fact that forecasts are uncertain and that they will deviate from the outcome. The forecast of future borrowing requirements ($\widehat{tlb_{t+24}}$) is therefore based on the total borrowing requirement we see two years ahead (tlb_{t+24}) and forecasting uncertainties two years ahead ($forecast_{t+24}$):

$$\widehat{tlb_{t+24}} = tlb_{t+24} + forecast_{t+24}$$

Equation 3

Forecasting uncertainties ($forecast_{t+24}$) are generated using an independent and random draw with replacement from a normal distribution, in which the standard deviation is based on historical forecast deviations. Historical forecasting errors are calculated in relation to GDP and future forecasting errors are scaled up in

[11] For inflation-linked bonds, the actual coupon plus 2 per cent in inflation compensation is paid.

relation to GDP forecasts. The forecasting errors over two years have a standard deviation of 190 billion expressed in 2026 GDP.

We then prepare a plan for long-term borrowing that aims to reach $x * \widehat{tlb_{t+24}}$ in two years, where x is the proportion funded with long-term borrowing. We therefore issue $\frac{1}{24}$ of $x * \widehat{tlb_{t+24}}$ each month over the next six months until we make a new forecast.

The proportion funded with long-term borrowings (x) is chosen so that 20 per cent of the outstanding debt at the end of the forecast period is to comprise short-term borrowing.[12] Short-term borrowing consists of a one-month treasury bill. Each month, we therefore issue a new such treasury bill.

Long-term borrowing is distributed over maturities of ten, five and two years. In May each year we introduce a new ten-year bond.[13] That way, we always have bonds with terms to maturity of two, five and ten years in which to issue.

The monthly issuance volumes in the different maturities for long-term borrowings are constant until we make a new forecast. The relationship for how the borrowing requirement is distributed across different terms to maturity is described in Equation 4:

$$tlb_t = \underbrace{(vol10Year_t + vol5Year_t + vol2Year_t)}_{Long-term\ borrowing} + \underbrace{\varepsilon_t}_{Short-term\ borrowing}.$$

Equation 4

The total borrowing requirement (tlb_t) shall each month, t, be matched by borrowings in bonds with terms to maturity of ten, five and two years ($vol10Year_t$, $vol5Year_t$, $vol2Year_t$) and short-term borrowing (ε_t). Since $vol10Year_t$, $vol5Year_t$, and $vol2Year_t$ only change every six months, the short-term borrowing is to be considered as a residual. This residual is to address seasonal and forecast deviations. Short-term borrowing will therefore vary each month.

Two different methods for long-term borrowing

In the simulations, we use two different methods for long-term borrowing, which are intended to illustrate how different objectives are set against each another. The first method focuses on predictability and keeps the distribution between ten-, five- and two-year maturities constant. Figure 10 illustrates distribution for the bonds.

In the second method, the weights are adjusted to bring the maturity to the target value at the end of the forecast period. The breakdown between ten-, five- and two-

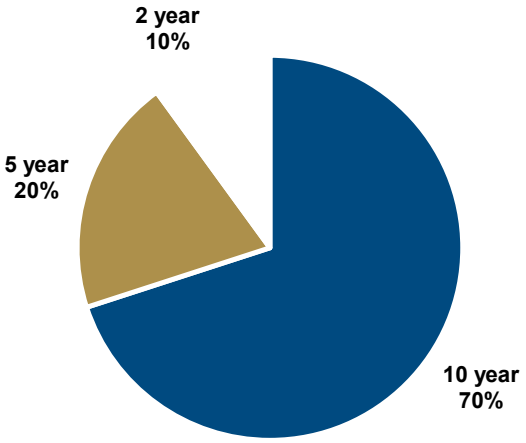
[12] When making a forecast, we arrive at a projected level of central government debt – for example 1,300 billion – based on the total borrowing requirement. We then establish a plan whereby 260 billion is to be short-term stock (1,300 billion multiplied by 20 per cent). If the borrowing requirement increases, so too does the short-term stock.

[13] We do not issue new inflation-linked bonds explicitly. The amount that would be allocated to inflation-linked bonds is instead distributed across nominal bonds. This simplification is reasonable as inflation-linked bonds only account for a small proportion of the Debt Office's new borrowings.

year maturities is adjusted every six months so that the projected maturity aligns with the target value at the end of the forecast period, provided the forecast proves accurate.

Figure 10 Bond distribution for the static borrowing method

Per cent



Note: The diagram illustrates how the borrowing requirement is distributed among bonds with different maturities for the static distribution borrowing method. This distribution means that, over time, short-term borrowing is to account for 20 per cent of the debt. The remaining borrowing requirement is allocated to two-, five- and ten-year nominal bonds in the amount of 10, 20 and 70 per cent, respectively.

Source: The Debt Office.

It is important to emphasise that these two methods represent ideal types. In real-life decision-making processes, these extremes are rarely found in their purest form. In practice, the Debt Office applies a combination of both methods and makes trade-offs between different objectives. On the one hand, we analyse how borrowing in different instruments at different maturities contributes to overall term to maturity and make adjustments to keep term to maturity within the set limits. On the other hand, we endeavour to act predictably and only make gradual changes in the weights between ten, five and two years. Which method is predominant depends on the circumstances each time borrowings are planned. The purpose of the simulations is not to capture all the considerations that are made in reality; rather, we wish to analyse the consequences when we make changes to the most important parts of the strategy.[14]

The process described above means that, in order to simulate term to maturity for a borrowing strategy (with either static or variable distribution), first we forecast the future borrowing requirement with forecasting uncertainty, and then follow that borrowing method to measure the realised term to maturity over time. We repeat

[14] A more detailed description of the Debt Office's borrowing strategy is provided in its borrowing strategy documents. https://www.riksgalden.se/en/our-operations/central-government-borrowing/strategy-and-policy/borrowing-strategy/

the process 10,000 times and thus obtain 10,000 time series for the realised term to maturity between 2026 and 2030.

Based on the simulations of term to maturity, we calculate the probability of the maturity falling outside a given deviation interval for each individual year. Probability is defined as the number of simulations for which term to maturity deviates from the interval divided by 10,000. A high probability means that it is relatively more probable that term to maturity will fall outside the chosen deviation interval, given the long-term scenario and forecasting uncertainties.

The Swedish National Debt Office is the central government financial manager and the national resolution and deposit insurance authority. The Debt Office thus plays an important role in the Swedish economy as well as in the financial market.

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