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1 Summary

The guidelines on central government debt management have a multiyear perspective so that conditions are established for a central government debt policy that is predictable and long term in nature. This year's decision on the guidelines covers 2002–2004. The guidelines for 2003 and 2004 are preliminary and may later be changed.

The foreign currency debt is to be amortised by SEK 15 billion in 2002. The National Debt Office may deviate ± SEK15 billion from the specified amortisation rate. The interval allows the Debt Office in principle to refrain from amortising the foreign currency debt if the krona should remain weak in 2002. The Debt Office is to take costs and risks into consideration in strategic decisions on the rate of amortisation.

The long-term aim is a reduction in the proportion of foreign currency debt in the central government debt and an increase in the proportion of kronor-denominated debt. The aim for 2003 to 2004 is an amortisation of the foreign currency debt amounting to SEK 25 billion a year. Under the assumptions stated in the guidelines on the development of the borrowing requirement and the exchange rate for the krona, the percentage of foreign currency debt is estimated to fall from its current level of 35 per cent of the central government debt to about 27 per cent by the end of 2004.

The National Debt Office will be permitted to choose other counterparts in addition to the Riksbank when exchanging foreign currency for Swedish kronor. The aim is to make debt management more cost effective. The new system will be predictable, clear and transparent. This system will enter into force on July 1, 2002.

The percentage of inflation-linked borrowing in the central government debt will increase in the long term. The rate of increase is to be weighed against the demand for inflation-linked bonds and the costs and risks of other borrowing. The guideline for the inflation-linked debt thus stands unchanged. Inflation-linked borrowing is to be made with long maturities. One new feature, however, is that the guideline includes provisions for issuing inflation-linked loans with relatively short maturities in order to adjust to market demand.

That part of the financing requirement not covered by inflation-linked borrowing and borrowing in foreign currencies is to be met by nominal loans in kronor.

The average duration of the nominal kronor-denominated and foreign currency debt for 2002–2004 is to be 2.7 years, which is the same as for 2001. When establishing the benchmark portfolios for the nominal types of debt, the National Debt Office may deviate from the stated benchmark by a maximum of ±0.3 years.

The central government debt is to have as an aim a dispersed maturity profile. Another aim of the borrowing is to have no more than 25 per cent of the debt fall due within the next 12 months.

2 Introduction

In 1998 the Sveriges Riksdag decided on a new decision-making structure and a new formulation of objectives for central government debt policy (Government Bill 1997/98:154, bet. 1997/98:FiU29, rskr 97/98:253). In the statute (1988:1387) on central government borrowing and debt management, the Riksdag legislated the overall goal for central government debt management. That goal is to minimise the long-term cost of the debt while taking into consideration the inherent risk. In addition the law stipulates that management is to be within the framework imposed by monetary policy.

Under the new decision-making structure, the Government is to decide no later than November 15 each year on next year's guidelines on the management of the central government debt by the National Debt Office. It will make a decision after the National Debt Office presents a proposal for the guidelines and the Sveriges Riksbank has been given the opportunity to comment on the proposal. The National Debt Office submitted its proposal for the guidelines on October 1, 2001 and the Riksbank's comments were received on October 18, 2001.

3 The Basis for the Government's Guidelines[1]

3.1 The Structure of the Central Government Debt

The overall goal of central government debt policy is to minimise the long-term cost of the debt while giving due consideration to the inherent risk. From this goal it follows that it is the expected total costs and the total risk in managing the debt that are of interest. Taking into account the interaction of different risks in the debt portfolio is especially important, as the total risk is not composed of the sum of the risks in the various portfolios.

The guidelines for central government debt policy are to be designed so that the debt will have the desired characteristics with respect to the overall goal. The distribution between the three types of debt—nominal kronor-denominated borrowing, inflation-linked borrowing and foreign currency borrowing—and the maturity and amortisation profile of each kind of debt are the main determinants of the debt's characteristics. Along with the size of the central government debt, these factors govern the expected total costs and total risk in the management of the central government debt.

At the end of 2000 the central government debt[2] came to SEK 1,281 billion (about 62 per cent of GDP), which amounts to a re-

[1] A more detailed explanation of some core concepts can be found in Chapter 6, the Technical Appendix.
[2] In the guidelines, central government debt means the unconsolidated central government debt managed by and reported on by the National Debt Office. A

duction of SEK 94 billion since 1999. The reduction was due to favourable economic conditions with increased tax revenues and lower disbursements for unemployment benefits. Transfers from the National Pension Insurance Funds and the in-part-privatisation of Telia also contributed to the reduction. The weakening of the Swedish krona in 2000 had the opposite effect on the central government debt, reducing its decline by over SEK 9 billion.

At the end of 2001 the central government debt is reckoned to come to SEK 1,125 billion[3], an estimated decrease of SEK 156 billion for the year. The most important factors explaining the decrease in the debt are the transfers from the National Pension Insurance Funds to the central government amounting to SEK 155 billion (half of which is in the form of government bonds) and an extra dividend from the Riksbank of SEK 20 billion.

The Government's decision on the guidelines for foreign currency borrowing has in view borrowing associated with foreign currency exposure. In order to get a true picture of the debt's foreign currency exposure, the debt management measures taken in foreign currency borrowing have to be taken into account. In order to reduce costs, the National Debt Office has chosen to borrow in Swedish kronor and then use currency swaps to convert the loans into foreign currency debt. In recent years this has been by far the most common method of foreign currency borrowing. The distribution of central government debt according to type, including debt management measures, is shown in Table 1 below.

better measure of the central government's total debt burden shows the consolidated central government debt as reported in the central government's *Annual Report* and in the Budget Bill for the respective fiscal year.

[3] Source: Ministry of Finance. See also Table 2.

Table 1. Structure of Central Government Debt Including Debt Management Measures at Year End, 1997-2000 and Projections for 2001 [SEK billions].

	1997	1998	1999	2000	2001
Nominal debt in kronor	911	920	874	801	662
Per cent	*63.3*	*62.4*	*63.6*	*61.8*	*57*
Inflation-linked loans	92	94	97	102	97
Per cent	*6.4*	*6.4*	*7.1*	*7.9*	*8*
Foreign currency debt	436	459	402	393	415
Per cent	*30.3*	*31.2*	*29.3*	*30.3*	*35*
Total debt incl. debt mgmt.	**1 439**	**1 473**	**1 373**	**1 296**	**1 175**
Total debt excl. debt mgmt.	1 430	1 449	1 374	1 281	1 148

Source: The Swedish National Debt Office (SNDO).
Note: The debt in foreign currency has been valued at the exchange rate in effect at year end. The valuation as of December 31, 2001 is based on closing exchange rates for October 3 used by the National Debt Office in its latest debt projections.

Nominal kronor-denominated borrowing traditionally represents the most important source of financing for the National Debt Office. Most of the borrowing is in treasury bonds (loans with maturities greater than one year) and treasury bills (loans with maturities generally less than one year). Borrowing in the Swedish domestic retail market—chiefly lottery bonds and National Debt Savings—is also included in this debt category. This kind of debt as a percentage of central government debt has been showing a downward trend since the middle of the 1990s. Estimates are that it will make up 57 per cent of the central government debt by the end of 2001.

Inflation-linked loans offer investors an opportunity to protect against the risk of inflation. For the central government it complements nominal kronor-denominated borrowing. Inflation-linked bonds as a percentage of borrowing on the Swedish market have steadily increased since they were first issued in 1994 and are estimated to represent 8 per cent of the central government debt at the close of 2001.

The percentage of foreign currency borrowing grew rapidly at the beginning of the 1990s from less than 10 per cent to almost 29 per cent of the central government debt in the fiscal year 1994/95. Subsequently the percentage has remained relatively stable at about 30 per cent. The percentage is expected to rise sharply during 2001 to about 35 per cent of the central government debt, owing to a substantial reduction in the total debt (primarily due to the National Pension Insurance Funds transfer of treasury bonds) as well as cuts in the amortisations of the foreign currency debt in order to minimise costs. The weakening of the Swedish krona has also contributed to an increase in the proportion of foreign currency debt.

3.2 The Basis for the Decisions on the Guidelines

The basis for the Government's decision: The long-term direction of central government debt management shall include a reduction in the percentage of foreign currency debt and the consequent increase in the percentage of kronor-denominated debt. In addition the National Debt Office also continues to take into account the costs and risks in strategic decisions on the rate of amortisation of the foreign currency debt.

The National Debt Office will also be given the opportunity to choose other counterparts than the Riksbank when exchanging foreign currency for Swedish kronor.

The guidelines on central government debt policy should have a three-year perspective in order to create the conditions for long-term planning. The guidelines for 2003 and 2004 are preliminary and may require changes in the future when decisions on the guidelines are being made.

Positions Taken in Previous Decisions on the Guidelines

In previous decisions on the guidelines, the Government has taken a position on a number of core issues for the purpose of clarifying the principles on which central government debt policy rests. Measuring the costs and the risk, the long-term structure of the debt and the degree of flexibility in the management of the debt are among the issues touched upon. The key positions taken are reviewed in the text that follows.

Costs and Risk in Central Government Debt Management

The goal of central government debt policy means that the costs of the debt should be weighed against the risks in its management. This consideration is critical in deciding the structure and the maturity that the debt should have. In the guidelines for 2000 the Government noted the measures that should be used with respect to costs, risks and maturities in the central government debt.

Because the debt is long term in nature and borrowing normally takes place with a large percentage of loans that remain outstanding until maturity, the costs should be measured in terms of the average running-yield-to-maturity[4]. The relevant superior measure of risk should thus be expressed as the risk of variations in this measure of costs, that is, the running-yield-at-risk. Other subordinated risks are the financial-savings-at-risk and the value-at-risk. The risk measures mentioned are nominal in character.

In the proposal for the guidelines for 2001, the National Debt Office argued that risk should be defined in terms of the extent to which the central government debt contributes to variations in central government finances. This Asset and Liability Management (ALM)-inspired[5] approach leads to the assumption that a debt portfolio that typically has low costs when the central government finances are weak (for example, as a result of a recession), is less risky than a portfolio in which the opposite applies. In the decision on the guidelines, the Government observed that

[4] The measure is defined as a weighted average of the issuing rates in the debt portfolio. The nominal amount of the respective securities comprise the weights. The issuing rates are the interest rates at which the securities were issued. Consequently the measure shows the costs in the form of the interest rate level expressed as a percentage.

[5] In conventional financial risk analysis [Asset and Liability Management (ALM)] risks can be minimised by matching the debts' characteristics with those of the assets. The principles have been developed for companies in the financial sector, but can also be used as a conceptual framework for analysing the central government's finances and debt management.

the ALM approach represented a plausible conceptual framework for analysing the risks in central government debt management and that the analysis should be expanded and improved. An approach using ALM seems more appropriate than a nominal concept of risk. Therefore, the risk associated with managing the debt should in principle be defined in terms of the debt portfolio's contribution to fluctuations in the budget balance and the central government debt. However, it has been noted that the ALM technique cannot yet be considered sufficiently developed from an operational perspective and that both nominal and ALM inspired measures of risk should be used for the time being.

The Debt's Long-Term Structure

In the guidelines for 1999 and 2000, there was not a sufficient basis for taking a position on the appropriate proportion for each of the various types of debt in the long term. Therefore, the guidelines aimed essentially at holding these proportions unchanged.

In the decision on the guidelines for 2001, the Government considered it possible to take a position on the long-term direction and structure of the central government debt. An overall assessment found that the grounds for foreign currency borrowing had become less important at the same time that the risks in the foreign currency debt had become more obvious. One observation was that there is no reason for assuming long-term systematic differences in costs between borrowing denominated in Swedish kronor and borrowing in foreign currency. The risk premiums that previously had made domestic borrowing expensive have gradually declined, making it harder to justify a large foreign currency debt because of the cost.

At the same time, the risks associated with a large foreign currency debt have become obvious. Changes in the krona's exchange rate affect the value of the foreign currency debt and thus the size of the central government debt as well as the central government's interest costs and thus the budget balance. From the perspective of both matching arguments and ALM, the foreign currency debt also risks making the swings in the public finances more pronounced because increased interest rates on the foreign currency debt run the risk of coinciding with increased budgetary pressures in times when the public finances can be expected to be weak for cyclical reasons. Therefore the Government found that a majority of arguments favoured reducing the percentage of foreign currency debt while increasing the percentage of the debt denominated in kronor.

This assessment is still valid. Developments in 2001 have underlined the risk that a large proportion of foreign currency debt implies for public finances. In spite of amortisations of the foreign currency debt, it is estimated to rise in 2001.

Time Perspective and Long-Term Planning

The focus on the long term should continue, given the overall goal of central government debt policy. Therefore the guidelines should give a more strategic direction and have a multiyear perspective. The long-term positions taken in the guidelines—for example, on the long-term development of the foreign currency debt and the National Debt Office's mandate to take strategic positions on the kronor-denominated debt and the foreign currency debt—also argue in favour of this focus on long-term positions. In the decision for 2001 it was stated that the guidelines should extend over the same time horizon as the expenditure ceiling in the central government budget, that is, during the period in which forecasts, for example, on central government debt and borrowing requirements, are available. In that event the time perspective in the decisions on the guidelines should be triennial. This year's decision concerns 2002-2004.

The guidelines for 2003 and 2004 are preliminary and should be seen as an expression of the Government's strategic direction for central government debt policy. This direction is reviewed in connection with the annual decisions on the guidelines. There is nothing to prevent a long-term strategy from being reconsidered in the light of new circumstances (f.ex. regarding the development in the central government finances) and new insights on policy direction. Guidelines that have already been decided could also be changed if there were conclusive grounds for changing the decision. However, there shall not be unwarranted changes in the guidelines.

The National Debt Office's Exchanges Between Kronor and Foreign Currency

The instruction (1996:311) for the National Debt Office states that the Riksbank is to make exchanges between the krona and foreign currencies on behalf of the Debt Office. Under the prevailing practice, the Riksbank makes a purchase of the same amount of foreign currencies every trading day to compensate for the reduction in the foreign currency reserves brought about by central government amortisations and interest payments on the foreign currency debt[6]. In this way the Riksbank avoids confusing foreign currency exchanges conducted for the National Debt Office's account with possible exchange rate policy interventions.

The National Debt Office is now proposing that it be given the opportunity to exchange foreign currency directly with other counterparts in addition to the Riksbank. The Debt Office cites the following reasons. The current system is not suited to the Debt Office's mandate to manage the amortisations on the foreign currency debt more actively. Changes in the routines for foreign currency exchanges would increase the chances of achieving the debt management objective and help lower the total cost of the central government debt. As in other aspects of central government debt management, a new system for making foreign currency exchanges should be predictable and transparent. An appropriate balance between predictability and flexibility would mean that the

[6] In the latter half of 2001, the Riksbank switched from daily to weekly currency exchanges. This adjustment is in response to the decision by the National Debt Office to reduce amortisations to SEK 10-15 billion, which is, in turn, based on the Government's decision in July to lower the benchmark for foreign currency amortisations from SEK 35 billion to SEK 25 billion.

Debt Office would publicly announce the projected annual pace of its foreign currency exchanges (amortisations and interest) and commit itself to distributing these exchanges relatively evenly over the year. Within the framework of the stated annual pace of amortisations, the National Debt Office in its operational management could then be more precise in choosing the point in time, technique, counterpart, etc. for a foreign currency exchange within a permitted deviation interval that has been made public in advance.

The Riksbank focuses its comments on the National Debt Office's proposed guideline on managing the foreign currency debt. In that connection, the Riksbank points to the risk that the Government, directly or via the National Debt Office, may be perceived as pursuing foreign exchange policy. The Riksbank is of the opinion that the benchmark for the amortisation of the foreign currency debt is to be decided based on a broad assessment of central government debt policy requirements. In this assessment the main consideration should be the central government borrowing requirement. But the goal of reducing the foreign currency debt and the possible effects on the domestic securities market also need to be taken into account. Furthermore the Riksbank is of the opinion that deviations from the benchmark should solely take place in the light of changes in the borrowing requirement. The Government has concluded from these comments that the Riksbank is of the view that the exchange rate for the krona should not affect either the Government's decision on the benchmark for amortising the foreign currency debt or the application of this decision by the National Debt Office.

According to the Riksbank, a change in foreign currency exchange procedures as set out in the proposal would give the Government access to the functions that make interventions in the foreign currency market possible and would increase the risk of market players believing that the Government was conducting exchange rate policy. A new system would also imply problems in the event of a possible future switch to a fixed exchange rate, for example, prior to participation in Stage 3 of EMU. In addition the Riksbank states that if new routines for foreign currency exchanges were decided, this decision should be in combination with a new legal status for the National Debt Office. That change in status should give the Debt Office a relationship with the Government analogous to that between the Government and the National Insurance Pension Funds. Lastly, the Riksbank is of the view that the current practice of having to take the exchange rate for the krona into account in amortisation decisions should be terminated.

In the guidelines for 2001 the Government clarified the possibility of the National Debt Office taking the value of the krona into account in decisions on how large a share of the foreign currency amortisation mandate is to be used. The aim was to create enough flexibility so as not to increase the cost of debt management unnecessarily in situations in which the value of the krona deviates markedly from the level perceived as warranted in the long term. Failing to take the krona's exchange rate into consideration in decisions on the benchmark for amortising the foreign currency debt or when applying it could be costly for the central government. Observations made this year are good illustrations. From the overall goal of central government debt policy, it follows that the costs involved in various management decisions have to be taken into account. To ignore minimising costs in managing the foreign currency debt would appear odd in this situation. The overall goal of central government debt policy thus supports the practice established in 2001. Experience with this new practice has been good. The handling of the amortisations has generally been regarded as an essential part of a well-planned central government debt management.

The established goal of central government debt policy is to minimise the costs in the long term while taking the risk in the management into consideration. The goal is also associated with the restriction that the management will be in conformity with the monetary policy requirements. In order to discharge the task legislated by the Riksdag, the Government has to assess what deviations from strict cost minimisation are warranted by monetary policy requirements.

The Government is of the opinion that the division of powers and responsibility that has grown out of the changes in the status of the Riksbank and in the system of controls in central government debt management are appropriate and explicit. The Riksbank is responsible for the application of the exchange rate system decided by the Government. In compliance with this responsibility, the Riksbank, through its control over the foreign exchange reserves, may intervene in the foreign currency market if it considers the situation to warrant it. This possibility of intervention exists irrespective of whether there are transactions in the background that have been initiated by the National Debt Office, the National Insurance Pension Funds or private players. The Riksbank's capacity to use interventions to affect the foreign currency market consequently is not circumscribed when the Government and the National Debt Office want to take the value of the krona into account in decisions on foreign currency amortisations.

The Government for its part is to take the statutory goal of cost minimisation as a basis when guidelines and other rules for the management of the central government debt are established. Given this goal, it would be unreasonable to disregard the krona's value in decisions about the rate at which the foreign currency debt should be reduced. For considerations of the krona exchange rate to have an impact on the central government's costs, it is essential that decisions on changing the rate of amortisation also have an effect on the actual exchange transactions made with players outside the central government.

Nor should transitional problems in connection with a possible Swedish association with the third stage of the economic and monetary union represent any major impediment to changes in routines for foreign currency exchanges in this respect. It is evident from the guidelines that these can be changed should the grounds for the decision be changed. Participation in ERM will probably be able to qualify as one such change. It may be added that the Government earlier expressed the opinion that possible membership in stage 3 of the economic and monetary union is not to be considered in decisions on the guidelines. The matter of foreign currency exchanges should be examined in the light of prevailing conditions.

The Government concludes that the opportunity for the National Debt Office to make foreign currency exchanges with other counterparts in addition to the Riksbank is a step in the direction of improved goal attainment and a logical outgrowth of central government debt management. In this respect the Riksbank has not been able to show clearly that strategic considerations respecting the krona or changed exchange rate routines prevent or make it substantially more difficult for the Riksbank to achieve monetary and exchange rate policy objectives. It is the Government's assessment that the misgivings that the Riksbank has expressed are not of sufficient importance that they warrant a departure from the goal of cost minimisation.

To sum up, the Government is of the opinion that there are good arguments in favour of the more flexible handling of the foreign currency debt that has come into effect this year. Given the position of weighing costs and risk in assessments of the amortisation rate, the conditions should be created for the central government to reduce the total costs of foreign currency exchange transactions. According to the Government the starting point should therefore be that the National Debt Office from now on is to be permitted to exchange foreign currency in the same manner that other authorities do. The strategic mandate of the Debt Office should also be supplemented by better means of minimising costs in operational matters with due consideration for risk. It should therefore be possible for the National Debt Office to change foreign currencies with counterparts in addition to the Riksbank. The Government's position means that the instruction for the National Debt Office in this section will be changed. The detailed formulation of the system is treated in Section 4.2 in the part on the foreign currency debt.

4 Guidelines on the Management of the Central Government Debt in 2002

4.1 The National Debt Office's Proposal and the Riksbank's Comments

The National Debt Office's Proposal

The National Debt Office is of the opinion that the aim of reducing foreign currency debt as a percentage of central government debt over the long term ought to be maintained. Therefore, foreign currency debt amortisations should rise to the previously stated aim of SEK 35 billion a year in 2003-04. The amortisation target proposed for 2002 for this type of debt is SEK 25 billion, a cut of SEK 10 billion compared with the target in the guidelines for 2001. The proposal ought to be seen in light of the krona's weakness, which, according to the National Debt Office, makes amortisation of the foreign currency debt expensive. An interval of minus SEK 25 billion to plus SEK 10 billion around the amortisation benchmark for 2002 is being suggested. In this way the National Debt Office can refrain from amortising should the krona remain weak.

In addition the National Debt Office is proposing that there should be a long-term rise in the percentage of inflation-linked borrowing, but that this proposal must be weighed against the demand for inflation-linked bonds and the borrowing costs for other types of debt, with due consideration given to risk. The proposal on inflation-linked borrowing is in conformity with the current guidelines. The proposed guidelines also contain a more in-depth analysis of the characteristics and role of inflation-linked borrowing and its effect on costs and risks in the overall debt portfolio. Remaining gross borrowing requirements should be met by nominal kronor-denominated borrowing, following the same guideline now in effect.

According to the National Debt Office, the average maturity for the total nominal kronor-denominated and foreign currency debt should continue to be 2.7 years (± 0.3 a year). The guideline on the average maturity for inflation-linked borrowing should be retained but construed as referring to maturities longer than five years.

There is a proposal to remove the detailed guideline on the maturity profile. The Debt Office should instead strive for an even maturity profile, with the aim of limiting the refinancing risks. The treatment of the maturity profile will be reported to the Government at a later date.

The National Debt Office is proposing to that it be given the possibility of conducting exchange rate transactions directly with other counterparts in addition to the Riksbank. The proposal aims at making it possible to use foreign exchange rates as a tool for lowering the cost of the debt and improving the chances of achieving the objective of central government debt management.

The Riksbank's Comments

The proposal by the National Debt Office on the percentage of inflation-linked borrowing, meeting the gross borrowing requirement and the average maturity of the debt are judged to be compatible with the monetary policy restriction in the objective for the central government debt policy.

Furthermore the Riksbank is of the opinion that the decision on the guidelines should be based on a broad assessment of the requirements of central government debt policy. One obvious basis is the development of the central government 's borrowing requirements. The National Debt Office's proposal to amortise SEK 25 billion of the debt in 2002 is considered reasonable, given the weakening of the budget expected by the Riksbank next year. A lower rate of amortisation may also be motivated by budgetary considerations. However, the Riksbank stresses the importance of continuing to amortise the foreign currency debt. A lower foreign currency debt would probably help stabilise the Swedish economy and strengthen the krona in the long term.

The National Debt Office should not be allowed to take into account strategic assessments of the krona's exchange rate development in decisions on the pace of amortisations because doing so increases the risk of confusing central government debt policy and monetary and exchange rate policy. Deviations from the target rate of amortisation should be governed by changes in the borrowing requirement only. For the same reasons, the Riksbank does not support the proposal by the Debt Office for independence in making foreign currency exchanges. The reasons for a change in exchange rate routines have previously been deemed insufficient. The Riksbank feels that no new arguments have been presented. If new exchange rate routines were to be decided, the change should be made in conjunction with a new legal status for the National Debt Office, that is to say, a relation to the Government similar to that of the National Insurance Pension Funds.

4.2 The Government's Decision

The Foreign Currency Debt

The Government's decision: The foreign currency debt is to be amortised by SEK 15 billion in 2002. The aim for 2003 and 2004 is for the amortisation rate to rise to SEK 25 billion a year.

The National Debt Office is allowed to deviate from the specified amortisation rate by ± SEK 15 billion.

Predictability and transparency are to characterise the National Debt Office's handling of the currency changes. The National Debt Office is to establish and make public guidelines for the operational management of currency changes. The new system will come into force on July 1, 2002.

According to the National Debt Office the analysis that led up to the decision that the percentage of foreign currency debt in the central government debt should be reduced is still valid. The Swedish krona's volatility in 2001 clearly illustrates that foreign currency debt is associated with higher risk than is kronor-denominated debt. As to the rest of the analysis, nothing substantially new has emerged—for example, developments in the public finances—to occasion a revision of the estimates made last year. The National Debt Office therefore is proposing an amortisation target for the foreign currency debt in 2004 of SEK 35 billion, which is the same rate given in last year's decision on the guidelines for 2001-2003.

For 2002 the preliminary basis ought to be the retention of the long-term direction. However, this would not be in keeping with the decision by the National Debt Office and the Government to reduce the rate of amortisation because of the weak krona. According to the National Debt Office the krona is likely to strengthen in 2002, but if so, it will start from a low level. Hence the krona is estimated to be somewhat weaker in 2002 than previous foreign currency forecasts indicated. The central government budget surplus is also expected to be lower than earlier estimates showed. These factors indicate that a more restrained rate of amortisation is warranted than that in the preliminary decision. A foreign currency amortisation of SEK 25 billion is being proposed for 2002.

Noting the extreme conditions now prevailing in the foreign currency market, the National Debt Office is proposing giving the amortisation interval greater downside flexibility. There should be authorisation of an interval of minus SEK 25 billion to plus SEK 10 billion around the target for foreign currency amortisations in 2002. The proposal would make it possible for the National Debt Office to refrain from amortisations if the krona remains weak. At the same time the interval's upper bound is in line with the long-term aim.

Table 2. Foreign Currency Borrowing and Foreign Currency Debt, the Borrowing Requirement, Changes in the Unconsolidated Central Government Debt and the Size of the Debt and TCW Index [SEK billions and per cent].

	1997	1998	1999	2000	2001	2002	2003	2004
Govt. Guidelines, Foreign Currency Borrowing, Net	0	-25	-25	-25	-35[1]	-15	-25	-25
Actual Foreign Currency Borrowing, Net	-2,5	-26	-25	-27	10-15	-	-	-
Foreign Currency Debt, Change in Value[2]	10	24	-57	-11	-	-	-	-
Foreign Currency Debt, Per cent of Total Debt	30%	31%	29%	30%	35%	-	-	-
Cent.Gov. Borrowing Requirement[3]	6	-10	-82	-102	-58	-15	13	17
Central Govt. Debt, Change[3, 4]	21	17	-75	-94	-156	18	5	12
Central Govt. Debt, Size[4]	1 432	1 449	1 374	1 281	1 125	1 142	1 147	1 159
Central Gov. Debt, Per cent of GDP[4]	79%	77%	70%	62%	52%	51%	49%	47%
TCW-Index in the Budget Bill for 2002	120	123	125	125	134	130	126	122

Source: Ministry of Finance. Forecasts for 2001-2004 have been extracted from the 2002 Budget Bill.

[1] In July 2001 the Government lowered the amortisation rate on the foreign currency debt to SEK 25 billion.

[2] The change in the value of the foreign currency debt is made up of foreign currency borrowing (net) and exchange rate changes affecting the debt incl. the derivatives portfolio.

[3] The borrowing requirement in any given year is not synonymous with the change in the size of the central government debt. The foreign currency debt revaluation has to be taken into consideration as well as transactions that affect the borrowing requirement but not the size of the debt.

[4] The central government debt is the unconsolidated debt managed and reported by the National Debt Office.

The Government is of the opinion that the decision on the guidelines should be based on the long-term strategic consideration of costs and risks in the management of the central government debt and an assessment of what an appropriate debt portfolio would be. Normally the decision on the guidelines is taken only once a year.

If the krona's exchange rate is relatively stable and does not markedly differ from a level that can be regarded as warranted in the long term, then the long-term aim expressed in the guidelines should not be based on prevailing exchange rates or exchange rate forecasts. The krona's exchange rate and its prospects can change rapidly. Possible decisions on adjusting the amortisation rate for changes in estimates of exchange rate developments should be made by the National Debt Office within a prescribed amortisation interval. However, this does not preclude that the Government in extreme situations, for example, in the event of sharp swings in the exchange rate or big changes in the borrowing requriment, could be compelled to adjust the guidelines during the current financial year. However, such changes are not to take place gratuitously.

In the decision on the guidelines for 2001, the Government stated that strong public finances and a rapidly shrinking central government debt in combination with the ambition that the percentage of the debt that was held in foreign currency would decline in the long term, warranted a somewhat faster amortisation rate than in previous years. The amortisation rate was therefore raised to SEK 35 billion a year for 2001-2003 from the SEK 25 billion in effect in previous years' decisions. The percentage of foreign currency debt could in that way be reduced to about 25 per cent by the end of 2003.

In the wake of the international downturn in the business cycle and the fall in the stock exchange, the krona has been weak in 2001. There are many indications that there will be an upturn in the business cycle in 2002 but in the present situation it is difficult to determine how rapid and how strong the upturn will be. In the Budget Bill for 2002, the Government expects that the krona will strengthen. This assessment stands. As a result of the uncertainty about business trends and stock market developments, which has increased after the terrorist attack in the United States on September 11, 2001, it may be sometime before there is a marked strengthening of the krona. If the krona remains weak, an amortisation of the foreign currency debt would be costly. The Government therefore is of the view that that amortisation of the foreign currency debt should be limited to SEK 15 billion in 2002.

The prospects for the public finances and developments in the central government debt do not appear to be as favourable as they were at the time of the decision on the guidelines last year. Therefore there are reasons for choosing a somewhat lower long-term amortisation rate for the foreign currency debt over the next few years. The long-term rate of amortisation should therefore be SEK 25 billion. This is the rate being proposed for 2003 and 2004. Even with a lower amortisation rate, it is estimated that the percentage of foreign currency debt in the total debt could decline considerably. Given the forecasts available on the krona's exchange rate and the size of the borrowing requirement, the proportion of foreign currency debt is estimated to fall to about 27 per cent of the central government debt by the end of 2004. The percentage of foreign currency debt at the end of 2001 is estimated to come to 35 per cent.

The Government is of the opinion that the interval around the amortisation target should be SEK ±15 billion. The interval in principle would allow the National Debt Office to refrain from amortising the foreign currency debt if the krona remains weak in 2002. According to the Government the mandate represents a reasonable balance between control and flexibility.

According to the positions taken by the Government that were discussed earlier in this report (see Section 3.2), the National Debt Office is to be allowed the option of exchanging foreign currencies through counterparts in addition to the Riksbank. The Government is of the opinion that the new system is to be predictable, clear and transparent. These requirements may be regarded as especially important when a new system is being established. Therefore the Government is of the opinion that the Debt Office should report its exchange requirements and the principles to be used in handling these requirements in the foreign currency market well in advance before it assumes responsibility for the foreign currency exchanges. These reports are to take as their starting point decisions by the Debt Office on the rate of amortisation made in accordance with the Government's guidelines and the interest payments on the foreign currency debt.

In its reports the Debt Office is to define a distribution over time of net foreign currency exchanges, spot and derivatives, that is neutral with respect to costs. The distribution should reflect foreign exchange transactions linked to the underlying payments flow, that is, amortisations, gross borrowing, interest payments, and payments relating to derivatives linked to those transactions. Furthermore the distribution should be relatively even over time. This is warranted by the need to spread the payments so as to reduce the risk that the exchange rate is unfavourable when the payment is made. The cost-neutral trajectory thus does not need to give the same net foreign currency exchanges every month because it would require extensive derivatives transactions. At the same time the distribution should be relatively even in order to spread the exchange rate risk in a satisfactory manner. An important aim in defining the neutral distribution of net foreign currency exchanges is to reduce uncertainty for market players about how the Debt Office will handle the foreign currency exchanges.

The National Debt Office is to establish permitted deviation intervals as a guide for its operational activities. Within these limits, the Debt Office may reduce foreign currency exchanges at times when they appear to be especially unfavourable. These active decisions are to be evaluated subsequently, for example, by estimating the differences in cost in relation to a cost-neutral distribution for the foreign currency exchanges. The evaluation system itself should have act as a control and have the result that the Debt Office will not deviate from the neutral trajectory other than if there are obvious cost advantages. Consequently there is no reason for the Government to provide more detailed direction for the Debt Office’s handling of foreign currency exchanges. The deviation interval is to be included in the Debt Office’s report.

In the Government’s judgement, the time between the decision on the guidelines and the turn of the year is much too short for the National Debt Office and other players to manage to adapt to the new instruction. Therefore the new system will come into effect on July 1, 2002.

Inflation-Linked Kronor-Denominated Debt

The Government's decision: Inflation-linked borrowing as a percentage of central government debt will increase in the long term. The rate of increase will be weighed against the growth in demand for inflation-linked bonds and the borrowing costs of other types of debt, with due consideration for risk.

The National Debt Office has in this year's written communication focused the analysis on the characteristics of inflation-linked bonds and their role in the debt portfolio. Inflation-linked debt has been included in the model estimates with the aim of illustrating the interplay between the three basic types of debt. Qualitative diversification arguments are the primary motivation for inflation-linked borrowing. As an example, long-term nominal and inflation-linked instruments are mirror images in important respects in risk considerations, a situation that leads to the conclusion that the central government debt portfolio should contain both types of bonds. A comparison of inflation-linked and foreign currency borrowing leads to the conclusion that the instruments have similar characteristics but that inflation-linked borrowing bears less risk and should be preferred from the standpoint of credibility. The National Debt Office's simulation model points out small diversification gains from including inflation-linked borrowing in the portfolio in a stable macroeconomic environment. However, estimates using historical data for the past 30 years give support to the hypothesis that the public finances are more stable if inflation-linked borrowing is included in the debt portfolio.

The overall conclusion is that the proportion of inflation-linked loans should be increased in the long term. However, the market conditions are still uncertain and the National Debt Office therefore proposes to leave the guidelines unchanged. This means that inflation-linked borrowing should also continue to be considered against the demand for inflation-linked bonds and costs and risks pertaining to the demand for inflation-linked bonds and the costs and risks of other borrowing.

In the guidelines for 2001 the Government stated that it is urgent to develop the analysis of the contribution of inflation-linked borrowing to the costs and risk in the central government debt. In the proposed guidelines, the National Debt Office has considered the characteristics of all three types of debt and their role in debt management. The Government broadly agrees with the assessments and conclusions obtained in the analysis. The inflation-linked borrowing component of the central government debt will therefore be increased in the long term. Otherwise the guidelines for the inflation-linked debt denominated in kronor should also be retained unchanged.

Given the intention of increasing the percentage of inflation-linked debt, it is, as the National Debt Office underlines, essential to develop the market for inflation-linked bonds. In this respect the market development efforts made by the National Debt Office and its primary dealers are essential, such as the effort to increase the investor base. In that connection the Government's proposal to transfer at mid-year in 2002 certain authorities' funds[7] now deposited in the National Debt Office to direct investments in the market (see the Budget Bill for 2002, volume 2, expenditure area 2) should be noted. The proposal refers to inflation-linked bonds corresponding to about 25 per cent of the stock now outstanding that would be able to improve liquidity and increase the chances for a well-functioning inflation-linked bond market.

[7] Refer to the Swedish Nuclear Waste Fund, the Deposit Guarantee Board and the Premium Pension Authority.

Nominal Kronor-Denominated Debt

The Government's decision: In addition to inflation-linked borrowing and borrowing in foreign currency, the central government's financing needs will be met by nominal kronor-denominated borrowing.

The nominal kronor-denominated debt represents a residual between the central government's borrowing requirement and borrowing in foreign currency and inflation-linked bonds. This does not stop it from amounting to approximately 60 per cent of the total central government debt and the central government's most important source of financing. The decision in this year's guidelines to amortise the foreign currency debt by SEK 15 billion and the limited possibilities of issuing inflation-linked bonds mean that the nominal kronor-denominated borrowing will continue to be the central government's most important source of financing. The guideline for the nominal kronor-denominated debt is being retained unchanged.

It should be noted that the National Debt Office first creates foreign currency debt by issuing kronor-denominated loans that are then converted to foreign currency by debt swaps. The extent to which the foreign currency debt is amortised, to the extent to which it is not done by borrowing foreign currency directly, does not affect issuing requirements for kronor-denominated debt because possible changes in the rate of amortisation only affect the scale of the swaps. This borrowing technique has helped make it possible to maintain the volume of issues in the kronor market and strengthened the market's liquidity.

Maturity

The Government's decision: For 2002 the average duration of the nominal kronor-denominated debt and the foreign currency debt is to be 2.7 years. The objective for 2003 and 2004 is for the duration to remain unchanged. When establishing the benchmark portfolios for nominal loans, the National Debt Office may decide on an average duration for the nominal debt that deviates by no more than ±0.3 years from the stated benchmark.

The inflation-linked borrowing will have a long duration.

The National Debt Office is of the opinion that the benchmark for the duration of the total kronor-denominated and foreign currency debt should be retained unchanged at 2.7 years for 2002. According to the National Debt Office no new arguments have emerged to warrant changing the maturity of the nominal debt. The guideline for the interval around the duration should also be retained unchanged, that is, at ±0.3 years.

For 2004 the direction is a little more uncertain. A reduced debt should warrant a shorter maturity (and vice versa). An increase in the percentage of inflation-linked debt would mean that the maturity of the debt in its entirety would increase because newly issued inflation-linked bonds generally have a longer maturity than nominal bonds. Thus there may be scope for shortening the duration in the nominal debt without increasing the refinancing risk in the debt. However, the National Debt Office is of the opinion that it is not meaningful to take these possibilities into account in deciding the direction for 2004. There is too much uncertainty. For the same reason possible membership in the third stage of the EMU has not been taken into account.

Table 3. Duration of the Nominal and Inflation-Linked Parts of the Central Government Debt at Year End (Number of Years)

	1996	1997	1998	1999	2000	2001
Nominal debt	3.2	3.1	3.1	2.9	2.9	2.9
Inflation-linked debt	12.4	11.9	11.5	10.7	10.6	9.1

Source: The National Debt Office. The figures for 2001 are estimates.

The Government shares the National Debt Office's assessment. The costs saved by further reducing the maturity are presumably small. The changed risk characteristics resulting from the aim of reducing the proportion of foreign currency debt and increasing the proportion of inflation-linked debt in the long term are presumably marginal in the short term, providing room for additional analysis and position taking in future decisions on the guidelines. Thus no strong arguments have emerged for changing the guideline on the maturity of the nominal debt. The average duration should also continue to be 2.7 years for 2002–2004. However, this should not prevent the National Debt Office from analysing afresh and in greater depth the possibilities of shortening the maturity before the decision on the guidelines for 2003.

In the guidelines for 2001 the Government was of the view that the arguments on balance indicated that the National Debt Office should refrain from position taking in the operational management of the kronor-denominated debt. However, there was some room for strategic positions based on views on long-term interest rate developments. The National Debt Office takes such positions by using the possibility in the mandate assigned it to deviate from the duration targets established by the Government in the guidelines. The National Debt Office has thus far chosen not to make use of the possibility of taking strategic positions based on long-term interest rate forecasts. The Government is of the opinion that the deviation interval for 2002 should also be ±0.3 years.

The present guidelines state that inflation-linked borrowing is to have a long maturity. This is interpreted to mean that a majority of the issues should have at least a 10-year maturity. Long maturities make the best use of inflation-linked bond's risk characteristics. However, the National Debt Office has noted that the real yield curve has a positive slope, that is, interest rates have been higher on the longest inflation-linked loans than on shorter borrowing of this type. The demand for shorter maturities on inflation-linked issues has also been noted. The National Debt Office is therefore proposing a modification in the interpretation of the guidelines to make it more possible for it to take current interest rate conditions into account when issuing loans.

The Government shares the National Debt Office's opinion. It is important to be able to meet the demand from market players and if possible, increase liquidity and vitality in the market for inflation-linked bonds. The guideline should therefore be interpreted as referring to issues of inflation-linked bonds with maturities of five or more years.

Maturity Profile

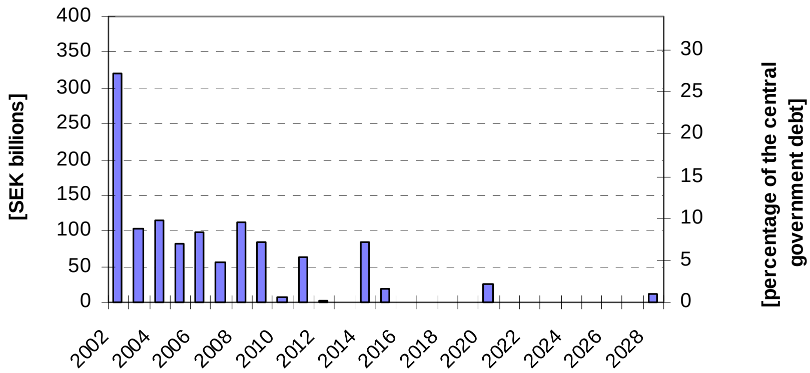
The Government's decision: The National Debt Office is to aim at a dispersed maturity profile for the central government debt. The borrowing is to be managed in such a way that no more than 25 per cent of the central government debt will fall due in the next 12 months.

At present the guideline states that the National Debt Office is to manage the borrowing with the aim that no more than 25 per cent of the central government debt falls due in the next 12 months. At the same time a maximum of 30 per cent is being allowed to mature within the period mentioned.

The National Debt Office is proposing that the guideline as it is currently formulated be scrapped. Instead an even maturity profile should be the aim. The National Debt Office is to report on its handling of the maturity profile at a later date.

A given duration can be achieved in various ways. The guideline for the average duration of the nominal debt of 2.7 years can, for example, be achieved by investing part of the debt in instruments with very short maturities and the other part in instruments with very long maturities. The maturity dates will then be concentrated in certain periods and the borrowing costs will be heavily dependent on the interest rate terms prevailing just then. Diagram 1, which follows, shows how much of the central government debt is projected to fall due each year. The basis is the projected composition of the debt at the end of 2001. In 2002 the amount estimated to fall due comes to SEK 320 billion (about 27 per cent).

Diagram 1. Projected Maturity Profile of the Central Government Debt at Year End 2001 (SEK billions and as a percentage of central government debt).



The present guideline is a complement to the duration target. It aims to limit the refinancing risks in the debt. However, these risks are not directly linked to borrowing maturing within 12 months. Large borrowing requirements concentrated in certain periods can constitute risks even if the percentage of borrowing falling due within 12 months is substantially below the 30 per cent restriction. Instead the distribution of the borrowing by maturity should be relatively even, avoiding concentrating on any single segment as far as possible.

The overall goal of the central government debt policy must be such that it is able to warrant the guidelines established in the decision on the guidelines. Restrictions that risk raising the cost of debt management without actually controlling the risks are to be removed. At present the guideline on the maturity profile is not appropriately designed in all respects. The Government sees no reason for keeping the restriction under which a maximum of 30 per cent of the debt falls due within any twelve-month period. However, there may be reasons for retaining the current aim whereby no more than 25 per cent of the debt should have an outstanding maturity of less than 12 months. The guideline should in this respect not be an impediment to the effort by the National Debt Office to avoid costly measures with short-term swings in the maturity profile. For example, the National Debt Office has stated that a future aim is to limit the percentage of borrowing with an outstanding maturity of less than 12 months to 25 per cent at most. A concrete guideline may also serve as a reference value in the annual appraisal of the management of the central government debt.

In all other respects the National Debt Office, in managing the debt, is to try to have a balanced maturity profile in place.

5 The Evaluation of Central Government Debt Management in 2002

The Government's decision: The National Debt Office is to establish internal guidelines for 2002 based on the Government's guidelines. The internal guidelines are to contain benchmark portfolios for each type of nominal debt and will be evaluated from both a quantitative and a qualitative perspective. The quantitative evaluation will refer to absolute costs and, will, as much as possible, be comparable to the Government's guidelines, with due consideration given to risk.

Two stylised calculations in which the amortisations will be evenly spread over the year will be used to evaluate the National Debt Office's handling of its mandate on foreign currency. The one calculation will correspond to the benchmark in the guidelines; the other will correspond to decisions by the National Debt Office.

The National Debt Office's handling of foreign currency trades will be evaluated based on its establishment of a relatively even distribution of exchange transactions over the year. Possible deviations will be evaluated by estimating differences in costs between the trajectory for foreign currency exchanges that are neutral in terms of the outcome and the actual trajectory.

The inflation-linked debt will be evaluated principally in qualitative terms. In addition the difference in cost realised between borrowing in inflation-linked bonds and nominal government bonds is to be reported.

There will be a quantitative evaluation of the operational management of the foreign currency debt. The costs of the debt based on market value will be compared with the costs of the benchmark portfolio for the foreign currency debt, with due consideration given to risk.

Background

Under the law on central government borrowing and debt management (1988:1387), the Government is to evaluate the management of the central government debt in a written communication to the Riksdag by April 25 every year. The evaluation aims at providing the opportunity for a complete assessment of the conduct of central government debt management as well as guidance for future decisions on central government debt management policy. In addition regularly recurring evaluations provide incentives for reasoned and effective debt management. The evaluation of the debt management policy will take place on several levels. The written communication to the Riksdag will include an evaluation of the National Debt Office's borrowing and management of the central government debt as well as the Government's decision on the guidelines.

The objective of central government debt policy is long term in nature and it is natural to conduct the evaluation using a time perspective in which temporary fluctuations in the result will be smoothed out. Therefore, in recent years the Government has used moving five-year periods in its evaluation of the management. The evaluation of the decision on the guidelines for 2002 will thus concern the years 1998–2002.

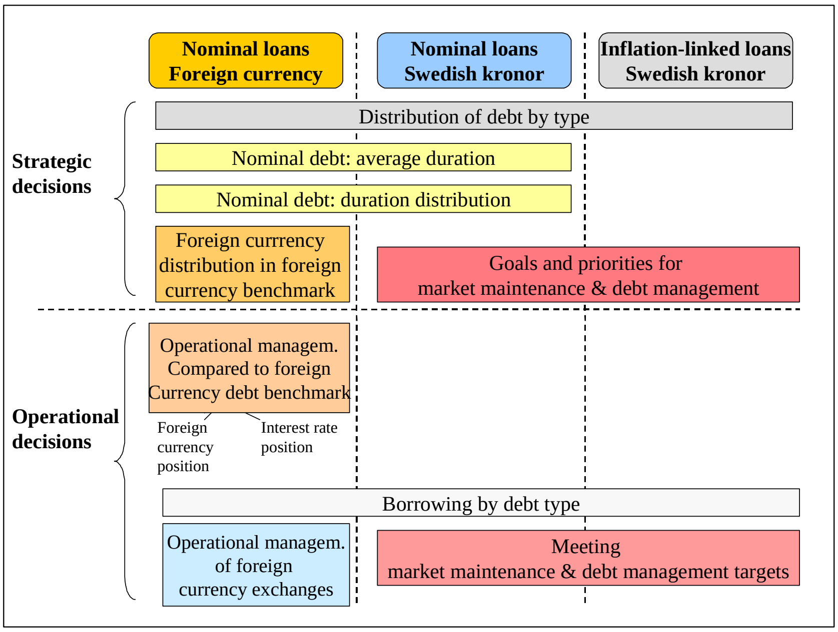
Evaluating Central Government Debt Management in 2002

The evaluation of the Government's guidelines for 2002 should be based on the goal of minimising the cost of management in the long term, while taking the risk into account, and should, in principle, be formulated in the same way as set out in the guidelines for 2000 and 2001.

The evaluation of the National Debt Office refers to its conduct of debt management according to the overall central government debt policy guidelines decided by the Government. On the basis of the Government's decision, the National Debt Office establishes more concrete guidelines for managing the debt. In the following discussion, the National Debt Office's decisions are divided into *strategic* and *operational* decisions. Strategic decisions aim at achieving the goal of central government debt policy and will be evaluated in relation to that goal. Thus the evaluation concerns the absolute costs. It should be noted that quantitative evaluations are not always meaningful. Qualitative assessments must always form an important part of each evaluation.

The implementation of the operational management is based on the strategic decisions. The evaluation of the operational management has in view how well the strategic management objectives have been achieved or, where appropriate, if the relative costs have been reduced. In the management of the foreign currency debt, an evaluation is made relative to a benchmark portfolio.

Figure 1: Evaluation of the National Debt Office's Strategic and Operational Decisions



Strategic Decisions

The evaluation of strategic decisions concerns internal guidelines of the National Debt Office. These include several crucial decisions:

– *Decisions on the distribution of the debt between various types of debt within the intervals stated by the Government*: The National Debt Office's flexibility in this respect stems from the interval around the targeted amortisation rate for the foreign currency debt and the mandate to increase the percentage of inflation-linked borrowing.

– *Decisions on the benchmark portfolios for the nominal kronor-denominated debt and the foreign currency debt*: They include decisions on average duration for the portfolios, decisions on duration for each of the portfolios and decisions on the currency composition of the benchmark for the foreign currency debt.

– *Decisions on objectives for debt management and market maintenance*: These decisions refer mainly to the choice of goals and setting of priorities. They also have in view whether these goals and priorities are expected to lead to the results being sought.

The evaluation of the strategic decisions, especially those concerning the benchmark portfolios, should, as far as possible, be made by contrafactual comparisons between clearly differentiated and stylised debt portfolios with respect to expected costs and risk. The costs refer to the absolute costs in terms of the average running-yield-to-maturity. One alternative may be a so-called status quo portfolio that assumes that the characteristics of the debt from the outset will be retained. It should be emphasised that the evaluation refers to debt management from a long-term perspective.

The evaluation of the National Debt Office's management of its foreign exchange mandate can be made through two stylised calculations in which the amortisations occur evenly over the year, one equivalent to the benchmark in the guidelines and the other corresponding to the decisions of the National Debt Office. Using the actual amortisation profile is not meaningful because it presents an uneven pattern. Decisions on using the foreign exchange mandate are based on strategic long-term assessments and thus should be evaluated from that perspective. The final result of a decision—for example, to reduce amortisations for a specified period—is at hand only at the time when the amortisation is actually carried out. Consequently the assessment of whether making such a decision was correct must, to a considerable extent, be based on a review of the reasonableness of the analysis on which the decision is founded.

Decisions on the distribution of the debt between different kinds of debt probably cannot be quantitatively evaluated in any meaningful way with contrafactual estimates unless a change in the proportions of the various types of debt is based primarily on considerations about exchange rate developments affecting the krona. It should be noted that the rate of increase in inflation-linked debt is to be weighed against the costs and risks of the other types of debt.

It should be stressed that the evaluation should be made in the light of the knowledge that existed at the time of the decision. It should also be stressed that the choice of alternatives for purposes of comparison is made between portfolios that beforehand appear to be reasonable. Contrafactual estimates should be complemented by qualitative evaluation.

Operational Management

Evaluating operational management entails an assessment of the extent to which the National Debt Office has achieved its agreed objectives and agreed measures have been taken. It also involves a quantitative evaluation in relative terms of the operational management of the foreign currency debt and the conduct of foreign currency exchanges.

As in previous years, the management of the foreign currency debt will be evaluated by comparing the actual costs of the foreign currency debt in market maintenance terms with the benchmark's hypothetical costs. The results indicate the extent to which deviations from the benchmark portfolio have led to higher or lower costs in relative terms.

The National Debt Office states in its proposal that one way to evaluate its management of foreign currency exchanges is for its Board to establish a relatively even distribution of the exchanges over time. In addition the Board is to establish permitted deviation intervals for the operational management. Within these frames, the National Debt Office can then vary the exchange transactions, reducing them in periods when they appear particularly unfavourable. Possible deviations can then be evaluated ex post by estimating the differences in cost between the trajectory for the foreign currency exchanges that are neutral in terms of the outcome and the actual trajectory. The Government shares the opinion of the

National Debt Office on how the evaluation of foreign currency exchanges should be made.

It is the National Debt Office's view that it is not appropriate to tie inflation-linked borrowing and its evaluation too inflexibly to the Riksbank's inflation target of two per cent. Instead the National Debt Office is to assess the timing and volume of inflation-linked issues on an ongoing basis and review in its reports the underlying arguments for its decisions. The evaluation will thus be primarily qualitative and made on an ex ante basis. In addition the differences in costs realised thus far should be reported as before. This means that a cost comparison between borrowing in inflation-linked bonds and borrowing in nominal government bonds for 1998-2002 is to be reported.

The Government shares the opinion of the National Debt Office. The quantitative measure for evaluating the inflation-linked debt does not correctly reflect the goal of debt management because risk is not taken into account. It is necessary to work with several dimensions in the criteria used when evaluating the inflation-linked debt.

In the guidelines for previous years, the Government endorsed evaluating the management of the nominal and the inflation-linked kronor-denominated debt chiefly in qualitative terms. The management should have in view the debt management and market maintenance conducted by the National Debt Office with the aim of achieving the lowest possible absolute interest cost (average running-yield to maturity). The Government also asked for a clarification of the concept of debt management and market maintenance, both with respect to the extent and the expected effects of various measures.

This year the Government would also like to emphasise the importance of developing quantitative evaluation methods with the aim of having indicators of the impact of the National Debt Office's measures on the central government's financing costs. Even if the evaluation may be expected to be mainly qualitative, there should be an effort to increase the quantitative elements of the evaluation. The importance of drawing up clear operational subobjectives for debt management and market maintenance before a new fiscal year should also be stressed. It would also be worthwhile, where it is suitable and possible, to engage external consultants in the evaluation of management of the debt. In this way additional reference points and quality assurance will be obtained. This is especially important for the overall evaluation presented to the Riksdag every April.

The National Debt Office should, as in the evaluation respecting 2000, report how the operational duration interval around the kronor-denominated debt and the debt denominated in foreign currency has been used. It should also report deviations from this interval and the reasons for these deviations.

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6 Technical Appendix: The Main Concepts Defined

Foreign Currency Borrowing

The mandate for foreign currency borrowing laid down in the guidelines on the management of the central government debt is defined in terms of flows. An amortisation of the foreign currency debt consists of the net of the amounts falling due and the amounts borrowed as regards both loans and derivative instruments, valued at the exchange rates in effect on the transaction day. This means that all foreign currency flows are included in the foreign currency mandate; for example, in swaps between kronor and foreign currencies, the foreign currency part of the swap is included in the foreign currency mandate, while the kronor part is included in the kronor-denominated debt. Unrealised revaluations of the debt owing to exchange rates are not counted in the amortisation of the foreign currency debt as stated in the guidelines. This means that an amortisation in terms of the foreign currency mandate does not ex post equal the change that can be measured in the value of the outstanding debt during the same period, as the outstanding debt also contains unrealised exchange rate revaluations.

Debt Swaps (Kronor/Foreign Currency Swaps)

For reasons of cost, the National Debt Office has chosen to take out loans in Swedish kronor and by debt swaps (kronor/foreign currency swaps) convert the loans to debt in foreign currencies. This practice has in most cases proved to be cheaper than direct borrowing in foreign currencies.

This form of foreign currency borrowing can be said to consist of two steps. In the first step borrowing in kronor in the form of ordinary bond issues takes place; that is, the National Debt Office acquires debt in kronor. The second step involves making a kronor/foreign currency swap, conducted with banks as counterparts. The swap gives the National Debt Office an asset in kronor – equivalent to the debt in kronor incurred by the issuance of the bond – and a debt in foreign currency. The debt in kronor has thus been converted into a debt in foreign currency. The cost savings occur as the National Debt Office receive a higher interest rate from the swap-contract than the interest rate paid by the SNDO when issuing the bond. This difference in interest rates is known as the swap spread.

Duration

Duration is used to measure the length of the debt. The measure calculate the debt’s average remaining time to maturity by multiplying the time to each cash flow (coupons and redemptions) by the size of the cash flow. As the present values of the future cash flows depend on the interest rate level, the duration is consequently dependent on the interest rate level. There are a couple of different definitions of duration. The National Debt Office’s target duration is expressed as Macauley duration, which means that the obligation’s yield-to-maturity is used to calculate the present value of the future cash flows. Macauley duration is generally expressed in years.

Maturity Profile

The maturity date profile is defined in terms of how large a percentage of the outstanding stock at the time of measurement has maturities within the prescribed maturity interval. In practice the maturity date profile is measured at the end of each month. The cash balance, which shows levels that on a daily basis in individual months may move from deficits of about SEK 35 to 40 billion to surpluses of the same magnitude, is estimated ex ante to be at an average level with a deficit of SEK 15 billion. However the cash balance changes in a predictable manner over the months. Accordingly it is known at what approximate level that amounts fall due for a twelve-month period on those days when the deficit in the cash balance is at its largest. For short-term borrowing (principally call loans and treasury bills with a maturity of less than 12 months), which are refinanced during the year, only the volumes that are outstanding at each time of measurement are included.

The maturity date profile thus gives an on-the-spot account of the total outstanding volume that will fall due within 12 months of a particular day. The net maturities of derivative instruments have been estimated at zero in the calculations. The net values appear only as a result of exchange rate fluctuations, and as the exchange rates at the due dates are not known in advance, zero is a reasonable forecast.