RIKSGÄLDSKONTORET
THE SWEDISH NATIONAL DEBT OFFICE

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Central Government Debt Management – Proposed Guidelines

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Summary

In this memorandum, the Swedish National Debt Office submits to the Government its proposed guidelines for the management of central government debt. The proposal is based on the legally mandated goal of government debt management, which is to minimise long-term costs while taking into account the risks inherent in such management and the constraints imposed by monetary policy. The main points in the proposal are:

- The benchmark for amortisation of *foreign currency debt* during 2003 should be SEK 25 billion. The Debt Office should be allowed to deviate from the pace of amortisation stated in the Government's decision by SEK ±15 billion. The benchmark for amortisation of foreign currency debt in 2004 and 2005 should be SEK 25 billion per year.

- The share of *inflation-linked loans* in the total central government debt should increase in the long term. Inflation-linked borrowing should be weighed against the growth in demand for inflation-linked bonds and the borrowing costs of other types of debt, with due consideration to risk.

- The remainder of the central government's gross borrowing requirement should be covered by *nominal krona-denominated loans*.

- The *maturity* (measured as duration) of total nominal krona and foreign currency debt should be 2.7 (±0.3) years. Inflation-linked borrowing should occur in long maturities.

- The Debt Office should aim at a smooth maturity profile for the purpose of limiting refinancing risk. Borrowing should be managed in such a way that no more than 25 per cent of central government debt will fall due in the next twelve months.

The Debt Office's proposal that amortisation of foreign currency debt shall be SEK 25 billion coincides with the long-term strategy that the Government stated last year. The interval of SEK ±15 billion will be used by the Debt Office to promote the goal of minimising costs while taking into account risks. Aside from budget and exchange rate developments, in deciding how to utilise this flexibility the Debt Office should be allowed to weigh in whether amortisations during earlier periods have been postponed due to its view on the krona exchange rate. This may mean that during one period, the Debt Office will choose to amortise more than the benchmark even if the krona is not perceived as overvalued, in order to change the debt in the direction of a decreased percentage of foreign currency debt in keeping with its long-term goal.

The Debt Office's proposed guidelines have been formulated on basis of existing currency policy conditions. At the same time, the Debt Office cannot ignore the possibility that a referendum on Swedish membership of the Economic and Monetary Union (EMU) will be organised as early as during 2003. The memorandum therefore presents an analysis of what consequences

a possible referendum might have for the guidelines. The Debt Office's conclusion is that a Yes vote for currency union membership will affect the prerequisites for central government debt policy to such a great extent that, at least with regard to amortisation of foreign currency debt, the guidelines should be changed. If, however, the referendum results in a No vote for membership, this should not trigger new guidelines, although there may be reason to maintain a degree of preparedness.

Regarding the percentage of inflation-linked debt in the total debt, the maturity of nominal krona and foreign currency debt and the maturity profile of the debt, the Debt Office is proposing no changes in relation to the existing guidelines.

In addition to its regular proposed guidelines, the Debt Office has reviewed the definition of its foreign currency mandate, i.e. the net borrowing benchmark that the Government establishes. The foreign currency mandate now in force is defined on the basis of how the central government's foreign currency borrowing affects the foreign currency reserve of the Riksbank, Sweden's central bank. This is no longer a suitable definition, since the Riksbank no longer handles the Debt Office's exchanges between Swedish kronor and foreign currencies. Since July 1, 2002, the Debt Office has made all exchanges directly in the market instead of via the Riksbank as earlier. The memorandum presents an in-depth analysis of how the foreign currency mandate should be defined.

The Debt Office proposes that the definition be changed in such a way that all transactions affecting the central government's foreign currency exposure are included in the mandate. This means that forward contracts will be included in the mandate. These forward contracts will thereby affect the pace of amortisation that is measured – right from the transaction date instead of when they expire, as today. This will not lead to any significant changeovers. The only change will be a slight modification in the date when the Debt Office's foreign currency transactions are reflected in the foreign currency mandate. The altered definition, in itself, will thus not cause any adjustment of the benchmark for foreign currency amortisations, either during 2002 or later.

In addition, the Debt Office has reviewed the evaluation system for central government debt management. This analysis focuses on areas that the Government has raised questions about, as well as the methods used by the Riksdag (Swedish Parliament) to evaluate the Government's guideline decision.

1 Introduction

In this memorandum, the Swedish National Debt Office presents its proposed overall guidelines for the management of central government debt, as provided by the instruction for the Debt Office (1996:311). This proposal is based on the goal formulated in Article 5 of the Act (1988:1387) on State Borrowing and Debt Management. This says that central government debt shall be managed in such a way as to minimise the long-term cost of the debt while taking management risk into account, and that management shall occur within the constraints imposed by monetary policy.

The memorandum is organised as follows. In Section 2, the Debt Office discusses the points of departure for the proposal in light of the analyses and Government decisions of prior years. Section 3 deals with the definition of the foreign currency mandate. The Debt Office presents its proposed guidelines in Section 4. The memorandum closes with a discussion of the formulation and implementation of the evaluation system.

2 Points of departure for the proposed guidelines

2.1 Introduction

The current system for controlling central government debt management was introduced in 1998. Since then, its approach to the goal of minimising cost while taking risk into account, as well as its analysis of government debt structure have gradually changed. As the point of departure for this year's proposed guidelines, the Debt Office will summarise its conclusions from these analyses and the decisions made by the Government.

2.2 Analyses and conclusions to date

2.2.1 Cost and risk measures

The Government's decision on guidelines for central government debt management is taken amidst uncertainty, since future interest rate and exchange rate movements as well as central government finances are unknown. Debt management must therefore be structured in such a way that there are margins for coping with negative surprises. This management must never be based on taking chances. This viewpoint is reflected in the legally mandated goal of central government debt management, which says that government debt shall be managed in a way that minimises long-term costs while taking into account the risks inherent in such management. The guideline decision thus embodies a trade-off between the expected costs and risks of the debt.

The question of how to measure the costs and risks of government debt has received considerable attention in earlier proposed guidelines and guideline decisions. In its guideline decision in 2000, the Government stated that in a consideration of the structure of government debt and its maturity, the costs should be measured by the *running yields* (average interest rate upon issue) and the risk as *running yields at risk* (distribution of average interest rate upon issue), which would provide a measure of the risk of rising issue rates. Running yields should also be used when evaluating central government debt management.

In this decision, the Government also stated that the risk should also be measured in terms of *the contribution that the debt portfolio makes to fluctuations in the budget balance and the debt.* This may be regarded as a *real-term* measure that supplements the above nominal risk measure. The Debt Office obtained inspiration for this risk measure from the asset and liability management (ALM) approach, in which the fundamental concept is that financial risks can be minimised by matching the characteristics of liabilities against those of assets. From the standpoint of debt policy, this means that the central government can reduce the risk in its debt portfolio by structuring the portfolio in such a way that interest costs co-vary with budget surpluses (excluding interest payments). This is based on the intuition that a debt portfolio that typically has low costs when government finances are strained, for example due to a deep economic downturn, is less risky than a portfolio in which the opposite is true.

2.2.2 Structure and maturity of the debt

In earlier proposed guidelines, the Debt Office has gradually analysed the issue of the structure and maturity of government debt. At present, this debt comprises approximately 34 per cent foreign currency debt and 10 per cent inflation-linked loans, with the remaining portion consisting of nominal krona debt. The conclusion of the Debt Office's analysis shows that foreign currency debt should decline in the long term, while the percentage of inflation-linked loans in the total debt should increase in the long term. The reason is that foreign currency debt is more risky that nominal krona debt, without yielding lower expected costs, while inflation-linked borrowing helps to reduce the risk level in the government debt.

In its guideline decisions for 2001 and 2002, the Government concurred with the Debt Office's assessment of central government debt structure. In its latest decision, the Government stated that foreign currency debt should be amortised by SEK 15 billion during 2002 and SEK 25 billion per year during 2003 and 2004. The Government also decided that the share of inflation-linked loans shall increase in the long term, but that the pace of this increase shall be weighed against the demand for inflation-linked bonds and the borrowing costs of other types of debt, with due consideration to risk.

The Debt Office has also analysed the choice of maturity (duration) of the nominal krona debt and foreign currency debt. The Debt Office's model simulations preparatory to the guideline decision for 2001 indicated that short-term borrowing in Swedish kronor might have advantages from both a cost and risk standpoint when costs are set in relation to gross domestic product (GDP). The reasons are that short-term interest rates are generally lower than long-term rates and that short-term domestic interest rates tend to co-vary positively with GDP growth. However, the potential gains from short-term borrowing must be weighed against the increased refinancing risk that short-term borrowing may cause. Considering that Swedish government debt is already relatively short-term and its duration was slightly shortened during 2000, the Debt Office has thus proposed no change in the existing maturity guidelines since then.

In earlier guideline decisions, the Government has concurred with the Debt Office's assessment of the duration of nominal krona and foreign currency debt. In its decision for 2002, the Government stated that the benchmark for the duration of nominal krona and foreign currency debt would remain unchanged at 2.7 years. The Government also decided that its aim for 2003 and 2004 would be an unchanged duration.

2.3 Priorities in preparing this year's proposed guidelines

In its proposed guidelines for 2002, the Debt Office completed its coverage of central elements of government debt characteristics, that is, the structure and maturity of this debt. This does not mean that the Debt Office's analytical and modelling work is over. However, the overall aim of central government debt policy should be regarded as firmly established. This year's guideline work has therefore focused on issues other than the earlier ones. The Debt Office has also been able to allocate more resources to such areas that concern the operational and practical administration of the central government debt and that are thus not presented here.

One issue that the Debt Office has prioritised in this year's proposed guidelines is the definition of its foreign currency mandate, i.e. the benchmark for net borrowing that the Government establishes. The background is that since July 1, 2002, the Debt Office has carried out all exchanges between Swedish kronor and foreign currencies directly in the market, instead of via the Riksbank as earlier. This has raised the issue of how the foreign currency mandate should be defined. At present, this mandate is defined on the basis of how central government borrowing in foreign currencies affects the foreign currency reserve. This is no longer a suitable definition, since the Riksbank no longer handles the Debt Office's exchanges. Section 3 discusses the issue of how a more appropriate definition of the foreign currency mandate, from a debt policy perspective, should be formulated.

Another issue that has been important to address in this year's proposed guidelines is the consequences of a possible EMU referendum during 2003. In working with proposed guidelines, the most important issue has concerned the guidelines for foreign currency debt. The reason is that Swedish accession to the EMU would, in a single step, transform a large proportion of the foreign currency debt into domestic currency debt. In Section 4.2.4, the Debt Office has therefore focused its analytical work on the consequences for the foreign currency debt guidelines. However, the Debt Office wishes to point out that it will maintain a high degree of preparedness and also plans to make extensive consequence analyses in other fields. For example, Swedish membership of the currency union might affect the prerequisites for the Debt Office's borrowing due to shifts in domestic demand for Treasury bonds and market liquidity. However, this is an issue that is not of direct significance to the Government's guidelines.

The Debt Office has also reviewed the evaluation system for central government debt management. A survey of earlier evaluations shows that both the Government and the Debt Office have sometimes had difficulty living up to the principles established earlier. Furthermore, in this year's evaluation of central government borrowing and debt management, the Government called for further documentation on how the strategic and operational currency positions of the Debt Office shall be evaluated and how decisions on a possible overall benchmark shall be taken. Another request was that the Debt Office should develop methods for in-depth assessments of how market maintenance and debt management affect the central government's borrowing costs. Section 5 presents a survey of all areas that will be subject to evaluation. However, the Debt Office has concentrated this work on those portions that the Government has raised questions about, as well as on methods for the Riksdag's evaluation of the Government's guideline decisions.

Finally, the Debt Office has a continuing mandate to develop lines of reasoning and methods for analysis of central government debt management. This year, the Debt Office has studied the issue of interest rate risk, duration and maturity profile. Its ambition has been to increase public understanding of what factors affect the risk of increased interest costs, as well as the association between duration and maturity profile. However, its conclusions from this work have not affected this year's proposed guidelines, but should be viewed as part of the Debt Office's continuous development work concerning issues related to government debt management. For this reason, the analysis is not presented as part of the proposed guidelines, but is appended as a separate report for the interested reader.

3 New definition of the foreign currency mandate

3.1 Background and points of departure

Since July 1, 2002, the National Debt Office has carried out all exchanges between Swedish kronor and foreign currencies directly in the market, instead of via the Riksbank as earlier. This change in the handling of the Debt Office's currency exchanges raises the issue of reviewing the definition of the foreign currency mandate, i.e. the benchmark for net borrowing in foreign currencies that the Government establishes in its guideline decision. The existing definition is based on how central government borrowing in foreign currencies affects the Riksbank's foreign currency reserve. Since these currency exchanges are carried out today in a way that does not involve the foreign currency reserve, it is logical to review the foreign currency mandate and, more generally, the principles on how the Government states guidelines for the foreign currency debt.

3.2 Existing definition

The Government controls the management of the foreign currency debt by stating a foreign currency mandate in terms of flows. In recent years, it has thus been a matter of a benchmark for the repayment of the foreign currency debt. Since the existing definition of the foreign currency mandate came into being during the period when the Riksbank handled the currency exchanges on behalf of the Debt Office, the foreign currency mandate was explained on the basis of how the transactions affect the foreign currency reserve. All foreign currency flows (excluding interest payments) are included in the foreign currency mandate, i.e. the net amount of maturing and newly agreed loans and those derivative instruments that cause initial flows.[1] For example, the foreign currency mandate includes the foreign currency portion of swaps between kronor and foreign currencies, since an exchange from kronor to foreign currencies occurs in conjunction with the currency swap. However, it does not include foreign currency forward contracts on the transaction date, since no flow occurs until the forward contract expires.

Also included are realised exchange rate losses and exchange rate gains on maturing loans. The reasons for this can be illustrated by an example. Assume that a loan of USD 1 billion is raised when the krona/dollar exchange rate is SEK 10 = USD 1, and it falls due on a date when the exchange rate has risen to 10.50. In this case, the Swedish central government realises an exchange rate loss of SEK 500 million. The day the loan falls due, the Riksbank's foreign currency holdings decrease by USD 1 billion, while the foreign currency reserve, which is measured in kronor, decreases by SEK 10.5 billion. Since the foreign currency mandate is defined in kronor, to cover the redemption the Debt Office must borrow the equivalent of SEK 10.5 billion. In this way, the currency reserve once again gains the equivalent of USD 1 billion.[2]

In this example the foreign currency reserve, even measured in foreign currency, is thus unaffected by the Debt Office's aggregate transactions. However, if the foreign currency mandate should not include the exchange loss, and the Debt Office thus only needs to borrow the equivalent of SEK 10 billion in order for the measured net amortisation to be zero, the returning inflow in foreign currency will be only USD 950 million. In that case, even though they may appear neutral in terms of figures, the Debt Office's transactions will lead to a reduction in the Riksbank's foreign currency reserve.

Unrealised changes in the value of the debt with respect to exchange rates, however, are not included in the amortisation of the foreign currency debt. Since unrealised changes, by definition, do not lead to any payments (flows), they do not belong in a flow-based measure.[3]

3.3 The foreign currency mandate from a debt policy perspective

3.3.1 Formulation of the foreign currency mandate

The main reason why the Debt Office is bringing up the issue of formulation of the foreign currency mandate is that its currency exchanges have been restructured. This change concerns how *flows* connected to the foreign currency reserve are handled. It may nevertheless be relevant not merely to think about how an alternative flow-based measure should look. The issue of how to formulate the foreign currency mandate should be examined more impartially.

[1] All transactions are valued at the exchange rates prevailing on the transaction date.

[2] This does not apply exactly if the refinancing occurs on another date and the dollar exchange rate has changed during the intervening period, but normally the difference should be small.

[3] The fact that changes in value are not included also means that amortisation, measured in terms of the foreign currency mandate, does not normally coincide with the change in the value of the outstanding debt during the corresponding period, since the debt also includes unrealised changes in exchange rates.

Based on the goal of cost minimisation while taking into account risk, in its guidelines for 2001 the Government decided on a long-term reduction in the percentage of foreign currency debt in the total debt. The most important argument is that foreign currency debt is associated with higher risk without offering correspondingly lower expected costs. The Government stated no specific percentage of foreign currency debt, among other things on grounds that the desired share is so much lower than the initial share that this question can wait.

One seemingly straightforward way of translating this decision into guidelines for central government debt management would be to state a multi-year trajectory according to which the *share of foreign currency debt* in the total debt will decrease by a number of percentage points per year (combined with a suitably balanced interval, to give the Debt Office room to take cost-related factors into account in its debt management). This would also be consistent with how a decision based on portfolio theory would be applied in a conventional asset portfolio. Given such a structure, the question of what *flows* should be included in the guidelines regulating foreign currency debt management disappears. It suffices to evaluate the instruments included in the debt and to make the transactions needed to achieve the desired percentage of foreign currency debt.

Despite its simplicity, this way of managing the foreign currency debt has been rejected. In its proposed guidelines for 2000, the Debt Office noted that regulation in terms of percentages of total debt (all else being equal) would require the central government to amortise more in periods when the krona is weak and amortise less when the krona is strong, in order to keep the percentage at the stated level. If the value of the krona fluctuates over time, the Debt Office would thereby systematically amortise more in periods when this is expensive (when the Debt Office has to pay relatively many kronor per foreign currency unit) and vice versa. The Debt Office declared that this was inconsistent with the cost minimisation goal.

Since then, the Debt Office has also been assigned to take into account the value of the krona when deciding how to utilise the amortisation mandate. This means that amortisations will be reduced when the krona is deemed temporarily weak, which happened during both 2001 and 2002, and vice versa. This mandate would be difficult to combine with guidelines stated in terms of a percentage of total debt, since in that case a weakening of the krona means amortisations must increase in order to maintain the desired percentage. The ambitions that the Debt Office should manage the foreign currency mandate actively in order to minimise costs have thus further distanced the debt management system from an approach based on a percentage of total debt.

The Government and the Debt Office have based their management of the foreign currency debt during 2001 and 2002 on the assumption that the krona has been temporarily weak and will eventually strengthen to at least a level around the average for the period since the krona's transition to a floating exchange rate. Given this assessment, it would not have been appropriate to state guidelines in terms of what percentage of total debt the foreign currency debt should represent, since this would have compelled sizeable amortisations even during the autumn of 2001 when the krona was extremely weak. To date, this exchange rate assessment appears correct. The management method can thus also be viewed as having been appropriate, since it allowed room for such assessments.

This does not mean that current practices are problem-free. One objection is that if the krona depreciates in such a way that the government's foreign currency debt increases in absolute terms and as a percentage of the total debt, this also increases *the risk* in this debt (given that foreign currency debt is perceived as more risky than krona debt). For reasons of risk, it might thus be justified to amortise when the krona is weak, even though it may appear expensive. The fact that to date it has proved justified from a cost standpoint to abstain from amortisations since mid-2001 can thereby not be cited out of hand as proof that generally speaking, this action has been consistent with the goal. There may also be an asymmetry in the current system. Experience shows that central government representatives, in particular, have had a tendency to underestimate how weak the krona exchange rate may become.

Given annual flow targets, there is thus a risk of losing sight of the long-term goal. The desired reduction in the percentage of foreign currency debt may consequently be delayed longer than would be justified from a risk standpoint. It should be noted, however, that an annual mandate expressed in flow terms can be combined with feedback between the percentage of foreign currency debt, as a measure of foreign currency exposure, and the pace of amortisation stated in the guidelines.

In some respects, the choice between management in terms of flows and percentages, respectively, can be said to reflect a trade-off between cost minimisation and risk. It is also a matter of assessing the value of a more active approach to central government debt management in relation to more passive, benchmark-regulated strategy. In the Debt Office's judgement, experience in the handling of foreign currency debt over the past few years illustrates the value of the active approach. It was reasonable to cut back amortisations during a period when the krona carried a low value, viewed in a historical and fundamental perspective. This strategy was made easier by the fact that the foreign currency mandate was stated in flow terms. An excessively strict percentage approach also tends to miss the *total* risk picture. The size of the foreign currency percentage must set in relation to the size of total central government debt. A large foreign currency percentage is more risky if total debt – and thus interest cost – is large in relation to GDP. Taken together, a high foreign currency percentage is thus less worrisome from a risk standpoint in today' government financial situation than, say, five years ago.

In light of this, the Debt Office believes that the foreign currency mandate should continue to be stated in flow terms. Analysis of how the foreign currency mandate ought to be defined should consequently focus on measures related to *transactions* connected to the foreign currency debt. However, changes in foreign currency exposure due to exchange rate movements should continue to be excluded from the mandate.

3.3.2 Definition of the foreign currency mandate

Given the conclusions in the preceding section, the question is *what* transactions should be included in the definition of the foreign currency mandate. A first reasonable criterion for assessing this question is whether the transaction changes *central government currency exposure*. This is a way of incorporating the ambition of diminishing the government's foreign currency risks by reducing the percentage of foreign currency debt in the long term. Transactions that lower foreign currency exposure should thereby be defined as amortisations, while transactions that increase exposure should be defined as new borrowing. One way of viewing this is the foreign currency exposure, in principle, will play the same role as the foreign currency reserve did for the existing definition.

With this point of departure, it is self-evident that loans and derivative instruments in foreign currencies should be included, in the same way as in the existing foreign currency mandate, with the additional proviso that transactions that affect exposure be included regardless of whether they represent initial flows or not. Consequently, currency forward contracts should be included in the mandate on the date when the contract is entered into, and not when the payment occurs, as now. The contract date is crucial to foreign currency exposure, not the flow arising when the contract expires. In practice, this change mainly means that amortisations are recorded earlier than with the existing definition.

How to treat exchange rate gains and losses is less apparent. It is therefore justified to return to the example in Section 2. Thus, assume once again that USD 1 billion is borrowed when the krona/dollar exchange rate is SEK 10 and the loan falls due on a date when the exchange rate has risen to SEK 10.50. The central government thus realises an exchange rate loss of SEK 500 million. As a consequence of this redemption, foreign currency debt decreases by a billion dollars, which is equivalent to SEK 10.5 billion. With kronor as a yardstick, foreign currency exposure has thus fallen by SEK 10.5 billion, and it requires a loan of USD 1 billion to restore this exposure. If the government only borrows the equivalent of SEK 10 billion, a reduction in exposure occurs. Consequently it is reasonable, even from the standpoint of foreign currency exposure, to include exchange rate gains and losses in the foreign currency mandate.

Based on effects on the government's foreign currency exposure, the government debt policy-related definition of the foreign currency mandate coincides with the existing definition, with the addition that currency forward contracts, which affect exposure without causing initial flows, should be included.

3.4 Conclusion

The Debt Office's overall assessment is that the foreign currency mandate should continue to be defined in flow terms. However, the definition should be changed to include all transactions that affect *central governments foreign currency exposure* and not, as earlier, the foreign currency reserve. This means that currency forward contracts should be included in the mandate. Forward contracts would thereby affect the measured pace of amortisation right from the transaction date, rather than when they expire, as they have until now. Since the Debt Office primarily uses forward contracts to reduce risks in conjunction with large maturities, this change will not lead to any major changeovers. The only change is that the date when the Debt Office's foreign currency transactions are reflected in the foreign currency mandate will change slightly. The changed definition will thus not, in itself, cause any adjustment in the benchmark for foreign currency amortisations, either during 2002 or in the future. In Section 4.2, the Debt Office will return to its proposal concerning the pace of amortisation in 2003.

4 Proposed guidelines

4.1 Introduction

In its guideline decision, the Government establishes overall guidelines for central government debt management. The main points of earlier guideline decisions have been that the Government has stated benchmarks and limits for administering the amortisation of foreign currency debt and for inflation-linked borrowing. The Government has also set benchmarks for the duration of the aggregate krona and foreign currency debt, as well as for the time to maturity of new borrowing in the form of inflation-linked bonds. Beyond this, the Government has controlled the maturity profile by stating a strategy for how large a percentage of central government debt may mature during a rolling twelve-month period.

In this year's proposed guidelines, the Debt Office is following the same guideline structure as previously. Its proposal is thus being expressed in the same way as the guidelines now in force. The time perspective in the guidelines is three years, equivalent to the same time horizon as the expenditure ceiling for the central government budget. The Debt Office is thus presenting guidelines for 2003 as well as preliminary guidelines for 2004 and 2005.

4.2 Foreign currency debt

The Debt Office's proposal: The percentage of foreign currency debt in central government debt should decrease in the long term. The proposed benchmark for amortisation of foreign currency debt during 2003 is SEK 25 billion. The Debt Office should be allowed to deviate from the stated amortisation rate by SEK ±15 billion. The benchmark for amortisation of foreign currency debt in 2004 and 2005 should be SEK 25 billion.

4.2.1 Guidelines now in force

In November 2001, the Government decided that the benchmark for the Debt Office's amortisation of foreign currency debt during 2002 should be SEK 15 billion. It also decided that the Debt Office may deviate from this benchmark by SEK ±15 billion. This flexibility is to be used to promote the goal of minimising costs while taking into account risk. The Government set a medium-term benchmark for the pace of amortisation during 2003 and 2004 of SEK 25 billion.

In December 2001, the Debt Office decided to take advantage of the flexibility in the pace of amortisation and base its loan planning for the time being on not making any amortisations. This decision is still in force. The most important reason is the weak krona. Amortisations in situations of a weak krona exchange rate lead to costs that can be avoided or limited if amortisations are carried out at a later date when the krona has strengthened to more normal levels.

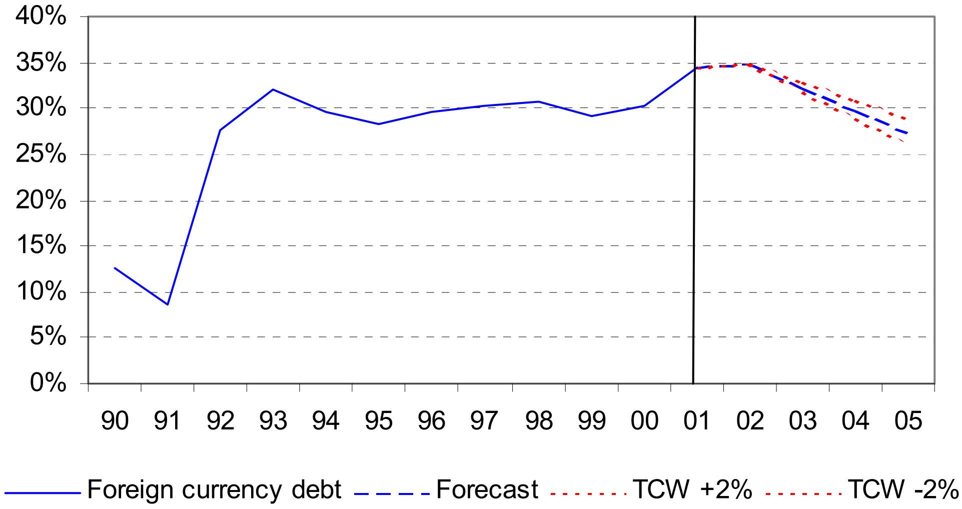
4.2.2 Deliberations and proposal concerning 2004 and 2005

The Debt Office's position concerning the pace of amortisation in 2003 should be based on the medium-term benchmark for amortisations. For this reason, it is discussing the benchmark for 2004 and 2005 first.

In its proposed guidelines for 2001, the Debt Office carried out an in-depth analysis of the characteristics and role of the foreign currency debt in the central government debt. Its conclusion was that the percentage of foreign currency debt should be reduced in the long term. The reason is that foreign currency debt is associated with greater risk than krona debt without having any cost advantages. In subsequent guideline decisions, the Government has concurred with the Debt Office's conclusion. In the Debt Office's judgement, nothing has emerged during the year that changes this earlier conclusion. On the contrary, the large exchange rate movements that have dominated both 2001 and 2002 have reinforced this picture.

In this context, it is interesting to note that the percentage of foreign currency debt in total debt, despite several years of amortisations, has not decreased. This is partly due to a decrease in the domestic portion of the debt because of transfers of bonds from the National Pension Funds (AP Funds) and the Riksbank, which reduced total debt without affecting foreign currency debt. But it is also because the krona has weakened, causing the market value of the foreign currency debt to rise. Chart 4.1 shows the change in the foreign currency percentage of total debt between 1990 and 2001. The chart also shows a forecast of how the percentage is expected to change in the future, given certain assumptions. The Debt Office will return to this below.

Chart 4.1 Foreign currency debt as a percentage of central government debt – historical change and forecast



In the opinion of the Debt Office, the guidelines for the pace of amortisation should be based on long-term and structural considerations. The present exchange rate should therefore not affect the benchmark for the pace of amortisation in 2004 and 2005. Instead, the decision should be based on an assessment of what constitutes an appropriate central government debt structure. In making this assessment, it remains true that it is appropriate to decrease the percentage of foreign currency debt. In last year's guideline decision, the Government stated on the basis of such an analysis that the benchmark for the pace of amortisation in 2004 should be SEK 25 billion. In the opinion of the Debt Office, nothing new has emerged during the year to indicate that the guidelines for 2004 should be changed. For the same reason, the Debt Office makes the assessment that the pace of amortisation in 2005 should be SEK 25 billion.

Chart 4.1 shows a forecast of how the percentage of foreign currency debt would change over the coming three years if the pace of amortisation were set at SEK 25 billion per year. In this forecast, it turns out that foreign currency debt would fall from 34.9 per cent at the end of 2002 to 27.5 per cent at the end of 2005 (see the dashed line). If the pace of amortisation were set instead at SEK 15 billion per year, foreign currency debt would only fall to 30.0 per cent. It should be noted, however, that this is a simplified forecast based on a net borrowing requirement of SEK 12 billion per year during this period and an unchanged exchange rate as measured by the Riksbank's Total Competitiveness Weighted (TCW) index. If the net borrowing requirement should exceed SEK 12 billion, or if the TCW exchange rate weakened (i.e. if the krona strengthened), the percentage of foreign currency debt in the total debt would fall faster. The chart demonstrates how the percentage of foreign currency debt is affected by shifts in the exchange rate. The dotted lines show how the percentage of foreign currency debt would change if the TCW exchange rate strengthened or weakened, respectively, by 2 per cent annually.

In light of this, the Debt Office proposes that the benchmark for amortisation of the foreign currency debt in 2004 and 2005 should be SEK 25 billion per year. This is the same medium-term benchmark that the Government stated in last year's guideline decision. With an amortisation of SEK 25 billion per year, the percentage of foreign currency debt should decrease to below 30 per cent during the period.

4.2.3 Deliberations and proposal concerning 2003

The main point of departure for deciding what pace of amortisation will apply in 2003 should be the pace of amortisation that the Government stated in last year's guideline decision, i.e. SEK 25 billion. As maintained above, this figure is an expression of a desire to reduce the percentage of foreign currency debt in the long term. Any adjustments due to short-term variations in the krona exchange rate or the budget trend, for example, should generally be made within the limits of flexibility in the pace of amortisation that the Debt Office has. Otherwise the Government's guidelines may tend to assume the role of short-term tactical decisions that need to be changed more or less often, rather than strategic guidelines for central government debt policy. Besides, both the Government and the Debt Office are of the opinion that the central government budget situation in 2003 will be consistent with earlier long-term projections of public sector finances. The budget projection thus provides no reason for deviations from the medium-term pace of amortisation that the Government stated last year. A preponderance of reasons therefore indicate that the benchmark for the pace of amortisation during 2003 should be the same as the medium-term benchmark for 2004 and 2005, i.e. SEK 25 billion.

The Debt Office's flexibility in deviating from the Government's benchmark should remain at SEK ±15 billion. This interval will be utilised to promote the goal of minimising costs while taking into account risk. The exchange rate trend is an important factor in case of decisions to take advantage of this flexibility. The budget trend may also affect the pace of amortisation, for example to keep too large a portion of borrowing or amortisation from burdening the same borrowing instrument.

When the Debt Office decides on the pace of amortisation within the framework of the interval stated by the Government, there is also reason to take into account foreign currency debt as a percentage of total central government debt. Behind the decision to amortise foreign currency debt is an analysis stating that this debt contributes to undesired risk in central government debt. The experiences of the past several years have shown that actual developments have not been consistent with intentions to reduce this percentage. One reason is that amortisations have been entirely or partially postponed as a consequence of the weak krona. It is therefore reasonable that when deciding how to utilise its flexibility, the Debt Office should consider whether amortisations during earlier periods have been postponed due to its view on the krona exchange rate. This may mean that in such a situation, the Debt Office will choose to amortise more than the benchmark even if the krona is not perceived as overvalued.

During a period, the krona has been very weak and it has been appropriate to abstain entirely from amortisations. Over the coming year, however, there is no reason to assume that this should be repeated. In light of this, the Debt Office proposes that the benchmark for amortisation of the foreign currency debt in 2003 should be SEK 25 billion, thereby concurring with the Government's preliminary guidelines in last year's decision. In addition, the Debt Office should be allowed to deviate from this benchmark by SEK ±15 billion. The interval is the same as in the guidelines now in force.

4.2.4 EMU

As earlier, the Debt Office's proposed guidelines have been formulated on the basis of the existing currency policy conditions. Thus, the point of departure for these guidelines is that Sweden is outside the currency union within the framework of the third stage of EMU. Although a decision as early as 2003 to join the currency union is far from unrealistic, the Debt Office cannot assume that such a decision will be taken. This would be second-guessing the results of a possible referendum that in political terms has been declared a prerequisite for membership.

At the same time, the Debt Office cannot entirely ignore the possibility that a referendum will be organised during 2003 and that its outcome will lead to membership a few years from today. Swedish membership of the currency union would affect the economic policy prerequisites for central government debt policy. The fact is that even a *decision* on membership would affect these prerequisites. For example, the existing flexible exchange rate regime would probably be replaced relatively quickly by participation in the Exchange Rate Mechanism (ERM2), with a fixed krona/euro exchange rate, where the EU Council of Finance Ministers (Ecofin) would decide a central rate, to which the krona would presumably be converted to the euro upon joining the currency union.

In case of membership, the part of Sweden's foreign currency debt that is denominated in euro, together with the krona debt that will be converted into euro, will constitute Sweden's domestic currency and thereby not entail any currency risk. In this way, the foreign currency debt would suddenly decrease drastically, since most of foreign currency debt exposure is in euro. Based on the now-existing structure of foreign currency debt, the debt would decline by about SEK 255 billion to about SEK 155 billion, representing less than 14 per cent of the total debt. It should be noted, however, that how large a percentage of total debt is exposed to the euro is something the Debt Office can easily change even before the conversion by adjusting the percentage of dollars and other non-euro currencies in the benchmark.

Given the prospect of EMU membership a new situation will thus arise, with great flexibility concerning the future percentage of foreign currency debt and consequently the foreign currency risk in the government debt. The Debt Office would no longer be limited by its size in the krona market. By means of transactions in euro, it could thereby quickly achieve any percentage of foreign currency debt at all, in principle. Faced with such a situation, it is thus important once again to analyse the issue of the percentage of foreign currency debt. In its earlier analysis of the percentage of foreign currency debt, the Debt Office drew no conclusions about what would be the optimal percentage in the long term, but was content to note that foreign currency exposure around 30 per cent is too large. There is thus reason to return to this issue again.

As for the management of the foreign currency debt until conversion, it should be noted that a Yes vote in a referendum and ERM2 membership do not, in themselves, mean that currency risk in the euro debt is eliminated. There is a certain, though very limited probability that membership will not materialise or that the krona exchange rate against the euro will be altered before conversion takes place. Although the risk is thus not eliminated, it will nevertheless be far smaller than under today's floating exchange rate regime.

In case of a Yes vote on currency union membership, however, it is reasonable to assume that membership will become a reality and that the percentage of foreign currency debt will thereby shrink. There are thus reasons to lower or possibly abstain from amortisations during the period until the final exchange rate fixing. Upon accession, the foreign currency debt will automatically be sharply reduced anyway. During the period from the referendum until the final exchange rate fixing, there will be room to analyse whether the Debt Office should keep a certain percentage of foreign currency debt or whether this should be phased out entirely. There may thus be reason to lower the pace of amortisation during this period, while awaiting the amortisation that will automatically occur when the euro debt finally and irrevocably becomes domestic currency, and utilise this period to analyse how the remaining debt should be managed. Such a measure should, in that case, be preceded by a new guideline decision from the Government.

If the referendum results in a No vote, the long-term analysis of the prerequisites of central government debt policy will be unchanged, since the Debt Office's analyses have, in all essential respects, been based on non-membership. Naturally it cannot be ruled out that market conditions will be affected by a No vote. The scale and nature of such disruptions are difficult to assess, however.

The Debt Office's conclusion is that a Yes vote on currency union membership in a referendum will affect the prerequisites for central government debt policy to such a great degree that at least the guidelines concerning the pace of amortisation should be changed. If, however, the Swedes vote No to membership, this should not require new guidelines, although there may be reason to maintain a degree of preparedness.

4.3 Inflation-linked debt

The Debt Office's proposal: The percentage of inflation-linked loans in government debt should increase in the long term. Inflation-linked borrowing should be weighed against the growth in demand for inflation-linked bonds and the borrowing cost of other types of debt, with due consideration for risk.

4.3.1 Guidelines now in force

The Government decided last year that the percentage of inflation-linked debt in government debt is to increase. Unlike foreign currency debt, it specified no quantitative goals, either for the percentage or for the pace of change. The Government instead stated that 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.

4.3.2 Deliberations and proposal

In last year's proposed guidelines, the Debt Office presented a far-reaching analysis of the characteristics and role of inflation-linked borrowing. Its conclusion was that inflation-linked borrowing helps decrease the risk in the central government debt portfolio. The reason is that in many respects, inflation-linked borrowing is a mirror image of nominal borrowing. If inflation falls below expectations, inflation-linked borrowing becomes cheaper than nominal borrowing, whereas if inflation exceeds expectations, inflation-linked borrowing becomes more expensive than nominal borrowing. By including both nominal and inflation-linked loans in its debt portfolio, the central government can thus decrease the risk of excessive fluctuations in debt costs.

In principle, inflation-linked borrowing should also be cheaper on average than nominal borrowing. The reason is that nominal borrowing is associated with an inflation risk premium. As for inflation-linked loans, however, the central government takes over the inflation risk from investors and should thus be allowed to benefit from the inflation premium. However, practical experiences in recent years indicate that the inflation risk premium is more than offset by other factors. During some periods the difference between nominal and real interest rates, so-called break-even inflation, has been substantially below the Riksbank's official inflation target of 2 per cent. This means that the expected real-term cost of nominal bonds, calculated on the basis of assumptions that the inflation target will be achieved, is lower than for inflation-linked bonds. One explanation for this may be that investors assume that inflation will be lower than the inflation target in the future, but the limited liquidity in the inflation-linked bond market is probably another reason why investors demand a certain extra return in order to hold inflation-linked bonds. Periodically, such a liquidity premium may more than offset the inflation risk premium. Inflation risk uncertainty, and thus the inflation risk premium, nevertheless varies over time. This means that the Debt Office should have room to adjust issue volumes in relation to the demand situation, as reflected by break-even inflation.

It is thus important to emphasise that the management of inflation-linked borrowing includes a trade-off between the goal of minimising expected costs and the possibility of reducing risk. It is therefore important that the Debt Office, exactly as before, be given the opportunity to assess the market situation before each issue date and not be forced to issue inflation-linked bonds in situations when they appear expensive compared to nominal bonds. In light of this, the Debt Office proposes that the guidelines for inflation-linked borrowing be kept unchanged. The goal should thus be that the percentage of inflation-linked loans in the central government debt is to increase in the long term, but that inflation-linked borrowing must be weighed against the increase in demand for inflation-linked bonds and the costs of other types of debt, with due consideration of risk.

4.4 Nominal krona debt

The Debt Office's proposal: Having stated guidelines for inflation-linked borrowing and foreign currency borrowing, it follows by definition that the central government's financing requirements should otherwise be covered by nominal krona debt.

4.4.1 Guidelines now in force

The Government decided last year that the central government financing needs not covered by inflation-linked borrowing and foreign currency borrowing should be met by nominal krona borrowing.

4.4.2 Deliberations and proposal

The guidelines for central government debt management are based on dividing the debt into three components: inflation-linked loans, foreign currency loans and nominal krona loans. Having stated guidelines for foreign currency borrowing and inflation-linked borrowing, it therefore follows by definition that the remaining portion of the borrowing requirement should be met by nominal krona loans. The krona market thus functions as a buffer in case of fluctuations in the borrowing requirement, or if plans for the other two types of debt should change. This is not only a mathematical necessity, but also reflects the fact that the krona market is the government's most important source of financing. By regularly holding auctions for both bonds and Treasury bills, it is therefore easy in this market to cope with changes in borrowing via other instruments or in the net borrowing requirement.

It should be noted that to the extent that the Debt Office creates foreign currency debt via krona loans that are swapped to foreign currency, the decision on the pace of amortisation of foreign currency debt is of no importance for the central government's krona-denominated issue requirement. In that case, all borrowing takes place in kronor and any changes in the pace of amortisation only affect the scale of the krona/foreign currency swaps. This technique for foreign currency borrowing has thus – in addition to providing cheap borrowing – helped keep up issue volumes in the krona market. This has probably been beneficial to liquidity and trading volume, and thus for the central government's borrowing costs.

4.5 Maturity

The Debt Office's proposal: The benchmark for average duration of the nominal krona and foreign currency debt should be unchanged at 2.7 years. The aim for 2004 and 2005 should be for duration to remain unchanged. The Debt Office should be allowed to decide on benchmark portfolios providing an average duration for the nominal debt that deviates by a maximum of ±0.3 years from the benchmark. The inflation-linked borrowing should have a long maturity.

4.5.1 Guidelines now in force

The Government decided last year that the average duration of the nominal krona and foreign currency debt should be 2.7 years for 2002. The aim for 2003 and 2004 is for the duration to remain unchanged. In setting benchmark portfolios, the Debt Office may decide on an average duration for the nominal debt that deviates by a maximum of 0.3 years from the benchmark. The Government also decided that inflation-linked borrowing should have a long duration. Newly issued inflation-linked bonds should therefore have a maturity of at least five years.

4.5.2 Deliberations and proposal

Nominal krona and foreign currency debt

In earlier proposed guidelines, the Debt Office has analysed the question of the maturity of nominal krona and foreign currency debt. Its conclusion from these analyses is that the Debt Office can achieve lower borrowing costs by borrowing with comparatively short maturities, without thereby increasing its refinancing risk excessively for that reason. A 2.7-year duration has been deemed suitable. Borrowing at even shorter maturities, however, has been regarded as too risky.

During the year, no new information has emerged that gives reasons for any change in the Debt Office's assessment concerning the benchmark for the duration of nominal krona and foreign currency debt. The Debt Office therefore proposes that during 2003, the benchmark be kept unchanged at 2.7 years. Nor is there anything that would justify a change in the interval of 0.3 years around the benchmark, which the Debt Office obtained earlier from the Government. The Debt Office therefore proposes that the guideline for the duration interval also be left unchanged.

Concerning the strategic direction for 2004 and 2005, conditions are more uncertain. For example, possible future EMU accession could have consequences for the choice of maturities. The reason is that in case of EMU membership, central government finances might show larger fluctuations, since the ambition to use fiscal policy might increase when monetary policy is tied up. This would be one argument for lengthening duration for the purpose of lowering the refinancing risk. However, it is not meaningful to try to weigh in all future possibilities when deciding the direction for 2004 and 2005. There is too much uncertainty, especially about EMU accession, to allow this. The Debt Office therefore proposes that for the time being, the strategic direction should be that the maturity of nominal krona and foreign currency debt will be kept unchanged at 2.7 years during 2004 and 2005 as well.

Inflation-linked debt

The guidelines in force for the maturity of inflation-linked debt say that inflation-linked borrowing should have long maturities. In earlier guideline decisions, this has been interpreted as meaning that new borrowing in inflation-linked bonds should occur in maturities of more than ten years. In last year's proposed guidelines, the Debt Office argued that this interpretation should be changed to include maturities of at least five years or longer. The reason was that the earlier interpretation rested on the perception that it should be cheaper for the central government to issue inflation-linked bonds with long maturities, since the inflation risk and thus the willingness of investors to abstain from expected return in exchange for inflation-proof interest should be larger in the long term. In practice, however, it has turned out that the cost difference between short-term and long-term inflation-linked bonds is relatively small. Furthermore, the demand for medium-term inflation-linked bonds has occasionally been relatively large.

In light of this, the Government's guideline decision last year stated that inflation-linked borrowing will occur with long maturities and that this will be interpreted as meaning at least five years or longer. The Debt Office finds no reason to change this interpretation in the year's proposed guidelines and consequently proposes that the guideline be left unchanged.

4.6 Maturity profile

The Debt Office's proposal: The Debt Office should endeavour to achieve a smooth maturity profile for the purpose of limiting its refinancing risk. Borrowing should aim at ensuring that not more than 25 per cent of central government debt will fall due within the next twelve months.

4.6.1 Guidelines now in force

The Government decided last year that the Debt Office should endeavour to achieve a smooth maturity profile in central government debt. Borrowing should aim at ensuring that not more than 25 per cent of central government debt will fall due within the next twelve months.

4.6.2 Deliberations and proposal

Among the purposes of the Government's guidelines for central government debt management is to limit the risk of major variations in the costs of this debt. The benchmark for the maturity of nominal debt, measured as duration, is an expression of a trade-off between costs and risks in debt management. However, a given duration may be achieved in different ways, for example through a concentration of borrowing around the benchmark or a mixture of short and very long maturities. The guideline for the maturity profile may be viewed as a supplement to the benchmark for duration, since it establishes restrictions on how government debt is allocated between maturities. As the Debt Office examines in greater detail in the attached report *"Duration, Maturity Profile and the Risk of Increased Costs for Central Government Debt"*, there is in fact a connection between the duration and maturity profile of this debt. The benchmark for the maturity profile thus places a restriction on how low the duration of the debt may be.

The policy of the Debt Office is to aim for a relatively uniform allocation of borrowing over the yield curve. The refinancing of maturing loans is thus spread over time, which reduces the risk that a large proportion of the debt must be refinanced during periods of high interest rates. This also satisfies the wishes of investors for financial assets with different maturities, which should help lower borrowing costs.

The Debt Office aims, and has aimed, at limiting short-term borrowing in such a way that no more than 25 per cent of government debt matures during the coming twelve months. It sees no reason to change this approach. The Debt Office therefore considers the guidelines now in force concerning the maturity profile to be satisfactory and proposes that they be left unchanged during the coming year.

5 Evaluation issues

5.1 Background

Evaluation of both the Government's and the Debt Office's decisions concerning central government debt management is of great importance. Firstly, the existing division of labour, with a relatively far-reaching delegation of central government debt policy from the Riksdag and the Government to the Debt Office, presupposes that it will be possible to show that this management is handled in a satisfactory way. Secondly, a good evaluation creates opportunities to improve operations and gain new knowledge that, in the long term, may lead to more cost-effective management.

Evaluating long-term central government debt policy strategies is not easy, however. A given borrowing strategy cannot simply be compared to an alternative one. One important problem in this context is that it is difficult to find a reasonable benchmark or comparison norm for central government debt management. In fact, the government securities market, i.e. the results of the Debt Office's decisions, often serves as a benchmark for other financial managers. It may be a matter of traditional fixed-income asset managers who compare their management results to various types of bond indices, but other asset managers such as hedge funds also frequently compare their results to interest rates on short-term government securities, for example. Assessing the Debt Office's management, however, requires a different yardstick.

Another problem is that overall central government debt strategies are usually based on motives other than short-term assessments of interest rate and exchange rate developments. An evaluation based on the market developments of the past year will therefore be relatively uninteresting. For example, if borrowing costs have decreased because the Government or the Debt Office has decided to shorten the duration of the debt during one year, it provides only limited guidance or no guidance as to whether this decision was correct or not. Since many strategies, especially at the overall level, are based on other factors besides market assessments, methods aimed at quantifying results by studying market developments during the preceding year will be faulty, or in some cases even misleading.

In the Debt Office's judgement, there is reason to review the principles for evaluation of central government debt management. A review of evaluations from earlier years shows that both the Government and the Debt Office have sometimes had difficulty in living up to the principles that have been established for evaluation. A natural point of departure for the review is to state for each area of central government debt management how the evaluation should be performed. A stringent, well-defined evaluation does not, however, automatically imply more quantitative elements. The goal should instead be to find a suitable and feasible evaluation method in each area. In some areas, this may mean abandoning earlier quantitative comparison norms, while in other areas it means that a more in-depth analysis that is carried out at longer intervals than has characterised the Debt Office's reporting to date.

In order to retain its focus on a longer time perspective, the Government has generally chosen to work with quantitative evaluations that cover rolling five-year periods. At the same time, annual results are reported. It is important to maintain this longer time perspective; in some cases, a longer period than five years may also be relevant. However, the Debt Office has not found reason to propose any change in the practices applied to date.

The following sections cover all sub-areas that are subject to evaluation. However, the analysis has focused primarily on three areas. This applies to the evaluation of the Government's guideline decision, where the ambitions established in 1999 have not been entirely implemented, as well as certain unclear points that the Government has cited concerning the evaluation of the Debt Office's foreign currency debt management. In addition, there is reason once again to discuss how the evaluation of market maintenance and debt management should be performed.

5.2 The Riksdag's evaluation of the Government's guideline decision

In 1999 the Debt Office, in consultation with the Ministry of Finance, submitted a report to the Government dealing with principles for the evaluation of the Government's decision on guidelines for central government debt management (May 25, 1999, Debt Office document number 1999/34). The report stated that the Government's guideline decision should be evaluated directly against the goal for management of central government debt. The evaluation should thus aim at assessing how the Government's guideline decision has affected the long-term costs of the central government debt as well as the risk level of debt management. Since the Government's guidelines are formulated on the basis of strategic and long-term deliberations, effects of short-term changes in interest rates and exchange rates have no role in this part of the evaluation. The evaluation should consequently be based on an examination of the decision in light of the knowledge that was available at the time it was taken. The evaluation should focus on assessing whether the analyses and arguments that led up to the Government's decision maintain good quality and appear reasonable. One part of the process should also be to scrutinise whether the arguments and discussions behind the decision remain valid, in order to provide guidance for future decisions.

Since there is no self-evident point of departure – equivalent to a benchmark portfolio – for a quantitative assessment of the Government's guideline decision, the evaluation must mainly be of a qualitative nature. However, the evaluation may be supplemented with quantitative elements. In its report, the Debt Office submitted proposals on how a quantitative evaluation of the Government's guideline decision could be implemented. The idea was that the quantitative calculations would have as their point of departure the Debt Office's proposed guidelines, in which the Debt Office would present a number of stylised, but clearly differentiated debt portfolios that the Government could choose between. One of these portfolios would be the "status quo" portfolio, representing the central government debt portfolio at the starting point, i.e. the portfolio in case of unchanged guidelines. The quantitative evaluation would thereby consist of comparing the costs of the portfolio chosen by the Government with the costs of the other portfolios.

In its proposed guidelines, however, the Debt Office has not been able to present such a menu of alternative central government debt portfolios as its report to the Government refers to. It is true that the Debt Office uses such portfolios in its quantitative models to provide documentation for decisions, but the transition from there to presenting a menu of portfolios to the Government has proved longer than the Debt Office had anticipated. The quantitative results of these models for costs and risks are not sufficiently clear and robust to make it reasonable to report the results in terms of rankable portfolios. The status quo portfolio has thereby become the only object for comparison. In turn, as a result of this the only quantitative element that is presented in the evaluation of the Government's guideline decision is the one concerning the duration of nominal krona and foreign currency debt. This compares the cost of the borrowing that was decided to the cost of borrowing in a portfolio with unchanged duration, which in this case happens to be the central government debt portfolio in 1999.

Raising the status quo portfolio in this way to a norm for evaluation is unfortunate. Firstly, it gives the impression that the 1999 portfolio in some sense comprised an optimal choice of government debt duration, which is hardly reasonable, considering that the portfolio came into existence as a consequence of the borrowing policies of the preceding 10–15 years. In addition, an evaluation against an unchanged portfolio has a conserving force. Combined with the fact that, despite what the 1999 report said, evaluations often emphasise quantitative indicators, such an evaluation norm may cause the Government to hesitate to make changes, since it thereby guarantees itself a zero outcome in relation to the original portfolio. With such a system, it is easy to forget that a decision *not* to make any changes is just as much of a decision as anything else, and that such a decision must also be evaluated in some way.

Given the difficulties of a quantitative evaluation of the Government's guideline decisions, in the Debt Office's opinion it would be more useful to focus the evaluation even more clearly on critically examining whether the analyses and arguments that led up to the Government's decision maintain good quality and appear logical. This does not prevent the evaluation from having quantitative *elements*. The decision to increase the percentage of inflation-linked bonds in government debt, for example, could be analysed in terms of the prevailing market conditions in the inflation-linked securities market. The quantitative elements should not, however, be aimed at identifying a quantitative *result*, for example by means of comparisons between the costs of the chosen debt and an alternative that, in practice, is chosen arbitrarily.

The point of departure for the evaluation should thus be to evaluate the Government's decision based on what factors were – or should have been – crucial to its decision. In this context, it is also suitable to analyse whether anything has emerged which implies that old conclusions should be re-assessed. One such future factor might be how the Government chooses to manage central government debt as a consequence of possible EMU membership. However, it is also important to point out that to the extent that the Government has stated its own market assessments as reasons for a given decision, the evaluation must also be based on how the market has developed. For example, it is reasonable for the Riksdag to study krona developments in case the Government cites developments in the krona exchange rate as a crucial reason for slowing the pace of debt amortisation, as occurred in 2001, for instance.

Furthermore, the fact that central government debt policy is long-term means that it is also reasonable to formulate the evaluation in a long-term context. In its proposed guidelines of recent years, the Debt Office has concentrated its analysis on one or a few issues each year. The first proposed guidelines primarily analysed the maturity of central government debt and the size of the foreign currency debt. In last year's proposed guidelines, the Debt Office analysed the role of inflation-linked bonds in central government debt. These analyses led to Government decisions to decrease the percentage of foreign currency debt in the total debt, shorten the duration of the debt as well as gradually try to increase the percentage of inflation-linked bonds. One point of departure for the evaluation of the Government's guideline decisions might therefore be to focus the evaluation on one or a few areas each year, in order to analyse these areas more thoroughly in this way. In this context, there is also reason to revive the proposal presented in Government bill 1997/98:154 on *Management of the Central Government Debt* that the Government may engage outside experts to obtain additional documentation for evaluation.

To summarise, the Debt Office recommends that the evaluation of the Government's guideline decision should primarily cover the strategic deliberations on which the decision was based. This means that the evaluation will largely be made in qualitative terms, but that it may contain quantitative elements to support the analysis. However, it is not suitable to present quantitative *results* in relation to any comparative index, since there is no reasonable comparison norm or benchmark. Nor is it suitable merely to compare the Government's choice of debt portfolio to a status quo portfolio, since in that case the status quo portfolio risks gaining status as the "optimal" debt portfolio and thereby providing the norm for central government debt policy without deserving such status. In addition, this may cause the Government to hesitate to make well-justified changes in the portfolio, since it thereby ensures itself a zero result against the original portfolio. The evaluation should instead focus on assessing whether the analyses and arguments that led up to the Government's guideline decision maintain good quality and appear logical. It may then be advantageous to focus the analysis on one or a few areas each year, in order thereby to obtain a more far-reaching analysis of these areas.

5.3 The Government's evaluation of the Debt Office

5.3.1 Foreign currency debt

The Debt Office's decisions on and management of the foreign currency debt cover a number of areas. One area deals with what pace of amortisation shall be chosen within the framework of the Government's amortisation benchmark and how the exchanges between Swedish kronor and foreign currencies are to be administered. Another area concerns the question of what currency benchmark the foreign currency debt should be steered towards and how to handle active management of the foreign currency debt. Finally, a third area includes the Debt Office's borrowing methods for the foreign currency debt. These three areas are presented in the same order below.

The foreign currency mandate

The Government has decided that the percentage of foreign currency debt in the total central government debt shall decrease. The reason is that the foreign currency debt cannot be assumed to provide any systematic cost advantages, while variations in the exchange rate of the krona against foreign currencies mean that the risk of foreign currency debt is higher than for krona-denominated debt. According to the decision now in force, the foreign currency debt will be amortised at a pace equivalent to SEK 15 billion during 2002. Around this benchmark, the Government has stated a permitted range of variation of SEK ±15 billion, within which the Debt Office may deviate from the benchmark.

Strategic decisions

During the past two years, due to the weak krona the Debt Office has chosen to deviate downward in relation to the Government's targeted pace of amortisation. Its assessment has been that the krona exchange rate is unreasonably weak and that it is therefore justified from a cost standpoint to decrease the pace of amortisation.

Evaluating any cost savings from the Debt Office's decision to deviate from the benchmark due to assessments about the future krona exchange rate is relatively easy. Fundamentally, it is a matter of studying krona developments and trying to assess whether the Debt Office's decision, given the information that was available on the date of the decision, was reasonable. Such an assessment can be made in both qualitative and quantitative terms. For instance, in last year's evaluation documentation, the Debt Office presented an arithmetic example based on some simple assumptions about the exchange rate in order to indicate the potential savings and risks involved in the deliberations on the pace of amortisation. The final outcome as to whether the decision helped reduce the costs of foreign currency debt amortisations, however, is not available until the date when the amortisation is actually carried out. Only then is it possible to measure in kronor the difference between the exchange rate that would have been paid if the amortisations had occurred during the year covered by the guidelines and the final rate. Consequently, it is also important to qualitatively evaluate the motives and arguments behind the Debt Office's decision.

It is also important to take into account the risks of deviating from the benchmark. For example, if the Debt Office chooses to reduce the pace of amortisation in relation to the Government's benchmark, the foreign currency debt will be larger and the government debt, all else being equal, will be riskier. From an evaluation standpoint, the only possibility of evaluating this seems to be to analyse and discuss the motives that the Debt Office cited and in what way risk aspects were weighed in. One method, which has also been used in simplified form by both the Debt Office and the Government, is to discuss risk on the basis of some stylised scenarios. This would provide a rough idea of how much more expensive the amortisations might be if the exchange rate moves in the opposite direction from the Debt Office's assessment.

To summarise, the existing evaluation of the Debt Office's strategic decisions on the foreign currency mandate is consistent with what has been discussed here. The Debt Office therefore proposes no changes in the existing evaluation principles.

Operational administration

Until July 1, 2002, the Debt Office carried out all exchanges between kronor and foreign currencies via the Riksbank. Since the administration of these exchanges was governed at that time by institutional limitations, it was hardly meaningful to evaluate this administration. However, now that the Debt Office will be carrying out currency exchanges directly in the market, and will thereby be given the opportunity to control how this is done, there is reason to evaluate these exchanges as well.

A natural point of departure for the evaluation of the first six months of activity is to assess whether the strategy that the Debt Office has chosen for these currency exchanges is reasonable and appropriate. In last year's proposed guidelines, the Debt Office argued that a cost-neutral trajectory of currency exchanges should represent a relatively uniform distribution of the exchanges over the year. This trajectory allows room for some flexibility, enabling the Debt Office to avoid carrying out transactions in situations where the foreign exchange market is thin, for example. There is thus a certain freedom of action, without differences in activity from one day to another being evaluated in terms of market values. The idea is that this flexibility will enable the Debt Office to act in a businesslike, professional way.

In addition to the necessary flexibility in the neutral exchange trajectory, the Board of Directors may establish a permitted deviation interval, although it has not done so in 2002. Within this interval, the Debt Office may deviate from the neutral exchange trajectory based on assessments of market conditions. Such operational decisions may be evaluated afterward, for example, by calculating the cost difference compared to the neutral trajectory. However, the purpose is not to generate gains through short-term positions in the krona market, but this flexibility should instead be utilised to avoid forcing the Debt Office to act on a given day or point in time when market conditions are unfavourable. It is also important to observe that the greatest advantage of the new system, which was also the basis for the Government's decision to give the Debt Office the opportunity to exchange currencies with other counterparties besides the Riksbank, is that any changes in the pace of amortisation will have an immediate impact on the central government's aggregate transactions in the foreign exchange market. This advantage is achieved even if the Debt Office does not actively deviate from the neutral trajectory of exchanges.

To summarise, the operational administration of the foreign currency mandate includes the Debt Office's administration of foreign currency exchanges. The Debt Office proposes that this administration should be evaluated by calculating the cost difference in relation to the neutral trajectory of exchanges, which represents a relatively uniform distribution of these exchanges over time. Since currency exchanges are a new activity, however, it is reasonable that evaluation methods be developed continuously.

Foreign currency benchmark and foreign currency debt management

For a number of years, the Debt Office has had a well-established model for managing and evaluating the foreign currency debt. This management occurs against a benchmark that stipulates a certain currency allocation and duration. The choice of benchmark is a strategic decision taken by the Board of Directors. The evaluation of operational administration occurs by measuring to what extent deviations from the benchmark have led to savings or higher expenses. This should also continue to serve as the basis for evaluating the management of the foreign currency debt.

Strategic decisions

The choice of benchmark for the foreign currency debt is a strategic decision taken by the Board. Ever since 1990, the ambition of this benchmark has been to create a currency basket that follows the krona as smoothly as possible. The intention has been to minimise the risk of fluctuations in the value of the foreign currency debt, measured in Swedish kronor, due to exchange rate movements between the currencies included in the debt. The Debt Office's analyses for establishing the benchmark have primarily been based on the "mean variance" methodology. This is a common method in financial management for establishing a suitable portfolio structure. The technique calculates a curve, an "efficient frontier", along which a number of debt portfolios with optimal foreign currency structures are obtained. These debt portfolios are optimal in the sense that for each given risk level, it chooses the foreign currency structure that has yielded the lowest cost, based on historical data. Based on this, the Debt Office has then chosen a foreign currency structure that has yielded a relatively low risk level and has been comparatively stable over time.

However, a risk-minimising benchmark is not necessarily the obvious choice. The Debt Office is entrusted with minimising the costs of central government debt, taking into account risk. With this in mind, on January 1, 2000 the Debt Office implemented a minor deviation from its usual risk minimisation strategy when it increased the percentage of foreign currency debt in Swiss francs by six percentage points at the expense of the percentage of the debt in euro. Its assessment was that debt in Swiss francs, due to the systematically low interest rates in Switzerland, would yield lower costs in the long term than debt in euro, at the price of insignificantly increased risk. Since this represents a long-term cost assessment, the Debt Office regards this adjustment as a lasting change in the benchmark. The analysis was mainly backward-looking and was based on how the cost of Swiss franc debt and euro (D-mark) debt has changed during both the past twenty-year period and shorter segments of this period.

The choice of benchmark should be re-assessed at regular intervals. Since the benchmark, by its nature, is of a long-term character, the Debt Office should not make excessively frequent changes in the benchmark, however. A suitable trade-off is to re-assess the analysis every three years. The Debt Office intends to implement a new analysis of the structure of the benchmark during the second half of this year. If this analysis leads to changes in the benchmark, the Debt Office can make a decision on such modifications in December 2002. The new benchmark could then go into force beginning next year.

In earlier proposed guidelines, the Debt Office has pointed out that the choice of benchmark portfolios for the central government debt can be evaluated quantitatively with the aid of stylised, counterfactual calculations, where various alternative type-portfolios are included. This principle was also regarded as possible to apply to the choice of currency structure in the benchmark for the foreign currency debt. A counterfactual calculation in this case would also concern how costs would have been affected by having a different allocation between euro and dollars, for example.

In the Debt Office's judgement today, this type of counterfactual calculations is not appropriate as an evaluation method for the foreign currency benchmark. The reason is that, precisely as in the case of the Government's guideline decisions, there is no reasonable comparison norm for quantitatively evaluating the benchmark portfolio. Such comparative calculations thus easily become arbitrary. In retrospect, it is always possible to identify another portfolio structure that has proved to yield lower costs. In addition, it is difficult to draw any conclusions for the future from such calculations. The evaluation of the chosen benchmark portfolio should instead be based on assessments of the relevance and the quality of the analyses and arguments that formed the basis of the Debt Office's choice of benchmark.

Aside from its decision on the benchmark portfolio, the Board of the Debt Office can take *strategic positions* in relation to the foreign currency benchmark. These positions are so large that they do not fit within the framework of the Debt Office's active management. For example, such a position was taken in December 2000, when the Board decided to increase the percentage of dollars and decrease the percentage of euro in the foreign currency debt. This was based on the Debt Office's belief that the dollar was sharply overvalued and would thus fall in value against the euro in the long term. Since this, unlike the increase in the percentage of Swiss franc debt, is a matter of a strategic position that is not intended to change the benchmark portfolio in the long term, the Debt Office's purpose is to report this dollar position separately and calculate its results in the same way as for active management. It is thus a matter of a temporary re-weighting of the foreign currency debt based on an exchange rate assessment. If it turns out that the Debt Office's assessment was correct and the dollar falls, it is natural to gradually reduce this strategic position. A first step in this direction was taken late in June 2002. In this way, the foreign currency debt will gradually move towards the structure of the long-term benchmark portfolio. The dollar position is independent of how the ordinary benchmark portfolio looks. The evaluation will thus not be affected if the dollar share of the benchmark is changed as a consequence of this autumn's analyses.

To summarise, the Debt Office believes that the evaluation of the choice of benchmark portfolio for foreign currency debt should mainly be made in qualitative terms. The reason is that there is no reasonable comparison norm for quantitatively evaluating the choice of benchmark. The evaluation should therefore focus on assessing whether the analyses and arguments that led up to the Debt Office's choice of foreign currency benchmark maintain good quality and appear logical. It may then be suitable also to analyse whether the arguments and conclusions are still valid, in order thereby to provide guidance for future decisions. The Debt Office's strategic foreign currency positions, however, should be evaluated quantitatively in the same way as the Debt Office's active management.

Operational administration

The foreign currency debt is steered towards a benchmark that stipulates a given currency allocation and duration. The Debt Office's active management means that within the limits established by the Board, the Debt Office may take positions in relation to the benchmark based on assessments of exchange rates and interest rates. Evaluation of this active management occurs by measuring to what extent deviations from the benchmark have led to savings or higher expenses. The calculations capture both realised flows and unrealised changes in market value.

Since 1992, another evaluation of the Debt Office's active management has also been made, in which the Debt Office's results are compared to corresponding results from a number of external portfolio managers that the Debt Office uses. Since July 1, 2002, five asset managers have been used, with the same limitations and opportunities for deviations as the Debt Office's own active management. This evaluation has also been supplemented by a comparison between the results achieved in relation to the risk taken by the Debt Office and the external managers, respectively, in their active management, a "risk-adjusted" result.

To summarise, the Debt Office believes that the evaluation of its active foreign currency management should continue in the above-described way. A modification of the external portfolio manager programme may possibly occur in the future, however, by giving one or more of the managers being used other limits and guidelines for administration than those applicable to the Debt Office's own management. Such a modification of the external manager programme would provide an opportunity for further diversification and greater cost savings, but to some extent reduces comparability to the Debt Office's results.

Borrowing

The evaluation of the Debt Office's borrowing in foreign currencies consists mainly of a report on how the Debt Office has borrowed during the year and whether any early repurchases of loans have been made. A large proportion of this borrowing in foreign currencies occurs with the aid of krona/foreign currency swaps. One reason is that these swaps often result in a lower borrowing cost than can be obtained using other forms of borrowing. Another is that this promotes liquidity in the Swedish bond market, since the issue volumes can be increased correspondingly in this way. The evaluation of the Debt Office's foreign currency borrowing using krona/foreign currency swaps consists of a report by the Debt Office on the scale of these transactions and an account of the changes in the swap spread during the year. The Debt Office also reports approximate cost comparisons between borrowing with the aid of krona/foreign currency swaps and ordinary capital market borrowing.

The Debt Office believes that the existing method for evaluating its borrowing in foreign currencies is satisfactory and therefore proposes no changes.

5.3.3 Inflation-linked debt

Strategic decisions

The Government has decided that the percentage of inflation-linked debt in the central government debt shall increase. However, this borrowing should be weighed against the growth in demand for inflation-linked bonds and the borrowing costs of other types of debt, with due consideration to risk. This means that the percentage of inflation-linked borrowing may not be increased regardless of price. Since the opportunity for fulfilling the Government's goal is thereby limited by the market conditions in the inflation-linked market, the Debt Office has chosen not to establish more detailed guidelines at Board level. Inflation-linked debt is thus administered at the operational level. The Government has approved this working system and declares that since the inflation-linked bond market remains relatively undeveloped, a preponderance of reasons indicate that market condition can best be assessed at the operational level.

Operational administration

Of all the financial instruments that the Debt Office works with, perhaps inflation-linked bonds are the type of debt in which the Debt Office's operational administration has the greatest impact on borrowing conditions. The market is still undeveloped, which means that it is of great importance to maintain good continuous dialogue with existing investors but, perhaps even more importantly, with potential new investors. The purpose is to improve the market for inflation-linked bonds and to attract new investors. The opinions of investors must be weighed against the Debt Office's responsibility to carry out cost-effective borrowing.

The current evaluation is based on a cost comparison with nominal borrowing. Crucial to the results is how inflation turns out, in relation to the break-even inflation prevailing on the issue date. In terms of evaluating whether borrowing in the form of inflation-linked bonds has been successful or not, this result should nevertheless be interpreted with some caution. Firstly, the result thereby calculated provides no answer to the question of how the risk in central government debt has been affected. Since perhaps the most important reason for increasing inflation-linked borrowing is that it gives government debt better risk characteristics, a strict cost comparison is not sufficient. Secondly, the existing model may lead to the belief that inflation-linked and nominal bond issues are perfect substitutes. The inflation-linked bond market is still relatively small and undeveloped. For this reason, it is not possible, even under favourable conditions, to replace nominal borrowing with inflation-linked borrowing quickly and on a large scale. Another reason why cost comparisons must be interpreted with caution is that inflation-linked borrowing occurs in longer maturities than nominal borrowing. This means, for example, that the longest inflation-linked borrowing is evaluated de facto against *fictitious* nominal borrowing.

In the same way as with nominal borrowing (see Section 5.3.4), operational administration should be evaluated by studying a number of different factors. Cost comparisons against nominal borrowing should also continue to be such an indicator. Others may be cover ratios, break-even levels in Sweden compared to other countries, relative pricing on the chosen issue loans etc. However, effects on the risk level in the central government debt cannot be analysed afterward, though it is possible to *illustrate* how inflation-linked bonds affect variations in the costs of the debt. This provides little guidance, though, since significant diversification gains occur when there are large market movements. Here an external examination of the Debt Office's and the Government's analyses in support of current policy would probably be a practical solution and should, in that case, be included in the Riksdag's evaluation of the Government (see Section 5.2).

To summarise, the existing evaluation of the Debt Office's operational administration of inflation-linked debt is consistent with what is discussed here. The Debt Office therefore proposes no changes in the existing evaluation principles.

5.3.4 Nominal krona debt

Strategic decisions

The strategic decisions on krona-denominated debt concern what principles such borrowing should follow. This is closely tied to the Debt Office's market maintenance measures and strategies (predictability, good information and communication, repo facilities etc.). Evaluation of the strategic direction of borrowing is thus closely related to evaluation of market maintenance and debt management. This evaluation should thus be consistent with what is discussed under Section 5.3.6.

In some cases, however, parts of the borrowing strategy may have been formulated for the purpose of achieving *measurably* lower costs, i.e. lower costs relative to another possible strategy. One such example, even though the Debt Office is not applying it at this time, is the use of interest rate swaps for the purpose of creating cheaper short-term funding than via traditional borrowing in the form of Treasury bills. In line with today's practices, this type of strategic decision should be evaluated quantitatively and on a yearly basis.

Operational administration

The Debt Office borrows sizeable amounts every year, primarily via auctions. It is therefore urgent to evaluate whether its operational administration is carried out in a satisfactory way. Just as in other parts of central government debt management, however, it is difficult to find any suitable indicators for assessing operations, among other things because the Debt Office is the only organisation carrying out such activities in Sweden. The most practical solution is probably the one already being used today. By studying cover ratios, interest rate spreads in auctions, relative pricing of loans issued etc., one can obtain a picture of how operations have turned out. But since much of the operational administration of nominal krona debt is also based on the Debt Office's market maintenance strategy, the evaluation of operational administration will, by necessity, fall under this (see Section 5.3.6).

5.3.5 Maturity

Strategic decisions

The strategic decisions on duration of nominal debt concern both what duration should be chosen within the framework of the Government's guideline decision and how this duration should be allocated between nominal krona debt and foreign currency debt.

Within a given interval, the Debt Office is allowed to deviate from the duration stated by the Government for aggregate krona and foreign currency debt. One reason for doing this might be that interest rates are cyclically either at a very high or very low level. For example, it might be suitable to deviate upward, i.e. to lengthen duration, if long-term interest rates fell to, say, less than 4 per cent for an extended period. This presupposes, however, that other factors such as the central government borrowing requirement do not point towards another strategy. The Debt Office is also allowed to divide up duration in various ways between nominal krona debt and foreign currency debt. In recent years, duration has been divided up in such a way that krona debt has been given a somewhat longer duration. There is an established evaluation method for this.

The Debt Office's administration of debt duration should be evaluated in light of the information available on the date of the decision. There is potential for carrying out this evaluation in both qualitative and quantitative terms. Furthermore, it is important that decisions not to change duration should also be evaluated. Otherwise, there is a risk that the evaluation will cause the Debt Office to avoid taking active decisions in order to achieve a zero result (see the section on the Riksdag's evaluation of the Government, where the same dilemma is discussed).

To summarise, the existing evaluation of the Debt Office's strategic decisions related to the maturity of nominal krona debt and foreign currency debt is consistent with what is discussed here. The Debt Office therefore proposes no changes in the existing evaluation principles.

Operational administration

Operational administration of both nominal krona and foreign currency debt was previously evaluated by means of comparisons with an established benchmark for duration in each class of debt. Beginning in 2001, this evaluation method for nominal krona debt was abandoned. As indicated earlier, the size of the debt means that in practice, it is impossible to steer the duration of nominal krona debt towards a narrowly defined benchmark; if this were done, the transaction costs would be sizeable. In addition, the earlier evaluation method did not reflect how the Debt Office's management of krona-denominated debt actually works. The Debt Office does not base its management of krona debt on short-term market assessments, and the earlier evaluation method therefore provides no answers either as to whether this management has been successful or not. Interest may instead be focused on the Debt Office's market maintenance and debt management. Evaluation of the operational administration of foreign currency debt, however, relies as earlier on comparisons with the duration benchmark.

5.3.6 Market maintenance and debt management

The Government has requested the development of methods for in-depth assessment of the effects of market maintenance and debt management, in both qualitative and quantitative terms. However, it is difficult to find a good method for quantitatively evaluating the effects of market maintenance and debt management. The purpose of the Debt Office's market maintenance and debt management measures is to reduce uncertainty and promote market liquidity, in order to lay the groundwork for lower borrowing costs. But it is impossible to determine what interest rates would have prevailed if the Debt Office had, for example, chosen another borrowing strategy or form of communication. This does not, however, prevent the cost effects of certain measures, such as the introduction of electronic trading, from being examined quantitatively. But an evaluation of market maintenance and debt management measures will unavoidably be mostly of a qualitative nature.

The market maintenance and debt management strategies of the Debt Office are long-term and have, in most cases, operated over a long period. For example, the Debt Office has chosen to concentrate its nominal borrowing to a small number of loans for the purpose of improving liquidity, a strategy that it has employed for about 15 years. In addition, for a long time the Debt Office has offered dealers repurchasing (repo) facilities for the purpose of avoiding shortage situations in the market. Long-term market maintenance and debt management strategies should therefore suitably be evaluated in longer cycles than the current yearly ones. A suitable trade-off would be, perhaps with the aid of an outside consultant engaged for this purpose, to perform an evaluation of the Debt Office's overall efforts every three or four years. This would provide a more coherent and comprehensive picture of the Debt Office's activities. It would also provide documentation that can be used in order to change or refine its market maintenance strategies.

For the evaluation of 2002 operations, the Debt Office is planning an international comparison of the Swedish government securities market, focusing on how the market maintenance efforts of the Debt Office look compared to those in other government securities markets. This could be one building block in a coherent analysis of the Debt Office's efforts to develop and maintain the Swedish government securities market for the purpose of achieving lower borrowing costs.

Strategic decisions

The strategic decisions concerning market maintenance and debt management primarily deal with the choice of goals and priorities. The Board of Directors establishes goals for the Debt Office's market maintenance and debt management measures. These are often of a *general* nature and include those measures that the Debt Office undertakes as part of its day-to-day operations.

Examples of such goals are that the Debt Office should carry out predictable borrowing, offer repo facilities and loan exchanges in order to support market liquidity, act consistently, predictably and openly in all its information and communication, and endeavour to broaden its investor base.

The Board also establishes *specific* goals. These include measures that the Debt Office takes during a single year of a nonrecurring nature. Examples of such measures are that the Debt Office will promote an increased share of electronic trading as well as develop a communication strategy for inflation-linked bonds. The latter category also includes steps that the Debt Office has taken during the year but that were unplanned, for example its expanded repo facility after the September 11, 2001 terrorist attacks in the US.

Evaluating the Debt Office's strategic decisions related to market maintenance and debt management measures is primarily a matter of deciding whether the goals that the Board has established are reasonable. This may be done, for example, by means of comparisons to other countries. However, it is impossible to calculate quantitatively what savings the Debt Office's strategies may have led to. Since the general goals are of a recurring nature, it is reasonable that they be evaluated at longer intervals than just one year. A suitable interval should be every three or four years. Specific goals, however, should be followed up yearly.

Operational administration

The evaluation of operational administration of market maintenance and debt management is a matter of determining to what extent the Debt Office has achieved the goals that its Board has established. In its yearly documentation for evaluations, the Debt Office should therefore report what measures were taken during the year, for example the extent of repo operations, loan exchanges, continuous exchanges of inflation-linked bonds etc. The deliberations behind this administration should also be reported. In addition, the Debt Office should report any direct, demonstrable costs or gains.

Since it is impossible in most cases to evaluate the Debt Office's market maintenance and debt management measures quantitatively, positions on these issues must be based to a large extent on qualitative analyses and deliberations. For example, one can gather the opinions of dealers and investors about the operations of the Debt Office or make comparisons to other countries. Since the Debt Office's general measures are of a recurring nature and since the evaluation must be done to some extent in collaboration with market players, it may be advantageous to perform the evaluation in collaboration with an outside consultant. It is also reasonable that such an evaluation be made at longer intervals than one year, preferably every three or four years. However, as earlier the Debt Office should report what measures it took during the year.

How the Debt Office's specific measures should be evaluated may vary from measure to measure. For this reason, in the decision itself the Debt Office should describe what effects the measure is expected to have and how this should be evaluated. It is also important that the measures stated by the Debt Office are also presented in its follow-up reports to the Government, something that the Debt Office has not fully lived up to until now.

Conclusion and summary

The Government has requested that the Debt Office, at both the strategic and operational level, develop more quantitative methods to make possible a thorough assessment of the effects of market maintenance on issue interest rates. The Debt Office concurs in the assessment that new methods for evaluating market maintenance and debt management must be developed. The main goal should, however, not be to develop quantitative methods, but rather to review how a coherent and fair evaluation can be achieved. This requires analyses of both quantitative and qualitative elements. One important step to achieve this goal is to divide up market maintenance and debt management measures into general and specific efforts. General efforts should be the topic of more extensive analyses, performed at longer time intervals than one year. Specific efforts should be evaluated on the basis of the effects they are initially deemed capable of achieving. Thus, for example, efforts to establish electronic trading can be analysed in terms of any effects on liquidity. Finally, the Debt Office should continue reporting what market maintenance and debt management measures it took during the year, although part of the analysis of their effects occurs at longer time intervals.