RIKSGÄLDEN
SWEDISH NATIONAL DEBT OFFICE

# Central Government Borrowing
## Forecast and Analysis 2007:3

### CENTRAL GOVERNMENT BORROWING REQUIREMENT



### NEWS



### FUNDING



### MARKET INFORMATION

# Large surplus, fewer T-bills

The forecasts for central government finances that we presented in June have been confirmed by the actual developments. We expect a surplus in state payments for 2007 and 2008, which will produce a negative borrowing requirement of SEK 135 billion and SEK 116 billion, respectively. This forecast is based on the Government's assessment in the Budget Bill of income from privatisation of SEK 50 billion each year. These amounts are, of course, very uncertain, although we expect to be able to manage any discrepancies in a way that does not disrupt our loan planning.

The rapidly decreasing central government debt is naturally positive for the Swedish economy, although it does pose challenges to the Swedish National Debt Office in our endeavour to contribute to the good performance of the financial markets. Our foremost priority here is to maintain a liquid market in government bonds. As shown by the revised loan plan, this means a reduction in the stock of T-bills, thus necessitating a new policy. In future, we will only issue in four maturities with at most a six-month term to maturity.

The financial turbulence which started this summer has also affected Sweden, although to a lesser extent than in many other countries. For the Debt Office, the reduced offering of government securities in combination with increased demand has led to our repo commitment being made use of to a considerably greater extent than before – and more than was intended.

This has probably contributed to the more stable situation in the Swedish financial market, although, at the same time, it has had an effect on price mechanisms. It is important that the situation is subsequently normalised. Our view of the conditions for the repo commitment as part of our market support is developed in an article in this report, "The role of the Debt Office in times of credit-market turmoil".

*Bo Lundgren*
*Director General*

# Central government borrowing requirement

*Our view of the development of central government finances is substantially unchanged compared with the June forecast. This year, we estimate a budget surplus of SEK 135 billion, which is SEK 3 billion less than estimated in June. This change is mainly due to increased interest payments on central government debt. Next year, tax cuts and slackening corporate profits will lead to a reduction of the surplus to SEK 116 billion. These forecasts include sales income of SEK 50 billion per year. The expected sales income means that the uncertainty of the forecast is greater than usual. Central government debt decreases to SEK 1,120 billion at the end of 2007 and to SEK 1,005 billion at the end of 2008. This corresponds to around 37 and 31 per cent of GDP, respectively. Central government net lending, which is not affected by sales income, is expected to total SEK 65 billion in 2007 and SEK 71 billion in 2008. That amounts to just over 2 per cent of GDP both years.*

*Figure 1.*
**Central government borrowing requirement 1998–2008**

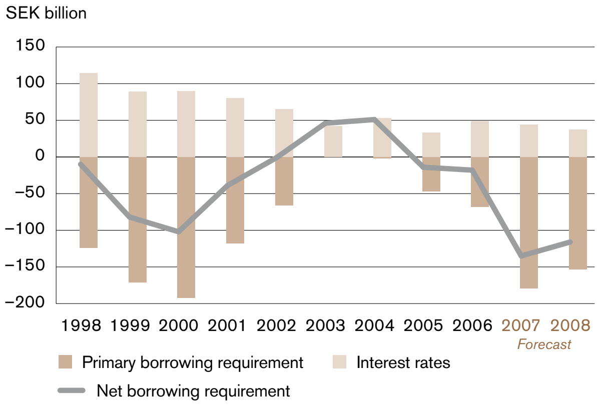



Table 1. CENTRAL GOVERNMENT NET BORROWING REQUIREMENT AND CENTRAL GOVERNMENT DEBT

| *SEK billion* | 2006 | Forecast 2007 | Forecast 2008 |
|---|---|---|---|
| Primary borrowing requirement | −68 | −179 | −153 |
| Interest on central government debt | 49 | 44 | 37 |
| Borrowing requirement, net | −18 | −135 | −116 |
| Debt adjustments | −24 | 11 | 0 |
| Revaluation, currency loan | −23 | 0 | 0 |
| Short-term investments | 4 | −26 | 0 |
| Change in central government debt | −39 | −150 | −116 |
| **Central government debt at year-end** | **1,270** | **1,120** | **1,005** |

## Annual forecast for 2007

We estimate that the borrowing requirement for 2007 will be SEK –135 billion, that is to say that central government payments will lead to a surplus. This is only a marginal change compared with the June forecast. This forecast includes sales income of SEK 50 billion. SEK 18 billion of this amount has already been realised by the sale of shares in TeliaSonera. In addition, we estimate an additional SEK 32 billion during the rest of the year. With such a short period of the year left, there is great uncertainty about the sales income for the calendar year 2007. It is, for example, not unlikely that the outcome for the remaining months of the year will be zero. On the other hand, a sale of, for instance, Vin & Sprit AB could produce considerably more than SEK 32 billion.

### The primary borrowing requirement

The primary borrowing requirement (all state payments excluding interest on central government debt) is expected to be SEK –179 billion, which is SEK 1 billion lower compared with the June forecast. The outcomes for the borrowing requirement in the past few months do not occasion any major changes in the forecast. The discrepancies that have occurred have been largely due to repo transactions by the Premium Pension Authority and the Swedish Nuclear Waste Fund. Otherwise, the outcomes have been relatively close to the forecasts.

The Premium Pension Authority and the Swedish Nuclear Waste Fund have both started using repo transactions in their management during the year. The payment for the repos is deposited in an account at the Debt Office, which affects the borrowing requirement. This means that the borrowing requirement has varied more from month to month than before and that forecast deviations have become larger. However, we do not expect any effect on the yearly borrowing requirement since the authorities will close their repos over the turn of the year.

Table 2. PRIMARY BORROWING REQUIREMENT 2007, CHANGE FROM PREVIOUS FORECAST *

*SEK billion*

| | |
|---|---|
| Debt Office's net lending | –12 |
| Swedish Road Administration | 7 |
| Swedish Rail Administration | 3 |
| National Labour Market Board | –3 |
| Taxes | 3 |
| Other | 1 |
| **Total** | **–1** |

** The amounts show the effect on the borrowing requirement. Thus, for instance, "Taxes 3" shows that income is expected to be lower.*

Payments from the National Labour Market Board (AMS) are expected to decrease by SEK 3 billion, which is mainly due to unemployment falling more quickly than we previously expected.

We estimate the tax revenue will be SEK 3 billion lower than in the previous forecast. This is mainly due to somewhat lower corporate tax revenue. The preliminary tax assessment outcomes for 2006 indicate that corporate profits in 2006 were lower than we expected. However, companies made high in-payments of preliminary tax during 2006. This means that payments of tax refunds to companies in December this year will be higher than previously estimated.

*The Debt Office's net lending* to central government agencies, public enterprises and state-owned companies is estimated at SEK –3 billion, which is SEK 12 billion less than in the previous forecast. The main explanation is that the Government proposed an additional amortisation of existing loans for infrastructure investments. This amortisation amounts to a total of SEK 10 billion, of which SEK 7 billion is for loans raised by the Swedish Road Administration and SEK 3 billion for loans raised by the Swedish Rail Administration. The net central government borrowing requirement is not affected by the additional amortisation since expenditure increases by the corresponding amounts.

**Interest payments on central government debt**

Interest payments are expected to be SEK 44 billion, which is SEK 4 billion more than previous forecast. Just over SEK 2 billion is explained by higher exchange rate losses. This is mainly due to the strengthening of the euro in relation to the dollar. The Debt Office controls the foreign currency debt in relation to a predetermined allocation between different currencies by using derivatives. Derivatives have short maturities and large exchange rate gains or losses may therefore occur even in the short term. However, we often have an offsetting position in the underlying loans. This means that we will make an offsetting gain or loss when the loans mature. It is thus purely a matter of accrual. Other changes in relation to the previous forecast are due to our planning to make other exchanges in nominal bonds than before, which will lead to larger capital losses.

## Annual forecast for 2008

The borrowing requirement in 2008 is expected to be SEK –116 billion. The new information which has become available since the previous forecast (primarily the Budget Bill, preliminary tax assessment outcomes for 2006 and new macro conditions) has led to a number of changes in the forecasts, in particular in the sphere of taxes. Most forecast adjustments mean lower income compared with the previous forecast. A one-off effect due to changed accounting rules for construction VAT leads, however, to the total forecasts both for tax income and the borrowing requirement being substantially unchanged.

The forecast includes SEK 50 billion of sales income, which is unchanged compared with the previous forecast. The forecast is based on continued high level of economic activity. The weak first quarter in the national accounts was followed by a stronger second quarter. However, the turbulence in the financial markets and higher interest rates have increased the risk for a weaker development of the real economy next year.

**The primary borrowing requirement**

The primary borrowing requirement (all state payments excluding interest on central government debt) is largely unchanged since the previous forecast.

Table 3. PRIMARY BORROWING REQUIREMENT 2008 CHANGE FROM PREVIOUS FORECAST *

*SEK billion*

| | |
|---|---|
| National Labour Market Board | –3 |
| Unemployment Insurance Board | 3 |
| Swedish Migration Board | 2 |
| Social Insurance Agency | 1 |
| Swedish Armed Forces | –1 |
| Other | –1 |
| **Total** | **1** |

** The amounts show the effect of the borrowing requirement, Thus, for instance, "National Labour Market Board –3" shows that expenditure is expected to be lower.*

The positive trend in the labour market means that payments from the National Labour Market Board for unemployment insurance will continue to fall sharply. At the same time, in-payments of fees to the Unemployment Insurance Board, IAF, are expected to decrease by approximately the same amount. This is partly due to a reduction in the number of members.

Payments from the Social Insurance Agency will be slightly higher than previously estimated. Payments of pensions are increasing which is due to the income index rising faster than before. At the same time, payments of sickness benefit and parental benefit are decreasing. Among other things, this is due to the factor for calculation of the income on which sickness benefit is based decreasing from 0.989 to 0.97 from 1 January 2008.

Payments to municipalities by the Swedish Migration Board are expected to increase by just under SEK 2 billion during 2008. Other expenditure is largely unchanged compared with the previous forecast.

In the sphere of taxes, we have made a number of larger changes in forecasts not least due to the proposals in the Budget Bill and preliminary tax assessment outcomes. The largest changes are for VAT and corporate taxes.

In-payments of VAT will be considerably higher than in the previous forecast. This is mainly due to new accounting rules for VAT on construction and civil engineering services. The new rules mean that VAT is to be charged continuously during the period of construction instead of after the final inspection. This means that VAT will be paid earlier, which will lead to an estimated one-off effect of SEK 10 billion for 2008. The total borrowing requirement over time is not affected.

Income from corporate tax is expected to be considerably lower than in the previous forecast. This is largely because we have adjusted our estimation of the profit levels to the preliminary tax assessment outcomes for 2006. Moreover, sharp increases in wages combined with weaker productivity development are expected to have a dampening effect on corporate profits. Despite this, it is worth noting that corporate profits, in a historical perspective, are still at very high levels.

The Government has proposed changes in property taxation from 1 January 2008. Property tax shall be paid to the municipalities at the same time as the annual tax is limited to SEK 6,000 or 0.75 per cent of the tax assessment value. These measures are being financed by the capital gains tax on sale of homes being raised from 20 to 22 per cent. Moreover, interest of 0.5 per cent of the deferred sales gains is to be charged. This will take place through a standard income of 1.67 per cent of the deferred amount being taken up in the income tax return as income from capital. In addition, a ceiling of SEK 1.6 million will be set for new deferrals. In conjunction with property tax being paid to the municipalities, the central government grants to the municipalities will be reduced by the equivalent amounts. Overall this rearrangement of property tax will have no effect on the borrowing requirement for 2008.

The "in-work tax credit" is to be increased by just under SEK 11 billion in 2008. This proposal has been included in previous forecasts. However, this tax cut will be around SEK 2 billion larger than we estimated, which increases the borrowing requirement by the same amount.

A number of excise taxes are being increased in 2008. The largest increases are for tobacco tax and carbon dioxide tax. Altogether, excise taxes are increasing by almost SEK 5 billion.

*The Debt Office's net lending* to central government agencies, public enterprise and state-owned companies is estimated to amount to SEK 12 billion, which is unchanged compared with the previous forecast.

**Interest payments on central government debt**

Interest payments are expected to be SEK 37 billion, which is SEK 1 billion higher than in the previous forecast. The explanation is mainly rising interest rates.

## SALES OF STATE ASSETS

As in previous forecasts, we assume income from sales of state assets of SEK 50 billion per year for 2007 and 2008. This is the same amount as estimated by the Government.

The state sold shares in TeliaSonera for SEK 18 billion in May 2007. This means that we expect a further SEK 32 billion in sales income this year.

The forecast for sales income is extremely uncertain. It is very possible that there will not be any more sales during 2007, while it could also be more than the SEK 32 billion in our forecast. There is also great uncertainty for 2008. It could be considerably more than SEK 50 billion and it could be less.

The Debt Office has no additional information about the sales process than what is generally available. Our task is to fund the central government debt at as low a cost as possible. The outcome will very probably deviate from our forecasts, but it is important for us to be able to deal with uncertainty and not to incur unnecessary costs in funding. Funding the central government debt is not planned in practice by calendar year but is a continuous process. We consider that the forecast made for sales income takes into account the uncertainty that this means for funding in the best possible way.

## CONDITIONS UNDERLYING THE FORECAST

In the areas where the forecast for the borrowing requirement requires macroeconomic assessments, the Debt Office bases itself on the National Institute of Economic Research's (NIER) macro scenario. In this forecast, we are using the macro forecast presented by NIER in August 2007. Information received after NIER published this forecast has also been taken into account in the forecast.

In August, the scenario of economic activity presented by NIER continued to be bright, even if growth this year is expected to be rather weaker than the assessment made in our previous forecast. GDP in fixed prices is growing by 3.5 per cent this year and by 3.8 per cent in 2008. Employment is continuing to increase at a fast pace and unemployment is decreasing. The number of employed persons is expected to rise by 2.2 per cent in 2007 and by 1.3 per cent in 2008. Average working hours are increasing and hourly wages are gradually increasing during the forecast period. Altogether, we expect that the wages bills, the largest single tax base, to grow by 7 per cent in 2007 and by 6 per cent in 2008.

Otherwise, our forecast takes into account the expenditure limits and tax rules proposed by the Government in various bills. However, in this respect, we make our own assessments of the financial effects on the state and of the time when these measures affect the state's payment flows. See, for instance, the fact box "Sales of state assets".

The Debt Office's forecast for interest payments on the central government debt is based on the interest and exchange rates at the time of the forecast. The stop date for the current forecast was 28 September 2007. We have also included the outcome for the borrowing requirement until the end of September.

## Central government net lending

Central government net lending is expected to amount to SEK 65 billion in 2007 and SEK 71 billion in 2008. The large difference in relation to the budget balance is mainly due to sales of financial assets not affecting financial net lending. The fact that shares are exchanged for cash makes no difference from the perspective of wealth. Central government net lending is often compared with the size of GDP. The ratio of central government net lending to GDP is just over 2 per cent in both years, a remarkably high level in a historical perspective. The Government's set goal is that net lending for the whole of the public sector (i.e. including local government and the pension scheme) should be 1 per cent of GDP on average.

Table 4. CENTRAL GOVERNMENT NET LENDING

| *SEK billion* | 2004 | 2005 | 2006 | Forecast 2007 | Forecast 2008 |
|---|---|---|---|---|---|
| **Budget balance** | **−51** | **14** | **18** | **135** | **116** |
| Adjustment items | 38 | −5 | 7 | −70 | −45 |
| Sale of limited companies | 0 | −7 | 0 | −50 | −50 |
| Transfer from AP funds | −4 | −2 | 0 | 0 | 0 |
| Lending, net repayment | 15 | 3 | 22 | 10 | 4 |
| Price and exchange rate losses | 19 | −3 | 12 | 5 | 0 |
| Accruals, other | 8 | 3 | −27 | −35 | 1 |
| **Net lending** | **−13** | **9** | **26** | **65** | **71** |
| Per cent of GDP | −0,5 | 0,3 | 0,9 | 2,2 | 2,2 |

## Monthly forecasts

The Debt Office publishes annual forecasts three times a year. Between regular forecasts, the Debt Office only makes revisions of the annual and monthly forecasts in exceptional cases. The revised forecast is then presented at the same time as the announcement of the outcome of the monthly borrowing requirement five working days after the end of each month.

Despite the small changes in our annual forecasts, the monthly forecasts have been adjusted relatively sharply compared with the June forecast. This is largely due to a change in the allocation of expected sales income. The SEK 32 billion we forecast for the rest of 2007 is now included in its entirety in the forecast for December. For 2008, SEK 50 billion in sales income has been allocated with SEK 12.5 billion each in March, June, September and December.

Otherwise, the high borrowing requirement in December is explained by the excess tax and payment of premium pension funds. The very low borrowing requirement in February is largely due to large supplementary tax in-payments.

Table 5. CENTRAL GOVERNMENT BORROWING REQUIREMENT

| *SEK billion* | oct | nov | dec | jan | feb | mar | apr | maj | jun |
|---|---|---|---|---|---|---|---|---|---|
| Primary borrowing requirement | −1,1 | −9,2 | 28,4 | −16,0 | −44,4 | −13,5 | −15,4 | −54,4 | −2,0 |
| Interest on central government debt | 2,1 | 0,5 | 12,9 | 4,5 | 0,6 | 4,1 | −0,6 | 5,7 | 1,2 |
| **Borrowing requirement** | **1,0** | **−8,7** | **41,2** | **−11,5** | **−43,8** | **−9,5** | **−16,0** | **−48,7** | **−0,9** |

## SENSITIVITY ANALYSIS

The Debt Office does not produce any overall sensitivity analysis for the borrowing requirement. Instead, we present a partial analysis of the effects that some important macro variables have on the borrowing requirement if they change. The table shows a rough estimate of these effects one year ahead. These effects must be added if it is wished to make an assessment of an alternative scenario, where a number of variables develop differently.

SENSITIVITY ANALYSIS, SEK BILLION

| Increase by one per cent/percentage point. | Effect on borrowing requirement |
|---|---|
| Wages bill [1] | −5 |
| Household consumption, current prices | −2 |
| Open unemployment | 5 |
| Interest rate level in Sweden | 4 |
| International interest rate level | 2 |
| TCW index | 0.5 |

[1] *Local taxes from employment are disbursed to local government with a one-year time lag. As a result, the effect on the central government borrowing requirement in a one-year time perspective – the time horizon in the table – is larger than the permanent effect.*

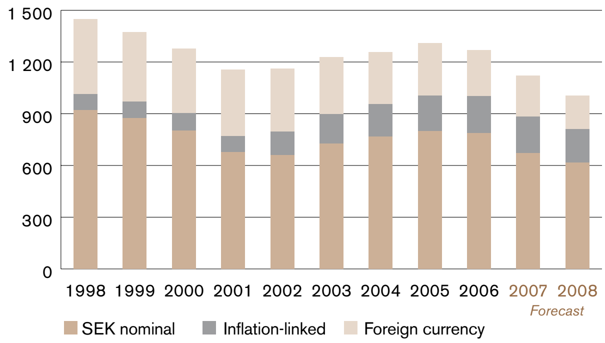
# Central government debt

At the end of September 2007, central government debt amounted to SEK 1,128 billion. This is a reduction since the turn of the year of SEK 142 billion. Central government debt is affected by the net borrowing requirement, short-term investments and debt dispositions. The Debt Office makes no forecasts of debt dispositions. However, we expect short-term investments to decrease by SEK 41 billion by 31 December.

At the end of 2007, central government debt is expected to total SEK 1,120 billion and at the end of 2008 SEK 1,005 billion. This is equivalent to around 37 and 31 per cent of GDP. [1]

[1] *This calculation is based on the National Institute of Economic Research's most recent forecast of GDP. Central government debt refers to unconsolidated central government debt.*

*Figure 2.*
**Government debt 1998–2008**
SEK billion



# Funding

*The issue volume of nominal government bonds is unchanged at SEK 1.5 billion per auction. A new T-bill policy with only four maturities up to six months is being introduced in January 2008. Borrowing in inflation-linked bonds is decreasing marginally to an annual pace of SEK 3 billion. The Debt Office is amortising the foreign currency debt at an annual pace of SEK 40 billion. Foreign currency borrowing is estimated at SEK 11 billion in 2008.*

## The funding requirement

The net borrowing requirement is estimated at SEK –135 billion and SEK –116 billion (budget surplus) for 2007 and 2008, respectively. This is substantially unchanged compared with the June forecast. However, there is a marked difference from 2006 when the surplus was only SEK 18 billion.

The Debt Office also needs to obtain funding for maturing loans. Altogether, funding in bonds and net funding in T-bills is estimated at SEK –77 billion in 2007 and SEK –18 billion in 2008. During the next two years, the budget surplus is thus expected to be larger than maturing bond loans. To maintain the maturity of the debt and contribute to liquidity in the bond market, we will continue to issue a relative large number of bonds. This means that we have to make a sharp reduction in T-bill borrowing.

Table 1 shows an assessment of the allocation of funding between bonds and T-bills and the allocation of bond borrowing between nominal government bonds, inflation-linked bonds and foreign currency bonds.

Table 1. FUNDING 2006–2008

| *SEK billion* | 2006 | 2007 | 2008 |
|---|---|---|---|
| **Net borrowing requirement** | **–18** | **–135** | **–116** |
| Change in cash equivalent holdings and retail market borrowing [1] | –38 | –21 | –10 |
| Maturing bonds and buybacks | 70 | 78 | 107 |
| Government bonds | 36 | 62 | 80 |
| Foreign currency bonds | 34 | 16 | 28 |
| **Total** | **13** | **–77** | **–18** |
| **T-bill borrowing, net** [2] | **–78** | **–129** | **–56** |
| **Bond borrowing, gross** [3] | **91** | **51** | **38** |
| Foreign currency bonds | 20 | 5 | 3 |
| Inflation-linked bonds [4] | 7 | 5 | 3 |
| Nominal government bonds [5] | 64 | 41 | 32 |
| **Funding in government securities** | **13** | **–77** | **–18** |

[1] *Change in outstanding deposits, liquidity swaps and repos. Retail market borrowing is assumed to be unchanged in 2007 and 2008.*

[2] *The net of issues (excluding exchanges) and maturities.*

[3] *Nominal amounts. Premiums and discounts (including inflation compensation) and exchange rate differences on issues are included in the net borrowing requirement as interest payments.*

| | *2006* | *2007* | *2008* |
|---|---|---|---|
| [4] *Issue volume per auction, average.* | *0.4* | *0.5* | *0.5* |
| [5] *Issue volume per auction, average.* | *2.8* | *1.9* | *1.5* |

The previous section on the central government borrowing requirement contains a discussion of the very high level of uncertainty attached to the forecasts of income from sale of state assets. We have taken into consideration the entire sales programme in our funding forecast as regards the assessment of the necessary amount of borrowing in nominal government bonds. The uncertainty as regards the time aspect of allocation is not so important here. The uncertainty as regards timing will mainly affect the allocation in time of T-bill borrowing and liquidity management.

Table 2. IMPORTANT DATES IN 2007 AND 2008

| Date | Time | Activity |
|---|---|---|
| 14 November | 16.20 | Conditions and coupon fixing for loan 1052 |
| 21 November | 11.00 | First issue of loan 1052 |
| 22-27 November | 11.00 | Exchanges to 1052 |
| 4-5 February 2008 | 11.00 | Buyback of loan 1043 for SEK 15 billion |
| 27 February 2008 | 09.30 | Central Government Borrowing – Forecast and Analysis 2008:1 |
| 13 March 2008 | 11.00 | Exchanges from 3105 to 3102 and 3104 |
| 2 October 2008 | 11.00 | Exchanges from 3105 to 3102 and 3104 |

## Nominal krona borrowing

### Nominal government bonds

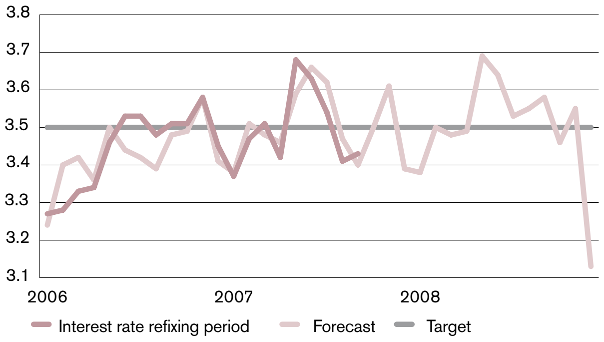
*Issue volume unchanged at SEK 1.5 billion*

The Debt Office will continue to issue government bonds at SEK 1.5 billion per auction. We expect to maintain this issue volume for the rest of the year and during 2008. The number of issue dates is 21 during 2008.

Our forecast for the interest rate refixing period is shown in Figure 1. The interest rate refixing period is calculated at 3.5 years on average during 2007 and 2008, in line with the benchmark established by the Debt Office. The maturity is developing approximately in line with the June forecast.

The short interest rate refixing period in December 2008 is due to large seasonal net borrowing requirements in that month at the same time as both inflation-linked and foreign currency loans mature in December 2008. Extensive short funding in December means that the maturity will be temporarily very short to be extended again during the spring of 2009.

*Figure 1.*
**Forecast and outcome for the interest rate refixing period of the nominal krona debt, 2006–2008**



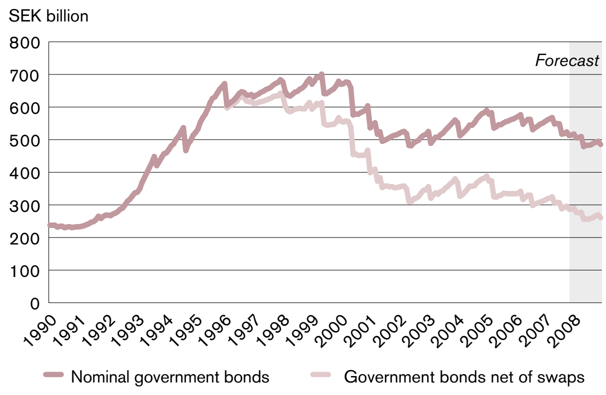

*The target for the interest-rate refixing period in the nominal krona debt is 3.5 ± 0.3 years. The monthly outcome is published on the fifth bank day each month in the press release on the outcome of the central government borrowing requirement.*

Since we are borrowing less in government bonds (Table 3), the outstanding volume of nominal government bonds will decrease in the coming two years.[1] However, this decrease is relatively limited compared with the reduction of central government debt. This reflects our aim to maintain a liquid bond market. The following table also shows the exposure in bond rates taking into consideration planned swaps. These are discussed in more detail in the section on T-bills and foreign currency borrowing.

Table 3. CHANGE IN OUTSTANDING GOVERNMENT BONDS, NET INCL. SWAPS

| *SEK billion* | 2006 | 2007 | 2008 |
|---|---|---|---|
| Nominal government bonds, issues | 64 | 41 | 32 |
| Maturities, buybacks and exchanges | −81 | −80 | −60 |
| Change in nominal government bond stock | −17 | −39 | −29 |
| Swaps, net | −11 | 18 | 3 |
| **Nominal government bonds and swaps, net change** | **−27** | **−20** | **−25** |

*Figure 2.*
**Government bonds and swaps**




[1] *Information about outstanding stocks in the different types of debt is published in the Debt Office's monthly report* The Swedish Central Government Debt.

*New ten-year bond in November 2007*

The next ten-year bond, loan 1052, will be introduced on 21 November 2007. The loan will mature on 12 March 2019. There will be an opportunity to exchange previously issued government bonds for this loan during the following four bank days (see press release about the exchanges of 4 September 2007). The new loan will be a ten-year reference loan in the electronic interbank market on the third Wednesday of March 2008.[2] Thereafter no new ten-year loan will be introduced before 2010 at the earliest since the outstanding loan 1047 will be a new ten-year reference loan in 2009.

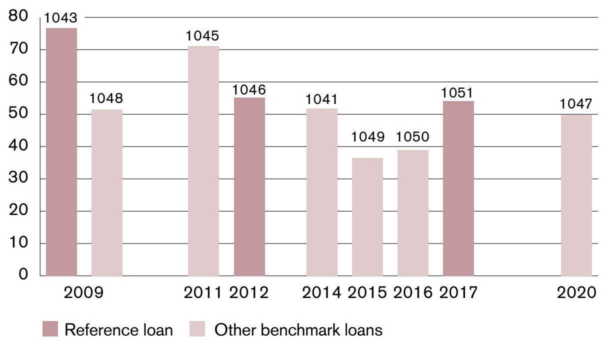
We expect to be able to continue to issue reference loans with two-, five- and ten-year maturities. Slightly over half of the issues will be made in the ten-year loan. We expect to make a few issues in the two- and fourteen-year maturities and the rest in the five-year segment.[3]

Table 4. REFERENCE LOANS IN THE ELECTRONIC INTERBANK MARKET*

| Date for exchange of reference loans (IMM date) | 2-year | 5-year | 10-year |
|---|---|---|---|
| 19 September 2007 | 1048 | 1046 | 1051 |
| 19 December 2007 | | | |
| 19 March 2008 | | | 1052 |
| 18 June 2008 | 1045 | 1041 | |

* *The above dates for change of reference loans refer to the settlement date. The first transaction date for a new reference loan is normally the Friday before the IMM date.*

*Figure 3.*
**Nominal government bonds (benchmark loans)**




[2] *The choice of reference loan in the electronic trade is determined by the loans that are closest in maturity to two, five or ten years. Reference loans are only changed, however, on IMM dates (the third Wednesday in March, June, September and December) with the criteria that the loans in terms of maturity shall be closest to two, five or ten years on the following IMM date. In this way, an underlying loan in the forward contracts will always be the same as a reference loan during the last three months of the contract.*

[3] *See the fact box about our issue decisions in* Central Government Borrowing –Forecast and Analysis 2005:3.

## T-bills and interest rate swaps

*New T-bill policy*

From the turn of the year, the Debt Office will only issue in four maturities up to at most six months. The last 12-month T-bill will be issued in December 2007.

In the June report we wrote that a change in our borrowing policy might be necessary. We subsequently circulated a proposal on a changed borrowing policy in September and have now received comments. These points of view were fragmented. Although several of the market participants, in the light of the current central government financial conditions, were positive to our proposals, a number of participants would prefer us to issue four T-bills maturing in IMM months and with up to 12-months maturity.

After having given careful consideration to the alternatives, we have concluded that it is difficult to combine a policy with T-bills with longer maturities than six months, which would at the same time be reasonably liquid, with our short-term funding requirements. We also consider that demand for T-bills is concentrated on short bills. It would be difficult to maintain a market with small outstanding volumes in the longest maturities without dealers being too dependent on our repos.

The new policy means that a new six-month T-bill, maturing on IMM dates, will be introduced every third month. A new three-month bill will be introduced in the other months. As before, we will use auction sales. There will thus be four outstanding maturities of up to six months on every occasion. As we are no longer exchanging bonds for T-bills, see below, there will often be a bond with a shorter maturity than twelve months available in the market.

As a rule, the Debt Office issues in the bill that is being introduced. The allocation of borrowing to four maturities controls our borrowing requirement otherwise. However, we normally do not issue in the two shortest maturities. We will continue to issue on tap in T-bills with customised maturities (liquidity bills) as well as in the two shortest maturities within the framework of our liquidity management.

The T-bill stock is estimated to average SEK 20 billion for every T-bill. This means that the T-bill stock will eventually fluctuate around SEK 80 billion. However, as now it will vary from month to month.

The issue volume per auction date is expected to be SEK 10 billion on average. The issue size will, however, vary depending on variations in the borrowing requirement over the year. Some issues will undoubtedly be larger than SEK 20 billion at the same time as others will not be larger than SEK 5 billion.

*Abolition of exchanges of bonds for T-bills*

With our new policy of issuing only up to six months, it is not reasonable to retain the present possibility of exchanges of bonds for bills when bonds have less than 12 months to maturity. This policy has assumed that we have a number of bills with longer maturities where the longest has been considerably longer than 12 months. We need to focus the outstanding bills on the shortest maturities.

Given the abolition of the possibilities of exchange, we will also retain the benchmark status of our nominal bonds up to maturity. This means that these bonds with short remaining time to maturity will have the same repo conditions as longer bonds in our market undertaking.

At present, we have no plans to offer exchanges of bonds to bills when the remaining time to maturity is shorter than six months, as the gains from such exchanges would not be big enough. If such exchanges were considered to make an important contribution to maturity, we do not want, however, to exclude the possibility of reconsidering this matter.

However, we will offer limited buybacks, around a fifth of the stock, of nominal government bonds when these have less than a year to maturity. We will offer a buyback of loan 1043 (January 2009) for a total of SEK 15 billion on 4 and 5 February 2008. The conditions will be notified a week before the auction. We will evaluate the buyback and the possibilities of offering a similar buyback of loan 1048 (December 2009) in December 2008.

*Reduced borrowing with T-bills*

Funding in T-bills (the net of issues and maturities) is expected to decrease by SEK 51 billion during 2007 compared with 2006 to then increase by SEK 73 billion during 2008. T-bill borrowing is decreasing sharply this year due to the strong demand for market support repos. In this forecast, we assume that the market has had time to adapt to new supply conditions during next year and this demand will therefore slacken to enable T-bill borrowing to be normalised again.

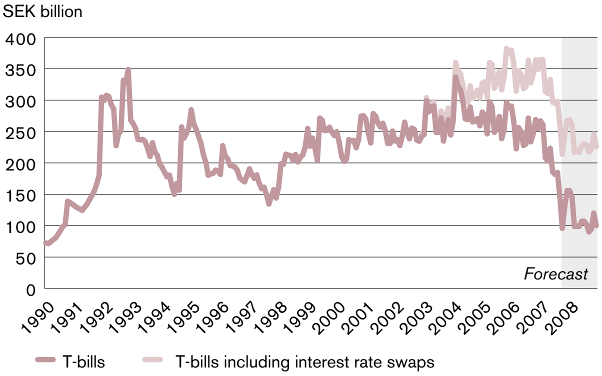
Table 5. CHANGE IN OUTSTANDING T-BILLS, NET INCL. SWAPS

| *SEK billion* | 2006 | 2007 | 2008 |
|---|---|---|---|
| T-bill borrowing, net* | −78 | −129 | −56 |
| Exchanges of government bonds to T-bills | 44 | 30 | 0 |
| Change in T-bill stock | −34 | −99 | -56 |
| Interest rate swaps, net | 9 | 10 | 14 |
| **T-bill stock and swaps, net change** | **−25** | **−89** | **−41** |

* *Net of issues (excluding exchanges) and maturities.*

*Figure 4.*

**T-bills and interest rate swaps**




During the past five years, the T-bill stock has fluctuated around SEK 250 billion. In 2008, we expect the stock to decrease by around SEK 100 billion. The stock will continue to decrease slightly during 2009.

*SEK 30 billion and SEK 38 billion in swaps*

The Debt Office can also create short-term borrowing by issuing bonds and then using interest rate swaps to shorten the time to maturity. Provided that the difference between the swap rate and the government bond rate is sufficiently large, this borrowing technique will also reduce the government funding costs. This technique also makes it possible to provide more liquidity in the bond market without increasing the total time to maturity. Good liquidity in the bond market should also contribute to reducing borrowing costs.

During 2007 and 2008, about SEK 30 billion and SEK 38 billion, respectively, of bond borrowing will be swapped for short interest rate exposure in kronor or foreign currency. Interest rate swaps can also be used as part of foreign currency borrowing. An interest rate swap will then be combined with a currency swap in such a way that the exposure in kronor is replaced by exposure in foreign currency.

The outstanding stock of swaps is expected to decrease slightly in 2007 and 2008 due to a larger volume of maturing swaps compared with previous years, see Table 6.

Table 6. CHANGE IN OUTSTANDING SWAPS

| *SEK billion* | 2006 | 2007 | 2008 |
|---|---|---|---|
| Interest-rate swaps * | 11 | 20 | 30 |
| Currency swaps ** | 23 | 10 | 8 |
| **Swaps total** | **34** | **30** | **38** |
| Swaps, maturities | −24 | −49 | −41 |
| **Swaps, net change** | **11** | **−18** | **−3** |

* *Interest rates swaps from long to short interest rate exposure in SEK*
** *Interest rate swaps from long to short interest rate exposure combined with currency swaps to foreign currency*

The outstanding stock depends on the swap volume which is mainly determined by our maturity targets and old outstanding swaps which are now maturing.

If market conditions change, the actual swap volume can deviate from the forecast. Swaps will continue to be made at a relatively even pace during the year.

## Inflation-linked borrowing

**Issue volume of approximately SEK 3 billion**

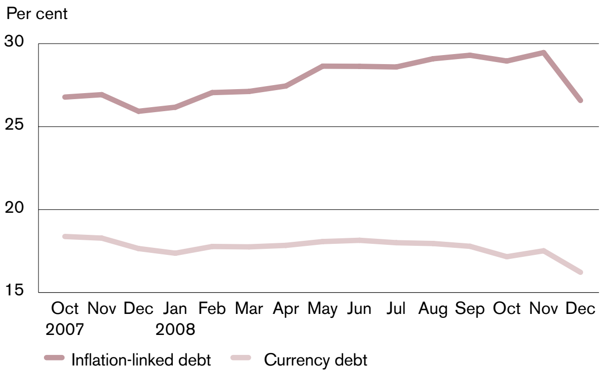
During 2006, we have issued SEK 7 billion in inflation-linked bonds. In the future, we expect to issue at an annual pace of approximately SEK 3 billion.

The share of inflation-linked debt is at present around 27 per cent of central government debt. This means that the proportion is now greater than that decided upon by the Government. To create flexibility in borrowing, the Debt Office has decided on a deviation interval of ±2 percentage points around the benchmark of 25 per cent. The maturity of inflation-linked debt at the end of the year shall be 10.4 years with a deviation interval of ±0.5 years. The interval has been set in such a way as provide us with the flexibility we need in our management of inflation-linked borrowing.

In the event of large budget surpluses, the share of inflation-linked debt will increase even if we refrain from issues. As shown by Figure 5, we expect that inflation-linked debt will remain at 27 per cent at the end of 2008. However, there is a great risk that the proportion will periodically exceed 30 per cent in coming years.

*Figure 5.*

**The share of inflation-linked and foreign currency debt of central government debt measured as a proportion of the aggregate central government cash flows**




*The benchmarks for how central government debt is to be allocated between different types of debt are stated in terms of all future cash flows (nominal debt plus coupons and expected inflation compensation). This can also be expressed as the market value of the debt calculated with zero interest rates and expected inflation compensation. We refer to this as the aggregate central government cash flows.*

The control of the share of debt for inflation-linked bonds around a benchmark is problematic for a type of debt such as inflation-linked bonds. We have previously noted this, in our proposed guidelines on central government debt management, among other places. Means are lacking, for instance, derivative instruments, which would be needed to keep the share at a relatively constant level at a reasonable cost during periods when the state budget is showing large deficits or surpluses; see the following section on measures to control the inflation-linked share.

The Debt Office aims for a long-term approach in borrowing and effective markets for central government debt instruments. We have therefore continued to borrow in the inflation-linked market, even though in small volumes, to contribute to liquidity.

During the remaining part of 2007, we are planning two sales auctions. The volume will normally be SEK 500 million. During 2008, six sales auctions and two exchange auctions are planned.

During 2008, issues will be relatively evenly spread between 3106, 3105, 3102 and 3104. The choice of bond for each particular auction will mainly comply with an internal issue plan which has been adopted in advance.

**Exchanges and buybacks of inflation-linked bonds**

During the autumn, we have considered a number of alternatives in our borrowing policy which aimed to avoid large maturities and, as far as possible, comply with the target of a 25 per cent inflation-linked share in a cost-effective way. In September, we circulated a proposal on possible alternative designs of exchanges and buybacks.

The reactions to our proposals have been mixed. Based on the responses to our reasoning, we only want to continue with one of the alternatives in the spring.

From next year, we will offer *exchange rate risk-neutral extension exchanges*[4] from 3105 to 3102 and 3104 for the equivalent of SEK 10 billion of loan 3105. These exchanges will take place on 13 March and 2 October 2008.

If the exchanges work satisfactorily, we expect to continue with these up to the end of 2013. However, we will allow at least SEK 25 billion of 3105 to mature.

In the more long-term calculations of the development of the share, we have assumed an issue volume of SEK 3 billion per year. We also expect to make exchanges equivalent to SEK 10 billion in 2009 and 2010. Subsequently the exchange volumes will be decreased to SEK 5 billion per year until the end of 2013.

The whole of loans 3101 and 3106 will continue to maturity, i.e. we will not offer any exchanges or buybacks. Table 7 includes a calculation of how the inflation-linked stock can develop up to 2015.

*Table 7.* CALCULATION EXAMPLE OF THE DEVELOPMENT OF THE INFLATION-LINKED STOCK UP TO AND INCLUDING 2015

*SEK billion*

| | |
|---|---|
| Outstanding nominal stock, October 20007 | 188 |
| Maturities in 3101, 3106, 3001 and SEK 25 bn of 3105 | −72 |
| Exchange rate risk neutral extension exchanges, net | −27 |
| Issues, SEK 3 bn per year | 25 |
| Outstanding nominal stock at the end of 2015 | 114 |

Of the other proposals we have taken up for discussion, we make the assessment that shortening exchanges and *exchanges from inflation-linked bonds to nominal bonds* are not of interest. These are the alternatives which we ourselves are most doubtful about and which also give rise to the most negative reactions.

*Buybacks,* in the form of reverse auctions, where we announce the buyback only a week in advance have been criticised by many participants since they would create uncertainty and insufficient unpredictability. We will not carry out any buybacks during the spring. This proposal could come into question at a later date in a modified form with ample advance notice. It should be emphasised that any buybacks would be relatively limited in terms of volume.

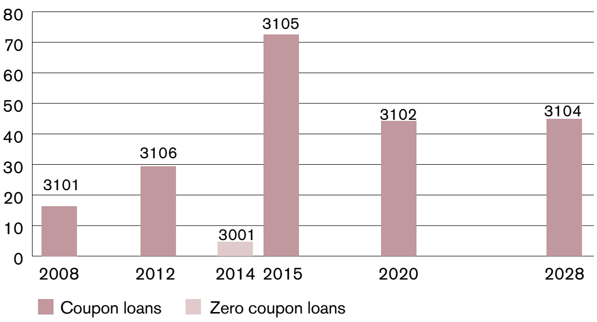
*Rebasing,* i.e. exchange of an inflation-linked bond for a new copy but with a new base index for inflation compensation, receives a positive reception from a number of participants. This exchange can in principle be regarded as bringing forward compensation for inflation. It could, for example, be carried out as a standing offer since the exchange can be simply made by a payment of inflation compensation as the difference in the transaction.

From our point of view, this is an attractive alternative. A number of participants make the criticism, however, that exchanges would decrease the outstanding inflation-linked exposure for investors and interest would therefore be weak. We would risk having two loans with poor liquidity. If interest in exchanges was weak, we could then end up in a situation where we had to pay to carry out exchanges of a sufficient extent. We are therefore not implementing this proposal for the time being.

[4] *Exchange rate neutral exchanges means that that the market value of the purchase and sale volume will be multiplied by the modified duration for the respective bond to be the same.*

Among our proposals, we mentioned the possibility of setting the same premium for our repo undertaking in inflation-linked bonds as for nominal bonds. This proposal is controversial to judge from the responses. In a separate article, we discuss the design of our market undertakings. We will come back to the question of the nature of these undertakings in the long term and then take up the question of pricing of repos in inflation-linked bonds in this context.

*Figure 6.*
**Inflation-linked government bonds**
SEK billion




## Foreign currency borrowing

According to the Government's guidelines, the foreign currency debt is to be amortised at an annual pace of SEK 40 billion. In 2007, foreign currency loans corresponding to around SEK 56 billion will mature. This means that we will need to borrow SEK 16 billion in foreign currency this year to achieve the target for the pace of amortisation. We have proposed an unchanged pace of amortisation for 2008. These calculations are based on the Government adopting this proposal. We thus estimate foreign currency borrowing of SEK 11 billion in 2008.

Table 8. FOREIGN CURRENCY BORROWING 2006-2008

| *SEK billion* | 2006 | 2007 | 2008 |
|---|---|---|---|
| Foreign currency borrowing requirement, gross | 43 | 16 | 11 |
| Foreign currency amortisation | –19 | –40 | –40 |
| Maturities and exchange rate differences | 62 | 56 | 51 |
| Foreign currency bonds* | 30 | 16 | 28 |
| Currency swaps** | 21 | 38 | 26 |
| Short-term currency loans, net | 4 | 0 | 0 |
| Realised exchange rate differences | 6 | 1 | –2 |
| Foreign currency borrowing, gross | 44 | 16 | 11 |
| Foreign currency bonds | 20 | 5 | 3 |
| Currency swaps, gross** | 23 | 10 | 8 |

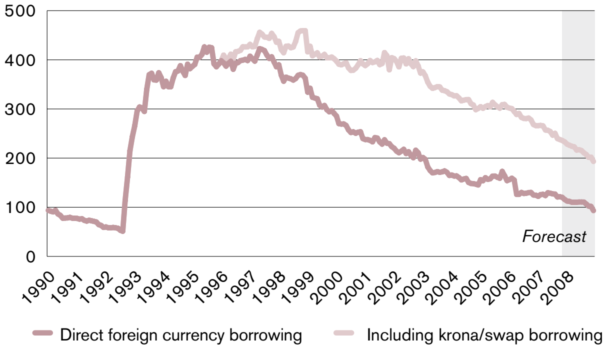
* *Valued at acquisition prices.*

** *Interest rate swaps from long to short interest-rate exposure combined with foreign currency swaps to foreign currency*

We can borrow in foreign currency by issues of krona bonds which are swapped for exposure in foreign currency (krona/swap borrowing)[5] or by issues of foreign currency bonds (direct foreign currency borrowing). The allocation of foreign currency borrowing between direct foreign currency borrowing and krona/swap borrowing depends on the interest terms that can be obtained. The small borrowing requirement and the priority we give to bonds issued in krona also restrict our ability to issue bonds in foreign currency.

For 2007 and 2008, the borrowing requirement has been allocated so that a larger part is planned to be in krona/swap borrowing than in direct foreign currency borrowing. Despite large budget surpluses, some direct foreign currency borrowing is still planned, even though limited in volume. Foreign currency bonds will thus only be issued if very good terms are offered. The actual allocation can therefore deviate from the assumptions in Table 8: direct foreign currency borrowing may be zero or SEK 5 billion depending on the state of the market. Since we have large maturities of direct foreign currency loans in both 2008 and 2009, the stock of bonds issued in foreign currency will rapidly decrease and provide an equivalent scope for borrowing in nominal krona bonds.

*Figure 7.*
**Development of foreign currency debt**
SEK billion




[5] *Foreign currency borrowing in the form of krona/swap borrowing means that the interest rate on government bonds in kronor is exchanged for short interest-rate exposure in foreign currency at the same time as the amount borrowed is exchanged to foreign currency.*

*After bond borrowing, we make a swap where we receive a fixed swap rate in kronor, which is higher than the bond rate (exposure in the long bond rate is eliminated), in order to instead pay variable interest in foreign currency. The transaction is a combined interest rate and foreign currency swap (base swap). Within the framework of the swap, we exchange at the same time the krona amount from the bond borrowing to foreign currency with our swap counterpart. We thus make a bond loan in kronor, have the amount exchanged to foreign currency and pay variable interest in foreign currency.*

*In the swap agreement, we agree at the same time, on maturity, to exchange the same amount in foreign currency back to kronor at the same exchange rate as in the original exchange. We can pay the bond maturity with the krona amount. To be able to exchange the amount back to kronor, we must first purchase the foreign currency before we can exchange to kronor. This creates a foreign currency exposure since we do not know the future exchange rate when we make the swap. Krona/swap borrowing thus gives the same currency exposure as if we issue a bond directly in foreign currency.*

The share of foreign currency debt is at present 18 per cent (see Figure 5 above). We expect to continue to amortise the foreign currency debt at the equivalent of an annual pace of SEK 40 billion in 2008 as well, provided that the exchange rate for the krona is at reasonable levels. When the share is 15 per cent, the size of foreign currency borrowing will be determined by the total funding requirement and the foreign currency borrowing required to retain the share in the range of 13–17 per cent, in accordance with the control system decided upon by the Government in 2006. Our assessment is that the share will be close to 15 per cent at the turn of the year 2008/2009.

## Summary

The large budget surplus means that borrowing in all instruments will decrease. However, we prioritise borrowing in nominal bonds. The issue volume in nominal government bonds will be unchanged at SEK 1.5 billion per auction. As far as we can now assess, we can retain this issue volume in 2008.

Bond borrowing will be allocated so that slightly over half will be made in the ten-year maturity. In addition, we expect to make a few issues in the two- and fourteen-year segment and the remaining issues in the five-year maturity. A new ten-year bond maturing on 12 March 2019 will be introduced as planned on 21 November 2007.

A new T-bill policy with only four bills up to six months will be introduced from January 2008. T-bill borrowing is expected to fall by SEK 51 billion in 2007 compared with 2006. We expect to make swaps equivalent to approximately SEK 30 billion and SEK 38 billion respectively during 2007 and 2008.

With the current forecast borrowing requirement, we expect a borrowing volume for inflation-linked bonds at an annual pace of approximately SEK 3 billion. During 2008, we will offer exchanges from 3105 to 3102 and 3104 for the equivalent of SEK 10 billion of loan 3105.

The Debt Office has amortised the foreign currency debt at an annual pace of SEK 40 billion since the turn of the year. Foreign currency borrowing is expected to amount to the equivalent of SEK 16 and SEK 11 billion respectively during 2007 and 2008.

# Proposed guidelines 2007

## – a discussion about the effects of a decreasing central government debt

*Every year, the Swedish National Debt Office presents a proposal to the Government where we analyse how the central government debt should be managed in order to achieve, in the best way, the goal of minimising the cost while taking into account risks. In this year's proposed guidelines, we discuss, among other things, the challenges that ensue from a continued surplus in central government finances. The expected sharp fall in central government debt over the next few years will have consequences, both in principle and in practice, for central government debt management. However, we are proposing unchanged guidelines for 2008–2010, since we do not see any appreciable reduction in future costs from shorter maturity or a changed composition of the debt.*

To illustrate how central government debt management is affected by the budget surpluses, we begin this year's proposed guidelines by a calculation example. In the most optimistic scenario, with general government net lending of 1.5 per cent of GDP on average during the period 2007–2015, the central government debt will fall to around SEK 700 billion in 2015 from around SEK 1,100 billion today. It should, however, be borne in mind that this is not a forecast but only a calculation example.

The discussions in this year's proposed guidelines indicate that a shrinking debt – regardless of how quickly it decreases – means that there are reasons of principle for taking slightly greater risks in the debt management in exchange for lower expected costs. We have two main instruments at our disposal for affecting the cost of the debt: the maturity and the composition of the debt. We discuss both these alternatives in this year's proposal.

### Average maturity

As long as the yield curve is upward sloping, it is possible to reduce costs by shortening maturity. The price we pay for that cost reduction is greater uncertainty about future interest costs – the interest rate refixing and refinancing risk increases – since maturing loans must be renewed more often. The limited borrowing requirement also makes it fully possible to shorten the maturity without a deterioration of the liquidity of the bond market. This is because our scope for changing the maturity with the aid of swaps has increased in tandem with reduced bond volumes.

Despite these prerequisites, we consider that there are insufficient reasons at present to change the benchmark for the maturity of central government debt. This is due to the current difference between short and long interest rates being so small that the previous trade-off between expected cost and risk is not as evident in the current situation. In other words, we consider that the potential advantage of shortening the maturity does not currently offset the increased risk.

### The composition of the debt

The other alternative – redistribution between types of debt – probably does not either lead to any significant reduction in the expected cost. It is difficult to envisage that it would be possible to borrow more cheaply in the long term, in a stable economy with strong central government finances and well-developed financial markets, by shifting part of the borrowing from one market to another. The reason for using several types of debt – nominal debt, inflation-linked debt and foreign currency debt – is instead to spread the risks by avoiding being dependent on the loan terms of a single type of debt.

However, the above reasoning is based on the foreign currency debt having essentially the same composition as to date, where we primarily strive to keep total currency risk low. Since the state should now be prepared to accept greater risks, we consider that there are reasons to change the starting point for the analysis of the characteristics of the foreign currency debt. The Debt Office will therefore review the composition of that debt on the basis of aiming for lower expected costs.

### Market support

The shrinking debt also brings to the fore issues concerning the practical management. An unavoidable consequence of the surpluses is that we will issue a smaller volume of government securities. We consider that we should safeguard our borrowing in krona bonds in the first place, which means that the extent of T-bill and foreign currency bond borrowing will decrease. Examples of measures that have already been carried out, or can be carried out, are to reduce the number of maturities, have fewer auction dates and concentrate borrowing on nominal bonds.

The Debt Office notes that it is important that we support the markets to the greatest possible extent. We should strive to ensure that the Swedish government securities market remains attractive to enable a quick and efficient increase in borrowing should the trend reverse. Among other things, the infrastructure with liquid markets, good investor confidence, primary dealers etc., which has been built up over a long period of time, should be maintained.

## Unchanged guidelines

**Target shares**

To sum up, we are not proposing any changes in the current guidelines. We thus recommend that the debt should consist of 15 per cent foreign currency debt, 25 per cent inflation-linked krona debt and 60 per cent nominal krona debt.

We are proposing an amortisation rate of SEK 40 billion for foreign currency debt in 2008, with a permitted deviation interval of SEK ±15 billion. It should be possible to introduce the new share-based control system for the foreign currency debt, decided upon by the Government in last year's guidelines, around the turn of the year 2008/2009, when the share is expected to be in the vicinity of 15 per cent. However, it is difficult to say exactly when this changeover should take place. We therefore recommend that we submit a proposal to the Government at a later date when we consider a changeover appropriate.

Inflation-linked debt will rise above its target share in the coming years. During 2008, the share of inflation-linked debt will increase to around 30 per cent and then fall to 27 per cent in connection with a loan maturing at the end of the year. During the following years, the share will again rise to just over 30 per cent.

The reason for this is that the decreasing total debt leads the share of inflation-linked debt to increase automatically until the next large maturity of an inflation-linked bond in 2012. At present there are no tools to guide the inflation-linked share towards its benchmark at reasonable costs. Moreover, we consider that it is important to have some presence on the primary market for the inflation-linked bond market to continue to perform well and be a possible source of funding in the future. Overall, this development means that there is a need to make in-depth analyses of how to control the share of inflation-linked debt over the long term. The Debt Office will discuss this matter again in next year's proposed guidelines.

**Average maturity**

We propose that the benchmark for the overall maturity at the end of 2008 be 4.8 years and that the target for the corresponding dates in 2009 and 2010 be 4.6 and 4.5 years, respectively. In principle, this means no change compared with last year's guidelines. The upward adjustment of the values for 2008 and 2009 by 0.2 years is due to the fact that the actual development of the maturity of the inflation-linked debt has deviated from that estimated, due to exchanges and issues not developing wholly in accordance with the assumptions on which last year's estimates were based.

**Other guidelines**

We are proposing unchanged guidelines for position-taking, market and debt support and retail borrowing.

The Government will decide on the guidelines for central government debt management for 2008-2010 by 15 November, after a statement by the Riksbank.

**The proposed guidelines are available in their entirety on our website: www.riksgalden.se.**

### PROPOSED GUIDELINES

**Foreign currency debt**

- The share of foreign currency debt should decrease to 15 per cent of central government debt. There shall be a control interval of ±2 percentage points around the target share.
- The benchmark for the rate of amortisation shall be set at SEK 40 billion during 2008. The Debt Office may deviate from the stated amortisation rate by SEK ±15 billion.
- It should be possible to introduce the new share-based control system around the turn of the year 2008/2009. The Debt Office will submit a proposal to the Government at a later date, when it is considered appropriate to change over to a share-based control system.

**Inflation-linked debt**

The share of inflation-linked krona debt shall be 25 per cent of central government debt. The Debt Office shall establish a deviation interval for inflation-linked debt.

**Nominal krona debt**

In addition to inflation-linked krona debt and foreign currency debt, the central government debt shall consist of nominal krona debt. The target share for the nominal krona debt will thereby, by definition, be 60 per cent of the central government debt.

**Maturity**

The benchmark for the overall maturity of central government debt shall be 4.8 years at the end of 2008. The focus for the corresponding dates in 2009 and 2010 shall be 4.6 and 4.5 years, respectively. The Debt Office shall break down the overall benchmark into separate benchmarks for each type of debt and specify guidelines for the operational control of the maturities.

**Other guidelines**

Unchanged guidelines for position-taking, market and debt support and retail borrowing.

# The role of the Debt Office in times of credit-market turmoil

*Global credit turmoil that arose this summer and has continued into the autumn has increased demand for government securities concurrently with a reduction in supply. This has led to a shortage of government securities also in Sweden. The Debt Office has a commitment to always lend government securities to its counterparties. Presently, we lend government securities in an amount of SEK 40 to 60 billion a day within the scope of this commitment. We do this by using repos, which means that we repurchase lent securities on the following day. The repo facility supports liquidity and has reduced the impact of international credit unrest on the Swedish fixed-income market.*

The fact that our primary dealers may borrow government securities from us reduces the risk of scarcity in the market. Compared with the bond market in the euro area, the Swedish fixed-income market has functioned well, bolstering its international reputation. At the same time our market commitment may have contributed to delaying necessary adaptations. It is therefore important that the participants in the fixed-income market adapt to new conditions with a smaller government debt by developing their management and using other instruments.

## Repos on the fixed-income market

Market makers (for example, banks) quote buying and selling prices for government securities to their customers. Normally, the bank holds only a small inventory of securities. This means that when the bank for example sells a government bond, it is selling something that it does not hold in inventory. The bank may then buy it from an investor or from another bank. If it is difficult to do so at a reasonable price, the alternative may be to borrow the security temporarily through a repo on the market. The lender of the security receives money in exchange. From the latter's point of view, it thus constitutes a short-term loan (see the fact box).

Another example is an investor wishing to sell a fixed-income security because he believes that interest rates will rise and he does not own the security. He may then sell a security that he first buys on the repo market (and thereby agrees to sell it back). This is the fixed-income market correspondent to shorting equities.

Repos are supplied by investors or banks who want to increase their return by lending their holdings of financial instruments.  Alternatively, it is possible to repo one's assets in order to borrow money for a shorter or longer time. A purchase of fixed-income securities may in principle be financed by the buyer repoing the holding.

The Swedish repo market functions very well in an international perspective. Liquidity is significantly greater than the volume of outstanding bonds might lead one to believe. This is a significant competitive advantage for the Swedish government securities market.

### WHAT IS A REPO?

A repo in a government security is a sale of a bond or T-bill with a concurrent agreement for the repurchase of the same security. To the other party, the repo entails the lending of money since one initially pays for the government security and then receives the money in return when the security is sold back.

More technically speaking, a repo may be described as an agreement for a spot sale in combination with a forward contract purchase of a specific security. A forward contract may be seen as a spot transaction with delayed payment. The buyer in the spot transaction (who lends money) gets compensation (interest) in the forward transaction. The compensation is the difference between the forward and the spot price. The forward price is determined on the basis of the spot price and a yield requirement (implicit "repo rate"). If the transaction is carried out in reverse (a spot purchase of securities etc.) this is called a reverse repo.

## Our role

When it is difficult to find a security at a reasonable price on the market, it is possible to turn to the Debt Office and do a repo in that security. The mortgage institutions have a corresponding commitment. [1]

[1] *Also foreign debt offices offer repos in case of shortage situations. The terms however vary between the countries. See, e.g., Holmlund, A [2003] "Market development work in Sweden and a few other European countries",* Central Government Borrowing: Forecast and Analysis 2003:3.

The market commitment or market-support repos entail that we upon request sell government securities at the same time as we repurchase the same securities one day later (repurchase agreement or repo). As the market knows that it is always possible to borrow government securities from us, uncertainty in the market is reduced. Market makers also know the cost of borrowing the government security from us and may quote narrow prices in government securities.

If a participant cannot deliver a government security in time to VPC, there is a risk of a chain reaction. Then there is also a default in the payment needed to perform another transaction and so on. Our market commitment thus constitutes a guarantee for a functioning settlement in the market for government securities.

The Debt Office assumed in February 2000 the market commitment for government securities from the Riksbank. It was deemed natural since the commitment refers to the government securities that the Debt Office issues and that therefore we should ourselves be responsible for the market support. Another reason was that the allocation of responsibilities between the Debt Office and the Riksbank had become clearer: the bank focusing on monetary policy and the Debt Office on the transactions related to the management of the government debt. The Riksbank no longer holds any Swedish government securities in its portfolio and therefore lacks the preconditions to carry out repos of the nature discussed here.

In order to avoid confusion, it should be mentioned that the Riksbank also engages in repo transactions, whereby the Riksbank repos in securities in exchange for liquid assets (money). These repos have a monetary policy purpose: to affect the liquidity of the banking system and tell which level of the short-term market interest rate (the overnight interest rate) that the Riksbank considers being compatible with its goals of stable prices, colloquially known as the repo rate of the Riksbank. Other participants (such as the Debt Office) will borrow money on the short term (or lend securities) on the repo market at an interest rate ultimately controlled by the Riksbank. Our repo facilities do not affect the preconditions for monetary policy.

Our market-support repos in government securities (bonds and T-bills) are carried out at the request of our primary dealers. Our policy is that the market itself should handle the repo market. Therefore, we charge for this service. When we carry out repos in nominal government bonds we add a premium of 30 basis points, in other words we borrow money in the repo agreement at an interest rate that is 0.3 percentage point lower than the repo rate of the Riksbank. The premium for T-bills is 15 basis points and that for inflation-linked bonds is 10 basis points. The lower premium for these government securities is not self-evident, but has been justified by T-bills having shorter maturity and both markets having inferior liquidity than the nominal one.

### AIM OF THE MARKET COMMITMENT

The aim of the management of the government debt is to minimize the long-term costs without taking too large risks. A well-functioning and liquid market in government securities with a broad investor base is important in order to achieve this aim. Our policy is to act with openness, transparency and predictability with the same aim: to contribute to a well-functioning and liquid market. The Debt Office's commitment to offer our dealers repo facilities may be seen as a part of these efforts. We aim to compensate for the relatively small size of the Swedish market. The repo commitment contributes to improving liquidity and depth in the market for government securities.

## Repos and our liquidity management

The Debt Office has over the years developed liquidity management vis-a-vis a greater number of counterparties and instruments. We adapt the size of our T-bill issues to changed cash flow forecasts; we may issue T-bills with tailor-made maturities (liquidity bills) and use repos to cover coming financing requirements well ahead of time. The remaining borrowing requirement may be covered by bank loans (deposits). By using repos we have been able to meet demand for government securities within the framework of our regular borrowing. [2]

It has however proven problematic to use repos in our short-term funding. The cost of carrying out repos with us has depended on whether we have had a borrowing or investing requirement. In cases of a borrowing requirement we have used market pricing. When we have had a surplus, we have charged the applicable premium within the scope of our market commitment. The profitability for investors of repurchasing their own holdings has therefore become dependent on our cash position and has been perceived as jerky. Until further notice, and since the demand for repos in government securities is great and thereby the "market price" is high, we will however only carry out repos in government securities within the scope of our market commitment at our fixed price list.

In case of surplus liquidity we may carry out reverse repos in government securities and in other interest-rate securities with good collateral. On the krona market these

[2] *Sjulander, A [2005] "The State's liquidity management",* Central Government Borrowing: Forecast and Analysis 2005:1

are primarily mortgage bonds. We may also buy back outstanding T-bills with a short remaining maturity or purchase other fixed-income securities with good creditworthiness such as mortgage bonds. On the international money market we may also carry out so-called tri-party repos, buy commercial paper or invest with other debt offices (governments). The remaining surplus liquidity we place with both Swedish and foreign banks on the deposit market for kronor and foreign currencies within the scope of the adopted credit limits.

## Liquidity turmoil in the autumn of 2007

During the global credit unrest that accelerated after the problems in the sub-prime market in the United States became obvious in the summer of 2007, the demand for government securities of good creditworthiness increased strongly. As investors reduced their holdings of higher-risk securities in order to purchase government securities, great portfolio reallocations were made.

In periods of such reallocations, bottlenecks with squeezes easily arise, in which it is difficult for participants to find the instruments that they demand on the market. This shortage situation is exacerbated by many investors refusing to repo their holdings. If a security, for example, is sold by a participant who takes part in the repo market and purchased by an investor who does not participate, the security disappears from the liquid part of the market.

The credit concern with the ensuing shortage of government securities has also been affected by a concurrent significantly smaller outstanding stock of T-bills. Increased demand in concert with a reduction in supply has not ameliorated the situation.

The result has been significantly increased demand for the repos we supply within the scope of our market commitment. During former turbulent periods, the demand for great volumes of repos may have continued for a few weeks, with temporary high peaks. In the autumn of 2005 and the spring of 2006, market-support repos were carried out roughly in the amount of SEK 5-10 billion on an average per day. During the present unrest, the daily repo volume is between SEK 40 and 60 billion. Note that the repos we carry out have a maturity of one day. The next day, new repos are therefore carried out in roughly the same amounts. We are thus rolling a repo stock of about SEK 50 billion daily.

Surpluses that arise in connection with great volumes of market-support repos are invested in the same manner as the surpluses that periodically arise also in normal times. Surpluses and deficits remaining at the end of the day with us and the large banks are handled by deposits. Deposits are however associated with credit risk, which is why we – like all banks – have limits on the size of the deposits that may be made with each counterparty.

In order to limit our credit exposure, we therefore attempt to invest surpluses with collateral in exchange for lending. This is achieved by investing surpluses in the form of a repo, in other words we lend the surplus and receive a security as collateral. The most common securities are government securities or mortgage bonds. Against the background of the great demand for government securities we presently make investments with mortgage bonds as collateral.

Our market commitment aims to facilitate the current trade, contribute to liquidity and prevent delivery problems with respect to government securities. The repo commitment has contributed to the Swedish fixed-income market having functioned well compared with other markets. For example, it has from time to time been difficult for the euro market to maintain a liquid trade.

During the ongoing credit-market turmoil, however, our repos have been used in a manner that was not intended, but may rather be described as a side effect of our standing commitment. At the same time as our repos have made a positive contribution in the form of additional liquidity and stability in the market, there are thus drawbacks. Our repos have been a cushion in times of unrest, and have contributed to limiting undesirable short-term interest-rate fluctuations and facilitated for our primary dealers to sustain trade. The impact of the shortage situation on the price and interest-rate setting on the market has been dampened.

Market prices fulfil the function to signal variations in supply and demand and to provide incentives to change. To the extent that our repos reduce the impact in the market, there is a risk that necessary adaptations are delayed.

The Debt Office may in principle not borrow more than what corresponds to the borrowing requirements of the central government. In the long run, we cannot borrow through repos and then manage the funds as a surplus. Sooner or later, extensive repos will mean that we for example will need to reduce bond borrowing, which would counteract our policy to prioritise this type of funding. It is also unreasonable for us to reduce the outstanding stock of T-bills only then to immediately repo the same volumes.

The repo market is a market which all participants in the government-bond and T-bill market take advantage of. It is therefore surprising that certain participants refuse to repo their holdings. These participants benefit from the efforts of others without contributing themselves.

It is also the case that repo activities provide a significant and secure income contribution for investors. If an investor voluntarily relinquishes a secure profit, that is an activity that more than well covers cost, it is justified to discuss how professional that fund management is. We assume that investors who at present do not participate in the repo market will reconsider their position without delay. It is also important that investors adapt their management to changed conditions. Central government debt is being reduced and it is necessary for the participants in the Swedish fixed-income market to use other instruments, such as forward contracts, FRA contracts and swaps to a greater extent, so that they can sustain an effective management without being entirely dependent on cash trade in government securities.

## TERMS FOR REPOS IN OUR MARKET COMMITMENT

The repo commitment applies to sales of government securities with payment on the next day, T+1, and repurchase the day after tomorrow, T+2 (tomorrow/next, T/N).

| **Instrument** | **Deduction from the repo rate of the Riksbank** |
|---|---|
| Nominal government bonds, benchmark | –30 basis points |
| Inflation-linked bonds | –10 basis points |
| Treasury bills | –15 basis points |

*Note:* In case of overnight payment, T+0 (o/n) we will make a deduction of 5 basis points from the T/N level.

We also have additional market commitments. See our website: www.riksgalden.se/funding_management

## A look ahead

Our market commitment is an important part of the Debt Office's efforts to minimize the costs of the central government debt. The Swedish market is relatively small compared with many other markets. We therefore believe that it is of value for us to support the market by supplying government securities through repos when there is a shortage. This contributes to liquidity and to less expensive borrowing in the long run.

We would like to avoid changing the terms of our market commitment in repos during the current unrest in the money market. However, this requires that market participants adapt their operations to an ever smaller government debt, which is leading to a reduction of the volume of government securities as well.

There may be reason to review the long-term design of our market commitment in the light of developments during the autumn. Are there defects in the present design of the commitment? Does the structure provide insufficient incentives for other participants to react and adapt? It may be inappropriate to cap the repo volumes since there are strong reasons to prevent delivery defaults. In this connection, the question should be asked whether it is justified to charge the same premiums for the repo facilities regardless of the extent to which the commitment is used. At the same time, there are advantages in having a simple system and avoiding pitfalls in the form of complex systems that in turn may give rise to speculations against the design of the system. As usual we welcome any comments and suggestions.

*Anna Sjulander*
*Debt manager*

*Thomas Olofsson*
*Head of funding*

# Market information

*Source: The Swedish National Debt Office, unless otherwise stated*

NOMINAL GOVERNMENT BONDS, OUTSTANDING VOLUMES, 30 SEPTEMBER 2007

| Maturity date | Coupon % | Loan no. | SEK million |
|---|---|---|---|
| 2009-01-28 | 5.00 | 1043 | 76,650 |
| 2009-12-01 | 4.00 | 1048 | 51,497 |
| 2011-03-15 | 5.25 | 1045 | 71,037 |
| 2012-10-08 | 5.50 | 1046 | 55,198 |
| 2014-05-05 | 6.75 | 1041 | 51,747 |
| 2015-08-12 | 4.50 | 1049 | 36,489 |
| 2016-07-12 | 3.00 | 1050 | 38,987 |
| 2017-08-12 | 3.75 | 1051 | 52,519 |
| 2020-12-01 | 5.00 | 1047 | 49,702 |
| Total benchmarks | | | 483,826 |
| Non-benchmarks | | | 34,799 |

T-BILLS, OUTSTANDING VOLUMES 30 SEPTEMBER 2007

| Maturity date | SEK million |
|---|---|
| 2007-10-17 | 10,088 |
| 2007-11-21 | 20,171 |
| 2007-12-19 | 59,448 |
| 2008-03-19 | 31,995 |
| 2008-06-18 | 11,930 |
| 2008-09-17 | 11,933 |
| Total T-bills | 145,565 |

INFLATION-LINKED GOVERNMENT BONDS, OUTSTANDNING AMOUNTS, 30 SEPTEMBER 2007

| Maturity date | Coupon % | Loan no. | SEK million |
|---|---|---|---|
| 2008-12-01 | 4.00 | 3101 | 16,347 |
| 2012-04-01 | 1.00 | 3106 | 29,335 |
| 2014-04-01 | 0.00 | 3001 | 4,698 |
| 2015-12-01 | 3.50 | 3105 | 72,499 |
| 2020-12-01 | 4.00 | 3102 | 44,151 |
| 2028-12-01 | 3.50 | 3104 | 44,899 |
| 2028-12-01 | 3.50 | 3103 | 3 |
| Total inflation-linked bonds | | | 211,932 |

RATING

| | Debt in SEK | Foreign currency debt |
|---|---|---|
| Moody's | Aaa | Aaa |
| Standard & Poor's | AAA | AAA |

NOMINAL GOVERNMENT BONDS, AUCTION DATES

| Announcement date | Auction date | Settlement date |
|---|---|---|
| 2007-10-17 | 2007-10-24 | 2007-10-29 |
| 2007-10-31 | 2007-11-07 | 2007-11-12 |
| 2007-11-14 | 2007-11-21 | 2007-11-26 |
| 2007-11-28 | 2007-12-05 | 2007-12-10 |
| 2008-01-02 | 2008-01-09 | 2008-01-14 |
| 2008-01-16 | 2008-01-23 | 2008-01-28 |
| 2008-01-30 | 2008-02-06 | 2008-02-11 |
| 2008-02-13 | 2008-02-20 | 2008-02-25 |
| 2008-02-27 | 2008-03-05 | 2008-03-10 |
| 2008-03-26 | 2008-04-02 | 2008-04-07 |
| 2008-04-09 | 2008-04-16 | 2008-04-21 |
| 2008-04-23 | 2008-04-30 | 2008-05-06 |
| 2008-05-07 | 2008-05-14 | 2008-05-19 |
| 2008-05-21 | 2008-05-28 | 2008-06-02 |
| 2008-06-04 | 2008-06-11 | 2008-06-16 |
| 2008-06-18 | 2008-06-25 | 2008-06-30 |

T-BILLS, AUCTION DATES

| Announcement date | Auction date | Settlement date |
|---|---|---|
| 2007-10-24 | 2007-10-31 | 2007-11-02 |
| 2007-11-07 | 2007-11-14 | 2007-11-16 |
| 2007-11-21 | 2007-11-28 | 2007-11-30 |
| 2007-12-05 | 2007-12-12 | 2007-12-14 |
| 2007-12-21 | 2008-01-02 | 2008-01-04 |
| 2008-01-09 | 2008-01-16 | 2008-01-18 |
| 2008-01-23 | 2008-01-30 | 2008-02-01 |
| 2008-02-06 | 2008-02-13 | 2008-02-15 |
| 2008-02-20 | 2008-02-27 | 2008-02-29 |
| 2008-03-05 | 2008-03-12 | 2008-03-14 |
| 2008-03-19 | 2008-03-26 | 2008-03-28 |
| 2008-04-02 | 2008-04-09 | 2008-04-11 |
| 2008-04-16 | 2008-04-23 | 2008-04-25 |
| 2008-04-30 | 2008-05-07 | 2008-05-09 |
| 2008-05-14 | 2008-05-21 | 2008-05-23 |
| 2008-05-28 | 2008-06-04 | 2008-06-09 |
| 2008-06-11 | 2008-06-18 | 2008-06-23 |
| 2008-06-25 | 2008-07-02 | 2008-07-04 |

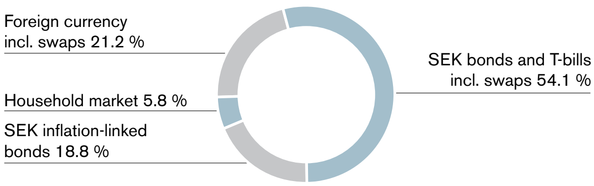
INFLATION-LINKED GOVERNMENT BONDS, AUCTION DATES

| Announcement date | Auction date | Settlement date |
|---|---|---|
| 2007-10-25 | 2007-11-01 | 2007-11-06 |
| 2007-11-22 | 2007-11-29 | 2007-12-04 |
| 2008-01-24 | 2008-01-31 | 2008-02-05 |
| 2008-03-06* | 2008-03-13 | 2008-03-18 |
| 2008-03-20 | 2008-03-27 | 2008-04-01 |
| 2008-05-15 | 2008-05-22 | 2008-05-27 |
| 2008-08-28 | 2008-09-04 | 2008-09-09 |
| 2008-09-25* | 2008-10-02 | 2008-10-07 |
| 2008-10-09 | 2008-10-16 | 2008-10-21 |
| 2008-11-20 | 2008-11-27 | 2008-12-02 |

**Exchange auction*

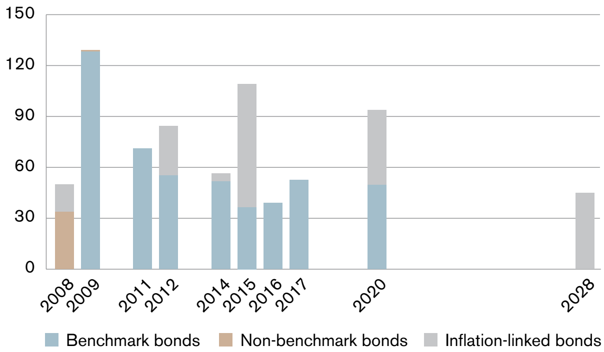
## Debt structure

Total debt SEK 1,128 billion — 30 September 2007



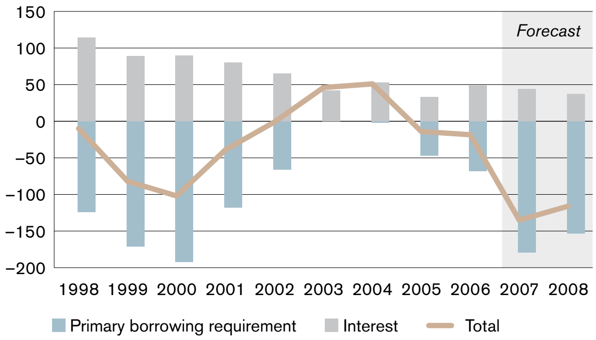

## Maturity profile, SEK nominal and inflation-linked bonds

SEK billion — 30 September 2007



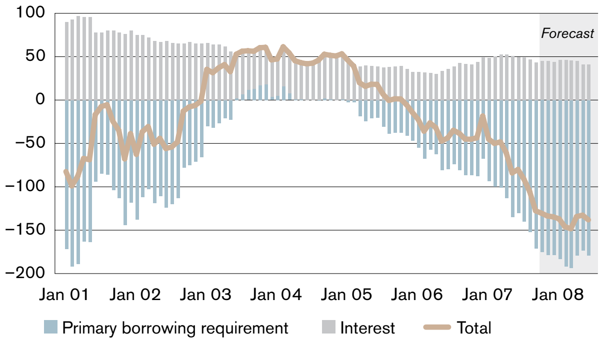

## Central government net borrowing requirement, 1998-2008

SEK billion

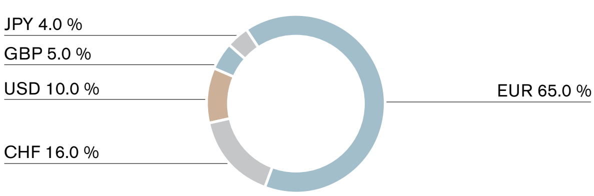



## Central government net borrowing requirement, 12 months

SEK billion

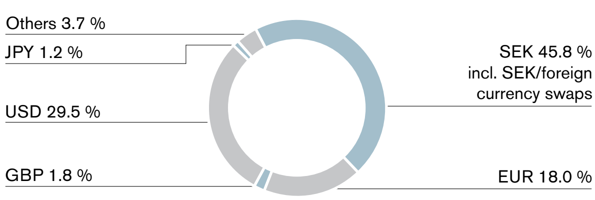



## Benchmark for the foreign currency debt composition

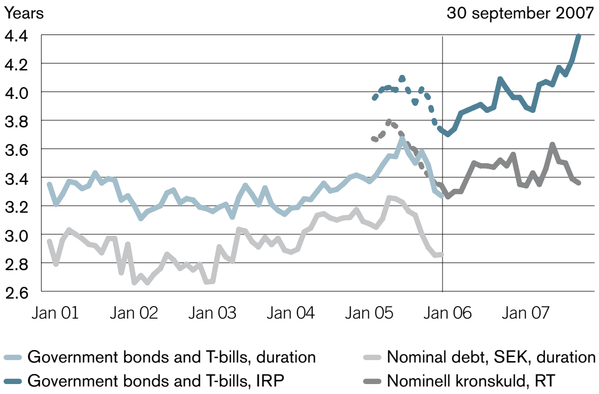



## Funding in foreign currencies

30 September 2007

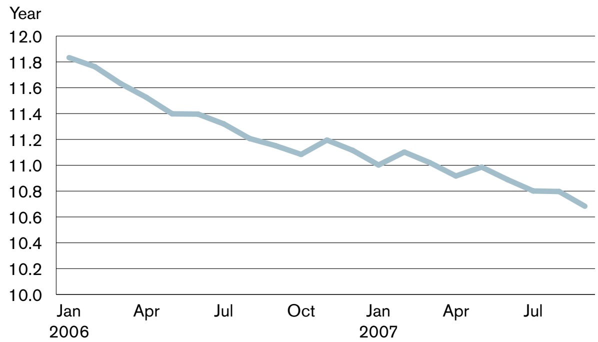


### Interest-rate refixing period (IRP) and duration of nominal debt

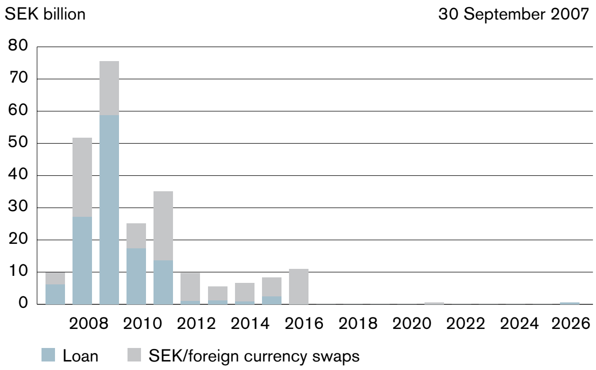



*On 1 January 2006 the measure of maturity was changed from duration to interest-rate refixing period (IRP).*

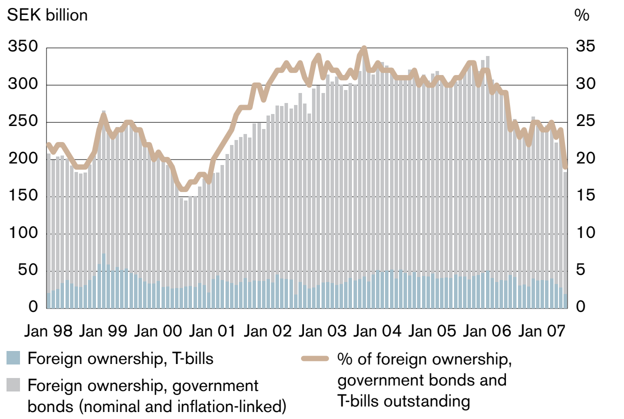
### Interest-rate refixing period (IRP) of index-linked debt




### Maturity profile, foreign currency loans excluding callable bonds

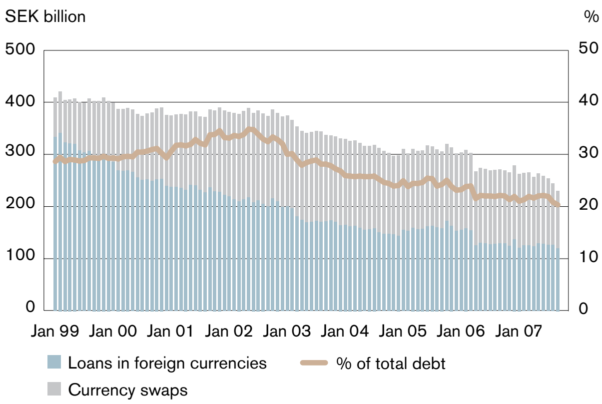



### Foreign ownership of government bonds and T-bills

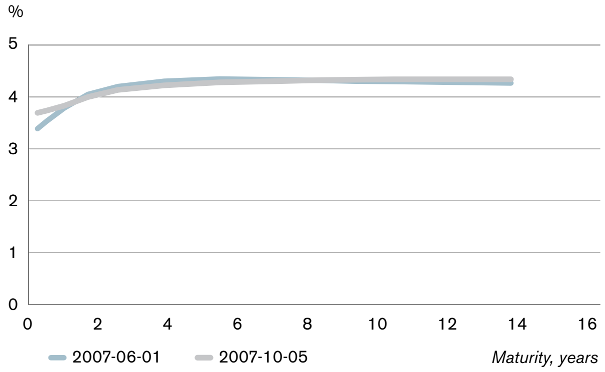



*Source: The Riksbank*

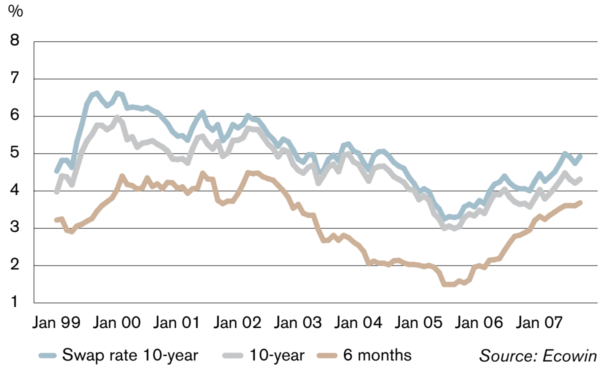
### Central government debt exposure in foreign currencies



## Yield curve, Swedish government securities

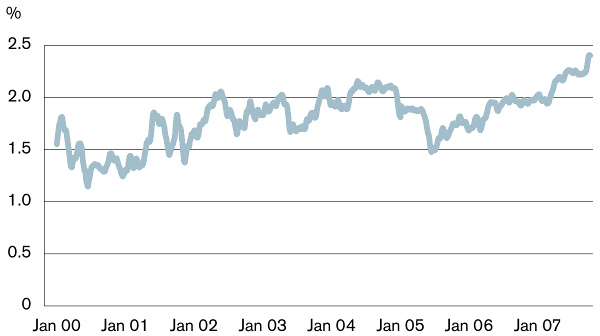



## Historical interest rates




*Source: Ecowin*

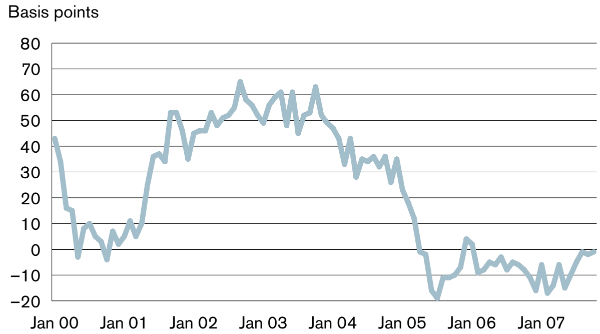
## Break-even inflation




1041 - 3105 (2000-01-01 to 2004-12-31)
1049 - 3105 (2005-01-01 and forward)

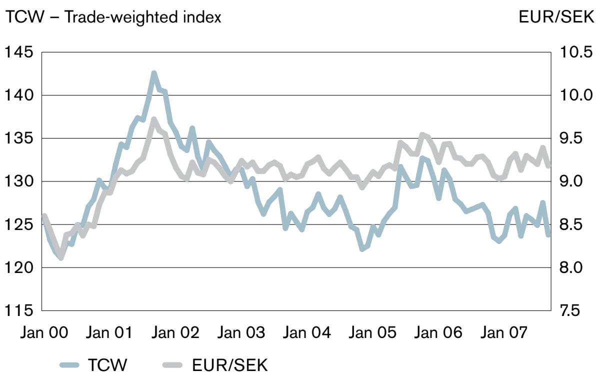
*Source: Ecowin*

## Interest rate spread vs Germany, 10-year



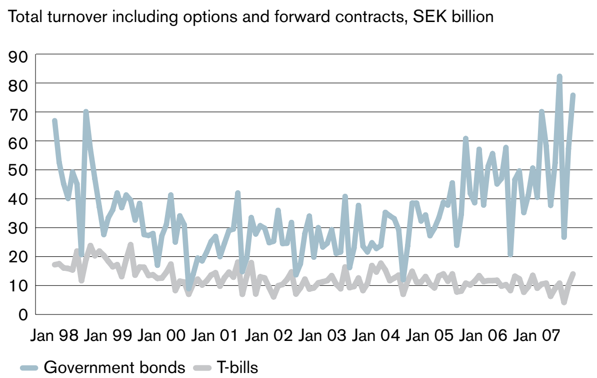

*Source: Ecowin*

## Historical exchange rates




*Source: Ecowin*

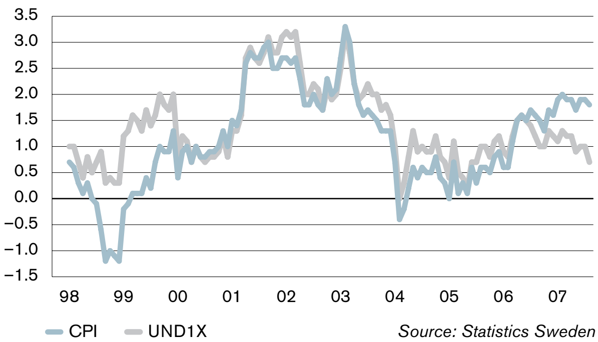
## Daily turnover, Swedish government securities



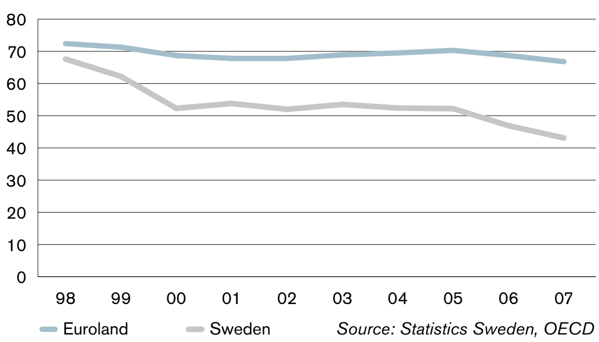

*Source: The Riksbank*

SWEDISH ECONOMY

### Inflation index: UND1X and CPI in Sweden




### General government debt in relation to GDP




NATIONAL ACCOUNTS, PERCENTAGE CHANGE

| Supply and demand | | | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|
| Gross domestic product [1] | | | 4.2 | 3.5 | 3.8 |
| Imports | | | 7.9 | 7.3 | 6.7 |
| Household consumption expenditure | | | 2.8 | 3.0 | 4.0 |
| Government consumption expenditure | | | 1.8 | 1.6 | 1.1 |
| Gross fixed capital formation | | | 7.9 | 9.6 | 5.6 |
| Stock building | | | 0.0 | 0.2 | −0.1 |
| Exports | | | 8.7 | 5.8 | 7.1 |
| **Selected Statistics** | **Jun 06** | **Aug 07** | **2006** | **2007** | **2008** |
| CPI, year-on-year | | 1,8 | 1.4 | 2.2 | 2.5 |
| Unemployment rate | | 4,8 | 5.4 | 4.5 | 3.9 |
| Current account | 5,2 | | 6.9 | 7.0 | 7.3 |

[1] ***SEK 2 671 billion (current prices 2005).***
*Sources: Statistics Sweden, The Riksbank.*
*Forecasts: National Institute of Economic Research.*

PRIMARY DEALERS

| Primary dealers | Nominal government bonds | Inflation-linked government bonds | T-bills | Telephone | Reuter page |
|---|---|---|---|---|---|
| ABN Amro | ● | | ● | +46 8 506 155 00 | PMAA |
| Barclays Capital | ● | | | +44 207 773 8275 | |
| Danske Markets/Consensus | ● | ● | ● | +46 8 568 808 44 | PMCO |
| Handelsbanken Markets | ● | ● | ● | +46 8 463 46 50 | PMHD |
| Nordea | ● | ● | ● | +45 33 33 17 58 | PMUB |
| SEB | ● | ● | ● | +46 8 506 23 151 | PMSE |
| Swedbank | ● | ● | ● | +46 8 700 99 00 | PMBF |
| Öhman | ● | ● | | +46 8 679 22 00 | PMOR |

# Glossary

**Benchmark bond** ▸ Bonds in which the Debt Office has undertaken to maintain liquidity. Normally have an outstanding volume of at least SEK 20 billion.

**Bond** ▸ Current (transferable) debt instrument that provides one or more payments of agreed amounts. The agreed amounts can be fixed in kronor or depend on some factor, for instance, inflation; see *inflation-linked bond*. Certain bonds have a number of payments in the form of recurrent interest payments and are then referred to as coupon bonds. A bond without interest payments is called a zero coupon bond. See also *T-bill*.

**Bond market** ▸ The market for securities with times to maturity longer than a year. Nominal and inflation-linked government bonds are traded in the bond market.

**Break even-inflation** ▸ The difference between the nominal and inflation-linked interest rate at the time of issue of an inflation-linked loan. It states how inflation must be on average for the cost of an inflation-linked and a nominal loan to be of equal size. If inflation is higher than break-even inflation, the inflation-linked loan will be more expensive for the state and vice versa.

**Capital market** ▸ Consists of the credit and stock markets.

**Coupon bond** ▸ A bond with an annual interest payment.

**Credit market** ▸ The market for borrowed capital. An umbrella term for the bond and money market.

**Derivative instrument** ▸ Financial asset, the value of which depends on the value of another asset. The most common derivative instruments are options, futures and swaps.

**Duration** ▸ Measure of the remaining maturity of a bond taking into consideration both the time to maturity and the coupon rate. A shorter maturity and a higher coupon rate will give a lower duration. Duration can also be viewed as a risk measure, which measures how much the market value of an interest security is affected by changes in the market interest rate.

**Fixed-income market** ▸ Instruments are traded here that provide a predetermined yield (interest). The fixed-income market consists of the bond and money markets.

**Fixed interest rate** ▸ Interest rate fixed at a particular level by agreement during the period of agreement.

**Float** ▸ The time from when money has been withdrawn from an account until it has been deposited in the account that it has been sent to. The banks can use the money during this time to earn interest.

**Floating interest rate** ▸ An interest rate that varies during the period to maturity.

**Forward (forward contract)** ▸ Agreement on purchase and sale at a specified price at a specified time in the future.

**Government bond** ▸ An umbrella term for the bonds issued by the Debt Office on the bond market. Includes both inflation-linked and nominal bonds.

**Inflation** ▸ General price increases that decrease the purchasing power of money. Usually measured with the aid of a consumer price index.

**Inflation-linked bond** ▸ A bond where the holder receives a fixed interest rate and compensation for inflation during the maturity. This means that the yield and the amount invested are protected against inflation, so that any inflation does not reduce the value of the bond during the period of saving.

**Interest rate refixing period** ▸ The average period until the cash flows provided by the central government debt are to be paid. Cash flows arise when interest and loans fall due for payment

**Issue** ▸ Sale of new government securities. Usually takes place by auctions.

**Limits** ▸ Quantitative limitation of amounts or risks.

**Liquidity bills** ▸ T-bills with customised times to maturity.

**Nominal bond** ▸ A bond which gives a predetermined amount in kronor on maturity. Nominal government bonds also give a fixed annual payment, a coupon rate.

**Money market** ▸ The market for interest-bearing securities with times to maturity of up to a year. T-bills are traded in the money market.

**Rating** ▸ Is a certificate of, for instance, the ability of company or a country to perform its financial obligations, i.e. a certificate of creditworthiness.

**Real interest rate** ▸ An interest rate, the value of which is protected against inflation, Cf *inflation-linked bond.*

**Reference loan** ▸ A reference loan is a benchmark bond traded as a 2, 5 or 10-year bond. Also called super benchmark. The Debt Office concentrates borrowing in these maturities, Cf *benchmark bond.*

**Repo (repurchase agreement)** ▸ Agreement on sale of a security where the seller at the same time undertakes to buy back the security after a set period for an agreed price. The repo can also be reversed, i.e. a purchase agreement in combination with future sale.

**Swap** ▸ Agreement between two parties on exchanging flows with one another during an agreed period, for instance, exchange of fixed interest for floating interest.

**T-bill** ▸ A short-term government security without interest during the period to maturity. The yield consists of the difference between final payment and the payment the T-bill is purchased for.

The next issue of Central Government Borrowing: Forecast and Analysis will be published on Wednesday 27 February 2008, at 9.30 am.

The report is published three times a year.

*For more information:*

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|---|---|---|
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| Funding: | Thomas Olofsson | +46 8 613 47 82 |

| Articles published earlier | Author | Issue |
|---|---|---|
| Will we benefit from changing auction format? | *Erik Zetterström* | 2007:2 |
| Strong economic growth and increased surplus in 2006 | | 2007:1 |
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