RIKSGÄLDSKONTORET
THE SWEDISH NATIONAL DEBT OFFICE

2004:3

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Continued deficit in the state budget

The Swedish National Debt Office calculates the central government borrowing requirement at SEK 57 billion in 2004, which is SEK 7 billion less than in the June forecast. This is mainly due to decreased disbursements by the National Social Insurance Board and the Swedish Armed Forces and from central government to local government. The total borrowing requirement for 2005 is calculated at SEK 46 billion. The reduction compared with the current year is mainly due to lower interest payments, largely due to currency gains, which will not be repeated in 2006.

According to the Government Budget Bill, the budget balance will remain negative in 2006 and 2007. The Government calculates a deficit of SEK 52 and 37 billion for the respective year. This means that central government in 2007 will have a budget deficit for five consecutive years. The fact that central government has to continue borrowing despite the economy being expected to develop well during this period, underlines the need to supplement the central government expenditure ceiling with a budget balance target as previously recommended by the Debt Office.

Taking into consideration the need to finance maturing loans and buybacks, gross borrowing is estimated at SEK 90 billion in 2004 and SEK 115 billion in 2005. In the proposed guidelines for central government debt policy submitted to the Government by the Debt Office in September, we recommend a shortening of the duration target value for the nominal debt from 2.7 to 2.5 years. This is intended to reduce the cost for the central government debt in accordance with the goal of minimising cost while taking into account risk. It can be added that the increased proportion of inflation-linked bonds has, per se, led to a lengthening of maturities in the total debt.

Assuming that the Government complies with the Debt Office's proposed guidelines, the issue volumes in nominal government bonds will be reduced by a half billion to SEK 3.5 billion per auction. This has led to a discussion of whether there would be a "shortage" of bonds with longer maturities. This is against the background, among other things, of proposals that the insurance companies must ensure that their assets correspond better to their commitments. Since the commitments for, for instance, pension insurance are long-term, this would in this case increase demand by the companies for long bonds.

In my view, this discussion is based on far too static a picture of both the government securities market and how Swedish central government debt management operates. It is not reasonable to talk about "shortage" in a market where prices (interest rates) are continually being adjusted so that demand is as large as supply. If investors want more long bonds, the yield curve will become flatter. In this way, it will be relatively cheaper for the state to issue long bonds. Since the Government's guidelines and the actions of the Debt Office within the framework of the guidelines are guided by an endeavour to minimise costs while taking into account risk, this development will in turn affect future issue decisions. Central government debt policy is accordingly flexible and takes changes in the surrounding world into account. However, we are guided by the taxpayers' interest in lower interest costs. We can therefore only respond to investors' wishes when they are reflected in a flatter yield curve.

Bo Lundgren
Director General

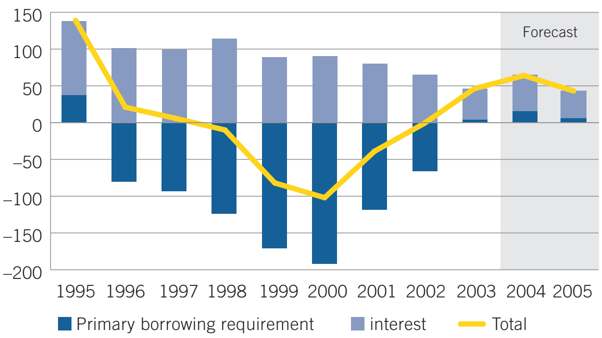
Central Government Borrowing Requirement

The Swedish National Debt Office's forecast of the borrowing requirement in 2004 indicates a deficit of SEK 57 billion. This is SEK 7 billion less than in the June forecast. The borrowing requirement for 2005 is estimated at SEK 46 billion. The main explanation for the reduction in the borrowing requirement between these years is lower interest payments on central government debt and increasing tax bases.

An upswing will lead to increased revenue from both consumption and wage-based taxes in 2005. The increase in tax revenue is slowed down, however, by the proposals on tax cuts presented in the Government Budget Bill. At the same time, the scope for expenditure increases is restricted by the expenditure ceiling adopted by the Riksdag. Interest payments on central government debt will decrease by SEK 15 billion between 2004 and 2005. This decrease is due to temporary effects from foreign currency gains on maturing loans.

Figure 1. Central government borrowing requirement

SEK billion



Forecast for 2004

The Debt Office's revised forecast for 2004 indicates a borrowing requirement of SEK 57 billion. Compared to June, the forecast has been reduced by SEK 7 billion. This is mainly due to the borrowing requirement during the period June to September being approximately SEK 4 billion lower than estimated. The reason for this is lower disbursements by some large government agencies. Furthermore, we expect payments to local government to be lower, which contributes to a lower borrowing requirement for the rest of the year as well.

The primary borrowing requirement (all central government payments excluding interest payments on the central government debt) is estimated at SEK 7 billion. This is SEK 8 billion lower than in the June forecast. This is also primarily due to lower disbursements by the Swedish Armed Forces and the National Social Insurance Board and lower payments to local government.

Tax revenues are, however, largely unchanged in relation to the previous forecast. There have been minor deviations among the different types of taxes. Among other things, payments of corporate taxes have been larger than expected. At the end of the year, supplementary tax payments are moreover expected to be higher, mainly due to somewhat increased payments of tax arrears. The increased tax arrears are explained by the final taxation for businesses and households now expected to be higher, and that supplementary payments of tax have been lower earlier in the year. At the same time, however, payment of excess tax in August was over SEK 1 billion higher than estimated. Disbursements made in December are also calculated to be slightly higher than in the June forecast.

We are assuming as in previous forecasts that no divestments of government property will take place. The Government has also removed the assumption of divestment income of SEK 15 billion for this year.

On the disbursement side, payments to local government are estimated to be approximately SEK 2.6 billion lower this year. The municipalities were allowed to retain too large a portion of the central government grant when the new guarantee pension was introduced in 2003. This is now being adjusted by lower payments in the second half of 2004.

For the remaining months of the year, we have also taken into consideration the restrictions in the right of government agencies to use appropriations announced by the Government in the Budget Bill with a view to complying with the expenditure ceiling for 2004. The Swedish Armed Forces is the agency that has received the greatest total restrictions. We make the assessment that no further expenditure cuts will be required this year to comply with the central government expenditure ceiling. We have therefore removed the item for unspecified expenditure reductions of SEK 2 billion that was included in the June forecast.

Total net lending by the Debt Office to government agencies, public enterprises and state-owned companies is expected to total approximately SEK 23 billion. This is approximately SEK 5 billion higher than in the previous forecast. The change is due to the winding-up this year of the account for individual skills saving, where funds have been set aside from revenue since 2000. The balance in the account is approximately SEK 6 billion and this amount will be taken out. However, an equally large amount will be entered as an income for central government so that the borrowing requirement as a whole will not be affected by the account being wound up.

Interest payments on the central government debt are expected to amount to approximately SEK 50 billion. This is an increase of SEK 1 billion from the previous forecast.

Forecast for 2005

The Debt Office's forecast for 2005 indicates that central government payments will show a deficit of SEK 46 billion. This is SEK 3 billion higher than in the June forecast. In relation to 2004, this means that the borrowing requirement will decrease by SEK 11 billion. The fact that the difference between the years will not be larger despite a reduction in interest payments of SEK 15 billion and a cyclical upswing giving rise to increased tax revenue, is mainly due to the tax reductions proposed in the Government Budget Bill. The scope for increased central government disbursements is as before restricted by the expenditure ceiling adopted for central government.

Table 1. Central government borrowing requirement and debt

SEK billion	2003	2004 (forecast)	2005 (forecast)
Primary borrowing requirement	4	7	11
Interest payments on debt	42	50	35
Net borrowing requirement	46	57	46
Debt adjustments	–28	–3	0
Re-evaluation, foreign currency loans etc	–18	–2	0
Short-term investments	7	–7	0
Change in central government debt	25	47	46
Debt at year-end	1,229	1,276	1,322

The primary borrowing requirement (all central government payments excluding interest payments) is estimated at SEK 11 billion. This is a small deterioration by SEK 4 billion between years despite an upswing next year. One of the explanations is that tax revenue will decrease due to a number of proposed tax cuts.

Tax payments normally comply with the nominal economic development, where the development of the total amount of wages and private consumption are of great importance. Together, taxes on wages and value-added tax account for approximately 85 per cent of the total tax payments. Already in the June forecast, we expected increased tax revenue of approximately SEK 30 billion between 2004 and 2005 mainly due to a stronger development of total wages in the business sector. The prospects for next year now look even better. The proposals presented in the Budget Bill for tax cuts will lead, however, to revenue not increasing so much next year as it would have done otherwise. Half of the fourth and final step in the income tax reform leads to an estimated fall in tax revenue of approximately SEK 6 billion. In addition, the municipalities will receive an extra addition next year by a tax reduction of SEK 6 billion.

Just as for 2004, we do not expect any divestment income from government property during 2005. Compared with the previous forecast, however, we have assumed that the state's dividends from companies will be SEK 5 billion higher. The largest part derives from TeliaSonera, which has indicated that they will pay additional dividends to the shareholders.

For 2004, we make the assessment that the total expenditure restrictions (appropriations that agencies must not use) will amount to approximately SEK 7 billion. We have made the assessment that the appropriations will be can-

Conditions behind the forecast

The Debt Office's forecast for the borrowing requirement is based on the National Institute of Economic Research's (NIER) macro picture in the areas requiring macroeconomic assessments. This forecast is based on the macroeconomic forecast presented by NIER in *The Swedish Economy* in August 2004. Some new information received from NIER after that has also been taken into account in the forecast.

NIER estimates that GDP will increase by 3.8 per cent this year. This is slightly more than one percentage point higher than when we made the borrowing requirement forecast in June. This increase is explained by the strong development of exports. However, this is not of such great importance for the borrowing requirement since the direct effect of increased exports does not produce especially large tax revenues, unless there is an increase in employment. NIER forecasts 3.3 per cent growth in 2005. Growth next year is expected to be driven by investments and consumption, which has a more positive impact on the borrowing requirement. Development in the labour market is the most important single variable for the borrowing requirement. The situation in the labour market seems to have stabilised and NIER forecasts a small improvement in 2005. The rate of increase for total wages, the most important tax base, is expected in 2005 to be over 1 percentage point higher than in 2004. Overall, the Debt Office largely concurs in the National Institute of Economic Research's macroeconomic assessment.

The Debt Office's forecast for interest payments on central government debt is based on the interest rates and exchange rates that exist on the date of the forecast. The stop date for the current forecast is 18 October 2004.

celled in 2005 or postponed until 2006. We have also made the assessment that no new expenditure restrictions will be necessary to comply with the expenditure ceiling in 2005. This despite the additional measures announced in the Budget Bill. The most important cause in our assessment is that the situation in the labour market has been stabilised, although at a poor level. However, one risk for exceeding the expenditure ceiling can be higher costs for sick leave and disability pensions than calculated by the Government.

Net lending by the Debt Office to central government agencies, public enterprises and state-owned companies is estimated to total approximately SEK 15 billion. Infrastructure investments amount to approximately SEK 4 billion.

Interest payments for 2005 are estimated to be SEK 35 billion. Compared with 2004, interest payments decrease by SEK 15 billion. The foremost explanation is that exchange rate differences have changed from a loss of approximately SEK 4 billion in 2004 to a gain of approximately SEK 7 billion in 2005. The gain is an accounting effect of the foreign currency loans taken up in US dollars in 2002 maturing next year. The loans were taken up at a considerably higher dollar exchange rate than the present rate. Since the Debt Office allocates the risk between different currencies with derivatives, the real gain under the whole maturity of the loans is considerably lower. Compared with the forecast in June, interest payments have decreased by SEK 2 billion. This is explained by larger issue premiums, which are in turn due to the lower interest-rate level.

Sensitivity analysis

All forecasts include elements of uncertainty. The Debt Office does not produce any overall uncertainty analysis for the borrowing requirement. Instead we present a partial analysis of the impact on the borrowing requirement that changes in some important macro variables, roughly estimated, will have in a one-year perspective. If one wishes to make an assessment of an alternative scenario in which several variables develop differently, their effects must be added together.

Table 2. Sensitivity analysis, SEK billion

Increase by one per cent/percentage point	Effect on the borrowing requirement
Total wages and salaires [1]	–6
Household consumption, current prices	–2
Registered unemployment	4
Swedish interest rates	4
International interest rates	1
Exchange rate	0.5

[1] *Local taxes based on working income 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.*

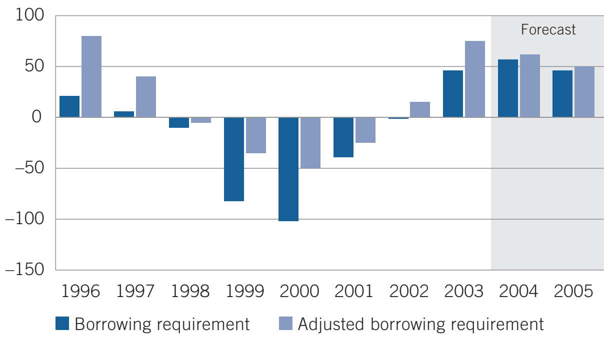
Comparisons

Borrowing requirement adjusted for temporary payments

Part of the payments that affect the borrowing requirement can be regarded as temporary. Previous examples of such payments are the payments for maturing of housing bonds that were transferred to the state from the AP (National Pension) funds and sale of state property. In 2005, we estimate that the state's share of TeliaSonera will provide approximately SEK 4 billion in additional dividend.

Figure 2. Reported and adjusted borrowing requirement

SEK billion



The borrowing requirement is estimated at SEK 57 billion in 2004. Adjusted for temporary payments, the borrowing requirement will be approximately SEK 62 billion. In 2003, the adjusted borrowing requirement was approximately SEK 75 billion.

In 2005, the borrowing requirement is estimated to total SEK 46 billion and the adjusted borrowing requirement approximately SEK 50 billion.

Table 3. Borrowing requirement adjusted for temporary payments

SEK billion	2000	2001	2002	2003	2004	2005
Borrowing requirement	–102	–39	–1	46	57	46
Divestment of government property	76					
Extra dividend from the central bank			20			
Transfers from National Pension Funds	45	42	7	14	4	2
Net lending to state agencies	–56	–25	–9	–3	–8	–9
Interest payments	–14	–5	–1	15	10	7
Other	1	2	–2	4	0	4
Adjusted borrowing requirement	–50	–25	14	75	62	50

Comparisons with other forecasts of the borrowing requirement

The Debt Office's forecast for the current year indicates a borrowing requirement of SEK 57 billion, which is SEK 7 billion less than the Government's calculation in the Budget Bill. The National Financial Management Authority (ESV) and NIER calculate a borrowing requirement of SEK 59 and SEK 49 billion respectively.

The known differences in assumptions on divestments and interest rates by NIER and ESV are very small. The Government has removed the assumption of SEK 15 billion in divestment revenue for 2004. The differences in the borrowing requirement are thereby explained by the relatively low primary borrowing requirement in the most recent months. ESV and NIER reported their forecasts for the central government borrowing requirement in August and the Government in September.

Table 4. Comparisons between borrowing requirement forecasts, SEK billion

	Debt Office		Government		NIER		ESV	
	04	05	04	05	04	05	04	05
Primary borrowing requirement	7	11	14	–1	0	–3	10	–9
Interest payments	50	35	50	39	49	39	49	39
Borrowing requirement	57	46	64	38	49	36	59	30
Borrowing requirement including Debt Office interest payments and divestment revenue	57	46	64	50	50	32	60	25

For 2005, the Debt Office calculates with a higher borrowing requirement than NIER and ESV, although lower than the Government, adjusted for known differences. The Government calculates with divestment revenue of SEK 15 billion in 2005, which reduces the primary borrowing requirement.

In common for all forecasters is that they believe in an improvement between 2004 and 2005. A cyclical upswing in 2005 will be reflected in lower primary borrowing requirement. ESV and NIER forecast a stronger improvement between these years, which can undoubtedly be partly explained by their not having had the opportunity to take into consideration the proposals on tax reductions announced in the Budget Bill.

Monthly forecasts

The Debt Office publishes annual forecasts three times a year. At the same time, we publish monthly forecasts for the intervening months. Between regular publications, the Debt Office only makes revisions of annual and monthly reports in exceptional cases. In these cases, the revised forecast is presented in conjunction with the presentation of the monthly borrowing requirement outcome, which occurs five working days after the end of each month.

The forecast for the borrowing requirement in October 2004 is SEK 6.2 billion. This is substantially as large a borrowing requirement as in the previous forecast. The large borrowing requirement in January is explained by the annual disbursement to the premium reserve system. The explanation for the surplus in February is large tax revenues.

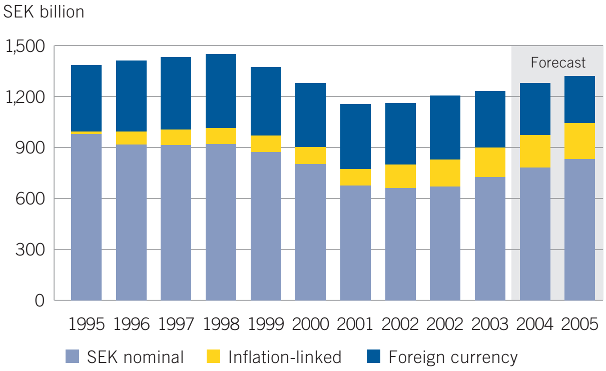
Table 5. Monthly borrowing requirement 2004, SEK billion

	Oct.	Nov.	Dec.	Jan.	Feb.
Primary borrowing requirement	6.0	–1.1	17.4	25.1	–23.0
Interest payments	0.2	–0.7	11.3	3.1	0.7
Borrowing requirement	6.2	–1.8	28.7	28.2	–22.3

The central government debt

At the end of September, the central government debt was SEK 1,243 billion. This is an increase of SEK 14 billion since the turn of the year. The borrowing requirement has increased the central government debt by SEK 24 billion. At the same time, debt-related dispositions and short-term investments have reduced the central government debt by SEK 10 billion. An example of a debt-related disposition is the revaluation of the foreign currency debt, which affects the size of the debt but not the borrowing requirement. The Debt Office does not take into account debt dispositions in its forecast of the development of central government debt. The central government debt is therefore expected to increase at the same pace as the borrowing requirement. At the end of 2004, the debt is projected to total SEK 1,276 billion and at the end of 2005 SEK 1,322 billion.

Figure 3. The central government debt, 1995–2005*



** A new measure of the central government debt was introduced in the beginning of 2003.*

Funding

Issue volumes of nominal government bonds will be reduced from SEK 4 to SEK 3.5 billion per auction. The Debt Office estimates that there will continue to be potential to issue inflation-linked bonds at an annual pace of approximately SEK 20 billion. A high level of maturing foreign currency loans means that foreign currency borrowing is expected to increase from SEK 11 billion in 2004 to SEK 28 billion in 2005. The funding forecast assumes that the Government decides to reduce the duration to 2.5 years and that this reduction takes place gradually during 2005, and that SEK 25 billion of the foreign currency debt is amortised next year as well.

Gross borrowing

In 2004 and 2005, the net borrowing requirement is estimated to be SEK 57 and SEK 46 billion respectively. Furthermore, the Debt Office will need to fund maturing loans and buy-backs. Total funding is calculated as being SEK 90 billion during 2004. Funding in 2005 is calculated to increase to SEK 115 billion.[1] The most important reason for the increase in funding, despite a reduced net borrowing requirement, is the high level of maturing foreign currency loans.

Table 1. Funding 2004 and 2005, SEK billion

	2004	2005
Net borrowing requirement	57	46
Change in cash equivalent holdings and retail market borrowing [1]	–4	6
Maturing bonds and buy-backs [2]	36	63
Government bonds	15	19
Foreign currency bonds	22	43
Total	90	115
Net funding with T-bills [3]	–30	0
Bond issues, gross [4]	120	115
Foreign currency bonds	9	14
Inflation-linked bonds [5]	20	20
Nominal government bonds [6]	91	81
Funding	90	115

[1] *Change in outstanding deposits, liquidity bills and repos. Retail borrowing is assumed to be unchanged during 2004 and 2005.*
[2] *No buy-backs are planned during 2004 and 2005.*
[3] *Net of issues (excluding exchanges) and maturities.*
[4] *Nominal amounts. Premiums and discounts (including inflation compensation) and exchange rate differences on issues are included as interest payment in the net borrowing requirement.*
[5] *Issue volume per auction, average. 1.0 1.0*
[6] *Issue volume per auction, average. 4.0 3.5*

Table 1 presents an assessment of the allocation of funding between bonds and T-bills as well as an allocation of bond issues among nominal government bonds, inflation-linked bonds and foreign currency bonds.

The allocation of funding among different instruments assumes that the Government, in line with the Debt Office's recommendations on guidelines for central government debt policy in 2005, decides to shorten the duration target for the nominal debt from 2.7 to 2.5 years. The funding forecast also assumes that the foreign currency debt will continue to be amortised at SEK 25 billion in 2005.

Table 2. New bond issues – maturities and issue dates

Bond	Maturity	First issue date
Seven-year inflation-linked bond (3106)	Apr 12, 2012	autumn 2005
Ten-year nominal government bond (1050)	2016	autumn 2005

Table 3. Important dates

Date	Activity
November 15 at the latest	The Government decides on guidelines for central government debt policy for 2005
December 9	The board of the Debt Office decides on guidelines for 2005
February 23	Central Government Borrowing – Forecast and Analysis 2005:1
March 23	Press release on exchanges of 1044 for T-bills
April 25–29	Exchanges of 1044 for T-bills

Nominal krona borrowing

T-bills and interest-rate swaps

The Debt Office's total funding in government securities is increasing by SEK 25 billion in 2005, primarily due to a higher level of maturing foreign currency loans. The main part of the increased borrowing will be issued in Swedish kronor. Foreign currency borrowing is limited by the target value for amortisation of the foreign currency debt.

The shortening of the duration target for the nominal krona debt [2] entails an increase in borrowing in T-bills in

[1] *Exchanges of government bonds for T-bills were also included in total funding in Central Government Borrowing – Forecast and Analysis 2004:2. The exchanges have been excluded in this forecast. In exchanges, T-bills are issued at the same time as the Debt Office buys back government bonds for the same amount. These issues are accordingly not actually part of funding.*

[2] *On December 9, the Debt Office decides on the duration of the nominal krona debt. It has been assumed in this forecast that the duration target will be gradually reduced from 3.0 to 2.8 years at the end of 2005.*

2005 compared with 2004, at the same time as there is a slight decrease in bond loans. Funding in T-bills is increasing by SEK 30 billion in 2005 compared to 2004.

The T-bill stock is expected to increase by SEK 65 billion in 2005. This increase is not only due to the size of net funding in 2005 but also to the exchanges of bond loan 1044 which are to take place in April. [3]

Table 4. Exchange of outstanding T-bills, net incl. swaps, SEK billion

	2004	2005
Short nominal krona debt and swaps, net change	50	86
Change of T-bill stock	20	65
T-bill borrowing, net [1]	–30	0
Exchange of government bonds for T-bills	50	65
Interest swaps, net [2]	30	21

[1] *Net of issues (excluding changes) and maturities*
[2] *No interest swaps mature during 2004–2005*

The Debt Office can also create short borrowing by issuing bonds and then using interest-rate swaps to reduce the duration. Provided that the difference between the swap rate and the government bond rate is sufficiently large, this borrowing technique reduces central government borrowing costs. Interest-rate swaps can also be used as part of the foreign currency borrowing. They are then combined with a currency swap so that the exposure in Swedish kronor is replaced by exposure in foreign currency. [4]

During 2004, approximately SEK 32 billion of bond issues will be swapped to short exposure in Swedish kronor or to foreign currency. The swap volume will increase to approximately SEK 35 billion next year. The increase in the swap volume contributes to reducing the duration and thus keeping up issue volumes in government bonds.

The actual extent can vary if market conditions change. Swaps will continue to take place at a relatively even pace during the year and with cost-effective maturities.

This year, practically the whole swap volume will be used to replace T-bills. In 2005, a standardised assumption is made that approximately SEK 21 billion will be used in this way.

Table 5 also shows the net change in the outstanding swap volume. Despite a larger gross swap volume being planned in 2005, the outstanding stock will not increase more quickly next year since maturities will also be larger.

Table 5. Change in outstanding swaps, SEK billion

	2004	2005
Swaps, net change	21	17
Swaps total	32	35
Interest-rate swaps [1]	30	21
Currency swaps [2]	2	14
Swaps, maturities	–11	–18

[1] *Interest-rate swaps from long to short interest-rate exposure in SEK*
[2] *Interest-rate swaps from long to short interest-rate exposure combined with foreign exchange swaps to foreign currency*

Nominal borrowing in government bonds

The issue volume is to be reduced to SEK 3.5 billion per auction

The issue volumes in nominal government bonds are to be reduced from SEK 4 to SEK 3.5 billion per auction from 24 November 2004. This reduction is being made to reduce the duration of the nominal krona debt. The Debt Office will thereby borrow a total of SEK 91 billion in nominal government bonds in 2004 and SEK 81 billion in 2005.

The outstanding bond stock will thereby decrease slightly during 2005. The exposure in long krona interest rates will decrease somewhat more since approximately SEK 17 billion net is expected to be swapped to short interest-rate exposure or to foreign currency.

Table 6. Change in outstanding government bonds, net including swaps, SEK billion

	2004	2005
Long nominal krona debt and swaps, net change	7	–21
Change in nominal government bond stock	28	–4
Nominal government bonds, issues	91	81
Maturities, buybacks and exchanges	–63	–84
Swaps, net	–21	–17

Interbank rates in real time

Interest rates on reference loans in the electronic interbank market are available to the market in real time.

Reference loans in the bond market are traded between our primary dealers in the OMX electronic interbank market (EIM, Saxess Trading). The primary dealers have an obligation to quote bid and ask yields in an electronic trading system with two, five and ten-year maturities with trading lots currently of SEK 200, 100 and 50 million.

Bid and ask yields (and prices) are available in real time on page 0#SETSYMED= in Reuters. The yields quotes to the median values, i.e. the interest rate that is in the middle of the quoted interest rates – both for bid and ask yields and for each maturity.

[3] *The change in the stock of T-bills also depends on the short-term funding requirement and how many T-bills are outstanding at the turn of the year. The extent of the planned exchange of a short bond to bills is moreover an uncertain factor. The change is measured between the last bank days of the respective year, which means that the change does not necessarily give a fair picture of how the average size of the stock changes.*

[4] *See box on borrowing instruments and swaps on p. 9 in Central Government Borrowing – Forecast and Analysis 2004:2. For an extended discussion on the use of swaps see, Holmlund, A, (2002), "Swaps in central government debt management", Central Government Borrowing – Forecast and Analysis 2002:3, p. 17-20. An account on how funding is allocated to different loan instruments can be found in Olofsson, T. (2002), "How central government debt is funded", Central Government Borrowing – Forecast and Analysis 2002:3, p. 13-16.*

Four loans included in planned issues

Bond issues are usually made in the reference loans with two, five and ten-year maturities that are traded in the electronic interbank market.[5] The policy of the Debt Office is at the same time to maintain good liquidity in all benchmark loans, which means that other loans can also be occasionally issued.

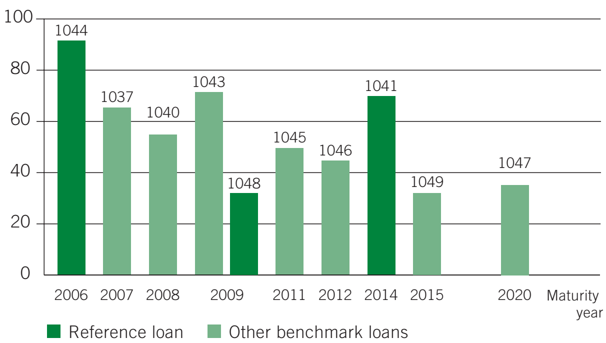
Loans with two-, five- and ten-year maturities will therefore be the natural issue candidates during the remainder of 2004 and 2005. The emphasis will be on issues of loans with longer maturities. The sixteen-year loan will also be issued on a few occasions.

Loans 1044, 1048 and 1041 are currently being traded as reference loans. The Debt Office introduced a new ten-year government bond, loan 1049, maturing on August 12, 2015. To date, approximately SEK 32 billion has been issued in the new loan. From December 15, two new loans will be reference loans in the two and ten-year maturities and on June 15, loan 1045 will become a new five-year reference loan.

In early autumn 2005, a new ten-year government bond will be introduced, loan 1050, maturing in 2016. The loan will start to be traded as a ten-year reference loan in the electronic trading system from December 21, 2005. Further details about the loan will be notified in the Central Government Borrowing report in February.

The sixteen-year loan 1047 now has an outstanding volume of approximately SEK 35 billion. The loan will not be issued as often in the coming years to avoid it becoming too large, which was already apparent in the previous Central Government Borrowing report. To contribute to continued good liquidity, the loan will, however, be issued on a few occasions per year until it becomes a ten-year loan.

Figure 1. Nominal government bonds (benchmarks)



[5] *The loans treated as reference loans in electronic trading are determined by which loans are closest, in terms of maturity, to two, five and ten years. However, reference loans change only on IMM dates (the third Wednesday in March, June, September and December) with the criterion that in terms of maturity the loans should be closest to two, five and ten years on the following IMM date. With this change, an underlying loan in the forward contracts will always be the same as a reference loan during the last three months of the contract.*

Table 7. Reference loans in the electronic interbank market

Dates for exchanges of reference loans (IMM-date)[1]	2-year	5-year	10-year
June 16, 2004	1044	1048	1041
December 15, 2004	1037		1049
June 15, 2005		1045	
December 21, 2005	1040		1050

[1] *The dates above are referring to payment dates. The first business day for a new reference loan is normally the Friday before an IMM-date.*

Inflation-linked debt

Issue policy

Unchanged pace of issues

In 2004 to date, approximately SEK 15 billion, i.e. an average of below SEK 1 billion per auction, has been issued. Demand has varied greatly between issue dates and has been somewhat weaker during the autumn.

The Debt Office expects to continue to issue inflation-linked bonds at an annual pace of approximately SEK 20 billion. However, the growth of the market is difficult to assess and the annual pace only states an approximate estimation.

Predictability with some flexibility

Inflation-linked bonds are issued every other week. The announced issue volumes are normally about the same size at each auction. However, larger deviations cannot be ruled out at times when market conditions are special, such as, for instance, on coupon maturity.

At times when demand is deemed good, the Debt Office normally uses flexible issue volumes. This is announced as an interval. The lower interval limit corresponds to the offered issue volume. The flexibility means that the issue volume can be increased up to the upper interval limit. One precondition is that this can occur without significant impact on interest rates, i.e. that the bid curve is flat within the interval. The interest-rate level shall also be reasonable.

Even if the issue volume does not vary so much from one auction to another, to some extent the Debt Office takes into account the prevailing demand situation and the pricing picture. The choice of loans, issue mechanisms and volume on individual issue dates is announced one week before the auction date after the Debt Office has gathered suggestions from primary dealers and investors. Both dealers and investors are welcome to pursue a continuous dialogue with the Debt Office concerning inflation-linked bonds and to submit suggestions before auctions.

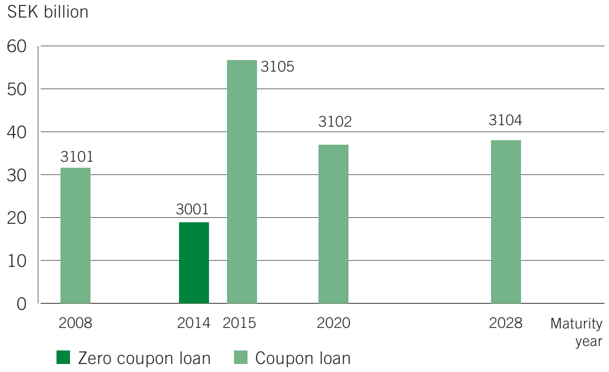
Current loans and issues

As announced in the previous Central Government Borrowing report, the Debt Office will issue a new inflation-linked bond (loan 3106) in autumn 2005, maturing on 12 April 2012. The new loan is being introduced with an issue and exchanges for 3101. A phasing-out plan for loan 3101 has been discussed in *Central Government Borrowing*

2003:2 and *2003:3*. The idea is for investors to be able to exchange to loan 3106 with an exchange volume of at most, for instance, SEK 10 billion per year. In this way, phasing-out of the loan can take place in a predictable way. A more detailed phasing-out plan will be announced in spring 2005.

Loans 3105, 3102 and 3104 will, together with loan 3106 when it is introduced in the autumn, be issued during 2004 and 2005. Loan 3101 can also come into question in the spring if the Government, in line with our recommendation, abolishes the restriction on maturity in inflation-linked borrowing.

Figure 2. Inflation-linked government bonds



Foreign currency borrowing

At present, the Debt Office is amortising foreign currency debt at an annual pace of SEK 25 billion. The funding forecast assumes that SEK 25 billion of foreign currency debt will be amortised in 2005 as well, in line with the guideline recommendation that the Debt Office has submitted to the Government.

In order to achieve the targeted pace of amortisation, the Debt Office needs to borrow the equivalent of SEK 11 and SEK 28 billion respectively in foreign currency in 2004 and 2005. The borrowing requirement in foreign currency is the difference between maturing loans and the pace of amortisation. In 2004 and 2005 loans, including foreign currency gains, will mature for SEK 36 and SEK 53 billion respectively. The increased currency borrowing next year is due to the high level of maturities of foreign currency loans.

Foreign currency loans can be funded by issuing government bonds, which are swapped in foreign currency exposure (SEK/swap borrowing)[6] or by means of issues of foreign currency bonds (direct borrowing in foreign currencies). The allocation of foreign currency loans between direct currency borrowing and krona/swap borrowing will depend on what interest rate conditions can be achieved.

[6] *Government bonds issues are first swapped to short interest rate exposure. Floating interest rates in SEK are then exchanged to short foreign interest rate with a currency swap that has the same maturity as the interest rate swap. At the same time, the Debt Office buys the foreign currency spot when the transaction is entered into. The currency is sold at the time of the swap. The currency swap thus creates a debt in foreign currency.*

So far during 2004, the Debt Office has issued direct foreign currency loans equivalent to about SEK 7 billion. The remaining borrowing requirement during the year and for 2005 has been allocated in a standardised way between direct foreign currency borrowing and SEK/swap borrowing. The actual allocation in 2005 may, however, diverge from this scenario.

Table 8. Foreign currency borrowing in 2004 and 2005, SEK billion

	2004	2005
Foreign currency borrowing requirement, gross	11	28
Foreign currency amortisation	–25	–25
Maturities and exchange rate differences	36	53
Foreign currency bonds [1]	22	43
Currency swaps [2]	11	18
Realised exchange rate differences	3	-8
Foreign currency borrowing, gross	11	28
Foreign currency bonds	9	14
Foreign currency swaps, gross [2]	2	14

[1] *Valued at current exchange rates.*
[2] *Interest rate swaps from long to short interest rate exposure combined with currency swaps to foreign currency*

Summary

The issue volumes in nominal government bonds will be reduced from SEK 4 to SEK 3.5 billion per issue date as from November 24, 2004. At the same time, T-bill borrowing will increase.

The funding forecast assumes that the Government decides to reduce the duration from 2.7 to 2.5 years and that this reduction takes place gradually during 2005, and that SEK 25 billion of the foreign currency debt is amortised in 2005 as well.

During 2005, the issues will be allocated between the two-, five- and ten-year loans – with the emphasis on the longer maturities. The sixteen-year loan will be issued on a few occasions.

The Debt Office will increase the volume of interest-rate swaps at an annual pace from SEK 30 to SEK 35 billion in 2005.

The Debt Office makes the assessment that there are prerequisites to continue to issue inflation-linked bonds corresponding to an annual pace of SEK 20 billion.

The Debt Office is amortising the foreign currency debt at an annual pace of SEK 25 billion. Foreign currency borrowing is expected this year to total SEK 11 billion. In 2005, borrowing is expected to increase to SEK 28 billion, due to a high level of maturing foreign currency loans.

The Proposed Guidelines in Brief

In this year's proposed guidelines, the National Debt Office has studied how the central government debt should be structured in the long term. The foreign currency debt is proposed to continue being reduced to a level around 15 per cent, while the percentage of inflation-linked loans should continue to increase to 20–25 per cent of the aggregate debt. The benchmark for the duration of the nominal krona and the foreign currency debt should be lowered from 2.7 to 2.5 years.

The National Debt Office annually submits proposed guidelines to the Government regarding the management of the government debt. The starting point of the proposal is to minimise the long-term cost of the debt while taking into account the risks inherent in the management. In this year's proposal, the Debt Office has had a special assignment to study the percentage of the foreign currency debt. This has occasioned a renewed analysis also of the percentage of the inflation-linked debt and thereby of the overall structure of the debt. The main points of the proposal are:

- The percentage of foreign currency debt in the government debt should be reduced in the long term to around 15 per cent. The proposed benchmark for amortisation of foreign debt during 2005 is SEK 25 billion. The Debt Office should be allowed to deviate from this benchmark by SEK ±15 billion. The proposed benchmark for 2006 and 2007 is SEK 25 billion per year.
- The percentage of inflation-linked loans in the government debt should increase in the long term to around 20-25 per cent. The borrowing should be weighed against the growth in demand for inflation-linked bonds and the borrowing costs of other types of debt, with due consideration to risk.
- The remainder of the gross borrowing needs should be covered by nominal krona borrowing.
- The benchmark for the average maturity (measured as duration) of the aggregate nominal krona and currency debt should be lowered to 2.5 years. The Debt Office should be allowed to decide on benchmarks providing an average duration for its nominal debt that deviates by a maximum of ±0.3 years from this benchmark.

Choice of Debt Structure

To state what is an "optimal" debt structure is difficult, since the connections are plentiful and complex. In addition, the desirable percentages vary over time, *inter alia* depending on the strains that public finances undergo. The choice of structure is therefore in great parts a question of assessment and ultimately depends on the risk that the state is willing to take in the debt management.

In the proposed guidelines, the Debt Office presents its assessment of an appropriately balanced structure of the government debt. The assessment is based on the analyses and arguments that the Debt Office has presented in prior proposed guidelines, but also on the modelling results that are presented in the proposal.

Foreign Currency Debt Percentage

The Government has for several years, at the proposal of the Debt Office, decided that the foreign currency debt shall be amortised on a current basis. The foreign currency debt has been reduced from a maximum of SEK 435 billion in 1998 to 311 billion as per 30 September 2004. This corresponds to a reduction from 30 to 25 per cent of the aggregate debt.

The assessment of the foreign currency debt percentage is based on several factors. The primary argument as to why the percentage of foreign currency debt should be reduced is that foreign currency debt is associated with more risk than domestic debt, at the same time as the cost may be assumed to be approximately the same. Moreover, foreign currency borrowing is a flexible instrument. Experience shows that if borrowing needs increase drastically, it may be advantageous to borrow in foreign currency. The reason is that not only does it reduce the pressure on the domestic market, it can also provide cost advantages to the extent the great borrowing need pushes up the krona interest rates and weakens the krona. In order for the state to have room to borrow a lot in foreign currency in the event of a crisis, the foreign currency debt may however not be too great at the outset.

The aim should not however be to eliminate foreign currency debt. Borrowing in several currencies reduces the interest rate risk by reducing the dependence on the Swedish interest rates. If Swedish interest rates were to rise sharply without a corresponding change in international interest rates while the krona exchange rates remain the same, the foreign currency debt contributes to limit the increase of aggregate interest expenses.

The Debt Offices concluding assessment is that the foreign currency debt percentage in the long term should be approximately 15 per cent. The foreign currency percentage is presently approximately 26 per cent. In order to continue the reduction of this percentage, amortisation should continue at an unchanged rate. The proposed benchmark for amortisation of foreign debt is SEK 25 billion, with the ability of the Debt Office to deviate from this benchmark by SEK ±15 billion.

Inflation-linked Percentage

The Debt Office started to issue inflation-linked bonds in 1994. The percentage of inflation-linked loans in the government debt has since then gradually increased and now amounts to 15 per cent. The guidelines have for several years stated that the percentage of inflation-linked debt should continue to increase in the long term. The argument has primarily been that inflation-linked debt contributes to a more diversified government debt in comparison to a portfolio composed entirely of nominal debt. This reduces the risk of excessive variations in the interest costs.

In addition to their favourable risk aspects, inflation-linked bonds should in the long term be somewhat less expensive than the corresponding nominal bonds. The reason is that investors may be assumed to be willing to pay a premium for the protection against inflation risk. The favourable trend of the inflation-linked bond market has moreover reduced the liquidity premium that from time to time has countered the inflation risk premium. The yield requirement for inflation-linked loans should therefore be lower than for nominal loans.

The percentage of the inflation-linked debt should therefore be permitted to increase to a long-term level of approximately 20-25 per cent. The inflation-linked debt is at that level assessed to have sufficient volume in order for the market to be liquid and in order for the diversification effects to have an impact. In combination with a lowered foreign currency debt percentage, it also creates the scope for a large and liquid nominal bond market. The pace of increase in the inflation-linked debt should as before be weighed against the demand for inflation-linked bonds and the cost of borrowing in other types of debt, with due consideration to risk.

Maturity of the Debt

The Debt Office has also analysed the maturity of the entire government debt. The benchmark for the duration of the nominal krona and the foreign currency debt has been unchanged since 2000. At the same time, the maturity of the entire debt has increased as a result of the percentage of inflation-linked bonds having increased. This trend will continue provided that the inflation-linked debt percentage increases. In combination with the foreign currency debt percentage being reduced, this leads to a reduction of the risk level of the government debt.

The Debt Office's assessment is that this will provide the scope for lowering the duration of the nominal krona and foreign currency debt to 2.5 years. The intention thereby is to lower the expected cost at the same time as the risk level is maintained at a desirable level. Taking into consideration the size of the krona debt in relation to the market, the adaptation of the duration to the new benchmark should be made gradually in order for the transaction costs not to become unnecessarily high.

According to the guidelines presently in force for the maturity of the inflation-linked debt, borrowing shall be made with bonds with a maturity of at least five years. The Debt Office proposes that this restriction be removed. The reason is to increase the ability to adapt the issues to market demands in an appropriate manner.

An Aggregate Maturity Measurement

The Debt Office has also investigated the possibilities to introduce a comprehensive measurement of the maturity of the entire government debt. The present benchmark for the maturity comprises only the nominal part of the debt. The difficulty of managing the duration of the inflation-linked debt and the fact that the inflation-linked borrowing should be adapted to prevailing market conditions, would however make such a management system difficult to handle. Technically, it would be possible, through adaptations of other types of debt, to still achieve a collective duration benchmark. It is however not self-evident that the transaction costs that would arise in such case are motivated from a risk point of view. The management of the maturity of the government debt therefore requires further analysis. Thus, in this year's proposed guidelines, we are not proposing a maturity measurement for the entire debt. It should however be emphasised that the guidelines even without a benchmark, as in this year's proposal, may be based on qualitative arguments, where the collective maturity of the inflation-linked and nominal debts are taken into consideration.

Extreme Shocks

In this year's proposal, the Debt Office has a special focus on how the costs of the debt are affected by extreme strain, such as, e.g., a currency crisis. The proposal presents the result of a number of sensitivity analyses made within the framework of a simple scenario model.

The Debt Office notes that the best manner of preparing for a crisis situation is to reduce the size of the government debt. In the management of the government debt, trade-offs must be made on a continuous basis between costs and risks, with due consideration of both the public financial prospects and current financial circumstances. The scenario calculations show that the Swedish public finances are sensitive to a sharp rise in interest rates. On the other hand, it appears relatively costly to increase the maturity of the debt. Also a currency crisis would have a significant impact, at the same time as the costs of reducing the risk level by adjusting the foreign currency debt percentage in all likelihood is rather low. Since the model captures the entire debt, it provides the ability to illustrate the type of risk trade-offs that underlie this year's proposed guidelines, where an increased inflation-linked debt percentage and reduced foreign currency debt percentage provide the scope for some reduction of the maturity.

Retail Borrowing in Sweden and Comparisons to Other Countries

In many countries, retail borrowing forms a part of the central government borrowing. Traditionally, retail borrowing has meant that the central government has sold products developed especially for smaller investors. The technical developments has however started to lower the barriers between the retail borrowing and institutional borrowing. One step in that direction is that Sweden, just like several other countries, is now selling government securities directly to smaller investors.

Why Central Governments Borrow From Consumers

There are several reasons that central governments obtain financing by retail borrowing. To some countries, retail borrowing constitutes an important source of financing, while others view retail borrowing as an inexpensive complement to institutional borrowing. A third motive may be that the central government would like to stimulate the domestic savings market.

Finance the Central Government Debt

In less developed financial markets, retail borrowing may be an important source of financing for the central government debt. In countries with developed financial markets, retail borrowing is normally not decisive for the financing of the central government debt. Many countries also finance their central government debt without any retail borrowing.

Cost Savings

In many countries retail borrowing is seen as a complement to other borrowing. Consumers and smaller investors have other preconditions and aims for their savings than institutional investors. This results in the borrowing risk becoming lower since the debt is spread to various types of investor groups, which in the long run may contribute to lower interest costs.

A majority of countries have requirements that retail borrowing may not be more expensive than other borrowing. Apart from Sweden, however, it is only Great Britain that has a pronounced requirement that the retail borrowing shall be *less* expensive than alternative borrowing.

Stimulate the Savings Market

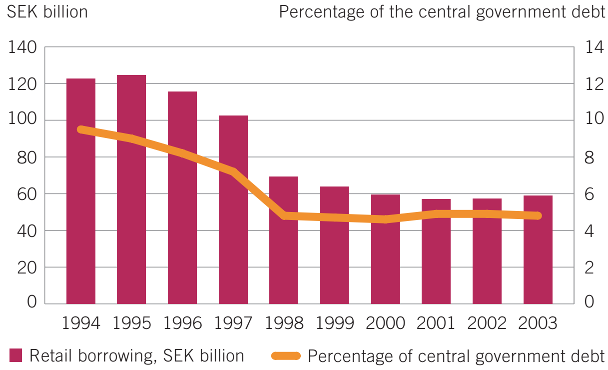
In developing countries that are in the process of building a domestic savings market the central government may try to stimulate private savings through paying higher interest rates to consumers than to institutional investors. In countries with well-functioning markets this is however relatively rare. The reason is that the central government subsidy, that interest rates above market rates constitutes, leads to the central government out-competing private alternatives. Thereby, private savings are not favoured as a whole; instead it merely leads to a reallocation between different savings forms.

To offer good savings forms for smaller investors does not however necessarily clash with requirements on cost-effectiveness in the borrowing. Retail borrowing may well contribute to both competition on the savings market and to stimulation of private savings without a central government subsidy.

The Role of Retail Borrowing in Sweden

In Sweden is the aim of the retail borrowing is above all to reduce the costs for the government debt, by the central government being able to borrow less expensively from consumers and smaller investors than from institutional investors. About 5 per cent of the Swedish government debt is comprised of retail borrowing. This corresponds to a little under SEK 60 billion. Figure 1 shows how retail borrowing has developed between 1994 and 2003.

Figure 1. The percentage of the retail borrowing of the Swedish central government debt



Note: The drop between 1997 and 1998 was a result of the product National Savings Account (Allemanspar) being removed as a result of abolished tax subsidies.

Retail borrowing in Sweden is aimed at investors that are too small for the institutional market. The investors are comprised of consumers, but also of smaller companies, organisations, foundations etc. Retail borrowing is carried out entirely without tax subsidies.

The Debt Office's savings products are sold via telephone, written booking forms, the Internet and dealers (lottery bonds only). The Debt Office engages a call centre that provides a majority of the sales and the contacts with the customers. The savings products are marketed through advertisements in periodicals and on the Internet, television commercials and direct marketing.

The market for savings in interest-bearing instruments in Sweden has an outstanding volume of approximately SEK 790 billion, of which the Debt Office's market share is approximately 7 per cent. The majority of the Swedish savings in interest-bearing instruments, approximately 70 per cent, is placed in regular bank accounts.

The Debt Office's savings products may be divided into two categories. The first category comprises traditional savings products that have been developed especially for smaller investors. The other category comprises the Debt Office's direct sales of government securities to smaller investors.

Traditional Retail Borrowing

Traditionally retail borrowing in Sweden has meant that the central government sells savings products that are especially aimed at smaller investors, e.g., *lottery bonds* and *National Debt Savings* (see the fact box about the Debt Office's savings products). Borrowing from consumers and other smaller investors is however associated with considerably higher

Retail borrowing in Sweden

Within the framework of retail borrowing the National Debt Office offers three different products. These are *lottery bonds, National Debt Savings* and *Retail Sales of Government Securities.*

Lottery Bonds

The sale of lottery bonds commenced in 1918. The outstanding volume today amounts to approximately SEK 40 billion.

The interest on lottery bonds is raffled out through draws. Each loan has a lottery percentage, which is the kitty that is distributed annually in the form of winnings. The lottery percentage, the annual interest rate of the lottery bond, is set in line with the market interest when the loan is issued. The number of drawing occasions varies between two and six per year.

The lowest savings amount for purchasing lottery bonds in the loans issued most recently been SEK 1 000. Customers who buy a series of lottery bonds, normally 25 or 50, are guaranteed a minimum profit, so-called guaranteed winnings. The maturity of new lottery bonds has in recent years been between three and six years.

Lottery bonds are normally sold twice a year. They may be bought directly from the Debt Office or through distributors, entirely without charge. Lottery bonds are registered with the central securities depositary VPC and have a secondary market on the Stockholm Stock Exchange.

National Debt Savings

National Debt Savings was introduced in 1997. The outstanding volume today amounts to approximately SEK 20 billion.

National Debt Savings is savings in account form, whereby the customers may choose between nominal or inflation-linked interest in maturities from floating up to eight years. The interest is paid out annually or at the end of the maturity. The interest on National Debt Savings is 0.25-0.35 per cent less than the interest rate on the capital markets for the corresponding maturity.

National Debt Savings is offered only directly by the Debt Office and is sold entirely without charge. There is no secondary market for National Debt Savings, but the customers may redeem the savings before the scheduled time at the Debt Office. The minimum permissible deposit amount is SEK 5 000 for a one-time deposit and SEK 200 for monthly recurring deposits. There is a maximum limit of SEK 5 million per day.

The National Debt Savings account, that has a floating interest rate that is fixed at 0.25 per cent under the repo rate, has been a big sales success since the introduction 1997. The increase was strengthened in connection with the stock markets starting to decline in the beginning of 2000.

Retail Sales of Government Securities

In the autumn of 2002, the Debt Office introduced Retail Sales of Government Securities. Through Retail Sales of Government Securities, consumers and smaller investors may participate in the Debt Office's auctions of treasury bills, nominal government bonds and inflation-linked bonds. Sales are made only through the Internet.

The customers may bid for at least SEK 25 000 kronor and not more than SEK 5 million. In each auction, a certain volume is reserved for retail customers. The retail customers then receive the average interest rate in the auction for their bids, entirely without charge. Government securities are registered with the central securities depositary VPC and have a secondary market on the Stockholm Stock Exchange.

Through Retail Sales of Government Securities, customers may tailor-make their own interest rate fund, consisting of different maturities of nominal and inflation-linked savings.

administrative costs than borrowing the same volume from a few institutional investors. As compensation, the central government offers a somewhat lower interest rate on this type of borrowing.

On the condition that retail borrowing meets the requirement of being less expensive than other borrowing, the Debt Office aims to offer good savings alternatives to smaller investors and to contribute to competition on the savings market. Consumers and other smaller investors are afforded the possibility to invest money in safe products at a favourable interest rate. The Debt Office offers interest rates that in many cases are higher than those offered by private banks and financial institutions. Thereby both the investors and the taxpayers benefit from retail borrowing.

Direct Sales of Government Securities

In Sweden, it is difficult for smaller investors who buy government securities from the bank to obtain a good yield. The government securities have been sold several times over and the banks impose charges for each sale. To enable smaller investors to purchase government securities directly from the Debt Office we introduced the product *Retail Sales of Government Securities* in the autumn of 2002.

Within the framework of Retail Sales of Government Securities, consumers and smaller investors may purchase nominal bonds, inflation-linked bonds and treasury bills directly in the Debt Office's auctions by submitting offers via the Internet. They obtain the average interest rate in the auction and may thereby purchase government securities at same interest rates as the big investors. In Sweden, like in many other countries, it is the department for retail borrowing that is responsible for the technical and the administrative solutions for the purchases by smaller investors of government securities. See the fact box about the Debt Office's savings products for more details about the product.

Historically, there has been a clear distinction between retail borrowing and institutional borrowing. The marketplace for government securities has been reserved to the big institutional investors. Technical developments, among other things through the Internet, have caused the cost of selling ordinary government securities directly to small investors to decrease. The technology has also reduced the need of intermediaries to distribute government papers to smaller investors.

In the long term, the increased direct sales of government securities may contribute to a decrease in the need for tailor-made products for small investors. With a higher interest rate for government securities than for traditional private market products, it is no longer profitable for the investors to buy the tailor-made products. This is however a development that lies far ahead in time. To many customers, the information and service that are offered for savings in more traditional private market products are also decisive, even if they get a somewhat lower interest rate than on government securities.

Result and Assessment

According to guidelines from the Government and Parliament, the central government's retail borrowing is to be evaluated annually. This is effected by the Debt Office reporting the result of the borrowing in the annual report.

Lottery Bonds and National Debt Savings

The result of lottery bonds and National Debt Savings is measured in relation to the assessed cost of borrowing at corresponding maturities on the institutional market. For lottery bonds, the spread against the interest rates on the capital market has so far been approximately 0.60 per cent and for National Debt Savings 0.25–0.35 per cent. Retail borrowing thus carries all of its own costs for personnel, sales, marketing etc. During the latest five-year period, the borrowing has moreover contributed to an annual cost savings of between SEK 144 and 327 million.

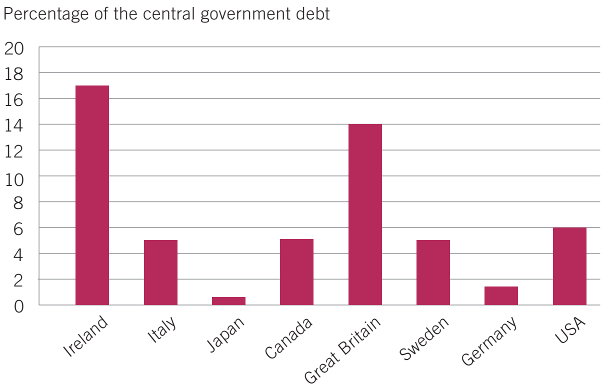
Retail Sales of Government Securities

Retail Sales of Government Securities is primarily intended as a bridge between retail borrowing and borrowing on the institutional market. The product is however not included in the result calculation for retail borrowing, since the government securities customers get the same interest rates as the customers on the institutional market. Instead, a qualitative evaluation is to be made of the product. The government securities sale is also to be considered as a way to develop new sales channels via the Internet.

International Comparison

It may be interesting to compare retail borrowing in Sweden with the borrowing in other countries. Figure 2 shows the percentage of the direct retail borrowing of the government debt in some different countries.

Figure 2. Retail borrowing as a percentage of the central government debt in different countries



Note: The percentages refer to borrowing directly from consumers and smaller investors. Indirect borrowing via intermediaries is not included. Data from 2004.

Great Britain and Ireland are the countries that have the highest percentage of the government debt financed through retail borrowing. These are also countries with a long tradition of retail borrowing and a broad range of different products.

It should be noted that Figure 2 covers only the *direct* retail borrowing. If also the *indirect* retail borrowing were to be counted, the columns in the diagram would in certain case be considerably higher. In many countries consumers buy regular government securities via intermediaries and own a significant part of the central government debt, even if there is only minor or no direct retail borrowing. Examples of such countries are Italy, Japan and France.

Different Types of Savings Products

Within the scope of retail borrowing there is a number of different savings products in different countries. In order to provide a general picture of the savings products that are available in different countries, we have in Table 1 divided them into four different groups. The groups are: *lottery bonds* (the interest is distributed through drawings), *savings bonds* (bonds tailored for small investors), *savings accounts* (one-time deposits or regularly saving in the form of an account) and *government securities* (the same instruments as are sold on the institutional market).

Table 1. Retail Products in Different Countries

	Lottery Bonds	Savings Bonds	Savings Account	Government Securities[1]
France				●[2]
Ireland	●	●	●	●
Italy		●		
Japan		●		
Canada		●		
Great Britain	●	●	●	●
Sweden	●		●	●
Germany		●		●
USA		●		●

1 Includes countries that sell at least one government security directly to smaller investors.

2 Via intermediaries

The United States and Great Britain are examples of countries where smaller investors may buy government securities directly from the central government. The US Internet service *Treasury Direct,* which offers Internet sales of government securities as well as savings bonds to consumers, has been somewhat of a role model for other countries' direct sale of government securities. Consumers have been able to buy government bonds and treasury bills directly from the US Treasury for a long time.

In most other countries, smaller investors may buy government securities only on secondary markets. In countries with a well-functioning secondary market, e.g., Denmark, it does not have to be a problem for smaller investors to buy government securities via a bank or securities broker. In less well-functioning markets, however, only the intermediaries make a profit from the sale, while the end customer gets an unsatisfactory yield.

The endeavour to develop the Internet as a sales channel is a clear trend in many countries. Internet sales are both a way for the central government to reach out to new groups of investors and to reduce costs. Sales via distributors – banks, financial institutions, post offices and in certain case businesses and employers – are also relatively widespread. In certain countries, e.g., Ireland and Italy, the post offices play a central role for the distribution of central government savings products. Many countries market their saving products in the same manner as private operators do. Other countries have no marketing at all.

To sum up, the Swedish National Debt Office has a long tradition within retail borrowing. This has contributed both to low costs of the government debt and increased competition on the savings market. One of the challenges ahead is to further develop the sales channels, above all via the Internet.

Malin Holmlund, product manager
Retail Sales of Government Securities

Market information

Source: The Swedish National Debt Office, unless otherwise stated

Swedish government debt

Government bonds, outstanding volumes, September 30, 2004

Nominal bonds (nominal amount)

Maturity date	Coupon %	Loan no.	SEK m
2006-04-20	3.50	1044	91,601
2007-08-15	8.00	1037	65,369
2008-05-05	6.50	1040	54,783
2009-01-28	5.00	1043	71,504
2009-12-01	4.00	1048	31,991
2011-03-15	5.25	1045	49,532
2012-10-08	5.50	1046	44,696
2014-05-05	6.75	1041	69,772
2015-08-12	4.50	1049	31,982
2020-12-01	5.00	1047	31,203
Total benchmarks			**542,434**
Non-benchmarks			**21,373**

T-bills, outstanding volumes, September 30, 2004

Maturity date (nominal amount)	SEK m
2004-10-20	24,192
2004-11-17	27,763
2004-12-15	73,323
2005-03-16	70,818
2005-06-15	49,297
2005-09-21	20,003
Total Treasury bills	**265,396**

Inflation-linked bonds (outstanding amount), September 30, 2004

Maturity date	Coupon %	Loan no.	SEK m
2008-12-01	4.00	3101	31,639
2014-04-01	-	3001	18,891
2015-12-01	3.50	3105	56,676
2020-12-01	4.00	3102	36,943
2028-12-01	3.50	3103	3
2028-12-01	3.50	3104	38,019
Total inflation-linked bonds			**182,172**

Rating

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

Government bonds, auction dates

Nominal bonds

Announcement date	Auction date	Settlement date
2004-10-20	2004-10-27	2004-11-01
2004-11-03	2004-11-10	2004-11-15
2004-11-17	2004-11-24	2004-11-29
2004-12-01	2004-12-08	2004-12-13
2005-01-05	2005-01-12	2005-01-17
2005-01-19	2005-01-26	2005-01-31
2005-02-02	2005-02-09	2005-02-14
2005-02-16	2005-02-23	2005-02-28
2005-03-02	2005-03-09	2005-03-14
2005-03-16	2005-03-23	2005-03-30
2005-03-30	2005-04-06	2005-04-11
2005-04-13	2005-04-20	2005-04-25
2005-04-26	2005-05-03	2005-05-09
2005-05-11	2005-05-18	2005-05-23
2005-05-25	2005-06-01	2005-06-06
2005-06-08	2005-06-15	2005-06-20

T-bills, auction dates

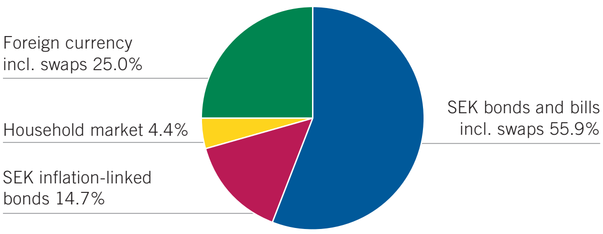
Announcement date	Auction date	Settlement date
2004-10-27	2004-11-03	2004-11-05
2004-11-10	2004-11-17	2004-11-19
2004-11-24	2004-12-01	2004-12-03
2004-12-08	2004-12-15	2004-12-17
2004-12-28	2005-01-04	2005-01-07
2005-01-12	2005-01-19	2005-01-21
2005-01-26	2005-02-02	2005-02-04
2005-02-09	2005-02-16	2005-02-18
2005-02-23	2005-03-02	2005-03-04
2005-03-09	2005-03-16	2005-03-18
2005-03-23	2005-03-30	2005-04-01
2005-04-06	2005-04-13	2005-04-15
2005-04-20	2005-04-27	2005-04-29
2005-05-04	2005-05-11	2005-05-13
2005-05-18	2005-05-25	2005-05-27
2005-06-01	2005-06-08	2005-06-10
2005-06-15	2005-06-22	2005-06-24
2005-06-29	2005-07-06	2005-07-08

Inflation-linked bonds

Announcement date	Auction date	Settlement date
2004-10-28	2004-11-04	2004-11-09
2004-11-11	2004-11-18	2004-11-23
2004-11-25	2004-12-02	2004-12-07
2004-12-09	2004-12-16	2004-12-21
2005-01-13	2005-01-20	2005-01-25
2005-01-27	2005-02-03	2005-02-08
2005-02-10	2005-02-17	2005-02-22
2005-02-24	2005-03-03	2005-03-08
2005-03-10	2005-03-17	2005-03-22
2005-03-24	2005-03-31	2005-04-05
2005-04-07	2005-04-14	2005-04-19
2005-04-21	2005-04-28	2005-05-03
2005-05-04	2005-05-12	2005-05-18
2005-05-19	2005-05-26	2005-05-31
2005-06-02	2005-06-09	2005-06-14

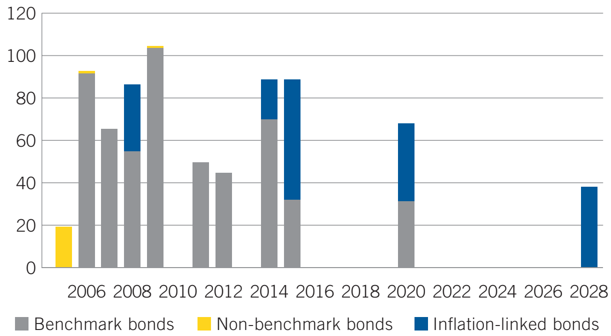
Debt structure

Total debt 1,243 SEK billion September 30, 2004



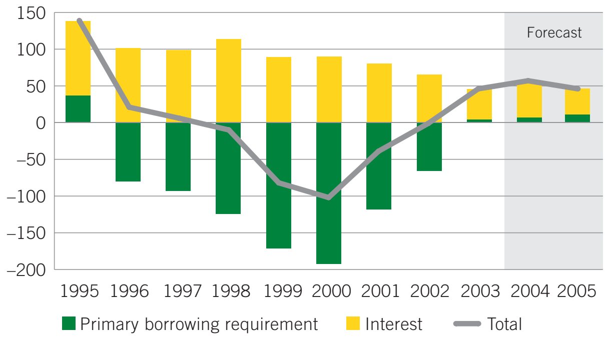
Maturity profile, SEK nominal and inflation-linked bonds

SEK billion September 30, 2004



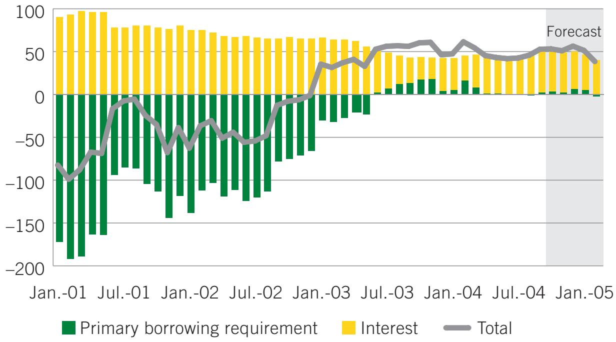
Central government borrowing requirement, 1995–2005

SEK billion



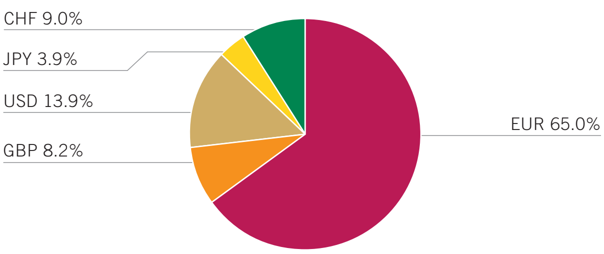
Swedish government borrowing requirement, 12 months

SEK billion



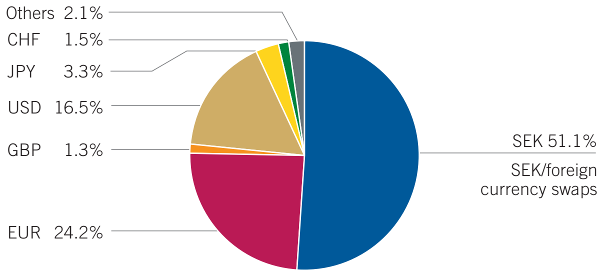
Foreign currency exposure, incl. derivatives

September 30, 2004



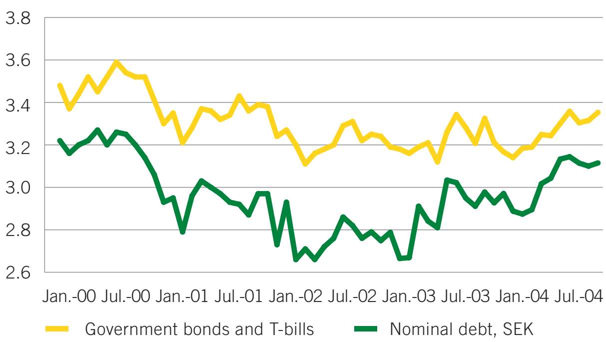
Funding in foreign currencies

September 30, 2004



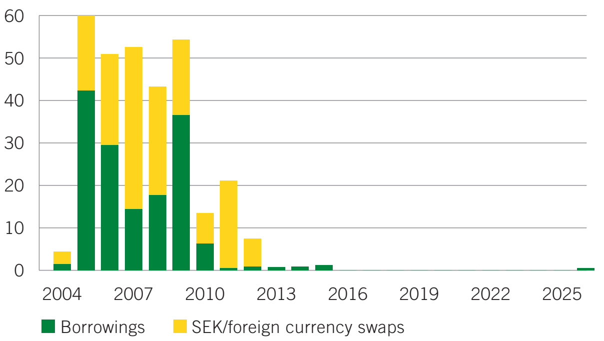
Duration of nominal debt

Years

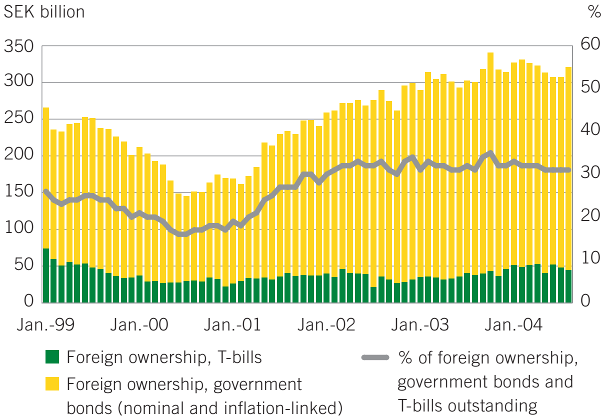


Maturity profile, foreign currency loans excl. callable bonds

SEK billion September 30, 2004

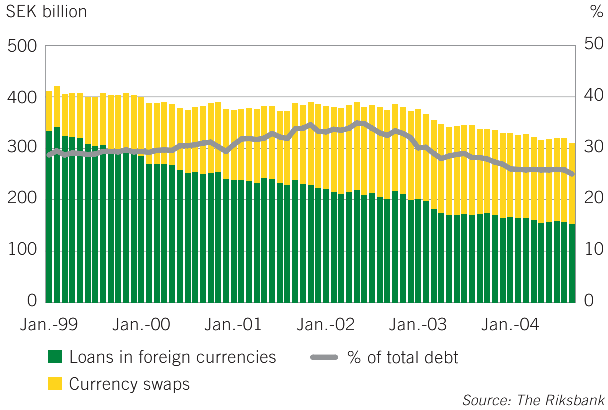


Foreign ownership of government bonds and T-bills



Source: The Riksbank

Central government debt exposure in foreign currencies

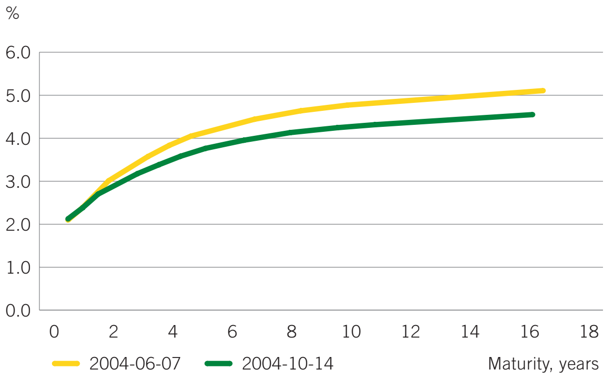


Source: The Riksbank

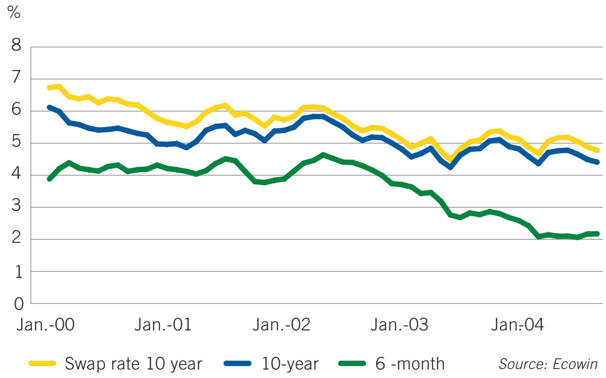
Financial markets

All values up to September 30, 2004

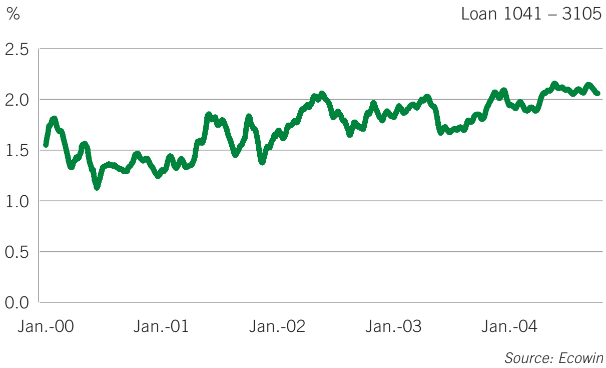
Yield curve, Swedish government securities



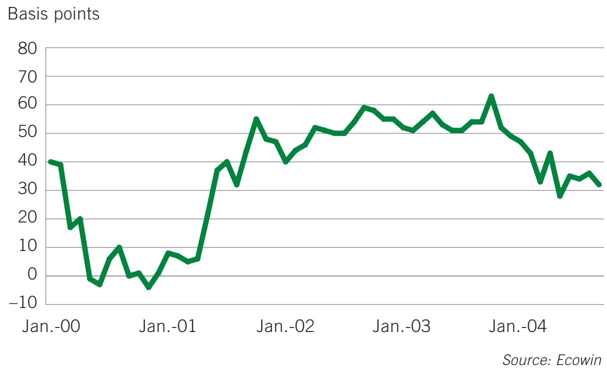
Interest rate developments



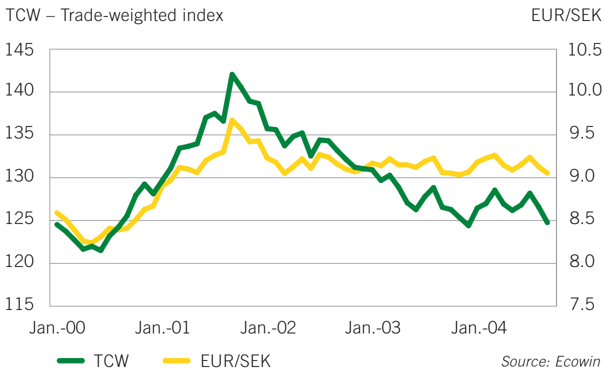
Break-even inflation



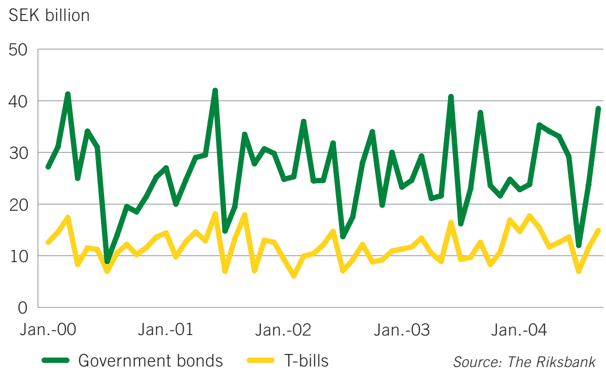
Interest rate spread vs Germany – 10-year



Historical exchange rates

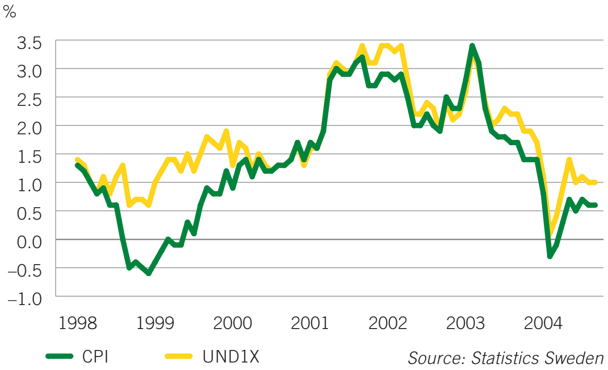


Trading volume, Swedish government securities



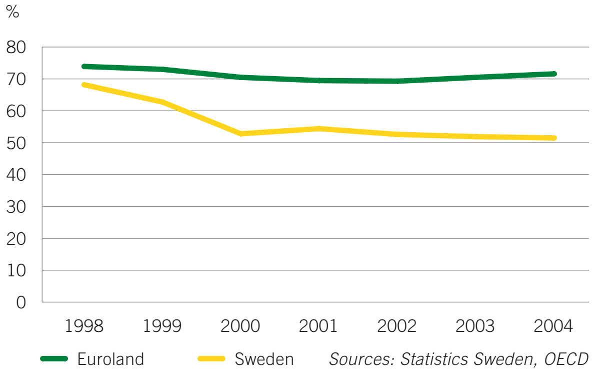
Swedish economy

Inflation indexes: UND1X and CPI in Sweden 1998–2004



Source: Statistics Sweden

General government debt in relation to GDP



Sources: Statistics Sweden, OECD

National accounts

Percentage change Supply and demand	2003	2004	2005	2006
Gross domestic product[1]	1.6	3.5	3.0	2.9
Imports	5.0	5.7	9.4	8.3
Household consumption expenditure	1.9	2.4	3.0	3.5
Government consumption expenditure	0.6	0.9	0.8	0.5
Gross fixed capital formation	–2.0	2.6	6.3	8.4
Stock building	0.2	–0.2	0.3	0.0
Exports	5.5	9.1	7.9	6.3

Selected statistics	June-04	Sep.-04	2003	2004	2005	2006
CPI, year-on-year		0.6	1.4	1.0	2.1	2.5
Unemployment rate		5.8	4.9	5.5	5.1	4.6
Current account	7.9		5.6	6.7	6.5	5.7

[1] *SEK 2,439 billion (current prices 2003).*

Sources: Statistics Sweden, The Riksbank; forecasts: National Institute of Economic Research.

Primary dealers

	Telephone	Reuter-page
ABN Amro Bank NV	+46-8-506 155 00	PMAA
Danske Consensus	+46-8-568 808 44	PMCO
E Öhman J:or Fondkommission AB	+46-8-679 22 00	PMOR
FöreningsSparbanken	+46-8-700 99 00	PMBF
Nordea	+45-33-33 17 58	PMUB
SEB	+46-8-506 23 151	PMSE
Svenska Handelsbanken AB (publ)	+46-8-463 46 50	PMHD

The next issue of *Central Government Borrowing: Forecast and Analysis* will be published on Wednesday, February 23, 2005, at 9.30 am.

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