

# Central Government Borrowing

### Forecast and Analysis 2008:3

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#### ECONOMIC DOWNTURN LEADS TO DEFICITS

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In Central Government Borrowing – Forecast and Analysis 2008:3, we present forecasts for central government finances and funding in 2008, 2009 and 2010. In the first section, we present annual and monthly forecasts for central government finances and the underlying analysis. These forecasts serve as the basis for funding, which is dealt with in the second section of the report. The calculations were completed on 21 October 2008.

In the article "Extra issues of T-bills", we describe our action during the autumn's turbulence in the financial markets.

Bo Lundgren Director General

#### SWEDISH NATIONAL DEBT OFFICE'S MISSION

The Debt Office is the Swedish government's financial administration. Our mission includes central government funding and debt management. The aim is to do this at the lowest possible cost while avoiding excessive risk.

In Central Government Borrowing – Forecast and Analysis, which is published three times a year, we present forecasts for central government finances in the coming two years. On the basis of these forecasts, we estimate how much the state needs to borrow and produce a plan for funding which is also included in the report.

On the fifth working day of each month, we publish the outcome of the central government budget balance (the net of all incoming and outgoing payments) for the previous month. We compare the outcome with the fore-cast from *Central Government Borrowing – Forecast and Analysis* and explain any deviations. In connection with the monthly outcome, we also present the debt development in the report *The Swedish Central Government Debt*.

## Summary

Swedish central government finances are deteriorating. The current financial crisis is dampening economic growth and will probably prevent further sales of state assets. Together this means that the surpluses of recent years are turning into deficits and that central government borrowing is increasing.

We are expecting a budget surplus of SEK 148 billion this year, which is SEK 15 billion lower than our previous forecast. For 2009, we are reducing our forecast for the budget balance by SEK 106 billion and will then have a deficit of SEK 23 billion. Our first forecast for 2010 shows a deficit of SEK 35 billion.

#### Lower tax income and a stop for sales

Central government finances are greatly affected by the economic downturn, mainly in the form of lower tax income. The Swedish economy will probably show zero growth next year in the light of the reduction in global demand. Household consumption will be dampened and corporate profits will fall. The state of the labour market looks considerably worse than it did a few months ago.

Tax income will also be affected by the Government's planned tax cuts which will come into effect next year.

Due to the financial turbulence, we only estimate SEK 3 billion in sales income in 2009. This income relates to payment for the shares in Beam Spirits & Wine which were sold in connection with the sale of Vin & Sprit. We do not expect any sales at all in 2010 since it will probably take some time before the situation in the financial markets improves.

#### Increased borrowing

The deterioration in central government finances means that central government borrowing will increase. The funding requirement will average around SEK 120 billion in 2009 and 2010.

The larger funding requirement will primarily be met by T-bills. The outstanding volume of T-bills is increasing by around SEK 50 billion to an average of around SEK 140 billion during 2010. Funding in nominal government bonds increases to SEK 74 billion in 2009 and to SEK 84 billion in 2010. We are raising the volume per auction from SEK 2 billion to SEK 3.5 billion from 19 November onwards. The outstanding stock of bonds will increase during 2010 to become as large as it was in 2006.

The main part of the bond funding takes place in the tenyear maturity. The increased funding will also enable us to improve liquidity in the maturities that now have small outstanding volumes.

Funding in inflation-linked bonds is unchanged at SEK 3 billion per year since the inflation-linked share of the total debt already exceeds the target of 25 per cent. We are continuing to offer exchanges of the seven-year inflationlinked bond to longer maturities.

Bond funding in foreign currency is limited to SEK 10 billion per year during 2009 and 2010. This volume will depend on the conditions we can achieve. We carry out the major part of foreign currency funding by swapping bond funding in kronor to foreign currency. The aggregate foreign currency funding is determined by the set target that foreign currency debt shall amount to 15 per cent of the central government debt. Total foreign currency funding will be around SEK 50 billion both in 2009 and 2010.

#### The development of central government debt

Central government debt will be SEK 1,121 billion at the end of 2008. The fact that the debt does not decrease as much as the budget surplus motivates, is due to the Debt Office having extensive short-term investments at present.

We expect the central government debt to be SEK 1,069 billion at the end of 2009 and SEK 1,104 billion at the end of 2010. This corresponds to around 33 per cent and 32 per cent of GDP respectively.

## Economic downturn leads to deficits

Our new forecasts for 2009 and 2010 indicate budget deficits of SEK 23 billion and SEK 35 billion respectively. For 2009, this is a weakening of central government finances of SEK 106 billion compared with our previous forecast. The turbulence in the financial markets and the concomitant global downturn will become more serious than we expected in June. The Swedish central government finances are greatly affected by the economic slackening, mainly through falling tax income. This loss of income is being intensified by proposed tax cuts. The financial turbulence also means that we do not expect any additional sales of state assets in 2009.

Despite some economic recovery, the deficit remains in 2010. We are not expecting any sales income that year. Furthermore, we make the assessment that the Government will carry out new fiscal policy stimulation measures in the range of SEK 30 billion.

For 2008, we expect a budget surplus of SEK 148 billion. This is SEK 15 billion lower than our previous forecast. The change is due to lower income from sales of state assets and lower tax income.

		Forecast	Forecast	Forecast
SEK billion	2007	2008	2009	2010
Central government debt				
at the beginning of the year	1,270	1,168	1,121	1,069
Primary borrowing requirement	-150	-189	-12	1
Interest on central government de	bt 47	41	34	34
Net borrowing requirement*	-103	-148	23	35
Debt adjustments	16	37	0	0
Revaluation, currency loan	4	10	0	0
Short-term investments	-15	64	-74	0
Change in central				
government debt	-102	-47	-51	35
Central government debt				
at year-end	1,168	1,121	1,069	1,104

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

\* The net borrowing requirement shows what the government needs to borrow to finance budget deficits. When there is a budget surplus, the net borrowing requirement is negative.

After four consecutive years of surpluses, we expect that central government finances will show deficits in 2009 and 2010. The global financial crisis has worsened in recent months and is now clearly affecting Sweden as well. The ongoing economic downturn is being intensified, which is leading to higher unemployment and falling profits both for companies and households. This has a negative effect on central government finances, mainly through falling tax revenue.

Due to lags, the ongoing economic downturn will not have a particularly large impact in 2008. According to our forecast central government finances will still show the largest surplus ever this year. A large part of the surplus is due to the state having sold assets.

### A large surplus in 2008

We expect a surplus of SEK 148 billion for 2008. This is SEK 15 billion lower than our previous forecast. The change is due to income from sale of state assets being SEK 10 billion lower and tax income falling by SEK 5 billion.

The reduced sales income is mainly due to the price for Vasakronan being lower than we expected. Furthermore, payment for the state's shares in the US company Beam Spirits & Wine has been postponed. These shares were sold in connection with the sale of Vin & Sprit and this payment was included in our forecast for 2008. The payment will take place in January 2009 instead.

In all for 2008, we estimate that income from sales of state assets will be SEK 77 billion. This consists of SEK 50 billion for Vin & Sprit, SEK 25 billion for Vasakronan and SEK 2 billion for the state's share of OMX.

The lower tax income is due to lower in-payments of valueadded tax and preliminary tax from companies.

We estimate interest payments of SEK 41 billion in 2008, which is SEK 1 billion lower than the previous forecast. The difference is explained by exchange rate differences.

The changes in forecasts are very small for other central government payments. The outcomes for payments have accorded well with our forecasts between June and September.

## Financial crisis intensifies economic downturn

Our view of the macroeconomic development is considerably more pessimistic than in June. The financial crisis and the intensified downturn lead us to expect lower growth, higher unemployment and a lower development rate of the tax bases.

### Weaker economy – although it is difficult to assess developments

The global economic downturn will be deeper than we expected in our previous forecast. The turbulence in the financial markets has increased in the recent period, which has led more states to adopt extensive support measures for the banking system. The crisis is now so severe that it will worsen the global downturn that was already under way before the events of the autumn. The underlying causes of the financial crisis are internationally determined. However, the effects have now become evident in the Swedish financial system as well.

It is uncertain how serious and long-term the effects will be on the global economy. We have assumed that the cyclical downturn in Sweden will be relatively deep but of short duration. We expect a recovery already in 2010. It is also possible that the government support measures for the banking system will soon have their intended effect. The downturn may then be milder than we expect.

#### GDP growth in 2009 close to zero

We estimate that GDP growth in Sweden will be close to zero in 2009 and around 2 per cent in 2010. Sweden is a small open economy which is highly dependent on exports. Demand from abroad is rapidly slackening. The state of the labour market looks considerably worse than it did just a few months ago. The number of redundancy notices has increased markedly during the autumn at the same time as the number of new vacancies is falling. We expect employment to fall and unemployment to increase during the forecast period. We expect that unemployment will be over 8 per cent at the end of 2010. Historically, large falls in growth have always meant rising unemployment.

#### Lower growth rate in tax bases

The decline in the labour market leads to a weaker development of gross wages. We expect gross wages to increase by around 3 per cent during 2009 and 2010. This is considerably lower than in the past few years, even if it is not remarkably low historically. Gross wages is the most important tax base and is therefore very important for the long-term sustainability of central government finances.

Household consumption will develop more weakly during the coming two years. The weaker labour market combined

with the falling value of housing and financial assets will reduce the propensity to consume. We estimate the rate of increase of consumption in current prices at below 4 per cent in both 2009 and 2010. A dampening of consumption affects central government finances mainly through lower income from value-added tax and excise taxes.

Corporate profits fall during 2008 and 2009 due to weaker demand both abroad and in the home market. Companies will reduce their investment rate during 2009. Crucial for the development of investments will be how companies can obtain the required finance in the current financial turbulence. During 2010, we believe that there will be a turning point in the development of profits along with the recovery in the global economy. The cost situation for companies will improve at the same time as demand will again increase.

### Stop date for interest calculations in the forecast 30 September

The Debt Office's current forecast for interest payments on central government debt is based on the interest and exchange rates applicable on 30 September 2008. We have also taken into account the outcome for the net borrowing requirement until the end of September.

# Cyclically sensitive central government finances show deficits in 2009 and 2010

Our new forecast for 2009 is a deficit of SEK 23 billion. Despite some recovery in the global economy, the deficit increases to SEK 35 billion in 2010.

#### Lower income from wage-based taxes and VAT

Tax income in 2009 decreases by SEK 62 billion compared with the previous forecast. The lower development of gross wages means that income from wage-based taxes decreases compared with the previous forecast. The higher unemployment and households' falling asset values (in particular, housing and shares) mean lower private consumption. This leads to the state receiving considerably lower income from value-added tax.

#### Falling profits for both households and companies

We expect falling corporate profits during both 2008 and 2009. The preliminary tax payments from companies have been slightly lower than we estimated during recent months and many companies have adjusted tax downwards for 2008. In our assessment, this development will continue next year as well. Payments of preliminary tax will be SEK 18 billion lower than in our previous forecast. During 2010, we expect some economic recovery, which will lead to a small increase in profits and thus income from corporate tax. Income from households' capital taxes will be slightly lower than we estimated in June. For a long time, we have forecast falling capital profits during 2008 and 2009. The development of the securities and housing markets in recent months has reinforced this impression and we are making a further downward adjustment of the forecast.

Preliminary tax assessment outcomes for 2007 show that household capital income reached record levels. We estimate that profits for 2008 will fall by 45 per cent. While this is a dramatic rate of reduction, profits in kronor will be only insignificantly lower than they were in, for example, 2005. In historical terms, the level we forecast for 2008 is not low. It should rather be interpreted as meaning that 2007 was an exceptionally good year. As in the case of corporate profits, we expect a recovery during 2010.

#### Tax cuts in the budget

In the Budget Bill, the Government suggested a number of tax cuts which will come into effect next year.

Tax on labour will be reduced through a third phase of the in-work tax credit and increased threshold for state tax. Furthermore, pensioners will receive a tax reduction in the form of a special basic deduction.

Employers' social security contributions will be lowered by 1 per cent and the reduction for social security contributions for young people will be expanded.

The corporate tax rate will be cut from 28 per cent to 26.3 per cent. This reduction is being funded via changes in rules, which are to counteract tax planning.

#### Stop for sales

In 2009, we estimate SEK 3 billion in sales income, which is for the shares in Beam Spirits & Wine. The severe situation in the financial markets means that we do not believe that there will be more sales next year. The value of the companies remaining on the sales list is considerably lower than before. This means that it is not probable that the Government would accept a price at current levels. Few potential buyers have the financial strength required to purchase today. It is also more difficult to finance a transaction by loans than previously.

We do not expect any sales income during 2010. We make the assessment that it will take time before the situation in the financial markets will improve to enable further sales to take place. It is also slightly easier for us to plan borrowing in a situation without sales, and then adapt if a sale takes place, than vice versa.

#### Stable dividends

Dividends on the state's shares are estimated at SEK 23

billion for 2009, which is SEK 4 billion more than in the previous forecast. This increase is due to our no longer including any sales of state assets, which means that the state retains its ownership shares and thus its dividends. Posten will also make an additional dividend that we did not include in the previous forecast.

We expect SEK 23 million in dividends for 2010 as well. A few large companies account for the major part of the dividends. We make the assessment that several of these will have a good dividend capacity despite the economic downturn.

#### Increased expenditure for the Employment Service

We expect expenditure for the Employment Service to rise during 2009. The increase is SEK 7 billion compared with the previous forecast. This is due partly to increased costs for the unemployment benefit and partly to larger costs for labour market programme measures. Expenditure for unemployment benefit is rising from a low level. This increase is also limited by many having left the unemployment benefit funds and benefit levels being lower than before.

In 2010, expenditure for the Employment Service will rise by SEK 3 billion compared with 2009. This is mainly due to increased expenditure on unemployment benefits.

#### Fiscal policy stimulation in 2010

We expect the Government to carry out new expenditure increases and/or tax cuts in the range of SEK 30 billion during 2010. We consider that the state of the economy will motivate further fiscal policy measures to stimulate demand in the economy.

#### Interest payments on the central government debt

For 2009, we estimate interest payments of SEK 34 billion, which is SEK 4 billion higher than in our previous forecast. Compared with 2008, this is a reduction of SEK 7 billion. A large part of this reduction is explained by the inflationlinked bond 3101 maturing in December 2008 and thus not being a charge on interest payments next year.

The increase compared with the previous forecast is mainly explained by exchange rate differences due to the weaker krona. At the same time, interest payments increase since the central government debt will be larger than we expected previously. However, this is counteracted by an increase in issue premiums, since we will issue larger volumes of bonds in Swedish kronor.

For 2010, we estimate interest payments of SEK 34 billion. Current interest payments in Swedish kronor are expected to continue to rise, although this is also counteracted then by larger premiums due to larger issue volumes of bonds in Swedish kronor.

#### Monthly forecasts

The Debt Office publishes 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 monthly outcome of the net borrowing requirement five working days after the end of each month.

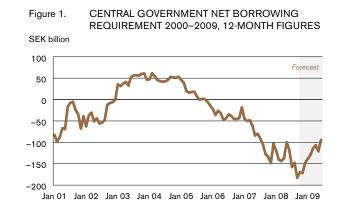
Table 2.	CENTRAL GOVERNMENT NET BORROWING
	REQUIREMENT PER MONTH
SEK	

Net borrowing requirement	* 11.2	2 –19.9	108.4	-15.5	-47.2	5.1	-15.8	-27.9	12.8
Interest on central government debt	2.5	-0.4	16.2	5.8	0.0	4.4	-0.8	4.9	1.2
Primary borrowing requirement	8.7	-19.4	92.2	-21.3	-47.2	0.7	-15.0	-32.8	11.6
SEK billion	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мај	Jun

<sup>+</sup> The net borrowing requirement shows what the government needs to borrow to finance budget deficits. When there is a budget surplus, the net borrowing requirement is negative. Variations from month to month are largely explained by variations in tax revenue, tax refunds and repo transactions by agencies. See Box for information about agency repos.

Repo transactions by agencies increase the borrowing requirement by SEK 27 billion in December and reduce it, by SEK 27 billion in January.

We estimate that sales of state shares will reduce the net borrowing requirement by SEK 3 billion in January. No subsequent sales income is included in the forecasts.



#### THE AGENCIES' REPO TRANSACTIONS

Some agencies, in particular the Premium Pension Agency and the Swedish Nuclear Waste Fund, have assets invested in the form of Swedish government securities. Since April 2007, the Premium Pension Agency and the Swedish Nuclear Waste Fund are repoing parts of these holdings. This means that they sell government securities while, at the same time, entering into a contract to repurchase the same securities in the future.

The agencies making the repos are paid in cash. In practice, this is a collateral-backed loan. Since the agencies provide collateral, they obtain good terms on the loan in the form of a low interest rate. The next step for the agencies is to invest the cash that they receive when entering into the repo in an account at the Debt Office. The variable interest rate on the agencies' accounts is close to the Riksbank's repo rate. The agencies are able to make a secure gain since they borrow more cheaply than the repo rate by providing government securities as collateral and then investing the cash at close to the Riksbank's repo rate with the Debt Office.

The role of the Debt Office is to be the agencies' bank. We are not involved in the repo transaction. The agencies do this on the market like any other player.

Repos lead to greater variations in the central government net borrowing requirement When the repos are entered into, the net borrowing requirement is reduced since the agencies deposit cash at the Debt Office at the same time. Conversely, the net borrowing requirement increases when the repo is terminated since the agency then withdraws its cash from its account. This has meant that the net borrowing requirement has varied considerably more from month to month than previously. However, the agencies close their repos over the year-end and the annual net borrowing requirement is accordingly not affected. The effect for a particular month is the change in the agencies' total volume of repos during the month compared with the previous turn of the month.

The Debt Office makes forecasts for the repo transactions based on the information we have available from the agencies. We make forecasts at a daily level, which are used internally in liquidity management, and we make forecasts at monthly level, which are published externally in this report. We have continuous contact with the agencies' asset managers to update our forecasts. However, these forecasts are very uncertain since the agencies can change their plans at short notice.

The volume of agency repos has gradually increased to almost SEK 30 billion. This means that the net borrowing requirement has decreased by as much. However, the agencies close the repos on certain occasions subject to their investment rules. Since they rapidly enter into new repos, this means that the Debt Office's funding requirement is affected for the duration of this activity.

#### SENSITIVITY ANALYSIS

The Debt Office does not produce any overall sensitivity analysis for the net 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 A	NALYSIS
---------------	---------

SEK billion Increase by one per cent/ percentage point	Effect on the net borrowing requirement
Gross wages <sup>1</sup>	-5
Household consumption in current price	es –2
Open unemployment	5
Interest rate level in Sweden	4
International interest rate level	2
TCW index	0,5

<sup>1</sup> 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 time horizon of one year (the time horizon in the table) is greater than the permanent effect.

#### Central government debt

We estimate central government debt at SEK 1,121 billion at the end of 2008. This is a decrease of SEK 47 billion compared with 2007.

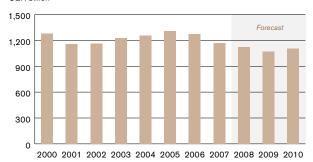
The fact that the debt is decreasing less than the budget surplus motivates, is explained by the Debt Office having extensive short-term investments at the present time. Since debts and assets are reported separately, central government debt will be temporarily larger than it would otherwise have been.

The large short-term investments mean that, as at 30 September, we have borrowed around SEK 93 billion extra by selling T-bills. We have done this to alleviate the shortage of T-bills that has arisen due to the turbulence in the financial markets. A further explanation is that we have invested the major part of the payment that the state received for Vin & Sprit in foreign exchange accounts. This money is to be used to pay loans in foreign currency when they mature at the beginning of 2009.

We have made an assessment that the short-term investments, which amounted to SEK 139 billion at the end of September, will decrease by SEK 65 billion until the end of the year. During 2009, we expect that the short-term investments will decrease to zero at the end of the year; see Table 1.

We accordingly estimate that the central government debt will be SEK 1,069 billion at the end of 2009 and SEK 1,104 billion at the end of 2010. As a share of GDP, this corresponds to around 33 per cent and 32 per cent respectively.

Figure 2. GOVERNMENT DEBT, 2000–2010 SEK billion



## Increased borrowing

Central government borrowing will increase in the next two years as government finances weaken. The issue volume in nominal government bonds increases from SEK 2 billion to SEK 3.5 billion per auction as from 19 November. During 2010, it will be SEK 4 billion kronor per auction. The outstanding volume of T-bills increases by around SEK 50 billion to SEK 140 billion on average during 2010. Funding in inflation-linked bonds is unchanged at SEK 3 billion per year. Foreign currency bonds may be issued to a limited extent.

The funding requirement increases during the next two years as central government finances deteriorate. The largest increase will be in T-bills. Funding in nominal government bonds also increases, while funding in inflation-linked bonds will be unchanged. There may be limited borrowing in foreign currency bonds equivalent to SEK 10 billion per year in the next two years. Table 1 shows the funding requirement and funding allocated to different instruments.

The forecast for central government borrowing refers to long-term gross funding. It consists of net borrowing that covers budget deficits by calendar year, refunding of maturing bonds and long-term borrowing in T-bills (long-term change in the outstanding T-bill stock). For the sake of simplicity, we will use the terms funding and funding requirement below only with reference to long-term gross funding. At the same time, there are current maturities and refunding of for example T-bills, which are not touched upon in this forecast.

Since mid-September, we have carried out a number of extra issues of T-bills in the light of the high level of demand for government securities and the deterioration in liquidity in the T-bill market. Since these are not part of our regular funding, we have disregarded the extra T-bill funding, which is discussed in a separate article.

#### Sharp increase in funding requirement

The funding requirement will be around SEK 120 billion on average in 2009 and 2010. This entails a change from 2008 of slightly over SEK 160 billion. This year, the budget surplus exceeds maturing bond loans and cash changes by SEK 44 billion.

During 2009 and 2010, bonds will mature for around SEK 100 billion per year on average. Maturities in 2009 are considerably larger than in 2010. This is because two nominal bonds mature in 2009 and none in 2010. One matures in January and one in December, which are countered by a need to increase borrowing in bonds both years.

In 2008, the sale of Vin & Sprit produced additional cash in foreign currency equivalent to around SEK 50 billion. This additional cash has been managed in foreign currency within the framework of our liquidity management and will be used to pay maturing foreign currency loans, particularly in January 2009. This means that part of the maturities in January will not need to be refunded, which explains why the funding requirement will not increase as dramatically in 2009 as would otherwise have been the case.

#### Table 1. FUNDING 2007-2010

Long-term funding consists of bond borrowing and long-term borrowing with T-bills. A budget surplus means that we have a negative net borrowing requirement. A negative funding requirement means that the budget surplus is greater than maturing bond loans including changes in cash equivalent holdings.

2007	2008	2009	2010
-103	-148	23	35
-36	18	-56	30
79	93	170	35
62	67	111	17
17	26	59	18
-59	-44	136	100
-110	-93	50	5
51	50	87	95
5	0	10	8
5	3	3	3
41	47	74	84
-59	-44	136	100
	-103 -36 79 62 17 -59 -110 51 5 5 41	-103         -148           -36         18           79         93           62         67           17         26           -59         -44           -110         -93           51         50           5         0           5         3           41         47	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

<sup>1</sup> Change in outstanding deposits, liquidity bills and repos. Retail market

borrowing is assumed to be unchanged from 30 September 2008.

<sup>2</sup> The net of issues (excluding exchanges) and maturities.

<sup>3</sup> Nominal amounts. Premiums and discounts (including inflation compensation) and exchange rate differences on issues are included in the net borrowing requirement as interest payments.

<sup>4</sup> Average issue volume per auction:

	2007	2008	2009	2010
Inflation-linked bonds	0.5	0.5	0.5	0.5
Nominal bonds	1.9	2.2	3.5	4.0

#### Table 2. IMPORTANT DATES IN 2008-2009

Date	Time	Activity
8-9 December 2008	11.00	Buyback of a limited part of loan 1048
5 March 2009	11.00	Exchanges from 3105 to 3102 and 3104
24 September 2009	11.00	Exchanges from 3105 to 3102 and 3104

### Nominal government bonds for SEK 3.5 billion per auction

The Debt Office will increase funding in nominal bonds from SEK 2 billion to SEK 3.5 billion per auction as from 19 November. In 2009, we will borrow SEK 74 billion in government bonds. Borrowing will need to be increased to SEK 4 billion per auction in 2010.

The nominal government bond stock will increase in 2010 after having decreased for three consecutive years. At the end of 2010, the stock will be around the same size as in 2006.

Although the outstanding stock has decreased, this reduction is limited compared with the decline in central government debt. This is because we have given priority to bond funding to maintain a liquid bond market. In 2009, the stock will decrease by a relatively large amount since two large loans mature during the same year, one in January and one in December.

Table 3 shows the change in stock and exposure in bond rates adjusted by swaps. Swaps mean that we shorten the interest rate refixing period. Swaps are discussed in more detail in the section on T-bills and foreign currency funding.

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

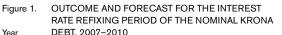
SEK billion	2007	2008	2009	2010
Nominal government bonds, issues	41	47	74	84
Maturities, buybacks and exchanges	-77	-60	-105	-11
Change in nominal government bond stock	-36	-13	-32	73
Swaps, net <sup>1</sup>	13	-2	-13	-23
Nominal government bonds and swaps, net change	-23	-15	-45	50

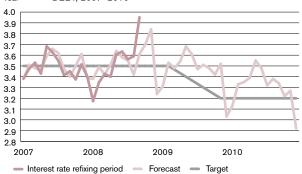
<sup>1</sup> Net of newly-issued and maturing swaps.

The Debt Office has proposed to the Government that the interest rate refixing period of the nominal krona debt be shortened from 3.5 to 3.2 years. The purpose is to reduce the costs of central government debt; see *Central Government Debt Management – Proposed Guidelines for 2009–2011.* The shortening is to be carried out by the end of 2010. In our forecast, we have assumed that the Government will adopt our proposal. Shortening of the maturity

does not affect funding in bonds but will be carried out by an increase in the swap volumes.

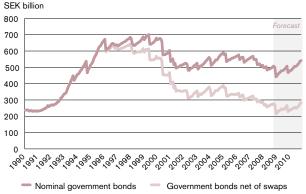
Figure 1 shows our forecast for the interest rate refixing period. The long interest rate refixing period during the autumn is due to payment from the sale of Vasakronan being made earlier than we expected in the June forecast. The extensive short-term funding in December each year entails that the maturity will temporarily become much shorter to become longer again during the spring.





The target for the interest rate refixing period in the nominal krona debt is  $3.2 \pm 0.3$  years, according to our proposed guidelines for debt management. The shortening of the interest rate refixing period shall be achieved by the end of 2010. 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.

Figure 2. GOVERNMENT BONDS AND SWAPS



#### Priority given to ten-year bonds

We normally issue bonds with two-, five- and ten-year maturities to support liquidity in the most traded bonds. Priority will be given to bonds with a ten-year maturity: slightly over half of the issues will be made in this maturity. We will also, as we have done during the autumn, issue in other maturities if it is motivated to maintain liquidity. The larger borrowing volume makes it possible to increase the outstanding stocks in the maturities considered small at present. We will not introduce any new ten-year bond until 2010 at the earliest. The outstanding loan 1047 (December 2020) will become a new ten-year reference loan in December 2009.

We are offering buybacks of Ioan 1048 (December 2009) corresponding to around a fifth of the stock. This buyback is taking place on 8 and 9 December 2008.

### Table 4. REFERENCE LOANS IN THE ELECTRONIC INTERBANK MARKET

Date for exchanges of

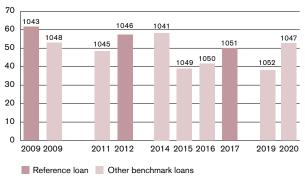
reference loans (IMM date)	2-year	5-year	10-year
17 Sept 2008	1045	1041	1052
16 Dec 2009	1046	1049	1047

Reference loans in the electronic trade are the loans that are closest in maturity to two, five or ten years. Reference loans are only changed on IMM dates (the third Wednesday of March, June, September and December) provided that the new loans are the loans that are closest in maturity to two, five or ten years on the following IMM date. Accordingly, an underlying loan in a forward contract will always be the same as a reference loan during the last three months of the contract. The dates in Table 4 for change of reference loans refer to settlement dates. The first trade date for a new reference loan is normally the Friday prior to the IMM date.

#### THE DEBT OFFICE'S ISSUES

Ahead of every auction, we decide which bond or T-bill will be issued. In the case of T-bills, we also make a decision on the volume. This decision is based on an internal issue plan based on our most recently published forecast of the borrowing requirement. Dealers and investors are given an opportunity to present their views before auction decisions. These views are of considerable value since we obtain an overall picture of market demand. However, it is never possible for any single participant to influence our issue decisions.

Normally we follow our established issue plan. However, should we receive clear indications that we should deviate from the issue plan, we are able to do so. Figure 3. NOMINAL GOVERNMENT BONDS (BENCHMARK LOANS) SEK billion



#### Increased funding in T-bills

The main part of the increased funding will be made in T-bills. This reflects the fact that adaptation to the large surplus during 2008 was mainly made in bills: T-bill funding is increasing rapidly now that we will see deficits. The outstanding stock will grow to an average of SEK 140 billion in 2010. This is considerably more than the SEK 80–100 billion that we previously estimated.

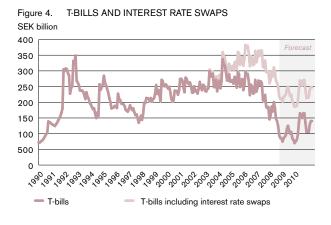
On average, we issue T-bills for around SEK 15 billion per auction during 2009 and 2010. The volume will vary sharply since the short-term funding requirement changes from month to month. As a rule, we have a large short-term funding requirement in December and January. During 2009, we expect that the stock will increase by around SEK 50 billion to remain at approximately the same level during 2010.

During December and January, we will split the regular auctions so that they occur more frequently. The reason for this is that we will borrow a relatively large amount in T-bills and because more frequent auctions contribute to more continuous additional liquidity and better price formation. The auction dates are shown in the section on market information.

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

SEK billion	2007	2008	2009	2010
T-bill borrowing, net <sup>1</sup>	-110	-93	50	5
Exchanges of government bonds to T-bills	27	8	0	0
Change in T-bill stock	-84	-86	50	5
Interest rate swaps, net	14	23	-18	7
T-bill stock and swaps, net change	-70	-63	32	12

<sup>1</sup> Net of issues (excluding exchanges) and maturities.



#### **T-BILL POLICY**

Every third month, we issue a new six-month bill, maturing on an IMM date (the third Wednesday in March, June, September and December). In each of the other months, we introduce a new three-month bill.

Accordingly, on every occasion, there are four outstanding maturities of up to six months. Since we no longer offer exchanges between bonds with a year remaining to maturity and T-bills, there is also, as a rule, a bond with a shorter maturity than twelve months in the market.

Normally, we borrow the whole issued amount in the new T-bill which we introduce in the auction. Otherwise, the allocation between T-bills is governed by our funding requirement. If we need to issue T-bills in the two shortest maturities, we normally do so on an on tap basis.

We will continue with on tap issues in T-bills with tailor-made maturities (liquidity bills) and in the two shortest maturities within the framework of our liquidity management.

#### Swap borrowing is increasing

Altogether, the use of swaps is increasing during 2009 to SEK 50 billion, as compared to SEK 45 billion in our previous forecast. The increased bond issuing during 2009 in combination with a shortening of the interest rate refixing period implies higher swap volumes.

The outstanding stock of swaps increases slightly during the period 2008–2010; see Table 6. The stock depends on the swap volume and outstanding swaps that mature.

The swaps are made relatively evenly over the year although with flexibility with respect to time and maturity. We may deviate from the forecast if the funding requirement changes during the year.

#### SWAPS

We can create short interest rate exposure by issuing bonds and then using interest rate swaps to shorten the interest rate refixing period. This technique also makes it possible to contribute to liquidity in the bond market without increasing the aggregate maturity of the debt. Provided that the spread between the swap rate and the government bond rate is sufficiently large, this borrowing technique reduces the state's borrowing costs. Good liquidity in the bond market should also contribute to reducing borrowing costs.

We use interest rate swaps as part of our foreign currency borrowing. We then combine an interest rate swap with a currency swap so that the exposure in kronor is replaced by exposure in foreign currency.

#### Table 6. CHANGE IN OUTSTANDING SWAPS

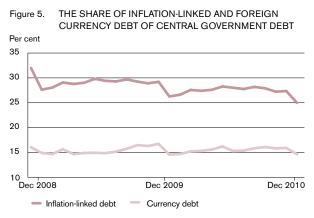
SEK billion	2007	2008	2009	2010
Interest rate swaps <sup>1</sup>	19	32	0	25
Currency swaps 2	11	4	50	25
Swaps total	30	36	50	50
Swaps, maturities	-43	-34	-37	-27
Swaps, net change	-13	2	13	23

 Interest rate 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.

### Inflation-linked funding unchanged at SEK 3 billion

We will continue to issue inflation-linked bonds to a limited extent despite the inflation-linked share being at present larger than the target of 25 per cent of central government debt. The issue volume remains at SEK 3 billion kronor per year. This is because we endeavour a long-term approach and well functioning markets for government securities. See the Box for a more detailed description of our reasoning on the inflation-linked share of the debt and its management.

As shown by Figure 5, we expect the average share of inflation-linked debt to be 29 and 27 per cent respectively in 2009 and 2010, which is lower than in our previous forecast because of the increase in central government debt. The maturity for inflation-linked debt shall be 10.6, 10.1 and 9.6 years respectively at the end of 2008, 2009 and 2010, with a deviation interval of  $\pm 0.5$  years. The interval has been set to provide us with the flexibility we need in our management of inflation-linked debt. On 30 September, the maturity was 9.9 years.



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 debt shares here differ from those reported in the section on market information, where the debt is valued at its nominal value at maturity.

#### STEERING OF THE INFLATION-LINKED SHARE

It is difficult to steer the inflation-linked share other than very roughly. This is due to the limited liquidity in the inflation-linked market and that we have small maturities in the coming years. Moreover, there is not a sufficiently developed market for inflationlinked derivatives.

Larger adjustments, to rapidly reduce the share to the desired level, would therefore be expensive for us. It would also conflict with our endeavour to act transparently and in a predictable way. We have therefore accepted large fluctuations in the share.

During autumn 2007, we considered a number of alternatives in our borrowing policy that aimed at avoiding large maturities and complying with the target of a 25 per cent inflation-linked share in the most cost efficient way. We have decided, for the time being, to continue with one of the alternatives: from 2008 onwards, we offer extension exchanges which are price risk neutral from bond 3105 to the considerably longer bonds 3102 and 3104. Exchanges that are price risk neutral mean that the market value of the bought and sold volumes multiplied by the modified duration of the respective bond should be equal. One of the six planned sales auctions remains in 2008. In 2009 and 2010, issues will be allocated between the bonds 3106, 3105, 3102 and 3104. The choice of bond for each particular auction will mainly comply with an internal issue plan decided in advance.

We have carried out two exchanges from 3105 to 3102 and 3104. In these auctions, we bought back approximately SEK 8.2 billion of Ioan 3105.

In the more long-term calculations, we let the issue volume remain at SEK 3 billion per year. We also expect to make exchanges corresponding to SEK 10 billion per year during 2009 and 2010. After that, the exchange volume will be reduced to SEK 5 billion per year until and including 2013. However, we will let at least SEK 25 billion of 3105 mature. We will not offer any exchanges or buybacks in connection with loans 3101 and 3106 maturing.

### Limited bond funding in foreign currency

Bond funding in foreign currency will be around SEK 10 billion per year during 2009 and 2010. We gave priority to bonds in Swedish kronor during 2007 and 2008 to maintain the market in these when central government debt was decreasing rapidly. Now that central government debt is increasing again, it is reasonable to allocate funding to several types of instruments.

Foreign currency funding was previously limited by the share of foreign currency debt being decreased by annual government decisions on amortisation regardless of funding requirements. The volume will now be mainly determined by the refunding requirement and the budget balance to maintain the share at 15 per cent of the central government debt. Since the total debt is growing, foreign currency funding must also increase.

Foreign currency funding can also take place by swapping bonds issued in kronor to foreign currency exposure. Since we need to borrow around SEK 50 billion in 2009 and 2010, there are reasons to do at least part of this through issuing bonds in foreign currency.

The allocation of foreign currency funding between bonds in foreign currency and swapped krona bonds also depends on the market conditions next year. For this reason, borrowing can deviate significantly from our forecast.

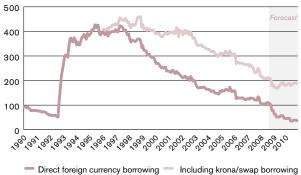
The Swedish krona is at present weak. This means, everything equal, that the proportion of foreign currency debt will be larger since this debt is expressed in kronor. The foreign currency debt may be within the control interval of  $\pm$  2 per cent that the Government has decided on. Thus, we do not need to reduce foreign currency funding when the krona is weak. The planned foreign currency funding means that the share will be slightly larger than 15 per cent at the current exchange rate.

 Table 7.
 FOREIGN CURRENCY FUNDING<sup>1</sup> 2007–2010

SEK billion	2007	2008	2009	2010
Foreign currency bonds, funding	5	0	10	8
Bond maturities	-17	-26	-59	-18
Change in foreign currency bonds	-11	-26	-49	-10
Short-term funding incl. forward contracts, net	3	-3	0	0
Change in foreign currency debt	-8	-29	-49	-10
Foreign currency swaps, net	-28	-21	31	16
Change in foreign currency debt				
incl. swaps, net	-36	-50	-19	7

<sup>1</sup> Nominal values.

Figure 6. DEVELOPMENT OF FOREIGN CURRENCY DEBT SEK billion



#### Swaps in foreign currency funding

The major part of foreign currency funding will be carried out by swapping bonds in kronor to exposure in foreign currency; see the Box for how this takes place. We will borrow in foreign currency by currency swaps for SEK 50 billion and SEK 25 billion respectively in 2009 and 2010. As has already been shown, this allocation depends on the terms and can therefore deviate from the forecast. If foreign currency funding with swaps turns out to be less than predicted here, the volume of interest rate swaps in the krona funding will increase to a corresponding extent.

#### STEERING OF FOREIGN CURRENCY DEBT

There are two ways of borrowing in foreign currency. We can either issue bonds in foreign currency or we can swap bonds in Swedish kronor to exposure in foreign currency.

How we allocate funding between direct foreign currency funding and krona/swap funding depends on the interest rate terms we obtain.

Currency funding in the form of krona/swap transactions means that the interest rate on government bonds in kronor is replaced by a short interest rate exposure in foreign currency, at the same time as the amount borrowed is exchanged to foreign currency.

In a krona/swap transaction, we first borrow in the Swedish bond market. We then make a swap in which we receive a fixed swap rate that is higher than the bond rate. At the same time, we pay a floating rate in foreign currency. Now we no longer have any exposure in the bond rate. This transaction is a combined interest rate and currency swap (basis swap). Within the framework of the swap, we then exchange the kronor we have received into foreign currency with our counterparty. The result is that we have issued a bond in kronor but receive the amount and pay floating interest in foreign currency.

When the swap matures, we exchange the amount borrowed with our swap counterparty. By agreement, this will be done at the same rate as in the initial currency exchange. We can pay the maturing bond with the krona amount. To be able to exchange the amount back to kronor, we must first purchase the foreign currency. This creates a currency exposure since we do not know the future exchange rate when we make the swap.

Borrowing through currency swaps accordingly provides the same currency exposure as if we had issued a bond directly in foreign currency.

## Extra issues of T-bills

In mid-September, the Debt Office decided to issue more T-bills than we need to fund the central government debt as such. This took place in the light of the high level of demand for government securities in the wake of the turbulent situation in the fixed-income market. Demand could not be reasonably managed within the framework of our normal system for lending T-bills to our dealers through market support repos. Instead, we decided to provide the market with additional T-bills through frequent extra auctions.

We have mainly placed the money received from the extra issues in loans to banks with covered mortgage bonds as collateral. In this way, our programme also supports the funding of the mortgage institutions. The framework for the programme is set in such a way that we can have at most SEK 150 billion in additional T-bills outstanding. We intend to continue with the extra auctions as long as this is needed to support the market for T-bills.

#### Only buyers in the market

After several months of increasing uncertainty in the fixedincome and credit market, developments accelerated in mid-September due, among other things, to the bankruptcy declaration of the US investment bank Lehman Brothers. Demand for secure government securities increased at the same time as other interest-bearing securities such as mortgage bonds were sold in the market. Few participants were willing to sell T-bills at the same time as demand became increasingly inelastic; investors seemed to want to have bills regardless of the yield. In this situation, trading does not function and price formation is disrupted. It is difficult for our dealers to quote offer rates to their customers. To be able to sell bills, the dealers must know that they can find someone to buy bills from, i.e. an investor who is prepared to sell bills.

The possibility of selling bills in a situation of this kind becomes dependent on the Debt Office's offer to temporarily lend bills. For many years, we have been committed to repoing out T-bills (and other government securities) to our dealers in temporary squeeze situations. Our commitment does not have any upper volume limit. This is important since the individual dealers must be able to count on this support being there the whole time. We charge a price to limit the use of our repos: the interest rate for lending money to the state via repos of this kind was 25 basis points lower than the Riksbank's repo rate.

On the morning of 18 September, we made the assessment that only very extensive support through our market commitment would make it possible to keep the T-bill market open. There is a problem here, however. While we

#### WHAT DO OUR MARKET SUPPORT REPOS ENTAIL?

Market support repos mean that we sell a T-bill (or a government bond) at the same time as we repurchase it with a one-day settlement. To give an example: let us say that we repo out a bill on Tuesday. We then deliver it on Wednesday and receive it back on Thursday. It could be said that we lend it between Wednesday and Thursday in a transaction that is agreed on Tuesday. By Wednesday, the dealer has hopefully found someone who wishes to sell the bill in question. Otherwise, the transaction can be repeated. When the Debt Office lends a bill in this way, we lend the money for the same period as the repo, i.e. from Wednesday to Thursday. During this period, the Debt Office has accordingly more money which is either needed to fund central government current payments or can be invested with interest. We charge 25 basis points for our repos in T-bills.

have no upper limit for our market commitment, we cannot in practice lend T-bills for an unlimited number of billion kronor. This would increase the reported central government debt and lead to an unreasonably extensive cash management. The market participants realise that there is such a limit. For this reason, expectations that the extent of repos is starting to approach this limit can release a situation where demand increases in an uncontrollable way and we have to abruptly close the repo facility.

#### Market commitment on hold

Some dealers stated that they did not consider that they were able to indicate the rates at which they were prepared to sell T-bills. There was a threat that price transparency would abruptly disappear. T-bill yields were on their way down to unnaturally low levels. The fact that the short T-bill yields in the United States had been pushed down below 0.5 per cent for similar reasons increased the pressure on us to act. There was a risk that also international participants would attempt to make use of this opportunity to obtain government securities.

We needed to make a quick assessment of the situation and the various possibilities. Information was also needed from our dealers. To be able to obtain information from market participants and to discuss different possibilities, it was necessary to announce a cessation of continued market support in the form of repos in T-bills during the decision-making phase. In this way, we prevented any participant obtaining access to better information than others. At 10 am, we issued a press release that this commitment had ceased and that a decision would be announced at 3 pm on how the situation would be dealt with.

It was rapidly clear that the market commitment would not work as intended in the situation that had arisen. The extent could be unreasonably large and the fixed pricing we apply in advance (linked to the Riksbank's repo rate) would not function if the bill yields fell rapidly. On the other hand, we made the assessment that trading in T-bills would probably come to a halt without our support. This would have been unfortunate in an otherwise uncertain situation.

#### Frequent auctions instead of repos

We decided instead to meet the demand for T-bills by frequent large issues. The primary market had to replace the loss of the secondary market. Instead of turning to dealers in the secondary market, investors were able (via dealers) to buy T-bills in our auctions. Frequent auctions were needed if this was to be a viable alternative. We started to issue bills several times a week, in addition to the ordinary bill auctions, which were held every other week.

The auction form has several advantages. It is open to all, the volumes are known in advance and the pricing is wholly transparent; we decide on the volume and the market the yield. The investor who is eager to purchase bills can then always do so by making an offer at a low rate in the auctions. A low rate is equivalent to a high price.

The turbulence in the fixed-income market was and is global and is not limited either to Sweden or to T-bills.

The situation that had arisen in the bill market was rather the tip of an iceberg.

Our decision on how to deal with the situation in the T-bill market was therefore made after consultation with the Riksbank at the same time as the Government Offices were informed informally. After an overall judgment of the situation, we decided to issue SEK 50 billion in bills in the next few days. We also announced that our assessment was that the total extent of the extra issues could amount to at most SEK 150 billion.

By advertising such a large volume, we wanted to indicate that there would continue to be good opportunities to buy T-bills.

## Large additional volume calms the market down

At the first extra auction for SEK 25 billion, offers were received equivalent to around SEK 70 billion. The bids (expressed in rate terms) were, however, not at all panicrelated and we reduced the volume already at the second auction, which was also for SEK 25 billion. A number of bids were made at a relatively high rate, thus not reflecting an exceptionally high level of demand.

Our interpretation of developments is that once investors realised that there was not going to be an acute shortage of T-bills, they were then willing to wait rather than purchasing bills with a very low yield.

The extra issues are primarily a way of maintaining a market for T-bills in a very turbulent situation. These issues do not correspond to any borrowing requirement but may be regarded as part of our market commitment.

In normal cases, we use our market support in the form of repos. Repos in T-bills entail an increase in the reported central government debt and that we will receive more cash that we may need to invest. By issuing bills in auctions, we obtained control of the size of the volumes that could be involved instead of allowing the demand for repos to determine the extent. These measures can thus be regarded as replacing repos by a volume-limited and controllable market support.

#### Investment through mortgage bonds

Since the extra issues do not correspond to a borrowing requirement, we must invest the surplus in the market. This is to take place at the best return while taking risk into account. The possibility of placing large surpluses in, for example, the dollar market was limited both by high costs to protect the exchange rate risk in the dollar and by the fact that the assets that would then come into question seemed uncertain from the point of view of credit risk.

By far the best alternative was therefore to invest the funds from the T-bill auctions in banks with Swedish covered bonds as collateral. The Debt Office has done this through reverse repos in mortgage bonds, which means that we purchase mortgage bonds in a commercial transaction where we at the same time sell them with a subsequent settlement date. The funds from the auctions have predominantly been invested in this way. The maturities have also mainly matched the maturities for the bills sold. We consider this form of investment reliable and have previously used it occasionally.

Given that the investments were made in this way, the banks can use illiquid mortgage bonds as collateral for loans from us. They use the borrowed money to buy Tbills, but are none the less in a more favourable situation. The T-bills can namely be used as collateral for loans from other counterparties. The net result of the transactions is thus that the banks do not need to borrow against mortgage securities in the market and instead can use government securities as collateral for loans from, for example, other banks. In this way, their current funding is facilitated despite the whole process (apparently) beginning with their lending money to the state.

In collaboration with the Riksbank, we could note before our decision that our measures fitted in well with the Riksbank's view of the measures that were needed. An effect of our T-bill issues was that we could also support mortgage financing by providing the banks with securities that functioned better as collateral. The stability plan announced by the Government on 20 October also includes an amendment to the Central Government Borrowing and Debt Management Act, which provides a clear legal basis for the action of the Debt Office.

At a later stage, the Riksbank has lent kronor in auctions where the bank has received, among other things, covered mortgage bonds as collateral. The need to make reverse repos in mortgage bonds with us has thereby decreased and our extra T-bill issues have had a more focused objective of supporting liquidity in this market.

#### Phasing-out of the extra T-bills

The extra issues will be phased out. The time and speed at which this happens will be determined by market conditions. At the time of the decision on extra issues, our outstanding stock of T-bills was only just over SEK 50 billion. The unusually low volume was due to the large surpluses in central government payments during the preceding months. At the same time as demand rose quickly, the supply was very limited, which contributed to the problems. In December and January, however, the central government borrowing requirement will be large. There will therefore be relatively large volumes of T-bills on sale in the ordinary funding programme. It will then be possible to replace the bills issued in extra auctions by ordinary bills.

The larger borrowing requirement in 2009 compared with the previous forecast from June also means that the outstanding stock will increase. The need for extra bills should therefore also decrease in the long term. The Government's plan to ensure stability in the financial system may also entail that there is less demand for extra issues.

Another issue is how the secondary market for T-bills will return to functioning normally and when the pricing will be normalised and restored. It is conceivable here that we will continue with relatively frequent auctions. This can be done by spreading the volumes at the ordinary auctions over more occasions.

Frequent ordinary auctions in an environment without extra auctions and without our normal market support in the form of repos should be able to contribute to a market situation for bills that balances our borrowing requirement with investors wanting to obtain T-bills. When price formation of this kind is established, there may be prerequisites for the secondary market to resume functioning. In this situation, it should also be possible to re-introduce market support to even out more temporary shortage situations. We will take up these issues in a future dialogue with the market participants.

In order for the market for T-bills to function satisfactorily, there must also be substitutes in the form of shorter securities such as certificates issued by companies and mortgage institutions. It is then a matter of restoring both liquidity and confidence in the market, and that portfolio managers design their rules for management of shorter investments on the basis of a reality where T-bills are a limited part of possible placements.

> Thomas Olofsson Head of Funding

## Market information

Source: Swedish National Debt Office, unless otherwise stated

#### NOMINAL BONDS, OUTSTANDING VOLUMES, 30 SEPTEMBER 2008

Maturity date	Coupon %	Loan no.	SEK million
2009-01-28	5.00	1043	61,662
2009-12-01	4.00	1048	53,001
2011-03-15	5.25	1045	48,354
2012-10-08	5.50	1046	55,203
2014-05-05	6.75	1041	58,251
2015-08-12	4.50	1049	38,991
2016-07-12	3.00	1050	41,489
2017-08-12	3.75	1051	50,026
2019-03-12	4.25	1052	36,005
2020-12-01	5.00	1047	52,701
Total benchmarks			495,683
Non-benchmarks			1,009

#### NOMINAL BONDS, AUCTION DATES

Announcement date	Auction date	Settlement date
2008-11-12	2008-11-19	2008-11-24
2008-11-26	2008-12-03	2008-12-08
2009-01-07	2009-01-14	2009-01-19
2009-01-21	2009-01-28	2009-02-02
2009-02-04	2009-02-11	2009-02-16
2009-02-18	2009-02-25	2009-03-02
2009-03-04	2009-03-11	2009-03-16
2009-03-18	2009-03-25	2009-03-30
2009-04-01	2009-04-08	2009-04-15
2009-04-15	2009-04-22	2009-04-27
2009-04-29	2009-05-06	2009-05-11
2009-05-12	2009-05-19	2009-05-25
2009-05-27	2009-06-03	2009-06-08
2009-06-10	2009-06-17	2009-06-23

#### T-BILLS, OUTSTANDING VOLUMES, 30 SEPTEMBER 2008

Maturity date	SEK million
2008-10-15	45,296
2008-11-19	42,658
2008-12-17	50,009
2009-03-18	17,656
Total T-bills	155,619

#### INFLATION-LINKED BONDS, OUTSTANDING VOLUMES 30 SEPTEMBER 2008

Maturity date	Coupon %	Loan no.	SEK million
2008-12-01	4.00	3101	17,039
2012-04-01	1.00	3106	33,557
2014-04-01	0.00	3001	4,892
2015-12-01	3.50	3105	75,800
2020-12-01	4.00	3102	47,023
2028-12-01	3.50	3104	48,348
2028-12-01	3.50	3103	4
Total inflation-lin	ked bonds		226,663

#### RATING

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

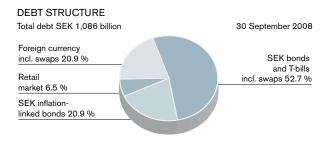
#### T-BILLS, AUCTION DATES

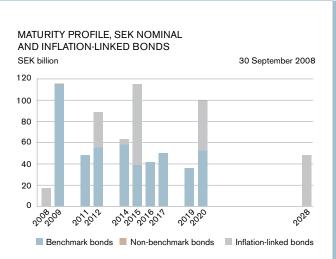
Announcement date	Auction date	Settlement date
2008-11-05	2008-11-12	2008-11-14
2008-11-19	2008-11-26	2008-11-28
2008-11-28	2008-12-05	2008-12-09
2008-12-03	2008-12-10	2008-12-12
2008-12-08	2008-12-15	2008-12-17
2008-12-30	2009-01-07	2009-01-09
2009-01-05	2009-01-13	2009-01-15
2009-01-14	2009-01-21	2009-01-23
2009-01-20	2009-01-27	2009-01-29
2009-01-28	2009-02-04	2009-02-06
2009-02-11	2009-02-18	2009-02-20
2009-02-25	2009-03-04	2009-03-06
2009-03-11	2009-03-18	2009-03-20
2009-03-25	2009-04-01	2009-04-03
2009-04-08	2009-04-15	2009-04-17
2009-04-22	2009-04-29	2009-05-04
2009-05-06	2009-05-13	2009-05-15
2009-05-20	2009-05-27	2009-05-29
2009-06-03	2009-06-10	2009-06-12
2009-06-17	2009-06-24	2009-06-26

#### INFLATION-LINKED BONDS, AUCTION DATES

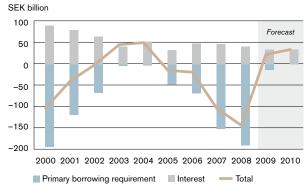
Announcement date	Auction date	Settlement date
2008-11-20	2008-11-27	2008-12-02
2009-01-15	2009-01-22	2009-01-27
2009-02-26	2009-03-05*	2009-03-10
2009-03-12	2009-03-19	2009-03-24
2009-05-07	2009-05-14	2009-05-19

\* Exchange auction



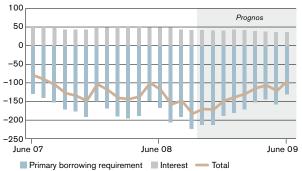


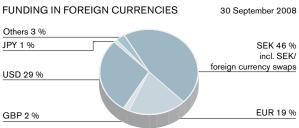
#### CENTRAL GOVERNMENT NET BORROWING REQUIREMENT, 2000-2010



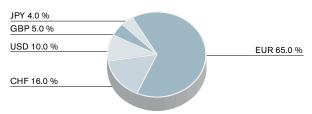
#### CENTRAL GOVERNMENT NET BORROWING REQUIREMENT, 12 MONTHS

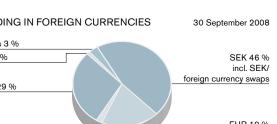
SEK billion

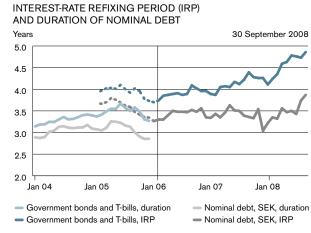




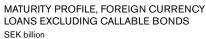
BENCHMARK FOR THE FOREIGN CURRENCY DEBT COMPOSITION







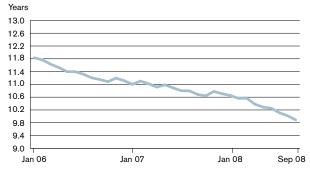
On 1 January 2006 the measure of maturity was changed from duration to interest-rate refixing period (IRP).



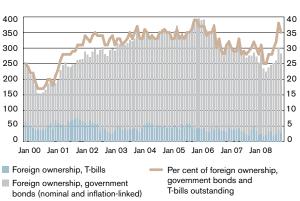
30 September 2008



#### INTEREST-RATE REFIXING PERIOD (IRP) OF INFLATION-LINKED DEBT

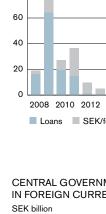


#### FOREIGN OWNERSHIP OF GOVERNMENT BONDS AND T-BILLS INCLUDING REPO POSITIONS SEK billion



Source: The Riksbank

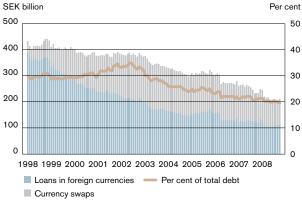
Per cent



Н

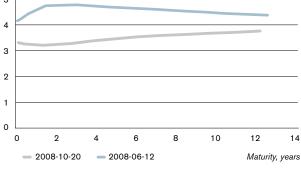
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NANCIAL MARKE

YIELD CURVE, SWEDISH GOVERNMENT SECURITIES
Per cent
5



HISTORICAL INTEREST RATES
Per cent
7



**BREAK-EVEN INFLATION** 



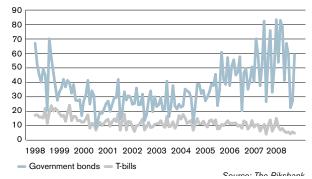
HISTORICAL EXCHANGE RATES

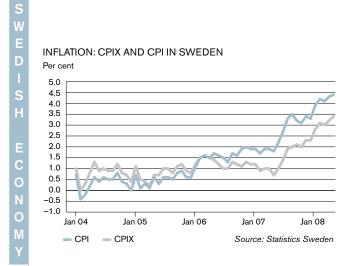


INTEREST RATE SPREAD VS GERMANY, 10-YEAR



DAILY TURNOVER, SWEDISH GOVERNMENT SECURITIES Total turnover including options and forward contracts, SEK billion





Per cent 80 70 60 50 40 30 20

0 1998 1999 2000 2001 2002 2003 2004 2005 0206 2007 2008 2009 - Euroland - Sweden Source: Statistics Sweden, OECD

	Nominella	Inflation-linked			
Primary dealers	government bonds	government bonds	T-bills	Telephone	Reuter page
Royal Bank of Scotland	•		•	+44 207 6785965	
Barclays Capital	•			+44 207 773 8275	
Danske Markets/Consens	us 🔍	•	•	+46 8 568 808 44	PMCO
Nordea	•	•	•	+45 33 33 17 58 /	PMUB
				+46 8 614 86 55	
SEB	•	•	•	+46 8 506 231 51	PMSE
Handelsbanken Markets	•	•	•	+46 8 463 46 50	PMHD
Swedbank	•	•	•	+46 8 700 99 00	PMBF

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#### GENERAL GOVERNMENT DEBT IN RELATION TO GDP

## Glossary

Benchmark bond > A bond in which the Debt Office has undertaken to maintain liquidity. Normally has 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 high 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.

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, whose value 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.

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-linked bond > A bond where the holder receives a fixed interest rate and compensation for inflation during the maturity. This means 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.

Liquidity bill > T-bill with a 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.

Reference loan > A benchmark bond traded as a two, five or ten-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.

Central Government Borrowing - Forecast and Analysis is published three times a year.

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