RIKSGÄLDEN
SWEDISH NATIONAL DEBT OFFICE

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Basis for evaluation of central government debt management

2008 and 2009

Contents

1 Objectives of central government debt management

The Debt Office is responsible for managing the central government debt: refunding and managing outstanding debts and raising new loans for the state. Borrowing takes place mainly by the Debt Office issuing government bonds and T-bills. These are purchased primarily by funds, insurance companies and financial institutions. A minor part of the central government debt is funded through savings products targeted on private individuals and other small investors. The Debt Office participates in both the Swedish and foreign fixed income market.

The overarching goal for central government debt management is to minimise the long-term cost of the central government debt without taking too great risks. Furthermore, this management shall take place within the framework of the requirements set by monetary policy. The Debt Office shall also contribute to improving the functioning of the market for government securities. The better the market works, the more investors will be prepared to pay for the securities we sell and the lower will be the state's borrowing costs. Market and debt maintenance are therefore part of the Debt Office's task. The Debt Office also engages in active management of foreign currency aiming at reducing the costs of central government debt.

Central government debt management takes place in accordance with the annual guidelines adopted by the Government after proposals from the Debt Office. These guidelines specify the benchmarks for the composition and maturity of the central government debt.

The largest part of the central government debt consists of nominal loans in kronor. Otherwise, the central government debt consists of inflation-linked krona debt and foreign currency debt. Allocating the central government debt to several types of debt is one way of reducing the risk of the central government debt.

The maturity of the central government debt is stated in terms of average interest rate refixing period. The benchmark for the maturity of the debt acts as a restriction on borrowing. Since the yield curve generally has a positive slope, it is more expensive to borrow in long maturities. At the same time, greater risk is associated with short term borrowing, since new loans must be raised every year for a large part of the debt on terms that are not known in advance. The asset managers who lend to the state mainly require investments with long maturities. It is therefore not reasonable to borrow too much in short maturities. By diversifying the maturity profile, the risk of a rapid increase in interest costs due to rising market rates is reduced. The benchmark set by the Government for the average interest rate refixing period is therefore based on an assessment of desired balance between cost and risk.

Within the framework of the Government's guidelines, the Debt Office makes different strategic decisions relating to management and borrowing. This concerns, for example, how to achieve the debt's overall interest rate refixing period, the size of the interval that there should be around the set benchmarks as well as the currencies to be included in the foreign currency debt and their respective shares. The Debt Office's Board is also able to make decisions on interest rate and currency positions in foreign currency.

Guidelines for 2008

According to the guidelines for 2008, the composition of the central government debt shall be steered towards:

- 15 per cent foreign currency debt. Amortisation of the foreign currency debt should amount to SEK 40±15 billion during the year.
- 25 per cent inflation-linked krona debt. The Debt Office shall establish a deviation interval around the share of inflation-linked debt.
- 60 per cent nominal krona debt.

According to the guidelines, the maturity of the whole central government debt shall be steered towards 4.8 years at the end of 2008.

The Debt Office may take active positions with derivative instruments with the intention of reducing the costs of central government debt, while taking into account risk. The limit for position-taking shall be SEK 600 million measured as daily Value-at-Risk at 95 per cent probability. The risk limitation applies to all positions except those relating to the krona's exchange rate for other currencies. The risk mandate applies both to the strategic and the operational level.

The guidelines also state that we shall borrow directly from private individuals and other smaller investors, for example, through lottery bonds. The goal is to achieve the greatest

possible saving in relation to borrowing through government bonds or T-bills.

Task in 2008

In the guidelines, the Government has given the Debt Office the task of

- Continuing to review the analyses and assessments on which the Government's decision on target shares for the foreign currency and inflation-linked debt is based.
- Reviewing the function and design of the repo facility.

Amended decisions in 2008

- In August 2008, the Government decided to change from amortisation to share steering of the foreign currency debt. This was a result of the share coming close to the target of 15 per cent.
- In October 2008, the Government decided to make it possible for the Debt Office to raise loans for the state to meet the need of sovereign securities with different maturities if this is needed to safeguard financial stability.

Guidelines for 2009

According to the guidelines for 2009, the composition of central government debt is to be kept unchanged compared with the previous year and to be steered towards:

- 15 per cent foreign currency debt (±2 percentage points)
- 25 per cent inflation-linked krona debt (long-term)
- 60 per cent nominal krona debt (residual)

According to the guidelines, the maturity for the different types of debt shall be:

- Foreign currency debt: 0.125 years
- Inflation-linked krona debt: 10.1 years (at the end of 2009)
- Nominal krona debt: 3.5 years

The Debt Office may take active positions with derivative instruments. The limit for position-taking shall be SEK 600 million measured as daily Value-at-Risk at 95 per cent probability. Within the aforesaid limit, the Debt Office may take positions in kronor in relation to other currencies of at most SEK 15 billion. The risk limitation applies to all positions except those relating to the krona's exchange rate for other currencies. The risk mandate applies both to the strategic and the operational level.

According to the guidelines, we shall contribute to reducing the costs of the central government debt by retail market borrowing. The goal is to achieve the greatest possible saving in relation to borrowing through government bonds or T-bills.

The Government has given the Debt Office the right during 2009 to cater for the need for central government loans with different maturities if needed to safeguard financial stability. The Debt Office is given the right to have outstanding loans for this purpose up to a maximum nominal value of SEK 200 billion with a view to countering the acute shortage of government securities while at the same time facilitating funding for the banks and mortgage institutions. The aforesaid loans do not affect the aggregate central government cash flows (SSK) measure[1] and thus not either the control of debt shares or the maturity.

Task in 2009

In the guidelines, the Government gives the Debt Office the task of:

- Reviewing the analysis and the assessments on which the Government's decision on the maturity of the nominal debt is based.
- Analysing and reporting on the measures undertaken by the agency within the central government policy task in connection with the financial and credit turbulence.
- Reporting at the latest by 30 April 2009 on how a more long-term and cohesive system could be designed taking into consideration the demands made within the framework of debt and market maintenance and the tasks of meeting the need of central government loans with different maturities. Furthermore, the Debt Office should report the additional measures which, as far as possible, can contribute to safeguarding the functioning of the financial market in times of stress in the financial system.
- Producing a main document with a view to providing a comprehensive picture of the decisions taken over the years and which affect the current central government debt management.

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[1] The benchmark for how central government debt is to be allocated between the different types of debt is 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 call this measure the aggregate cash flows of central government debt (SSK).

Amended decision in 2009

- In March 2009, the Government abolished the maturity target with a view to being better prepared for larger borrowing requirements and making possible borrowing in long bonds.
- In May 2009, the Government decided to increase the Debt Office's position mandate to at most SEK 50 billion, in the light of the very weak krona and the current uncertainty about the borrowing requirement.

Notes for readers

In Chapter 2, we give an account of the costs and risks that the central government debt gave rise to in 2008 and 2009. Chapter 3 contains a summary of the strategic decisions we have taken during these two years. This is followed by a review of the operational management, see Chapters 4–6. Our borrowing activity, the active management in foreign currency and retail market borrowing in 2008 and 2009 are described here. Chapter 7 contains a review of the market maintenance we have engaged in to improve the functioning of the market for government securities. Finally, there is an overall assessment of results and goal fulfilment.

2 Costs and risk of central government debt management

2.1 Interest payments on the central government debt

Interest payments on central government debt in 2008

Interest payments were SEK 33.2 billion during 2008. The set appropriation was SEK 40.6 billion. This difference is mainly explained by higher issue premiums than expected, which is in turn explained by lower market yields than those on which the calculation of the appropriation was based. The higher premiums were counteracted slightly by higher capital losses in buybacks. Exchange rate gains were also higher than expected.

Compared with 2007, interest payments decreased by SEK 14.0 billion. SEK 9.0 billion of the difference between years is attributable to exchange rate differences and SEK 4.5 billion to issue premiums. The size of the exchange rate differences depends on the development of exchange rates for loans in foreign currency between the date when the loan was raised and when it matures. During the autumn of 2008, the Debt Office also had investments in foreign currency since the cash payment for Vin & Sprit was paid in foreign currency. These investments generated gains when they matured since the krona had weakened.

Interest on loans in Swedish kronor remained at approximately the same level as during 2007. The fact that interest payments did not decrease despite decreasing central government debt is partly due to inflation-linked bond 3101 maturing. A large part of the interest on an inflation-linked bond is paid on maturity. Interest on loans in foreign currency decreased by just over SEK 1 billion. Current interest payments remained overall at an unchanged level compared with 2007.

Interest payments on central government debt in 2009

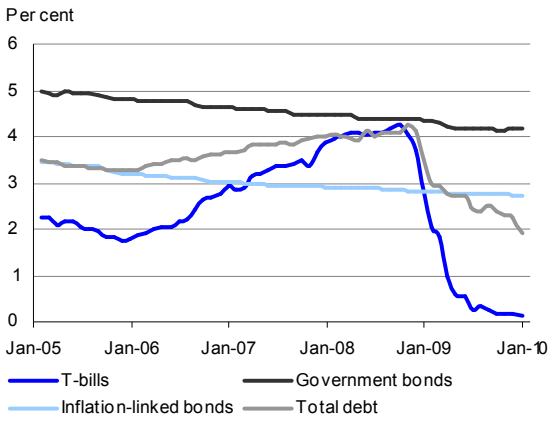
Interest payments were SEK 31.4 billion in 2009. The set appropriation was SEK 33.7 billion. This difference is mainly explained by lower market interest rates than those on which the calculation of the appropriation was based. This led to lower yields on loans in nominal kronor and higher issue premiums than expected. The lower yields were set off by exchange rate losses being greater than expected.

Compared with 2008, interest payments decreased by SEK 1.8 billion. Lower market interest rates led to interest payments for loans in nominal kronor, foreign currency and deposits and lending altogether decreasing by SEK 17.7 billion. Issue premiums and exchange rate losses decreased by SEK 2.8 and SEK 2.3 billion respectively. At the same time, exchange rate differences increased by SEK 20.4 billion. The size of exchange rate differences depends on the development of exchange rates for loans in foreign currency between the date when the loan was raised and when it matures. Gains and losses are also affected by the forward contracts which we use to achieve the foreign currency exposure we have decided on for each currency.

2.2 Running yield – a measure of the cost of central government debt

The cost of central government debt can be calculated by accruing interest payments. With the running yield as a measure of cost, the payments are calculated as being evenly spread over the time to maturity of the instrument. The measure is calculated at the end of the month as a nominal weighted average of historical yields. Running yield for the central government debt as a whole and our largest loan instruments in Swedish kronor are shown in Figure 1.

Figure 1 RUNNING YIELD



Note: The average running yield of the total central government debt has been calculated including swaps and liquidity management instruments.

The average running yield for the whole of the central government debt rose marginally during 2008 to subsequently fall sharply for the whole of 2009. The lower market rates have a full impact on the running yield on all

loans and instruments with short maturities. The running yield of the bond stock changes considerably more slowly, however, due to a lower rate of turnover in the outstanding amount. At the end of 2009, the average running yield on the central government debt was 1.9 per cent.

Nominal bonds

The running yield for the total stock of nominal bonds has gradually decreased since 2007 when it was 4.48 per cent. At the end of 2009, it had fallen to 4.15 per cent. The lower running yield is explained by the issues having taken place at lower market interest rates than the historical average. At the end of 2008, we had sold bonds for the equivalent of SEK 47 billion at an average yield of 3.82 per cent which was 0.31 percentage points lower than in 2007. During 2009, nominal bonds were sold for SEK 110 billion at an average yield of 3.17 per cent, which was 0.65 percentage points lower cost for new borrowing compared with the previous year. The 30-year bond which was sold at a yield of 3.75 per cent was included in the average for 2009.

T-bills

The running yield for outstanding T-bills changes quickly to the current market interest rate. This is due to the whole bill stock being rolled over at new yields within the course of six months. In 2009, the running yield fell consequently apace with rapidly falling market rates. The average running yield for outstanding stock bills was calculated in December 2009 at 0.13 per cent, which can be compared with 2.82 per cent at the end of 2008. During the year, we issued just over SEK 300 billion in bills, a reduction from the volume in 2008 of SEK 450 billion. The outstanding stock was SEK 115 billion at the year-end 2009 compared with SEK 139 at the turn of 2008.

Inflation-linked bonds

The running yield for the inflation-linked bond stock at the end of 2009 was 2.77 per cent, which was a slightly lower level compared with the previous year. For bonds sold in 2009, the cost was 1.42 per cent. This was 0.37 percentage points lower yield compared with 2008. The lower borrowing cost is explained by the general fall in rates in both the nominal and inflation-linked fixed income market. Gross sales amounted to just over SEK 10 billion. A third of the sales took place in outright auctions. The remainder was sold by switch auctions and exchanges.

2.3 Running yield at risk

The risk of central government debt is partly governed by the maturity benchmarks for the three types of debt. The maturity is stated in terms of the average interest rate refixing period which affects how much the average running yield of the central government debt changes.

Figure 2 RISK MEASURED AS STANDARD DEVIATIONS OF MONTHLY CHANGES IN RUNNING YIELD

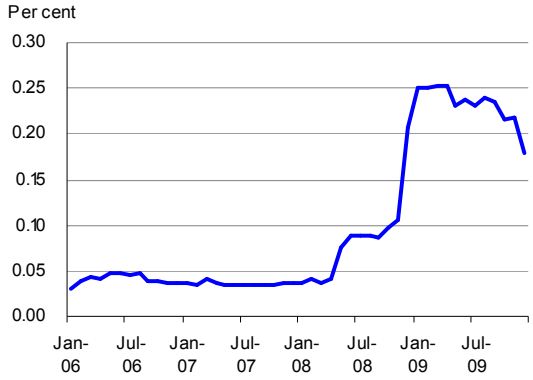


Table 1 RUNNING YIELD (RY)[1]

	Government bonds			T-bills[4]			Inflation-linked bonds[5]		
	2007	2008	2009	2007	2008	2009	2007	2008	2009
Total debt[2] (SEKbn)	511	508	505	180	139	115	216	207	200
Borrowing[3] (SEKbn)	61	47	110	318	453	304	17	20	10
RY total debt (%)	4.48	4.36	4.15	3.89	2.82	0.13	2.94	2.83	2.77
RY borrowing (%)	4.13	3.82	3.17	3.60	3.76	0.43	1.85	1.79	1.42

1 In order to compare the running yield for nominal and inflation-linked instruments, the running yield for inflation-linked bonds must be adjusted for inflation.
2 Assumed loans are not included.
3 Volume issued in auctions and sale part of exchange transactions.
4 Including liquidity bills and extra bills outstanding at the year-end 2008/2009.
5 The volume of inflation-linked bonds includes accrued inflation.

The maturity benchmarks are intended to control and limit the risk in the expected cost. We expect, for example, that the variations in the cost of central government debt will be higher for a short maturity than for a long maturity benchmark. An uncertainty about the future, i.e. expected risk, is not to be confused with a historic outcome, which we show of in Figure 2.

Expected risks are forward-looking and can, for example, be calculated with the aid of Cost-at-Risk techniques. Figure 2 does not show expected risks but variations in the monthly outcome. The risk is calculated as a standard deviation in one year's rolling monthly changes of the cut-off yield. The variation of the historical cut-off yield is one way of describing the risk "wise after the event".

Ex post the risk was stable until mid-2008. Thereafter, the risk level increases coinciding with increased uncertainty in the finance market. However, there is some lag due to the risk level being calculated with the aid of a one-year historical account.

The crisis culminated in autumn 2008. We saw, in particular, falling interest rates on T-bills and an increasingly weak krona exchange rate. All in all, costs feel while risk increased since the difference between individual monthly outcomes increased. In early 2009, the annual cost was around SEK 30 billion at the same time as the variation in the running yield peaked at 25 basis points. The remaining quarters of 2009 entailed continued high risk although with a falling risk level.

It is worth bearing in mind that the central government debt management is limited by more restrictions in addition different maturity targets. The guideline decision means, among other things, that we take into account the percentages of central government debt and take into consideration the whole of the central government balance sheet in an Asset and Liability Management (ALM) perspective[2].

[2] *The Government has stated that the central government debt should be viewed in an overall balance sheet perspective, in such a way that the characteristics of the debt should be considered taking into account the size of and composition of the state's assets (in a broad sense). This is usually described as an asset liability management (ALM) approach.*

3 Strategic decisions

3.1 The maturities of the different types of debt

The Government decided in the 2008 Guidelines for Central Government Debt Management that the maturity benchmark for the whole debt, which was to be achieved by the end of the year, should be 4.8 years. The level of the comprehensive maturity is based in practice on the Debt Office's analyses and deliberations on the maturity of the respective debt component. For 2008, this meant that the maturity of the nominal krona debt was 3.5 years, the maturity of the inflation-linked debt 10.6 years and the maturity of the foreign currency debt 0.125 years. The benchmark for the comprehensive maturity is calculated by weighing together the proposed benchmark shares, i.e. 15 per cent foreign currency debt, 25 per cent inflation-linked debt and 60 per cent nominal debt.

The comprehensive maturity was a tool for the Government's control of the maturity of the central government debt at an overarching level. By specifying a benchmark for the comprehensive maturity, the Government could decide on the direction at an overarching level and delegate implementation to the Debt Office. The Debt Office allocated the maturity among the debt components in such a way as to achieve the comprehensive maturity.

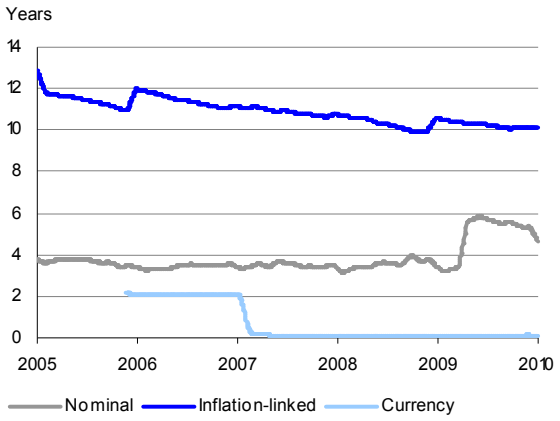
For 2009, the Government decided in the guidelines on separate benchmarks for maturity in the respective type of debt. These were to be 3.5 years for the nominal krona debt, 10.1 years for the inflation-linked debt and 0.125 years for the foreign currency debt respectively. The main reasons for the change were to make steering more transparent. As the benchmark for the maturity of the foreign currency debt was made as short as possible and the maturity of the inflation-linked debt is difficult to steer in the short term, the maturity benchmark meant in practice determining the maturity of the nominal krona debt.

Slight changes were also made in the control of debt shares. From 2009 onwards, the benchmark of the inflation-linked debt was to be achieved in the long term. This change was reasonable in the light of the growth of the inflation-linked share due to a rapid reduction in the central government debt as a whole. Buybacks of outstanding bonds were considered to be unsuitable from a cost point of view and long-term control appeared to be a better alternative.

Already early on in 2009, the prerequisites for the current year's guidelines changed. The forecasts for the future borrowing requirement were adjusted upwards at a fast rate at the same time as there was a sharp fall in yield rates. The prerequisites for issuing government bonds with a long maturity appeared to be very favourable. In response to a recommendation by the Debt Office, the Government revoked the benchmark decision for the maturity of the nominal krona debt, which enabled the Debt Office to issue a large volume of long bonds.

In March, maturity rose as a consequence of the Debt Office issuing 30-year bonds for a volume of SEK 38 billion. The interest rate refixing period of the nominal krona debt remained at around 5.5 years for the rest of the year.

Figure 3 THE MATURITIES OF TYPES OF DEBT



Note: 30 days moving average.

3.2 Amortisation of foreign currency

According to the Government's original guidelines for 2008, the benchmark for amortisation of the foreign currency debt was SEK 40 billion. The Debt Office was allowed to deviate from the benchmark by ± SEK 15 billion.

The Debt Office amortised a total of SEK 37 billion during 2008. Maturing foreign currency bonds together with other payments amounted to SEK 42 billion. During the year, we did not issue any foreign currency bonds. However, we created an exposure in foreign currency equivalent to SEK 5 billion by borrowing in nominal government bonds and exchanging them for foreign currency borrowing through swap agreements.

On 28 August 2008, the Government decided to abolish the benchmark for the amortisation rate and instead control the foreign currency debt by a benchmark for its share of the total debt. Accordingly, the share of foreign currency debt is to be 15 per cent of the central government debt. A deviation interval of ±2 percentage points is applied.

The reason for this change was that the share of foreign currency debt had approached 15 per cent and that the Government had already decided in the guidelines for 2007 on a new control system for central government debt management. Underlying this change was several years' work to reduce the size of the foreign currency debt. However, the immediate cause was that the income from sale of Vin & Sprit equivalent to SEK 50 billion was in foreign currency.

Among other things, the control system meant that the Government decides on benchmarks for the percentage of inflation-linked krona debt and of foreign currency debt. The benchmark for the inflation-linked krona was set at 25 per cent and the benchmark for the foreign currency debt at 15 per cent. No benchmark was set for the third type of debt as its percentage follows on from that of the other two.

The Swedish krona weakened very sharply during the latter half of 2008 to levels that the Debt Office considered to be unreasonable in a medium-term perspective. Since the amortisation mandate was no longer in force, there was no longer any possibility of deviating from a set target for the size of amortisation. However, the Debt Office took a strategic position for a stronger krona, which is described in section 3.5.

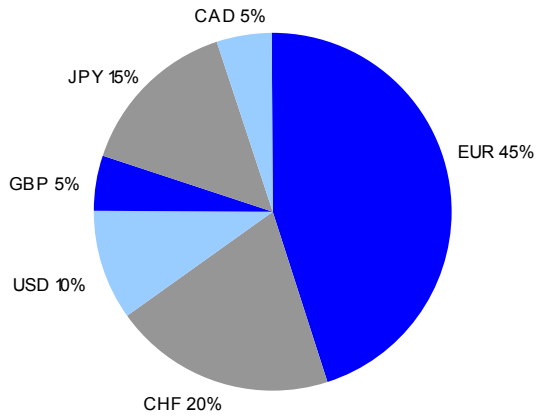
3.3 Distribution of the foreign currency debt

The Debt Office decides the allocations of currency shares in the foreign currency debt on behalf of the Government. This debt is distributed over a number of currencies in a benchmark portfolio, decided upon by the Debt Office every third year. At the end of 2008, the benchmark for 2006 ceased to apply, at the same time as we adopted a new benchmark for the period 2009–2011.

New benchmark portfolio, 2009–2011

The foreign currency benchmark is intended to find a balance between low expected cost and acceptable risk. Historically, we have endeavoured to obtain an allocation of foreign currencies with a view to limiting the risk since the foreign currency debt has been undesirably large. The focus on the risk aspect, i.e. stable costs calculated in kronor, has traditionally meant a large share of euro. The total share of foreign currency debt is nowadays in line with the target of 15 per cent. It has therefore been possible to tone down our concentration on minimising risk

Figure 4 FOREIGN CURRENCY BENCHNMARK IN 2009



Compared with the previous year's benchmark portfolio[3] the share of euro decreased by 20 percentage points while the debt in Swiss francs and Japanese yen increased by 4 and 11 percentage points respectively. The Canadian dollar, which was not previously included in the benchmark portfolio, was given a share of 5 percentage points.

The Canadian dollar was included in the benchmark primarily to reduce the variation in the cost and the increased shares in Swiss franc and Japanese yen aim to reduce the long-term cost.

The benchmark portfolio is chosen for a three-year period when the borrowing cost is to be evaluated in relation to a neutral reference portfolio. The reference portfolio[4] is a start portfolio with a composition that provides the least possible fluctuation in cost. During 2009, the benchmark portfolio in comparison with the reference portfolio has developed in line with our expectation of lower cost (indicatively SEK 5.8 billion) although with a higher extent of cost variation (3 percentage points higher than the reference portfolio's risk).

The current composition meant during 2009 a slightly higher cost in relation to the previous benchmark. The strengthening of the Canadian dollar was the main reason for the increase in cost although at the same time, this effect was set off by the weaker development of the exchange rate for the yen.

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[3] The benchmark portfolio for 2006–2008 consisted of 65% EUR, 16% CHF, 10% USD, 5% GBP and 4% JPY.

[4] The reference portfolio for 2009–2011 consists of 83% EUR, 14% AUD, 2% GBP and 1% CAD i.e. the risk-minimising portfolio.The reference portfolio has been produced with a so-called "mean variance optimisation" on historic data.

Evaluation of the benchmark portfolio for 2006–2008

The past three year's currency benchmark was concluded at the end of 2008 and shall therefore be evaluated as a whole. The cost of our active choices is reported in terms of deviation in relation to the reference portfolio for 2006–2008[5]. In the benchmark for 2006–2008, the share of debt in Swiss francs was 16 per cent while the share of debt in euro was 65 per cent. This meant a higher share of Swiss francs and a smaller share of euro of 7 percentage points in relation to the comparison portfolio for 2006–2008.

The background to our increasing the share of Swiss franc was an assessment of a lower interest rate cost which would not be fully offset by an unfavourable exchange rate development. These two factors together would contribute to a lower borrowing cost. Combined with a stable relation to the Swedish krona, we considered that there were good reasons to increase the percentage of debt in Swiss francs in relation to the higher euro percentage in the comparison portfolio.

During the first two years of the evaluation period, the Swiss franc weakened in relation to the euro although it strengthened at the end of the period. Over the period as a whole, the Swiss franc strengthened slightly in relation to the euro. The unfavourable exchange rate movement was counterbalanced, however, by lower interest cost in Switzerland in relation to the euro market. Viewed over the whole three-year period, the cost of the foreign currency debt was SEK 200 million lower compared with risk-minimising portfolio for the period. This deviation entailed a slightly higher variation in the cost of the foreign currency debt.

3.4 Share steering

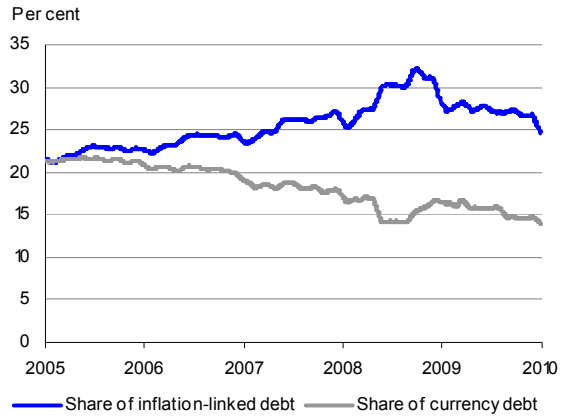
For 2008, the Government decided that the central government debt should consist of 25 per cent inflation-linked debt. The share of foreign currency debt was to be amortised by SEK 40 billion during the year to decrease in the long term to 15 per cent of the total debt. The remaining part of the central government debt would consist of nominal krona debt. At the request of the Government, the Debt Office set a deviation interval around the inflation-linked share of ±2 percentage points.

In August 2008, the Government revoked the amortisation mandate for the foreign currency debt and decided at the same time to introduce share steering of this debt. This change was carried out as a consequence of the share of foreign currency debt approaching 15 per cent. This swift reduction was due to the income for Vin & Sprit equivalent to SEK 50 billion in foreign currency. Since the measure of the size of debt percentages is intended to show the debt's exposure in different types of debt, the share of foreign currency debt decreased the same day that the Vin & Sprit deal was legally binding.

For 2009 the Government decided that the central government debt should in long term consist of 25 per cent inflation-linked debt. The share of foreign currency debt should be 15 per cent and remainder of the central government debt consist of nominal krona debt. In response to a recommendation by the Debt Office, the deviation interval around the inflation-linked share was removed. The reason for the Government changing the control of the inflation-linked krona debt was that the Debt Office has limited ability to influence the share of inflation-linked debt in the short term. It is particularly difficult to reduce the share of inflation-linked debt at the same time as the total debt is being rapidly reduced.

It is difficult to steer the share of inflation-linked debt, other than very roughly. This is because the inflation-linked market is thin and there are neither short inflation-linked loans nor a sufficiently developed market for inflation-linked derivative instruments. Major adaptations to bring the percentage down to the desired level would probably be both expensive and conflict with our endeavour to act in a transparent and predictable way. It was therefore reasonable for the Government to adjust the form of control for 2009 and to accept relatively large fluctuations in the inflation-linked share.

Figure 5 DEBT SHARES 2005–2009



Note: 30 day moving average.

For 2008, the Government set a deviation interval for the amortisation rate at ± SEK 15 billion. And a control interval for the foreign currency share was set at ±2 percentage points for 2009. The deviation/control interval is primarily intended to avoid costs arising from steering measures

[5] *The risk-minimising portfolio for 2006 – 2008 consisted of 72% EUR, 9% CHF, 10% USD, 5% GBP and 4% JPY.*

caused solely by temporary changes in exchange rates. If the amortisation rate/foreign currency share due to exchange rate changes were to be outside the deviation/control interval, measures should be taken aimed at restoring the amortisation rate/foreign currency share to within the interval. This applies unlike the situation when the deviation has other causes. In the latter case, the amortisation rate/percentage of foreign currency debt should be restored to the benchmark.

3.5 Active management

Alongside the ordinary funding of the central government debt, the Debt Office has been allowed to take positions through active management. A position means that we increase or decrease exposure in a particular type of asset on the basis of our assessment of how its value will develop. We can take currency positions in Swedish kronor and interest and exchange rate positions in the international markets. The goal is to reduce the state's costs without incurring too much risk.

A profit in active management reduces the state's interest costs by the same amount. Active management is a normal component of asset management but is unusual among central government debt managers.

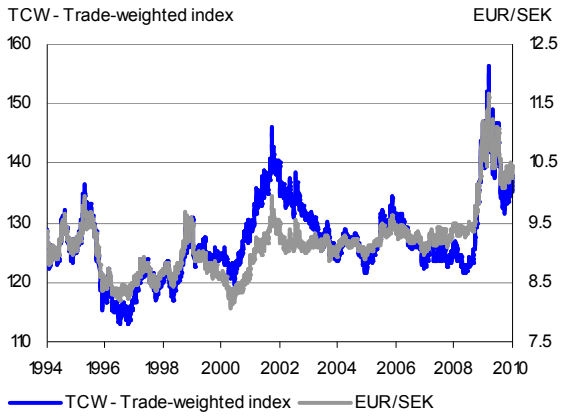
Position for a stronger krona

During the first quarter of 2009, the Debt Office built up a position of SEK 15 billion for a stronger krona in relation to the euro. This was the maximum permitted according to the Government's guidelines. We made the assessment that the krona was so weak that there were reasons to build up a larger position. In response to our recommendation, the Government changed the guidelines so that we were able to increase the position at most to SEK 50 billion. We were also able to take positions in kronor without using derivatives and outside the limit that restricts other position-taking, see below. The position was gradually built up to just under SEK 50 billion up to 31 December 2009.

The background to our proposal to increase the scope for krona positions was also the uncertainty about the foreign currency borrowing requirement during the autumn of 2009. There was great uncertainty about the total borrowing requirement since the crisis could well have developed negatively with an increased borrowing requirement. A rapidly increased need for borrowing has to be partly met by foreign currency borrowing since this market is often deeper than the market for Swedish government securities. Increased foreign currency borrowing is, however, limited by the scope for foreign currency exposure in the central government debt. It ought, bearing in mind the very weak krona, to be cheaper in this situation to accept a greater foreign currency exposure than 15 per cent of the central government debt compared with raising foreign currency loans and hedging the foreign currency exposure.

The krona position is strategic, which means that we can sustainably retain it. A future closing of the position will take place over a long period. Although the krona has strengthened since the lowest rates in early March 2009, it still appears to be undervalued. In our assessment, the krona exchange rate is far from the levels that can be justified by more fundamental conditions. It should therefore be possible for the krona exchange rate to strengthen considerably in time. By increasing currency exposure when the krona is weak and reducing it again when the krona has strengthened, we can reduce the costs of the central government debt.

Figure 6 THE DEVELOPMENT OF THE EXCHANGE RATE FOR THE KRONA



As of 31 December 2009, the first part of the position showed a gain of SEK 0.8 billion and the second, where SEK 33 billion of SEK 35 billion had been made, a gain of SEK 0.9 billion.

Gain on strategic dollar position

In March 2009, we reported a strategic dollar position that resulted in a profit of around SEK 2.5 billion. The decision on the position was taken around the half-year end of 2008 when the dollar was weak in relation to the euro. The position which amounted to 1.6 billion dollars was taken at an average rate of just under 1.58 dollar per euro. After a sharp strengthening of the dollar, we closed it at an average rate of around 1.26 during the first quarter of 2009.

Turbulent period in the financial markets

2008 and 2009 will go down in history as a period when the entire global financial system was close to collapse. It was possible to stabilise this development thanks to powerful measures in the form of government guarantees and capital contributions to the banking sector, as well as measures from central banks with greatly reduced interest rates and liquidity support.

During the first half of 2008, the banks with large exposure to US mortgage credits started to have problems with growing loan losses. These problems grew ever larger to culminate in the autumn of 2008 with the bankruptcy of the bank Lehman Brothers. When the problems in the financial markets became worse during autumn 2008, access to credit was made difficult for businesses and households. With increased insecurity and more stringent credit conditions, businesses cut costs by laying off staff, reducing their stocks and postponing investment. In this way, the financial crisis rapidly led to a deteriorating situation for economies that were already vulnerable.

At the same time, there was a sharp reduction in risk in the financial markets where more risky assets were rapidly divested. In parallel, credit exposure was reduced. The effect on the financial markets was sharp reductions in the global stock markets and falling bond yields. In the foreign exchange market, the US dollar and the Japanese yen primarily strengthened when currencies were revalued.

To counteract these effects, a number of central banks opted to reduce key policy rates in a coordinated way during the final quarter of 2008 and the first quarter of 2009. The result was the key policy rate was at historically low levels in all major countries. In parallel, various facilities were created to meet the need of liquidity in the financial markets. Among other things, the UK and US central banks also chose to introduce so-called quantitative stimulants by buying various fixed-income securities such as mortgage bonds in the second-hand market. At the beginning of 2009, the US government introduced a range of programmes and stimulants in an attempt to restore confidence in the financial markets. The intention was to stimulate demand in the real economy. Most countries followed suit with similar measures. This can be regarded as the end of the negative development that had then existed in the financial markets for almost a year.

The prices of financial assets were very depressed at this time. With extensive government support and guarantee undertakings, confidence started to be return and a recovery started in the financial markets during the spring. The major share indexes recovered some of the loss that had taken place during 2008. Prices of raw materials also increased. In the foreign exchange market, the currencies that had strengthened during the crisis months weakened again. At the same time, the bond yields were held down by low key policy rates and a small risk of rising inflation, with a lot of spare capacity in the global economy. The major central banks maintained a stimulating monetary policy with low interest rates and generous access to liquidity throughout 2009. The intention was primarily to promote the access of credit for businesses and households.

Powerful government stimulants from most countries, including the US and China, contributed at the same time to the economic recovery that took place in the latter half of 2009. Despite this, unemployment continued to rise at the same time as the development of household income remained weak.

The Swedish economy was hit hard

The Swedish economy was tangibly affected by the turbulence on the financial markets. Due to their dependence on exports, Swedish businesses were directly affected by falling orders following on from the global downturn. World trade decreased for the first time since the Second World War. At the same time, a couple of Swedish banks had problems with large loan losses in the Baltic countries.

The Swedish T-bill market collapsed in the days after the Lehman crash. To provide support to the instable finance market, the Debt Office decided at very short notice to issue extra T-bills. The additional funds we obtained were invested in mortgage bonds, which provided additional support to the market.

To counteract the negative development, the Riksbank decided to reduce the key policy rate sharply at the end of 2008 and in early 2009. Like other small currencies, the Swedish krona weakened in relation to the major currencies. Apace with the gradual restoration of confidence, the order inflow to the Swedish export industry also improved during the latter half of 2009.

4 Funding

4.1 Loan strategy

The Debt Office's borrowing is in principle governed by two factors. The first is to meet the central government borrowing requirement and fund the maturing loans. The second is for the composition and maturities of the central government debt to comply with the Government's guidelines, adjusted for any deviations that we decided upon within the frameworks set by the Government.

The largest part of central government borrowing takes place by the Debt Office issuing nominal government bonds and T-bills. Part of the borrowing is covered by inflation-linked bonds that provide investors with protection against inflation. The Debt Office also borrows in foreign currency and from private individuals as well as other small investors.

4.2 Challenges during 2008 and 2009

The past two-year period has entailed major challenges for central government debt management. During 2008, there was a record large surplus in the state budget due to large tax revenues and sale of state assets, including Vin & Sprit. In 2009, there arose instead a large budget deficit as a result of the change in the state of the economy and on-lending to the Riksbank with a view to strengthening the currency reserve.

During 2008, the surplus was so large that we had difficulties in continuing the normal issue of government securities in regular auctions. This risked having a negative effect on liquidity, in particular in the market for nominal government bonds. In this situation, we prioritised borrowing in nominal government bonds by reducing borrowing in T-bills and refunding maturing foreign currency loans. The issue of inflation-linked bonds was reduced to a minimum since the share exceeded the target of 25 per cent. In practice therefore, we replaced foreign currency loans and T-bills by nominal government bonds.

During autumn 2008 and in 2009 when the downturn came, we first increased borrowing volumes in nominal government bonds and then foreign currency borrowing. In this way, we made use of our diversified central government debt. When the borrowing requirement increased, we could increase the diversification of borrowing. In this way, we avoided exposing the market for nominal government bonds to too large strains.

We refrained from, like many other states, rapidly increasing short term borrowing. Given the prevailing uncertainty, we wanted to reduce the funding risks by raising more loans with long maturities.

During the spring of 2009, we raised several foreign currency loans in both dollars and euro. A contributory cause of the extensive foreign currency borrowing was the discussions that we engaged in during the spring with the Riksbank on increasing the foreign currency reserve. We wanted to be out in good time by raising foreign currency loans to have in readiness should the Riksbank need large volumes. In a situation of this kind, it is important to avoid a situation where we would be obliged to raise large loans on the international capital market in a short time.

During spring 2009, we also raised a large loan in nominal government bonds when we issued a 30-year government bond. Swedish investors had for many years wished for a long government bond of this kind. The insurance companies had a pent-up demand to extend the maturity of their assets to be able to better match their liabilities. This has also been one of the criteria used by the Swedish Financial Supervisory Authority to assess the solvency of insurance undertakings. There was accordingly a demand for the longer maturities that we could make use of to borrow large amounts in the Swedish market. In normal cases, the Swedish krona market is not sufficiently deep to make it possible to raise large loans with long maturities quickly.

The global crisis in the financial markets, not least in connection with the Lehman collapse in autumn 2008, also entailed major challenges. Shortly after the Lehman collapse, the demand for T-bills became explosive when investors were reluctant to buy securities with low liquidity. In this situation, T-bills suddenly appeared to be almost the only investment alternative in the fixed income market.

It rapidly became unsustainable to handle the sharply increased demand within the framework of our ordinary system for lending T-bills via repos. Since this system does not have any upper limit and no mechanism for price adjustments, the central government debt could have increased in an uncontrollable way. Instead we chose to abolish the undertaking and issued large volumes of T-bills in a number of extra auctions instead.

The extra funds we obtained were not used for funding. These were invested instead mainly in reverse repos in mortgage bonds, which provided additional support to the

instable finance markets and provided the banks with liquid funds.

Table 2 FUNDING IN GOVERNMENT SECURITIES

	2005	2006	2007	2008	2009
Net borrowing requirement[1]	**-14**	**-18**	**-103**	**-135**	**176**
Change in cash balance and retail market[2]	24	-39	-35	57	-138
Maturities, buybacks, etc.	56	71	79	96	181
Government bonds	16	36	62	68	121
Foreign currency loans	40	35	17	28	59
Total	**66**	**13**	**-59**	**18**	**218**

	2005	2006	2007	2008	2009
T-bill borrowing, net[3]	**-27**	**-78**	**-110**	**-32**	**-24**
Bond borrowing, gross	**93**	**91**	**51**	**50**	**243**
Foreign currency bonds	25	20	5	0	130
Inflation-linked bonds[4]	12	7	5	3	3
Nominal government bonds[5]	56	64	41	47	110
Funding	**66**	**13**	**-59**	**18**	**218**
[1] A negative borrowing requirement means that the state budget is in surplus					
[2] Change in liquidity management instruments and retail market loans, net					
[3] Net of issues (excluding exchanges) and maturities during the calendar year					
[4] Issue volume per auction, average	0.6	0.4	0.5	0.4	0.5
[5] Issue volume per auction, average	2.4	2.8	1.9	2.2	3.3

4.3 Nominal krona funding

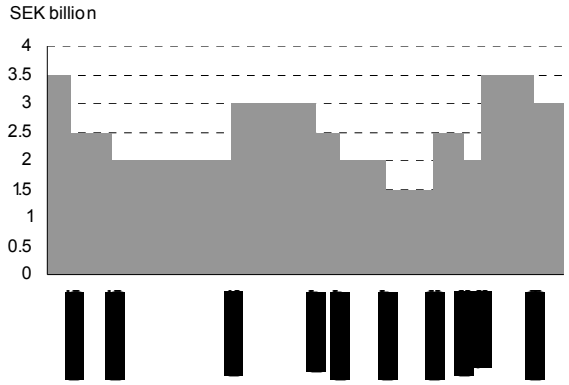
Nominal government bonds

The major part of borrowing took place in the normal order in nominal government bonds. In all, we issued SEK 47 billion in 2008, which increased to SEK 110 billion in 2009. The large increase in the past year was an effect of our need to cover large volumes of maturing nominal bonds combined with an increasing gross borrowing requirement.

Nominal government bonds are issued in auctions that are held every other week. At the beginning of 2008, the issue volume was only SEK 1.5 billion on each issue date. As from March, the volume was raised to SEK 2.5 billion to then fall to SEK 2 billion in August the same year as a result of variations in the borrowing requirement. Subsequently, the financial crisis hit in earnest and we saw that central government finances weakened.

We therefore increased the issue volume of nominal bonds to SEK 3.5 billion on every issue date from November 2008 onwards. Thereafter issue volume remained unchanged until August 2009 when it was reduced to SEK 3 billion, and remained at the level for the rest of the year.

Figure 7 AUCTION VOLUMES OF NOMINAL GOVERNMENT BONDS OFFERED



The Debt Office has a policy of primarily issuing in certain standard maturities, two-, five- and ten-year nominal bonds. This is maintained by our regularly issuing new ten-year bonds which subsequently roll down to become five- and then two-year bonds. During 2008 and 2009, however, we did not need to issue any new ten-year bond since the segment was already covered by a long bond with a maturity not far above ten years.

On 23 March 2009, a new thirty-year government bond, loan 1053, was introduced maturing on 30 March 2039. As mentioned above, this was part of a strategy to make use of a pent-up demand for long government bonds and at the same time raise larger loan volumes in readiness for a rapid increase in the borrowing requirement. In this way, we could avoid a rapid rise in short borrowing which otherwise would have led to an increased refunding risk.

The most important reason for raising a loan with a long maturity was, however, that we made the assessment that a loan with a long maturity could provide cost benefits in the long term. The yield level on bonds, in particular with long maturities, appeared to be very low in a historical perspective. The background was the strong demand for liquidity and low credit risk in combination with Swedish investors endeavouring to extend the maturity of their fixed interest assets.

A 30-year loan may be regarded as a replacement for three successive 10-year loans during the coming 30-year period, or as replacement for a twenty-year loan combined with a ten-year loan in twenty years. In other words, a favourable interest rate can be locked in by issuing a loan now with a very long maturity.

It can, of course, not be excluded that a long bond yield may be lower in 20 years time than it was in spring 2009. However, there is probably not a lot of scope for it to be much lower while in a historical perspective it is probable that it will be higher and a considerable probability that it will be much higher.

The issue of a 30-year government bond may thus be regarded as a very cheap insurance against higher interest rates and probably as a cheap loan in a longer perspective.

Normally we issue new bonds by first auctioning a limited volume and then carrying out exchanges of shorter bonds in exchange for the new bonds. In this situation, we were, however, not only interested in a new loan with a low interest rate but also in being able to raise a large loan.

There was considerable uncertainty about how great the interest would be in a long bond and about the interest rate that it would be possible to issue a relatively large volume. There was a clear risk that an advertised volume of, for example, SEK 40 billion which would be offered in one or more auctions would entail a sharp rise in the interest rate which investors would require compared with a purely theoretical calculation of what the interest rate should be.

In this situation, we chose the sell the new bond in a syndication. This means that our dealers sold the bond together for us in a bidding procedure where we offered a volume that was not announced in advance at a pre-announced interest difference in relation to our 10-year bond. The new bond could thus be sold with relatively small price uncertainty. This sale was also a one-off offer. Those who did not participate missed the opportunity altogether. Furthermore, the order book was built up successively with feedback to the investors during the sales process. When the investors were informed that there was great interest, the investors that followed a bond index needed to make even larger bids. We had ensured that this mechanism would work since the publishers of bond indexes had promised to calculate and publish the new index already on the same day that we sold the bond.

Altogether, we sold around SEK 38 billion at a rate of 3.75 per cent. After the issue date, the rate has constantly been above this level, which may be seen as an indication that we succeeded in attracting interest in the issue on the issue date rather than that intermediaries bought to then sell at a lower rate on the second-hand market, for example, to index fund managers.

It would furthermore have been difficult to sell the same volume in an auction, not only due to price uncertainty but also because our dealers would have had difficulties in buying the bond for resale. Bonds with such a long maturity have a high rate risk that it can be difficult to hedge against. A rise in rates would have entailed great losses before they could be resold since the dealers would have had problems in hedging the interest rate risk.

During 2008, we had no maturing nominal government bonds. However, we had two large maturities in 2009 totalling SEK 113 billion. The Debt Office stopped offering exchanges of government bonds with less than a year to maturity for bills, partly because we limited the number of outstanding bills with at least six months' maturity and partly because the of the reduced borrowing requirement. Instead we invited the market to participate in a limited buyback of the loan, corresponding to a fifth of the stock.

Table 3 VOLUME ISSUED IN SEK MILLION AND RUNNING YIELD PER LOAN

2008

Loan	Due date	Coupon	No. of auctions	Volume issued	Yield[1]
1041	2014.05.05	6.75	4	9 999	3.60
1046	2012.10.08	5.5	1	2 000	3.24
1047	2020.12.01	5	1	1 499	4.18
1048	2009.12.01	4	1	1 500	3.95
1049	2015.08.12	4.5	1	2 500	4.10
1050	2016.07.12	3	3	6 499	4.12
1051	2017.08.12	3.75	1	2 500	4.49
1052	2019.03.12	4.25	9	20 498	3.74
TOTAL				46 995	

2009

Loan	Due date	Coupon	No. of auctions	Volume issued	Yield[1]
1041	2014.05.05	6.75	4	13 500	2.35
1045	2011.03.15	5.25	1	3 500	1.17
1046	2012.10.08	5.5	2	6 499	1.96
1047	2020.12.01	5	2	5 999	3.37
1049	2015.08.12	4.5	1	3 000	2.80
1052	2019.03.12	4.25	12	39 197	3.26
1053	2039.03.30	3.5	1	38 075	3.75
TOTAL				109 770	

[1] Average action yield

Table 4 AVERAGE VALUE OF COVER RATIO AND AUCTION YIELD FOR NOMINAL GOVERNMENT BONDS 2005–2009

Per cent	2005	2006	2007	2008	2009
Cover ratio[1]	3.69	3.87	3.28	2.54	2.35
Average auction yield [2]	3.04	3.60	4.07	3.82	2.86

[1] Volume of bids received in relation to issue volume offered, syndication in 2009 is not included.
[2] Only outright auctions, i,e. exchange auctions and syndication are not included.

According to Table 4, the average cut-off yield fell slightly between 2007 and 2008, around 0.25 percentage points. Subsequently, the cut-off yields fell sharply and reduced from an average of 3.82 per cent to 2.86 per cent during 2009, a total reduction over a two-year period of as much as 1.2 percentage points. This reflects the fall in bond interest rates in the past two years.

Bond issues had an average cover ratio of 2.54 in 2008 and 2.35 in 2009 which is lower than in 2007. The cover ratio shows the relationship between the total volume of bids in an auction and our issued volume offered.

Short term funding

T-bills

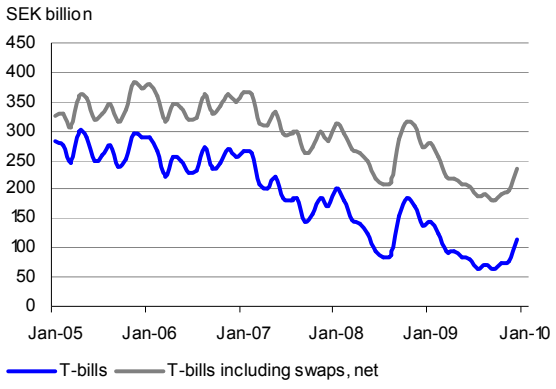
Funding in T-bills increased from SEK -110 billion in 2007 to SEK -32 billion in 2008, that is by SEK 78 billion. This is explained by our having a very low borrowing requirement during 2007 and we therefore reduced borrowing in T-bills to give priority to liquidity in government bonds, but also by our issuing extra bills and having SEK 52 billion outstanding at the end of 2008. During 2009, funding in T-bills increased by a further SEK 8 billion.

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

	2005	2006	2007	2008	2009
Funding in T-bills, net[1]	-27	-78	-110	-32	-24
Exchanges of government bonds for T-bills	56	44	27	0	0
Change of T-bill stock	29	-34	-84	-32	-24
Interest swaps, net[2]	41	9	14	22	-13
Change of T-bill stock including swaps in SEK, net	70	-25	-70	-10	-37

[1] Net of issues (excluding exchanges) and maturities during the calendar year
[2] Net of swaps entered into and maturing.

Figure 8 DEVELOPMENT OF T-BILL STOCK 2005-2009



As from 2008, the Debt Office has applied a new policy for T-bill borrowing with four outstanding maturities up to at most six months. Previously, we had six maturities up to twelve months. The last twelve-month bill was issued in December 2007.

During 2008, the bids submitted covered the whole of the volume offered in every T-bill auction. Two of the 36 auctions in 2009 were not fully subscribed. In these auctions, we reduced the volumes, which meant that SEK 6.5 billion or 2.1 per cent of the T-bills offered were not sold. This did not entail any problem for our funding, however, since the T-bill borrowing was replaced in the short term by borrowing within liquidity management and then successively by compensating increases of following T-bill auctions.

T-bill borrowing has been unevenly distributed over the past two years. In December both years, we had, however, a very large borrowing requirement. We therefore chose to complement T-bill borrowing by raising commercial paper, see section 4.5. The loans were hedged against kronor so that they became in practice a replacement for T-bill borrowing.

The average yield in the auctions was 3.58 per cent during 2008 which was marginally lower than the previous year. During 2009, however, the auction yield fell very sharply to an average of 0.43 per cent.

Table 6 AVERAGE VALUE OF COVER RATIO AND CUT-OFF YIELD FOR T-BILLS

Per cent	2005	2006	2007	2008	2009
Cover ratio[1]	2.51	2.04	2.50	2.35	2.32
Average auction yield[2]	1.80	2.52	3.60	3.58	0.43

[1] Volume of bids received in relation to issue volume.
[2] Only outright auctions, i.e. exchange auctions are not included.

Interest rate swaps

During 2008, we swapped SEK 31 billion of bond borrowing for short Swedish interest rate exposure and SEK 5 billion to short interest rate exposure in foreign currency. During 2009, only SEK 5 billion was swapped to short Swedish interest rate exposure while SEK 50 billion was swapped to short interest rate exposure in foreign currency.

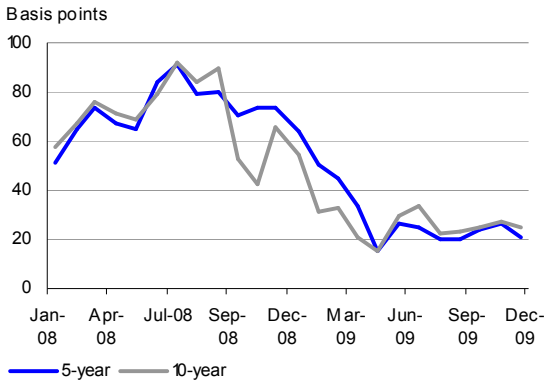
When we borrow via the swap market, we first issue a nominal government bond. In the next step, we exchange the fixed bond interest rate for a variable bank interest rate in kronor (Stibor) to shorten the interest rate refixing period. This technique also makes it possible to contribute to the liquidity of the bond market without increasing the comprehensive maturity. Good liquidity in the bond market should also contribute to reducing borrowing costs in the long term.

The alternative to short interest rate exposure via the swap market is to borrow in T-bills if the maturity is taken for granted. Our proposed guidelines for the maturity are based on our making extensive swaps to achieve a relatively short maturity.

The gain or loss of using swaps, at a given maturity, depends on the swap spread in relation to the average difference between Stibor and the corresponding T-bill interest payment (the TED spread). In the case of the swap spread being higher on the contract date than the average TED spread during the time to maturity of the swap, it will have been more advantageous to swap long borrowing for short compared with borrowing directly in T-bills. Another type of gain by using swaps is that we can borrow with relatively short maturity and thus reduce costs.

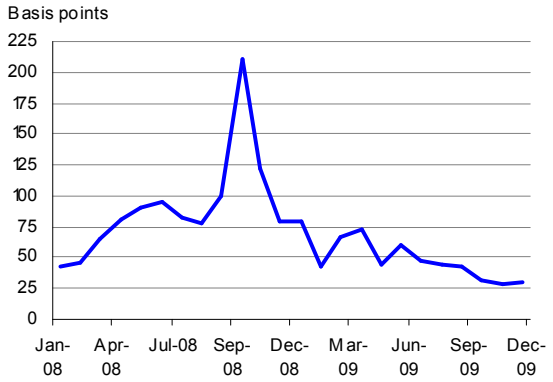
The liquidity of the swap market was relatively good both in 2008 and 2009. Despite increased risk aversion and temporarily reduced liquidity in the fixed income market, we have been able to trade swaps on good terms. The average maturity of the swaps was the same as in bond borrowing during both 2008 and 2009. The swaps were made relatively evenly distributed over the years. During 2008, SEK 31 billion were swapped with a swap spread of 72 basis points and SEK 5 billion with a swap spread of 25 basis points in 2009. In 2009, swap trading mostly took place towards the end of the year.

Figure 9 DIFFERENCE BETWEEN SWAP RATE AND BOND YIELD (SWAP SPREAD) 2008–2009



The swap spread (the 5-year) was on average 73 basis points in 2008 and 31 basis points in 2009. Rising interbank interest rates during the autumn of 2008 increased the average of the TED spread during the year. During 2009, this spread has fallen slowly to a more normal level at the end of the year apace with calmer and more stable markets.

Figure 10 DIFFERENCE BETWEEN STIBOR AND 3-MONTH T-BILLS (TED-SPREAD) 2008–2009



The effect on cost of using interest rate swaps cannot be easily estimated. Swaps normally have a maturity of between 5 and 10 years. It is only when they have matured that we will know the result. The swaps made during 2008 and 2009 thus have a number of years left before the difference between the swap spread and the TED spread can be calculated.

A calculation we regularly make is how great the difference between the swap spread and the current size of the TED spread. Measured as the outstanding stock of swaps, which was SEK 121 billion at the end of 2009, the accumulated result was a loss of SEK 775 million[6]. It should be noted that swaps entered prior to 2008 are also included here.

This valuation will vary quite a lot before the outstanding stock has matured.

A simple comparison of the cost for swap borrowing directly against bill borrowing is partial. At a given maturity, it is not reasonable to replace swapped government bonds by T-bills. This would create a far too great refunding risk and the market is probably not sufficiently large. In a larger perspective, it may therefore be more relevant to compare with the bond interest rate when the swaps are valued. It is also what we do when we produce proposed guidelines for the maturity of the nominal krona debt. Swaps actually imply that we are able to keep a shorter maturity in the debt than we would otherwise be able to do.

Result of nominal krona funding

The Debt Office only makes a qualitative evaluation of funding in the nominal instruments.

[6] *This amount also includes the result from SEK 21 billion of swaps that matured between 2003 and 2009.*

The most important decision was to increase long term borrowing at an early stage of the crisis rather than short term borrowing and to use the strong market potential of long maturities by issuing a 30-year bond. The decision to issue it in the form of syndication was also an important choice which made it possible to borrow a large volume at low costs.

Our assessment is that the auctions functioned well, even if not every T-bill auction was fully subscribed. This is confirmed by questionnaire surveys addressed to dealers and investors, see section 7.4. The rate we obtained in the auctions lay mainly between the yields that correspond to the market's bid and ask rates, which must be regarded as a very good result: both as regards borrowing costs and as an indication of a well functioning market.

4.4 Inflation-linked funding

During 2008, the Debt Office issued SEK 2.6 billion in inflation-linked bonds. The outstanding inflation-linked debt decreased from SEK 216.8 billion to SEK 207.3 billion at the end of the year. Despite the decrease in the inflation-linked debt, the inflation-linked share of the total debt increased. This is partly due to the decrease in total central government debt and partly because we now take into consideration all future coupon payments and the future expected inflation when the shares are calculated. The share of inflation-linked debt was as large as 28.2 per cent on 31 December 2008, which was over the benchmark set by the Government (25 per cent).

Already at the end of 2007, we decided to reduce borrowing in inflation-linked bonds from SEK 5 to SEK 3 billion per year. This reduction was an adaptation to the decreased borrowing requirement which contributed to the inflation-linked share growing to a size that exceeded the target of 25 per cent.

During autumn 2007, we also considered a number of different alternatives in our borrowing policy to avoid large maturities and as far as possible comply with the target of a 25 per cent inflation-linked share in a cost-effective way. We chose to go on with one of the alternatives.

As from 2008, we then decided to offer price risk neutral switches from the shorter loan 3105 to the longer loans 3102 and 3104. These switches meant that we buy back more than we sell, which contributes to reducing the slightly too large share. During 2008 and 2009, we made four such switches and the stock decreased by a total of SEK 8.9 billion.

At the end of 2009, the inflation-linked share had decreased to 24.6 per cent.

Table 7 CHANGE IN INFLATION-LINKED DEBT DURING 2008–2009

Outstanding inflation-linked stock on 31.12.2007, SEKbn	216.8
Outright auctions	2.6
Switch auctions	-4.0
National Debt Savings, Inflation-linked	0.1
Exchanges	1.7
Assumed inflation-linked bond loans	-0.3
Inflation adjustment	4.1
Maturity, Loan 3101, 01.12.2008	-14.6
Repo before maturity	0.8
Outstanding inflation-linked stock 31.12.2008, SEKbn	207.3

Outstanding inflation-linked stock . 31.12.2008, SEKbn	207.3
Outright auctions	3.0
Switch auctions	-4.8
National Debt Savings,inflation-linked	0.0
Exchanges	-2.5
Assumed inflation-linked bond loans	0.0
Inflation adjustment	-3.3
Outstanding inflation-linked stock, 31.12.2009, SEKbn	199.7

The past two-year period was marked by falling real interest rates. The average cut-off yield for 2008 was 1.79 per cent, which was lower than the previous year. During 2009, rates continued to fall and we had to issue inflation-linked bonds at historically low levels. The average auction yield was 1.46 per cent for 2009.

Table 8 AUCTIONS OF INFLATION-LINKED BONDS

	2005	2006	2007	2008	2009
Issue volume[1], SEK billion	13.0	3.8	-6.8	-1.4	-1.8
Volume sold[2], SEK	12.1	6.7	5.0	2.6	3.0
Cover ratio[3]	3.8	4.0	5.16	3.18	4.96
Average auction yield[4], per cent	1.61	1.62	1.87	1.79	1.46
BEI[5], per cent	1.84	1.89	2.21	2.11	1.67

[1] The total volume issued in auction activity during the year, net after outright auctions, switch auctions and buybacks.
[2] Total sold volume in the outright auctions excluding switch auctions and buybacks.
[3] Bid volume submitted in relation to offered issue volume, outright auctions.
[4] Weighted average interest over the year in the outright auctions.
[5] Average break even-inflation in the outright auctions.

In order to compare the cost of inflation-linked and nominal borrowing with corresponding maturity, the break-even inflation is calculated (BEI). This states how high inflation must be on average during the maturity of the bond for the cost of inflation-linked and nominal borrowing to be the same. If inflation is below the break-even level, inflation-linked borrowing will have been more favourable than borrowing in nominal bonds with the corresponding maturity.