

# Basis for evaluation of central government debt management

## *2012*



# Contents

<b>1</b>	<b>Objectives of central government debt management</b>	<b>2</b>
<b>2</b>	<b>Cost and risks of central government debt management</b>	<b>3</b>
2.1	Interest payments on the central government debt	3
2.2	Average running yield	3
2.3	Risks in central government debt management	4
<b>3</b>	<b>Maturity and debt composition</b>	<b>6</b>
3.1	The maturity of the debt	6
3.2	Composition control	6
<b>4</b>	<b>Borrowing</b>	<b>8</b>
4.1	Nominal borrowing in SEK	9
4.2	Inflation-linked borrowing	11
4.3	Foreign currency borrowing	12
4.4	Liquidity management	13
<b>5</b>	<b>Position-taking</b>	<b>16</b>
5.1	Limited losses 2012	16
<b>6</b>	<b>Retail market borrowing</b>	<b>18</b>
<b>7</b>	<b>Market support and debt maintenance</b>	<b>19</b>
7.1	Our strategy	19
7.2	Market commitments	19
7.3	The investors' perception of the Debt Office	20
<b>8</b>	<b>Goal fulfilment and results</b>	<b>22</b>

# 1 Objectives of central government debt management

The Swedish National Debt Office is responsible for managing existing central government debt and raising new loans by issuing government bonds and treasury bills that are primarily purchased by funds, insurance companies and financial institutions. A small part of the Government debt is financed by savings products targeting private individuals and other small investors. The Debt Office participates in both the Swedish and overseas fixed income markets.

The overall objective of central government debt management is to minimise the long-term cost of government debt without excessive risk-taking. Apart from this, management must comply with monetary policy requirements. The Debt Office is also to contribute to improving the functioning of the government securities market. The better the market functions, the more investors are prepared to pay for the securities we sell and the lower the borrowing costs. Consequently, market support and debt maintenance form part of the Debt Office mandate. Another part of the mandate is to take positions in derivative instruments with a view to minimising the cost of government debt.

Central government debt management conforms with guidelines determined annually by the Government, based on proposals from the Debt Office. The guidelines specify benchmarks for the composition and maturity of the central government debt.

The main part of the central government debt consists of nominal Swedish currency loans; the remainder consists of inflation-linked Swedish currency debt and foreign currency debt. Diversifying the government debt portfolio is one way of reducing risk.

Central government debt maturity is specified in terms of an average rate refixing period. The benchmark for the maturity of the debt functions as a borrowing restriction. Since the yield curve in general has a positive slope, it is more expensive to borrow at long maturities. At the same time, short-term borrowing involves greater risk, since a large proportion of the debt must be refinanced on terms that are not known in advance. Asset managers mainly require investments with long maturities. It is therefore not reasonable to borrow large amounts with short maturities.

The benchmark stipulated by the Government for the average interest rate fixing period is therefore based on a trade-off between cost and risk.

Within the framework of the Government guidelines, the Debt Office makes various strategic decisions relating to management and borrowing. These include how to achieve the average rate refixing period for the debt, how great the intervals should be around the benchmarks set, and the selection and internal distribution of currencies in the foreign currency debt. The Debt Office is also able to make decisions concerning interest rate and foreign currency positions.

## Guidelines 2012

According to the 2012 guidelines, the composition of central government debt shall be steered towards:

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

The average rate refixing period for the different types of debt shall be steered towards:

- Foreign-currency debt: 0.125 years
- Inflation-linked krona debt: 7 - 10 years
- Nominal krona debt:
  - Maturities up to 12 years: 2.7 - 3.2 years
  - Maturities exceeding 12 years: SEK 60 billion

The limitation on active position-taking was SEK 450 million, measured as daily Value-at-Risk at 95 per cent probability. The risk limitation covers all positions except those that relate to the krona's exchange rate against other currencies. The Debt Office may take positions in SEK in relation to other currencies of at most SEK 15 billion.

The guidelines also state that we must contribute to reducing the cost of central government debt through retail market borrowing. The objective is to achieve the greatest possible saving compared with loans via the institutional market.

# 2 Cost and risks of central government debt management

## 2.1 Interest payments on the central government debt

Interest payments on the central government debt were SEK 27.2 billion in 2012. This is SEK 0.5 billion lower than the appropriation (SEK 27.7 billion). Compared with 2011, the interest payments have decreased by SEK 7.2 billion. This is primarily the result of a SEK 6.7 billion improvement in exchange rate losses between 2011 and 2012, though the latter is largely due to high exchange losses in 2011 caused by the strong Swiss Franc.

Apart from this, higher issue premiums contributed to reducing the interest expenditure between 2011 and 2012. This is mostly due to the coupon on the ten-year reference loan being significantly higher than market interest rates in 2012.

The low market interest rates have also entailed increased capital losses in connection with exchanges of government bonds as a means of maintaining the market. Between 2011 and 2012, capital losses increased by SEK 2.7 billion to a total of SEK 12.5 billion. However, this is not an increase in expenditure in a real sense; the exchanges result in lower interest expenditure in the coming year as loans with a relatively high coupon are exchanged for loans with a lower coupon. The total interest expenditure do hence not increase in the long term as a result of exchanges.

## 2.2 Average running yield

The overall objective of central government debt management is to minimise the long-term cost, whilst taking risk into account. According to the Government guidelines for central government debt management, the overall measurement of the cost is to be the average running yield. The idea is to reflect the average cost accrued by the time of the debt's maturity. The factors that contribute to the cost are the interest rate, inflation compensation and exchange rate gains or losses.

### Method of measuring costs

Defining the cost for the central government debt has been a difficult task over the years. Previously, the Debt Office has had no means of measuring the cost consistently and accurately for all debts and instruments. Above all, it has been difficult to define the cost of debt for which not all cash flows are known in advance. This is due to the way in which

fluctuations in the CPI (Consumer Price Index) and exchange rates affect the cost of inflation-linked debt and foreign currency debt.

In the proposed guidelines for 2013, published in autumn 2012, the Debt Office presented a method for the calculation of cost, including inflation compensation in inflation-linked debt and the impact of the exchange rate on the foreign currency debt, which facilitates the comparison of all debts and instruments on an equal basis.

This method of measuring the cost provides an accurate picture of the average running yield for the entire portfolio. Essentially, it means that the cost of a loan is the amount borrowed in relation to the agreed future cash flow necessitated by the loan. A large part of the agreed cash flow for the loan is however not known in advance. For example, the cash flows for a foreign currency loan are not known as they depend on the future development of the exchange rate. Hence the cost of a foreign currency loan is not known until the loan has matured.

Because of this, the total cost of the debt today is always unknown. The costs of today depend on what will happen in the future. It is however possible to estimate the cost, given assumed scenarios for e.g., exchange rates and inflation. However, the current situation is that the Debt Office lacks the technical support required for this and cannot therefore present the costs for 2012 according to the new method.

### Qualitative evaluation of costs in 2012

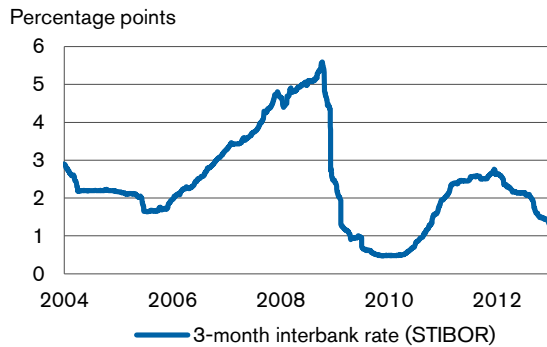
Whilst we cannot yet measure the cost quantitatively, we can make a qualitative assessment of how the cost has been affected in the last year by its three primary contributing factors: the refinancing of matured loans, the development of short-term rates and fluctuation of the krona's exchange rate.

In 2012, a government bond introduced in 2002 and an inflation-linked bond introduced in 2005 matured. Both bonds had been issued at interest rates higher than the current rates. When bonds mature and are then refinanced at lower rates, the cost is lower.

Our primary strategy is to finance the debt with ten-year government bonds and thereafter shorten the duration through interest rate swaps. A large part of the nominal krona debt is therefore exposed to three-month STIBOR (floating bank rate in SEK). The diagram below shows the

development of three-month STIBOR over the last ten years. In 2012, STIBOR averaged 2.0 per cent. Over the last ten years, the average has been 2.5 per cent. The interest rate on treasury bills has had a similar development in 2012.

FIGURE 1. DEVELOPMENT OF THREE-MONTH STIBOR



In 2012, the value of the krona rose by an average of 5.6 per cent against the currencies included in the foreign currency benchmark, which contributes to reducing the cost. The appreciation of the krona affects the cost of the foreign currency debt in different ways, depending on how the foreign currency exposure is created.

Roughly half of the debt's foreign currency exposure is created with short-term contracts, meaning the appreciation of the krona has a direct impact on the cost. The other half is created through more long-term commitments, where the final cost is determined primarily by the future exchange rate of the krona.

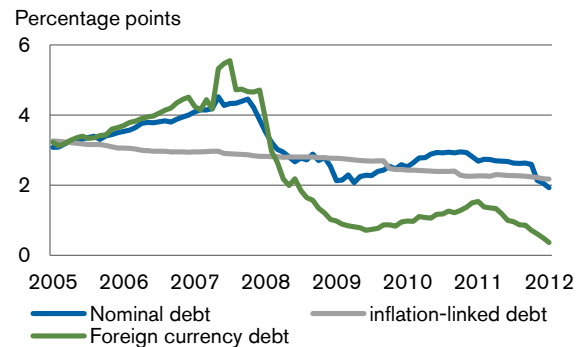
For foreign currency debt, the cost is also affected by the low interest rate level. As the maturity of the foreign currency debt is short, the lower rates quickly affect the cost.

### Quantifying running yield

We still do not have the technical support in place to calculate the cost in accordance with the principle that we presented in the guidelines for 2013. In this section, we therefore present the average running yield measured traditionally in order to facilitate comparison with previous years. However, this does not give us the actual cost for 2012. The average running yield provides only a snapshot of the cost at one point in time, not an estimation of what the cost has been for the entire year. Nor does it include all of the components of the cost, though it does provide a quantitative indication of how a certain part of the cost has changed.

It should be mentioned that the costs for debts in the diagram below cannot be compared with one another since inflation and foreign currency is not included in the cost of inflation-related and foreign exchange debt. Nor are the costs themselves directly comparable, as different types of debt have different maturities.

FIGURE 2. AVERAGE RUNNING YIELDS



The average running yield for the nominal krona debt was 1.9 per cent on 31 December 2012. This was a reduction of 0.8 percentage points compared with its level on the same day one year earlier (see the qualitative evaluation above for an explanation of the change).

The average inflation-linked rate on the existing inflation-linked debt was 2.2 per cent on 31 December 2012; a reduction of 0.1 percentage points compared with the same figure one year earlier. This does not however reflect the entire cost of inflation-linked debt as the inflation component is not included.

The average interest rate on the existing foreign currency debt was 0.4 per cent on 31 December 2012; a reduction of one percentage point compared with the same day one year earlier. This also does not reflect the entire cost of the foreign exchange debt as the development of the exchange rate, which largely determines the cost, is not included.

## 2.3 Risks in central government debt management

According to the Government guidelines for central government debt management, the overall measurement of risk shall be the variation in the average running yield.

### Method of measuring risk

An important matter to consider is at what interval the variation should be measured, or rather the period of time for which the cost shall be calculated, (on a monthly/yearly basis, etc.) when the variation is calculated. This determines whether it is a short or long-term cost variation that is captured. The longer the period of time, the greater the short-term cost variation that disappears. The question is whether the State will take into account the risk of the cost becoming high in the short or long term. In the proposed guidelines for 2013, the Debt Office discussed this issue and concluded that five years was a reasonable time period.

As previously mentioned, we cannot currently measure the average running yield quantitatively or, consequently, the

variation in this. It should however be noted that a measurement of variation cannot be used to describe what the risk is today. The variation can only be calculated retrospectively. The series of costs for which the variation is measured must therefore be in the form of realised costs, i.e., it cannot be calculated based on assumed scenarios for inflation, exchange rate, etc. In our case, this means in practice that the variation can only be measured long after the fact as the debt consists of long-term commitments with, in many cases, unknown future cash flows.

The measurement of variation is in any case appropriate as a primary measurement of risk in selecting the strategic portfolio. But in practice, when the current risk is to be quantified or assessed, a measurement of variation cannot be used. The risk is instead analysed by means of studying the risk factors that affect the future cost and thereby give rise to risk. When, in the future, we have the opportunity to calculate the average running yield in accordance with our new method for measuring the cost, we can perform quantitative studies of the risk by stress-testing the risk factors and observing how this affects the future cost. Currently, we can only make a qualitative analysis of this nature.

#### Qualitative evaluation of risk

The risk factors that lead to the cost are changes in interest rates, inflation and exchange rates. The way in which the cost is affected depends on how the debt portfolio is exposed to these risk factors. The composition of the debt has remained largely unchanged in recent years. When we perform an assessment of the various risk factors, we see no reason for the risk of an unexpected upturn of the cost to have changed.

A risk to which we pay particular attention within our strategy is the risk of refinancing. Strictly speaking, this is the risk that the State is unable to borrow enough to cover maturing

loans. But in practice, it is more the risk that the State will be forced to pay very high interest in order for the investors to be prepared to lend money. It therefore concerns the risk that the cost will be unexpectedly high. By limiting the risks associated with refinancing, we thereby reduce the principal risk of cost variation.

We take the refinancing risk into account by ensuring that excessive amounts do not need to be refinanced at one time, and by contributing to an effective government securities market.

The majority of our borrowing is done via government bonds where the length of the period to maturity varies. We endeavour to achieve an even debt maturity profile in order to avoid the maturity of an excessive amount at any given time. When a debt matures, we do not need to refinance the entire amount over a short period of time. We plan the borrowing in a two to three-year perspective and regularly issue small volumes in our auctions. In this way, we spread out the refinancing over a long period and many of the bonds that mature are replaced in advance.

In a functioning market with good liquidity and satisfactory market depth, we can borrow without affecting the market prices. An important factor in achieving this is that the borrowing is characterised by predictability and transparency. This is an important part of our strategy.

Swedish government securities stand out as a secure placement as concerns over the development of central government finances have increased in many other countries. The Swedish Government has enormous credibility as a borrower, thanks to our strong central government finances, our own currency and our own central bank. These factors, combined with the Debt Office's strategies for borrowing and maintaining the market, mean that Sweden's refinancing risk is small.

TABLE 1. AVERAGE RUNNING YIELDS<sup>1</sup>

	Government bonds			Treasury bills <sup>4</sup>			Inflation-linked bonds <sup>5</sup>		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Total debt <sup>2</sup> (SEK bn)	557	547	540	92	72	105	212	216	192
Borrowing <sup>3</sup> (SEK bn)	58	41	59	307	229	254	8	6	7
GER total debt (%)	3.99	3.80	3.33	1.03	1.30	0.94	2.47	2.32	2.25
GER borrowing (%)	2.63	2.42	1.60	0.47	1.60	1.13	0.51	0.55	-0.01

<sup>1)</sup> In order to compare the average running yield for nominal and inflation-linked instruments respectively, the average running yield for inflation-linked bonds must be adjusted for inflation.

<sup>2)</sup> Loans taken over are not included.

<sup>3)</sup> Volumes issued in auctions

<sup>4)</sup> Including liquidity bills.

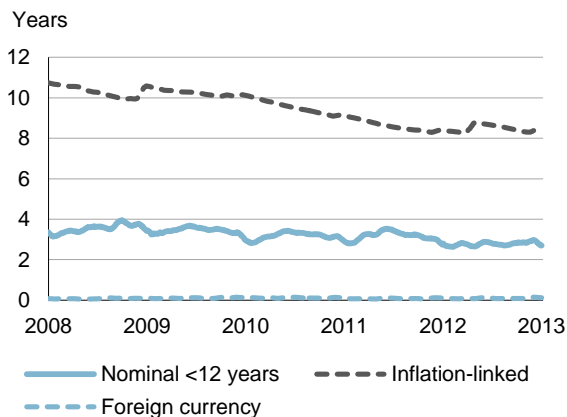
<sup>5)</sup> The total debt for inflation-linked bonds includes accrued inflation.

# 3 Maturity and debt composition

## 3.1 The maturity of the debt

The Government decided in the guidelines for central government debt management 2012 that the maturity for the nominal krona debt for maturities up to twelve years must be between 2.7 and 3.2 years. This control interval replaced the previous benchmark of 3.1 years in order to increase the flexibility of borrowing, as overly strict control of the central government debt entails a risk of inefficiency. For maturities exceeding twelve years, the ceiling of SEK 65 billion was replaced with a benchmark of SEK 60 billion. The Government's ambition for the long term is to increase the proportion of debt in the long maturity segment and thereby to a certain extent reduce the risk of refinancing.

FIGURE 3. THE INTEREST RATE REFIXING PERIOD OF DIFFERENT TYPES OF DEBT, 30-DAY MOVING AVERAGE

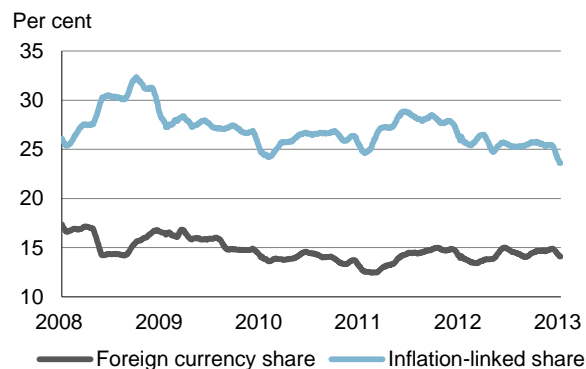


For the inflation-linked debt, the Government decided that the maturity of the inflation-linked krona debt shall be between 7 and 10 years. This means a widening of the interval by a year with the aim of increasing the operative flexibility in the light of a decreasing Government debt. For the foreign exchange debt, the Government decided that the maturity shall be 0.125 years, same as last year.

## 3.2 Composition control

For 2012, the Government decided that the central government debt would consist of 25 per cent inflation-linked debt. The share of foreign exchange debt will amount to 15 per cent and the rest of the central government debt shall consist of nominal krona debt. The decision was made in accordance with the Debt Office's proposal and did not entail any changes when compared with 2011.

FIGURE 4. DEBT SHARES 2008-2012, 30-DAY MOVING AVERAGE



The average share of inflation-linked debt was 25.5 per cent in 2012. On two specific occasions the share fell by two per cent. These were in April when an inflation-linked bond matured and in December when the nominal krona debt increased as a result of seasonal activity.

The average share of foreign exchange debt was 14.3 per cent in 2012 and remained within the control interval of +/- 2 percentage points throughout the year.

### **Great uncertainty remains regarding the situation in the Eurozone in 2012**

Concern over the economic development in Greece remained. Following further parliamentary votes on austerity measures leading up to 2014, the lenders decided in autumn to approve additional aid to the country. Since Greece gained a new coalition government in June, the market focus shifted slightly towards Spain. The country's debt problems, weak banking systems and general weak economic outlook are the biggest contributory factors behind this concern. The concern lessened considerably once the Eurozone countries offered aid of up to EUR 100 billion, in order to recapitalise debt-burdened Spanish banks. At the same time, the problems with central government finances are major and the country's borrowing costs are high, which means that Spain is expected to apply for a support programme so that ECB can make supportive purchases of the country's government bonds.

### **Mixed economic growth outlook**

The outlook for growth has deteriorated in general for the Eurozone in 2012. In the debt-ridden countries, the outlook has remained negative and for countries such as Germany and France that have thus far performed reasonably well, the outlook has deteriorated. Contributory factors include the savings many countries are now making and the debt reduction in the banking sector which affects banks' lending.

For the USA, the growth outlook is somewhat better. The economy has recovered in 2012, although there is a great deal of uncertainty over 2013. The so called "fiscal cliff" was avoided at the last moment through the retention of various tax reliefs for low and medium income earners at the end of the year. At the same time, tough negotiations remain concerning reductions of expenditure and the debt ceiling. The negotiations will likely have a major impact on the state of US economy in the coming year.

### **Most measures have been taken to allay concerns**

The Eurozone countries have taken a number of measures during 2012 in order to reduce concerns over the financial markets and the risk that the crisis will spread. As a result of the high interest rates on government bonds for debt-burdened Eurozone countries, the ECB announced in September its intention to commence making supportive purchases of government bonds on the secondary market with the purpose of driving down rates. Supportive purchases can be made of government bonds with maturities of up to three years. Before this can take place, the country in question must first have applied for supporting loans from the ESM or the EFSF and thereby agreed to certain conditions. The Eurozone countries have also decided that the ESM should be able to contribute capital directly to banks once a system of common banking supervision has been established.

In response to the weak economic outlook and concerns over the markets, several central banks have taken measures to stimulate the economy. The ECB lowered its key interest rate to 0.75 per cent from the previous 1 per cent. At the end of August, ECB President Mario Draghi made a notable speech in which he promised that the ECB would do what it takes to safeguard the future of the single currency. The subsequent developments of the financial markets have been positive, with the Euro increasing in value and a reduction in credit spreads between countries.

The Riksbank has lowered the repo rate to 1.0 per cent via three reductions of 0.25 per cent. In the USA, the Federal Reserve has continued to drive down the long-term interest rates via new quantitative reliefs. In November, the Federal Reserve took the next step by anchoring the monetary policy to a real objective. They promised to retain the quantitative reliefs until unemployment has fallen below 6.5%. The central banks of both the UK and Japan have also chosen to stimulate the domestic economy by increasing their purchasing of securities.

### **Swedish economy continues to be strong**

Sweden has continued strong central government finances and a relatively low central government debt as a percentage of GNP. The effects of uncertainties in the rest of the world do however affect the aggregate demand, and growth in 2012 was substantially lower than in 2011. Strong demand for Swedish government securities has made it possible to continue to lend at record low rates. The Swedish krona has also become stronger over the year.



# 4 Borrowing

Central government borrowing primarily takes the form of the issuance of government bonds and treasury bills. Some of the borrowing is done with inflation-linked bonds, which provide the investors with protection against inflation. The Debt Office also borrows in foreign currency and from individuals as well as other smaller investors.

The central government budget showed a deficit of SEK 25 billion for 2012. In 2011 there was a surplus of SEK 68 billion. As a result of the central government budget going from surplus to deficit, borrowing increased over the course of the year. However, we replaced a somewhat lesser volume of maturing loans than in the previous year.

The long-term borrowing could be made at very low interest rates in relation to historic levels and compared with most other central government borrowers. Strong central government finances have made Swedish government securities attractive for investors, not least in light of the concern over the Eurozone. The low long-term interest rates mostly reflect a gloomy global outlook, but also the fact that countries such as Sweden, the USA and the UK, unlike the Eurozone countries, have their own currency and central banks.

TABLE 2. CENTRAL GOVERNMENT BORROWING

Billion SEK	2008	2009	2010	2011	2012
<b>Net borrowing requirement<sup>1</sup></b>	-135	176	1	-68	25
Discrepancy between trade date and settlement date	-9	-20	25	11	-6
Private market, securities, etc., net <sup>2</sup>	-17	6	2	-9	-1
Money market, maturity <sup>3</sup>	234	111	209	178	159
Capital market, maturity, change and repurchase	89	179	37	125	130
<b>Borrowing requirement, gross</b>	<b>161</b>	<b>452</b>	<b>275</b>	<b>238</b>	<b>307</b>
<b>Money market, borrowing<sup>4</sup></b>	111	209	178	159	206
Treasury bills	139	115	85	72	105
Commercial paper	6	25	55	43	77
Liquidity management instruments	-33	69	39	45	24
<b>Capital market, borrowing</b>	50	243	97	79	101
Government bonds	47	110	58	41	59
Inflation-linked government bonds	3	3	8	6	7
Bonds in foreign currency	0	130	31	31	35
<b>Borrowing, gross</b>	<b>161</b>	<b>452</b>	<b>275</b>	<b>238</b>	<b>307</b>

<sup>1)</sup> A negative borrowing requirement means that the central government budget reveals a surplus

<sup>2)</sup> Change in private market loans and securities, net

<sup>3)</sup> Initial stock maturing within 12 months

<sup>4)</sup> Remaining stock as per the last day of December

As in previous periods with limited borrowing requirements, we prioritised borrowing in government bonds and the bond borrowing increased in relation to the previous year. In order to secure good liquidity in the market for government bonds, we have continued to offer exchanges to the ten-year bond as a supplement to the issued bonds in an attempt to contribute to improved liquidity in the market. We also offered the exchange for the two-year reference loan.

Borrowing in treasury bills and inflation-linked bonds increased somewhat over the year. Despite this, the level of borrowing remains low. We did not issue any foreign currency loans, apart from those for on-lending to the Riksbank.

## Long-term borrowing on the gradual increase

By the end of 2011, the Government decided that the percentage of long-term bonds would gradually increase. In the guidelines for 2012, the ceiling of SEK 65 billion for maturities longer than 12 years was replaced by a benchmark of SEK 60 billion. Following dialogue with market actors, the Debt Office decided to introduce a new government bond in March, Series no. 1056, with a 20-year maturity. The sale took place via syndication in the form of the exchange for Series nos. 1054 and 1047.

We sold a total of SEK 11 billion in the syndication. The volume of bonds with a maturity longer than 12 years thereby increased to SEK 53 billion. We could have issued a larger volume in order to reach the benchmark of a total SEK 60 billion, but decided that the interest rate would then be too high in relation to a reasonable theoretical level. We based this on the assumption that the benchmark shall be achieved within the scope of our overarching objectives of cost minimisation with regards to risk, i.e., without taxpayers incurring any unjustified additional costs. In light of this, we could not sell a larger volume.

Our ambition is for the stock of long-term bonds to increase gradually, at a pace adapted to the market conditions so that the cost does not become too great. In certain periods, the demand for long maturities has been very strong from the life insurance sector, which needs to match its liabilities. This was the case in 2009, something that we were able to take advantage of by issuing a larger volume of a 30-year obligation. In recent years, the demand for long-term government securities has been significantly lower. One major contributory factor is that the Swedish Financial Supervisory Authority has changed the principle for determining the discount rate for life insurance companies' liabilities.

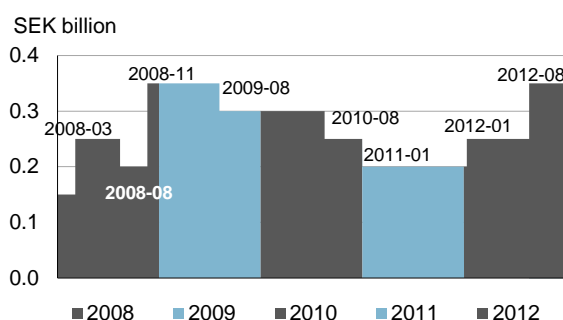
The Debt Office monitors on-going market demand. Before each government bond auction, we investigate the demand for different maturity segments. In this way, we can utilise auctions where there is a great deal of interest in long maturities to fill up on long-term loans. In time it may also be appropriate to supplement the stock with a new 30-year bond as the current lowest loan is approaching a maturity of 25 years.

## 4.1 Nominal borrowing in SEK

### Government bonds

The majority of the borrowing in 2012 was conducted via government bonds. The issue volume increased to SEK 59 billion from SEK 41 billion in 2011, due to the budget deficit. The adaptation to the somewhat higher borrowing requirement was made partly through our increase of the issue volume from SEK 2 billion to SEK 2.5 billion per auction in the first half of the year and to SEK 3.5 billion in the second half of 2012. The adaptation was also achieved via an increase in the number of auctions from 18 to 21.

FIGURE 5. AUCTION VOLUMES OF GOVERNMENT BONDS OFFERED



The demand for the bonds has been high. All auctions were oversubscribed and we received bids of an average SEK 2.12 per krona offered. This is somewhat lower than the average for 2011, but then the issue volume per auction has nearly doubled.

TABLE 3. ISSUE VOLUME IN MILLIONS OF SEK AND AVERAGE RATE PER LOAN IN 2012<sup>1</sup>

Loan	Maturity	Coupon	No. of auctions	Volume sold	Interest <sup>1</sup>
1051	12/08/2017	3.75	4	12,000	1.16
1054	01/06/2022	3.50	13	35,500	1.68
1057	13/11/2023	1.50	3	10,500	1.68
1053	30/03/2039	3.50	1	1,000	2.08
Total				59,000	

<sup>1</sup>) Average interest in the auctions

The Debt Office has a policy of primarily issuing bonds with certain standard maturities; two, five and ten-year

government bonds. We maintain this by regularly issuing new ten-year bonds which, as they shorten, become five-year and then two-year bonds.

We introduced two new government bonds in the course of the year. In March we issued SEK 11 billion via syndication in bond no. 1056, a new 20-year bond maturing in June 2032. At the same time, we repurchased the corresponding amount in loans 1054 and 1047. In October we introduced loan 1057, maturing in November 2023. In March 2013, bond 1057 will replace loan 1054 as a ten-year reference loan.

Our ambition is to quickly build up the outstanding volume in new loans in order to promote liquidity in the market. In connection with the introduction of loan 1057, we therefore offered the change to loan 1054 and 1047. Up until the introduction of loan 1057, the issued bonds were predominantly loan 1054, which has been a ten-year reference loan throughout 2012.

TABLE 4. COVER RATIO AND RUNNING YIELD FOR GOVERNMENT BONDS

Per cent	2008	2009	2010	2011	2012
Cover ratio <sup>1</sup>	2.54	2.35	2.33	2.43	2.12
Average rate <sup>2</sup>	3.82	2.86	2.63	2.42	1.60

<sup>1</sup>) Volume of bids received in relation to offered issue volume, 2009 syndication not included.

<sup>2</sup>) Only outright auctions; exchange auctions and syndication are not included.

The average rate in the auctions was considerably lower in 2012 compared with the previous year. From both a historic and international perspective, the interest rates are very low. The fact that the demand for Swedish government securities is so high, and that the interest rates are consequently so low, is partly due to remaining concerns over the economic and political development in the Eurozone. It is also due to a further deterioration of the growth outlook for the rest of the world, which has not least contributed to lower long-term interest rates. This has benefited the influx of foreign currencies and government securities in terms of sound central government finances, which has led to record foreign ownership of Swedish government securities in 2012.

### Short-term borrowing

#### Treasury bills (T-bills)

The average T-bill stock was over SEK 82 billion in 2012, a slight increase when compared with 2011.

The demand for treasury bills was limited at times. At three of the 26 auctions of 2012, we cut down the issue volume. This means that over SEK 1 billion of the offered treasury bills were not sold. This did not entail any problems for the financing as the T-bill borrowing was replaced by other short-term borrowing in our liquidity management.

As a rule, we experience major borrowing requirements at the end of the year. We therefore chose to supplement the T-bill borrowing by borrowing short maturity loans in foreign currency through the commercial paper market. The loans were hedged against the krona so that they were in practice a replacement for T-bill borrowing. We also issued a limited volume of January bills in "on-tap sales".

FIGURE 6. DEVELOPMENT OF THE T-BILL STOCK 2008-2012

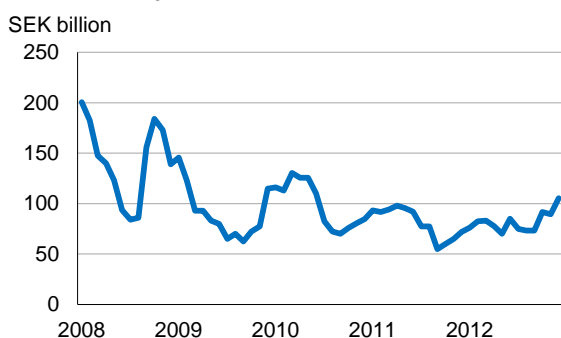


TABLE 5. COVER RATIO AND AVERAGE RATE FOR TREASURY BILLS

Per cent	2008	2009	2010	2011	2012
Cover ratio <sup>1</sup>	2.35	2.32	1.91	1.80	2.15
Average rate <sup>2</sup>	3.58	0.43	0.47	1.60	1.13

<sup>1)</sup> Volume of bids received in relation to offered issue volume.

<sup>2)</sup> Only outright auctions; exchange auctions are not included.

The average interest in the auctions was 1.13 per cent in 2012, which was significantly lower than in 2011. The lower running yields reflect the Riksbank's lowering of the repo rate on three occasions, from 1.75 per cent at the beginning of the year to 1.0 by the end of the year.

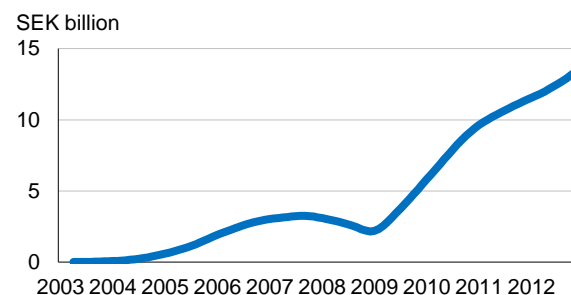
#### Interest rate swaps

In 2012, we swapped SEK 20 billion of borrowing in bonds to short-term Swedish interest rate exposure and SEK 20 billion to short-term foreign currency interest rate exposure. The average maturity in the swaps was in line with the maturity in the bond borrowing in 2012.

When we borrow via the swap market, we first issue a government bond. In the next step, we exchange the fixed bond rate for a floating krona bank rate (STIBOR) in order to shorten the fixed rate period.

Thanks to interest rate swaps, we can retain a shorter duration in the debt than we would otherwise be able to. Our proposed guidelines for the maturity are based on our capacity to make extensive swaps in order to achieve a relatively short maturity and thereby lower the expected interest expenditure without increasing the refinancing risk.

FIGURE 7. INTEREST RATE SWAPS, ACCUMULATED RESULTS



The impact on the cost depends on the difference between the fixed rate that we receive when we make a swap and the floating STIBOR rate which we then pay until the swap matures. The swaps normally have a maturity of between five and ten years. It is only once they have matured that we have answers. The swaps made in 2012 therefore have a number of years remaining before the result can be calculated ex post.

Figure 7 shows the computed outcome since we introduced swaps in the borrowing in SEK in 2003. The outcome corresponds to the difference between the floating interest we pay and the fixed interest we have received to date in the swaps. Since the start in 2003, the use of swaps has reduced the costs of the central government debt by SEK 14 billion, given the actual borrowing in government bonds.<sup>1</sup> In the past five years, the average cost saving has been SEK 2.09 billion per year, see Table 6.

TABLE 6. SAVING PER YEAR ON OUTSTANDING SWAPS

SEK billion	2008	2009	2010	2011	2012	Average
Saving	-1.00	3.32	3.94	2.01	2.19	2.09

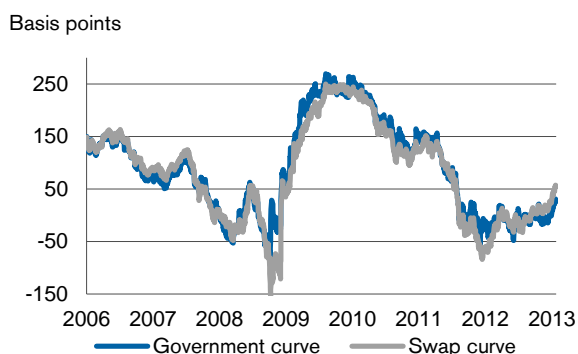
The cost benefit of shortening the maturity through swaps can be illustrated by the slope of the swap curve, i.e., the difference between the fixed interest we receive and the floating interest we pay. The alternative to short interest rate exposure through swaps is to replace borrowing in government bonds with T-bills. The saving we then achieve depends on the corresponding slope of the government curve. Figure 8 shows the difference between the five-year swap rate and three-month STIBOR (Swap curve) together with the difference between the five-year bond yield and the three-month T-bill interest rate (Government curve).

In general, if the government curve slope is steeper over time than the swap curve slope, then T-bill borrowing is a cheaper alternative to borrowing through bonds and swaps. Prior to 2008, short-term borrowing through swapped bonds was

<sup>1</sup> This sum also includes the results of SEK 21 billion swaps that matured during the period 2003–2012.

generally cheaper than borrowing in T-bills. In recent years, T-bills would instead have generated a marginal saving when compared with swapped bonds. Over time, the difference between the gradient of the swap and government curves is negligible.

FIGURE 8. CURVE SLOPE BETWEEN 3 MONTHS AND 5 YEARS



In practice, since the difference in cost is marginal, the choice between short-term borrowing through swapped bonds or T-bill issuance is decided by other factors. Our priority is to maintain liquidity and infrastructure in the bond market, which is our most important market. Another important aspect is the larger refinancing risk associated with T-bills.

### Result of nominal krona borrowing

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

In our assessment, borrowing has functioned well and there has been a good level of demand, despite low rates. This is confirmed by the questionnaire surveys addressed to dealers and investors, see section 7. The interest rate that we obtained in auctions lay mainly between the rates corresponding to the market's bid rate and ask rate, which may be regarded as a very good result, both with respect to borrowing costs and as an indication of an effective market.

## 4.2 Inflation-linked borrowing

In 2012, the Debt Office issued SEK 6.5 billion in inflation-linked bonds, see Table 7. The accrued inflation compensation in inflation-linked debt dropped by just under SEK 4 billion. At the same time, we repurchased more than we issued in exchanges.

In April 2012 the inflation-linked bond series no. 3106 matured, with an outstanding volume of SEK 20 billion. Overall, the outstanding inflation-linked debt decreased by approximately SEK 23 billion to SEK 193 billion.

TABLE 7. INFLATION-LINKED DEBT, CHANGE IN 2012

Outstanding stock, 30/12/2011, SEK billion	215.6
Auctions	6.5
Maturity & net of the exchange	-25.4
National Debt Savings, Inflation-linked	-0.1
Bonds taken over	0.0
Inflation adjustment	-3.6
<b>Outstanding stock, 28/12/2012</b>	<b>192.9</b>

Increased issue volumes in the nominal stock, together with the maturity of Series no. 3106, contributed to a lower share of inflation-linked debt in 2012 than in 2011. On average, inflation-linked debt comprised 25.5 per cent of the total debt in 2012. The corresponding figure for 2011 was 27 per cent. According to Government guidelines, the debt share shall be steered towards 25 per cent in the long-term. Borrowing in inflation-linked bonds was SEK 7 billion in 2012; an increase from the previous year's SEK 6 billion.

Inflation-linked rates fell in 2012, compared with the previous year. The average running yields were -0.01 per cent over the year. This is considerably lower than the previous year, when the average was 0.55 per cent. The difference between nominal rate and inflation-linked rate is a measure of the anticipated inflation. A negative inflation-linked rate therefore indicates that inflation is expected to exceed the nominal rate for the corresponding maturity.

TABLE 8. AUCTIONS OF INFLATION-LINKED BONDS

SEK billion	2008	2009	2010	2011	2012
Issue volume <sup>1</sup> , SEK billion	-1.40	-1.80	11.90	0.60	7.18
Volume sold <sup>2</sup> , SEK billion	2.60	3.00	7.70	6.00	6.50
Cover ratio <sup>3</sup>	3.18	4.96	5.34	5.24	5.83
Average rate <sup>4</sup> , per cent	1.79	1.46	0.51	0.55	-0.01
BEI <sup>5</sup> , per cent	2.11	1.67	1.73	1.89	1.48

<sup>1)</sup> Total volume issued in auctions over the year, net after outright auctions, exchanges and buybacks.

<sup>2)</sup> Total sold volume in auctions excluding exchanges and buybacks.

<sup>3)</sup> Volume of bids received in relation to offered issue volume, outright auctions.

<sup>4)</sup> Weighted average rate over the year in the outright auctions.

<sup>5)</sup> Average break-even inflation in the outright auctions.

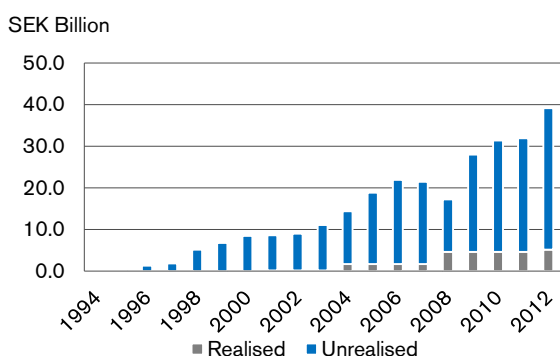
To compare the cost of inflation-linked and nominal borrowing with the corresponding maturity, the break-even inflation (BEI) is calculated. This specifies how high the average inflation must be during the life of the bond for the cost to be the same for inflation-linked and nominal borrowing. If inflation is lower than the break-even level, inflation-linked borrowing will be more advantageous than borrowing in nominal bonds with the corresponding maturity.

The actual rate of inflation dropped somewhat over the year. The inflation adjustment for the inflation-linked bonds was 0.4 per cent in 2012, measured as the development of the CPI.<sup>1</sup> The break-even inflation in 2012 was 1.48 per cent on average in our auctions. Whether the 2012 inflation-linked borrowing will be successful from a cost perspective can only be determined once the respective bond has matured and we know what the realised inflation was.

### Result of inflation-linked borrowing

The rate of inflation fell in 2012 and was significantly lower than the average break-even level in the inflation-linked debt. The indicative result, measured as the cost difference between borrowing in inflation-linked and nominal bonds, increased by around SEK 7.2 billion during the year, see Figure 9.

FIGURE 9. INFLATION-LINKED BONDS, INDICATIVE RESULT



The positive result is due to the average inflation being, since 1994, significantly lower than the average break-even level at which the inflation-linked bonds were issued. The unrealised accumulated result is primarily attributable to the large issue volumes during the period 1995-1997.

In Prospera's survey, the inflation-linked market receives a low rating in terms of liquidity and price information. This is mainly due to small issue volumes and the fact that many investors have a buy-and-hold strategy, which reduces liquidity in the market.

For a year or so, we have had a long-term strategy to distribute the inflation-linked debt across several maturities. Provided that individual issues are not too small, we hope to be able to improve liquidity in the market. A greater number of outstanding loans mean increased flexibility for the Debt Office, investors and dealers alike.

<sup>1</sup> The inflation-linked bonds are linked to the CPI with a three-month lag. Hence the inflation number thus refers to the period October 2011 to October 2012.

## 4.3 Foreign currency borrowing

Borrowing in foreign currency normally takes place through our issuing of foreign currency bonds (direct foreign currency borrowing on the capital market) or through exchanging Swedish currency borrowing for foreign currency exposure (krona/swap borrowing); see the krona/swap borrowing fact box for a more detailed description. The Debt Office can also issue in foreign currency via the sale of commercial paper with maturities of up to one year.

When the borrowing requirement is low, we prioritise borrowing in government bonds and therefore refinance loans in foreign currency via krona/swap borrowing. The borrowing on the capital market for the year was purely related to the refinancing of loans to the Riksbank. Overall, the borrowing amounted to SEK 35 billion for the year. This was achieved via the issue of three-year bond loans, two in dollars and one in Euros. The dollar loan of USD 2.25 billion and the Euro loan of EUR 1.5 billion were raised in the spring. The other dollar loan of USD 1 billion was issued in October.

In addition, we regularly refinanced an outstanding stock of approximately SEK 7 billion in commercial paper for the Riksbank. Commercial paper was also issued as part of the liquidity management; see section 4.4. Over the year, we sold commercial paper corresponding to SEK 141 billion with an average maturity of 66 days. The cost came to 11 basis points below USD Libor.

We also lent the equivalent of SEK 2.6 billion to Ireland.

In 2012, the krona/swap borrowing amounted to SEK 20 billion. The borrowing related to the refinancing of currency swaps, foreign currency loans and on-loans to Ireland.

### Result of foreign currency borrowing

The range of bonds with high credit worthiness has been limited over the year. This has meant that our loans have increased in value in the secondary market and that we have been able to raise new loans with very favourable terms. A stable value on the secondary market is important for Swedish bonds attractiveness to investors, even in future issues.

Both in dollars and Euros, the borrowing was at a record low cost in relation to the respective swap curve. Compared with central governments and large international borrowers, we borrowed at what were at the time the lowest levels for syndicated loans. The low levels compared with 2011 owe somewhat to lower interest rates globally, as well as investors' increasing needs for strong credits in combination with the Governments limited borrowing requirement. The large demand for Swedish government bonds should be seen as a positive reflection of the Governments competitiveness on the capital market.

## Krona/swap borrowing

The first step in a krona/swap transaction is that we borrow on the Swedish bond market. Thereafter, we make a swap in which we receive a fixed swap rate, which is higher than the bond rate, and pay a floating rate in foreign currency. The exposure in the long-term bond rate is thereby eliminated. This transaction constitutes a combined interest rate and currency swap (basis swap). Within the framework of the swap, we then exchange the SEK amount from the bond borrowing into foreign currency with our counterparty. The result is that we have issued a bond loan in SEK but receive the amount and pay variable interest in foreign currency.

When the swap matures, we exchange the amount borrowed with our swap counterparty. By agreement, this is to be done at the same rate as in the initial currency exchange. We can then pay the maturing bond with the krona amount. To be able to exchange the amount back to SEK, 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 krona/swap borrowing accordingly provides the same currency exposure as if we had issued a bond directly in foreign currency.

TABLE 9. RELATIVE BORROWING COST FOR BONDS IN FOREIGN CURRENCY AND KRONA/CURRENCY SWAPS

Basis points compared with USD Libor	2008	2009	2010	2011	2012
Bonds <sup>1</sup>	-	3	0	-9	-15
Basis points compared with Euribor	2008	2009	2010	2011	2012
Bonds <sup>2</sup>	-	20	-	-55	-51
Krona/currency swaps <sup>3</sup>	-73	-46	-73	-97	-100

<sup>1)</sup> Three months' floating bank rate

<sup>2)</sup> Six months' floating bank rate

<sup>3)</sup> Three months' floating bank rate

The dollar loan was issued on average at 15 basis points below three months' USD Libor and the Euro loan at 51 basis points below six months' Euribor. After commissions, this corresponds to around 12 basis points in dollars and 48 basis points in Euros.

Via basis swaps, we can convert the dollar loan into terms of Euribor to facilitate comparison with levels for the loan in Euros. A comparison of this nature reveals that the interest rate on dollar loans is considerably lower than on Euro loans. Since 2002, dollar loans have been the primary and most beneficial source of the Debt Office's direct borrowing in

foreign currency. The choice of issue currency in 2012 has been steered by the wishes of the Riksbank.

Favourable terms, mainly in the first half of 2012, made it possible to fix a very attractive swap spread. The cost of krona/currency swaps was 100 basis points below Euribor. The swap borrowing was therefore cheaper than the borrowing done in the capital market in 2012.

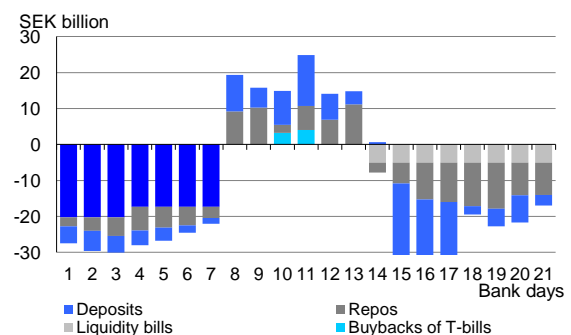
In this context, it should be noted that an important motive for borrowing foreign currency on the capital market is to spread the underlying financing across several markets and to build a broad investor base. This lays the foundations for a low long-term cost for the entire central government debt. When we raise a krona/swap loan, this often means that we refrain from making equivalent swaps on the krona market. In other words, we miss out on low-cost krona borrowing when we use swaps in our foreign currency borrowing.

## 4.4 Liquidity management

The Debt Office manages central government long-term and medium-term borrowing, as well as the State's short-term funding and investment requirements. Liquidity management is taken care of by the usage of money market instruments, commonly used in cash management by large institutions. There is no sharp distinction between longer borrowing and liquidity management. Borrowing in T-bills is used partly for long-term funding of the underlying central government debt and partly to handle fluctuations in cash flows between the months of the year. Variations in T-bill borrowing thus become part of liquidity management. Changes in the forecast for the cash flow are countered primarily by adjustments in the issue plan for T-bills.

The instruments that are additionally used are bank loans and deposits, repos, on-tap sales and buybacks of T-bills, liquidity bills (T-bills with tailor made maturities), tri-party repos (repos against a basket of securities with a third party that handles the securities) and commercial papers. We deal in both SEK and foreign currency.

FIGURE 10. LIQUIDITY MANAGEMENT DURING A TYPICAL MONTH (POSITIVE FIGURES CORRESPOND TO SURPLUSES)

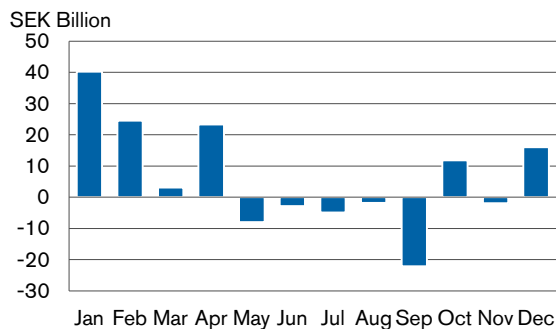


The liquidity during a typical month normally follows a pattern with surplus liquidity a couple of days in the middle of the month in connection with tax payments. It normally becomes a deficit on the same day that the liquidity for the month's Treasury bill maturity is paid out. Even though deviations from this pattern are rather the rule than the exception, the basic pattern may be worth bearing in mind. There is also a seasonal pattern where large tax payments in February mean that the surplus is normally large in the spring and summer, but then gradually decreases during the autumn so that December and January are the months with the greatest deficit.

From 2008 and onwards, the liquidity management has become more complex, primarily due to more extensive handling of foreign currency. The process which then began resulted in more counterparties and new instruments in the liquidity management. We work continuously to improve the liquidity management and increase its efficiency, and have also done so in 2012. Over the year we have started a project aimed at providing even better system support for forecasts of liquidity. We also continually review our limits.

The diagram below shows the daily debt, net of debts and investments, under liquidity management.

FIGURE 11. AVERAGE NET DEBT IN LIQUIDITY MANAGEMENT PER DAY, 2012<sup>1</sup> (SEK BILLION)

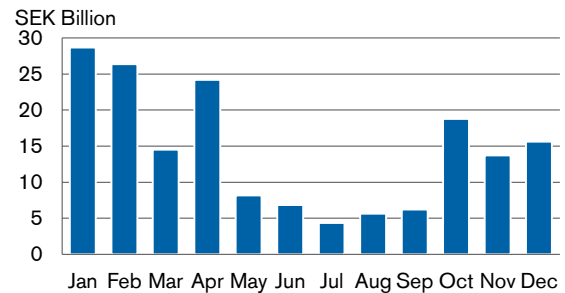


1) Negative figures indicate surplus

Part of the liquidity management concerns somewhat longer maturities than overnight loans and investments. A narrower measure of our cash position is shown in Figure 12. This is the daily position on the deposit market, i.e., bank loans and bank deposits.

During certain periods, it has been a matter of managing liquidity surpluses. We have also handled surpluses in foreign currency. In liquidity management, the underlying borrowing or investment requirements in SEK steer the activities. In cases where we need to borrow in Swedish currency, all assets in foreign currency are exchanged for Swedish currency by means of currency swaps; i.e., we sell foreign currency and obtain SEK during a determined maturity, to then exchange the SEK back to foreign currency upon maturity, at a predetermined exchange rate.

FIGURE 12. AVERAGE NET DEBT ON THE DEPOSIT MARKET PER DAY, 2012 (SEKBN)

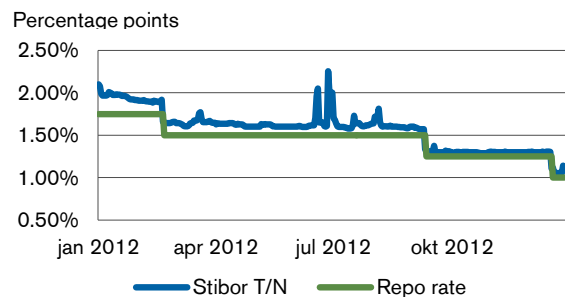


### Less uncertainty on the overnight loan market in SEK

The financial crisis which began in 2008 has continued to affect the market. There has been uncertainty regarding the banks' view of their ability to finance themselves. The majority of large Swedish banks have therefore retained a surplus of money on maturities of one day or longer. This means that the banks are willing to pay extra in order to lend money one or two days in advance - often significantly more than they can borrow from the overnight market. We have therefore worked actively to have a low borrowing requirement in the overnight market. We have primarily made use of reverse repos in mortgage bonds and government bonds, where we have been able to invest for a better return than the repo rate. We have also repurchased T-bills prior to maturity. In this way, we have been able to both meet the market's financing need whilst achieving our objective of borrowing at as low a cost as possible, taking risk into account.

When concerns over access to liquidity in the Eurozone were at their greatest, even the overnight market in SEK was affected. The difference between the overnight rate and the rate the banks were willing to pay in order to borrow in advance increased markedly during this time. As the Eurozone crisis subdued, concerns over the overnight market also decreased. The difference between the Riksbank's repo rate and the STIBOR fixing for TN (Tomorrow/Next) is shown in Figure 13. The figure shows that the difference between the overnight rate and the STIBOR fixing was at its greatest during parts of the summer, to then drop to minimum levels during the second half of 2012.

FIGURE 13. STIBOR FIXING TOMORROW/NEXT AND THE RIKSBANK'S REPO RATE IN 2012

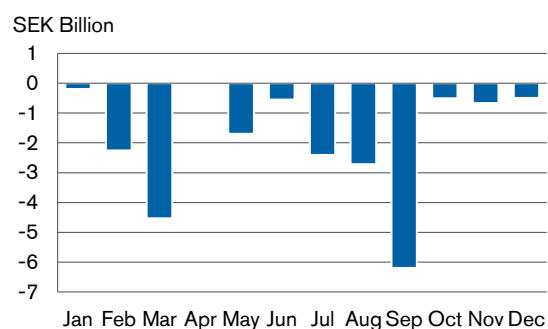


### Flows in foreign currency

Maturing loans, interest payments, EU payments and accounts with securities generate a constant flow of foreign currency which is exchanged for SEK. To comply with the Government's requirement for an evenly distributed exchange rate pace, we use both the spot and forward market. In the event of large maturing loans in foreign currency, we buy currency forwards in advance of the final payment. The net of the flows is in this way distributed evenly over the months of the year. The Board determines the maximum deviation from such an even exchange rate pace. During 2012 the deviations every month were smaller than this limit.

The Debt Office endeavours in the daily management of currency exchanges to use periods of good liquidity to reduce costs. The forwards' maturities are determined partly by the underlying requirement for Swedish currency and the pricing on the forward market. Concerns in Europe have meant that, on and off during 2012, the pricing in the forward market has fluctuated widely.

FIGURE 14. AVERAGE NET DEBT IN LIQUIDITY MANAGEMENT IN FOREIGN CURRENCY PER DAY, 2012<sup>1</sup> (SEK BILLION)



1) Negative figures indicate surplus



# 5 Position-taking

The Debt Office takes active positions in foreign currency with the aim of reducing central government costs. By taking positions in derivatives, we can adjust the debt's maturity and distribution across currencies, based on assessments of future interest and exchange rate movements. We can take foreign currency positions and interest positions but, in the latter case, only in foreign currency.

Within the continuous internal management, relatively small positions are normally taken. When we believe the potential yield is large in relation to the risk, we make larger adjustments of the debt. Decisions concerning larger and more long-term strategic positions of this nature are put before the Board.

In 2012, the total risk-taking should not, according to the guidelines, exceed SEK 450 million, measured as a daily Value-at-Risk (VaR). The Board of the Debt Office has allocated SEK 220 million of this in daily VaR to continuous position-taking in foreign currency. The remaining part is available for strategic positions.

In order to diversify the management and gain an understanding of the effectiveness of the internal management, the Debt Office also enlists the help of a number of external managers.

TABLE 10. RESULT OF THE POSITION-TAKING

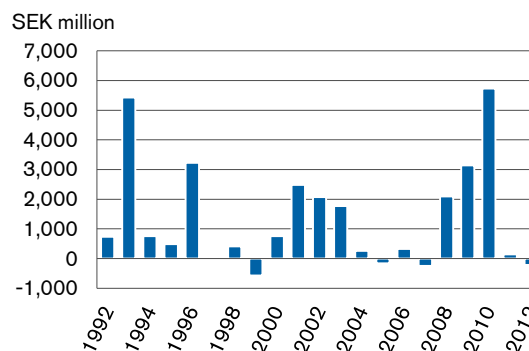
SEK million	2008	2009	2010	2011	2012	Average
Own position-taking	1892	3048	5464	134	-185.3	2071
Of which						
Strategic	1587	2623	6051	285	0	2109
Continuous	305	426	-587	-151	-185	-38
External position-taking	187	90	263	-1	-25	103
<b>Total result</b>	<b>2079</b>	<b>3138</b>	<b>5727</b>	<b>133</b>	<b>-210</b>	<b>2173</b>

## 5.1 Limited losses 2012

Position-taking is an activity in which the result inevitably varies between years. It is therefore evaluated in five-year periods. During the period 2008-2012, the average gain has been SEK 2.2 billion per year. By far the largest contribution comes from the strategic position for a stronger Swedish krona which was built in 2009. The final part was liquidated in summer 2011. The external management produced a surplus of SEK 103 million per year. The ongoing internal management produced a deficit of SEK 38 million per year.

In 2012, the activities resulted in a loss of SEK 210 million, see Table 10.

FIGURE 15. ANNUAL RESULT OF POSITION-TAKING



### Continuous position-taking

The financial markets continued to be characterised by political developments rather than macroeconomic development. Interest rates in several parts of the world fell to new record lows. Germany, France, Switzerland and Denmark experienced negative nominal rates on short maturities. Inflation-linked rates have continued to fall to even more negative levels. The unpredictable environment was reflected in the weak results for both the internal and external position-taking, which both produced negative results. The internal position-taking produced a loss of SEK 185 million while the external management produced a negative result of SEK 25 million; see Table 10. Both results correspond to around 0.10 % of the nominal amount.

The loss can be largely attributed to the second quarter of the year. In the first quarter, interest rates had a strong, upward trend driven by improvements on the US labour market and the ECB's liquidity injections in Europe. However, this quickly changed in the second quarter to steeply falling interest rates as the labour market's recovery stopped short at the same time that concerns, primarily with regards to the developments in Greece, escalated. The summer saw the lowest levels yet on several fixed income markets. A 10-year American bond fell to 1.38%, a German 10-year to 1.17%, a Swedish 10-year to 1.17% at their lowest in the summer. A two-year German bond was noted at -0.09 % at its lowest.

In late August, ECB President Mario Draghi made a speech in which he promised that the ECB would do whatever it takes to safeguard the future of the single currency. This, together with new quantitative reliefs from the Federal Reserve, improved risk appetite once again. 10-year interest rates in the USA were back up at levels just below 2 %. Macro data from the autumn showed signs of a modest recovery.

### Positions in the continuous internal management

For the Debt Office's position-taking, the environment has been demanding. A positive result was turned into a negative one as the rates quickly fell back in April and May. The negative results have been somewhat mitigated by successful positions for flatter curves in Europe and positions for rising interest rates from negative absolute levels. Within the scope of its position-taking, the Debt Office has paid negative rates in rates swaps in Swiss Francs, and has indirectly paid negative rates via interest rate futures on a two-year German bond.

Over the year, the Debt Office has had a position for a stronger US dollar against the Australian dollar, Euro and the Japanese Yen. Tactical changes have meant that the short position in Australian dollars has been favourable, despite the strengthening of the currency over the year. Against the Euro, the Debt Office has not managed to time the market movements as well and the Euro's appreciation has therefore weighed the results down. Towards the end of the year, the Yen began to weaken rapidly and this position thus gave a surplus.

### Result for external managers

To obtain a measure of goal fulfilment in the Debt Office's own active management, to spread the risks of the management and to increase competence at the agency, the Debt Office has used external managers since 1992. The external managers also serve as an important source of information for the internal management. PIMCO, IPM and Mellon were enlisted for the entire year. The management contract with Amundi was terminated in February. Alliance Bernstein has been enlisted since November.

The managers' risk mandate is calculated on nominal reference portfolios which correspond to SEK 6 billion or SEK 8 billion per manager. The result is evaluated on an ongoing basis, both in absolute and relative terms.

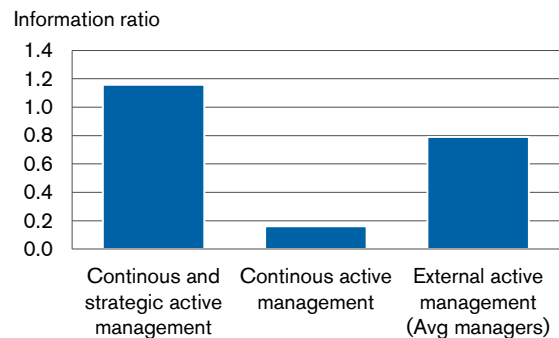
### Risk-adjusted result

The information ratio<sup>1</sup> is a generally used measure for reporting a risk-adjusted result. A high value means that the manager has taken relatively small risks in relation to the result achieved. Figure 16 shows the risk-adjusted result for our strategic positions, the continuous position-taking and the external management as a group. For the information ratio for the total management, we show the combined position-taking and thereby take into account all diversification effects.

<sup>1</sup> The information ratio is calculated based on monthly data. The reported annualised information ratio is obtained by dividing the average annual result expressed in basis points by the standard deviation of the monthly results recalculated on an annual basis.

$$\frac{\sum \text{result in bp} / \text{number of years}}{\sigma \times \sqrt{12}}$$

FIGURE 16. RISK-ADJUSTED RESULT



### Diversification

All external managers have the same mandate and can take positions on all markets with the same type of instrument. In spite of this, we can see clearly positive effects of diversification. They all have unique management styles, are based in different countries and have different approaches.

The combined position-taking reveals a better risk-adjusted result than that of the average individual manager. In 2012, the external managers' results had a standard deviation of 47 basis points of the managed amount on average. If we add up the individual managers' statistics as a group, the standard deviation for the group's result drops to 28 basis points.

We see the same phenomenon throughout the continuous position-taking, though the effect is smaller as the internal position-taking dominates in size. In 2012, the entire continuous position-taking had a standard deviation of 15 basis points of the managed amount, whilst for the internal continuous position-taking this was 18 basis points.

### Transfer of information

Apart from functioning as a diversification of the position-taking, using external managers also contributes knowledge and information. This is achieved primarily through daily insight into the managers' individual and combined positions. The managers' positions have fluctuated wildly over the year and among themselves. This reflects a development that is hard to assess, as well as a lack of trends over the year.

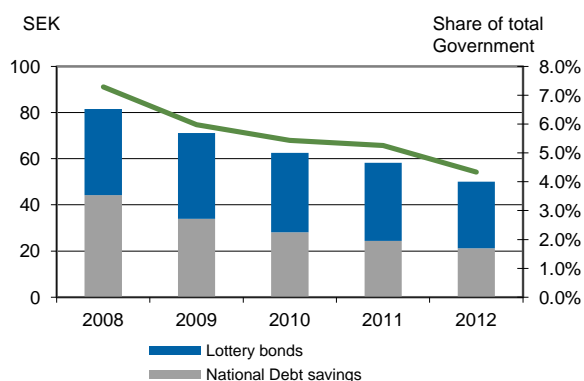
In addition to the continuous evaluation of the position-taking, we have had regular meetings and telephone conferences with the managers. This regular contact increases understanding of the various management processes and occasionally produces ideas that can also be used in the internal management.

# 6 Retail market borrowing

The Debt Office does not borrow purely from the institutional market, but also from individuals and smaller investors, in order to finance central government debt. We offer two savings products; lottery bonds and National Debt Savings. At the end of the year, SEK 50.1 billion, or 4.3 per cent of central government debt, was financed in this manner.

The objective for retail market borrowing is for it to be less costly than the borrowing we conduct via T-bills and government bonds. In 2012, retail market borrowing reduced the cost of central government debt by SEK 129 million. For the five-year period 2008-2012, the combined cost saving was SEK 804 million.

FIGURE 17. RETAIL MARKET BORROWING, TOTAL AND AS A SHARE OF CENTRAL GOVERNMENT DEBT 2008-2012



## Low interest rate shrinks market share

At the end of the year, lottery bonds and National Debt Savings constituted 3.3 per cent of the savings market in Sweden, which includes bank deposits, bond funds and private bonds. This is a decrease of 0.9 percentage points compared with the same figure at the start of the previous year. The savings market has grown whilst the amount of savings deposited with us has decreased. The low interest rate on Government bonds makes it difficult to compete with other forms of saving.

## New lottery bonds in April

In April, we sold new lottery bonds to a value of SEK 2 billion. Due to the low market rate, it was uncertain until the very end whether we could issue the premium loan. The coupon rate, the rate which we annually give away as tax-free gains, was 0.80 per cent and the guaranteed interest rate 0.50 per cent.

The premium loan planned for the autumn had to be cancelled as the interest rate was too low at that point to satisfy a reasonable profit plan. The total outstanding volume of lottery bonds decreased by about SEK 5 billion over the year.

The result for lottery bonds was SEK 126 million in 2012 - SEK 5 million less than in 2011. The result was affected by a decrease in the outstanding volume. At the same time, the costs fell as we only issued one new premium loan.

Unredeemed bonds that fall under the statute of limitation have a large effect on the result. Lottery bonds are subject to limitation ten years after maturity and following this the money goes to central government. In 2012, fewer bonds were subject to limitation than in 2011, which led to a worse result than 2011. If we disregard the revenues from these bonds, the 2012 result has improved by SEK 9 million. This effect will cease from 2013 as all older bonds are now subject to limitation.

## Reduced outflow for National Debt Savings

The outstanding volume in National Debt Savings decreased by SEK 3 billion in 2012. The decrease was at a slower pace than in 2011. In recent years, low interest rates have made it difficult to attract customers. For accounts with a floating interest rate, the rate went down from 1.50 to 0.75 per cent in 2012 in line with the Riksbank's reduced repo rate.

Accounts with fixed rates are linked to the interest rate on government securities. The interest rate was below one per cent for all maturities for most of the year. Accounts with fixed rates only constitute a small percentage of borrowing in National Debt Savings. Since 10 December, we no longer open new accounts with a fixed rate. This is because there is so little interest in this type of account that it is unprofitable for us to offer them. Deposits already made will remain until maturity in accordance with agreement with the customer.

The yield from lottery bonds in 2012 was SEK 4 million - about SEK 8 million less than in the previous year. The deterioration is a result of a decrease in saving activity.

TABLE 11. SAVING, RETAIL MARKET BORROWING

SEK Million	2008	2009	2010	2011	2012	Average
Lottery bonds	106	170	171	130	126	703
National Debt Savings	38	36	12	11	4	101
<b>Total saving</b>	<b>144</b>	<b>206</b>	<b>183</b>	<b>142</b>	<b>129</b>	<b>804</b>

# 7 Market support and debt maintenance

## 7.1 Our strategy

The objective of central government debt management is to minimise the long-term costs whilst taking risk into account. To achieve this, we aim to create an attractive market for government bonds, T-bills and inflation-linked bonds with a broad and stable investor base.

At a strategic level, market support and debt management is mainly a matter of setting up principles for our operational activities. Among other things, these principles concern the Debt Office's borrowing strategy, which involves concentrating the debt to a limited number of maturities and maintaining effective sales channels.

In keeping with our principle of open, predictable and long-term communication, we publish "Central Government Borrowing – Forecast and Analysis" three times a year. These reports describe the interaction between our borrowing requirement forecasts, the guidelines established by the Government, and the breakdown of borrowings by instrument. This is in order to make it easier for market actors to follow developments in and gain an overview of central government debt policy. Every year we ask investors and dealers how they perceive our communication.

Investor relations must be characterised by openness, transparency and predictability. Even in the annual survey, dealers and foreign investors rate the Debt Office's borrowing activities higher for their transparency than other debt offices.

The Debt Office follows a long-term plan and works with Swedish and international counterparties on a continuous basis. In 2012, trips were made to Europe, Eastern Europe, Central Asia, the Middle East and North America to meet with foreign investors. We also participate regularly as a speaker at investor seminars.

A more detailed description of the principles mentioned above can be found in the Debt Office's financial and risk policy.

## 7.2 Market commitments

The Debt Office has a number of market support commitments to its dealers in order to maintain the liquidity in government securities. This is in order to reduce uncertainty in conditions of short supply, eliminate risks in the event of

transaction problems and compensate for the relatively small size of the Swedish market. These commitments apply regardless of our own cash-based funding requirements.

This market commitments involve:

- Access to an unlimited repo facility for our dealers for nominal and inflation-linked government bonds. A limited repo facility for T-bills.
- Exchanges between inflation-linked bonds at rates based on the prevailing market conditions and demand, as well as a certain premium. The exchange facility is no longer available when the loan is shorter than one year.
- Repo swaps in all instruments with fixed prices for a limited volume. Reposwaps mean that we exchange one government security for another (with an agreement of an exchange reversal). Hence, contrary to regular repos, this procedure does not involve any cash flows.
- Offer exchanges in order to increase the volume in benchmark bonds with 2, 5 and 10-years remaining until maturity.

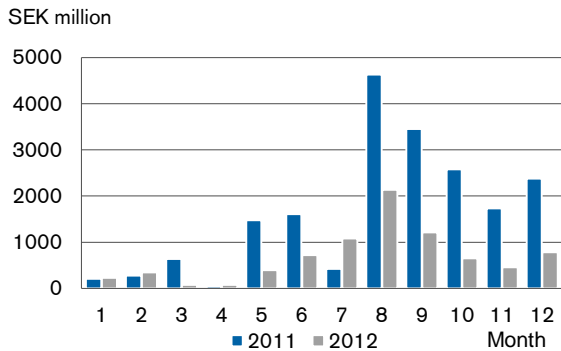
Continuous exchanges in inflation-linked bonds increased in 2012 and amounted to SEK 11.2 billion, compared with SEK 8.8 billion in 2011. The market support repos are the market commitment that is in greatest demand. A market support repo means that a dealer can purchase a government security from us with an agreement to sell it back to us at a later date. In 2012, we made market support repos in government bonds for an average of SEK 700 million per banking day. The corresponding figure for 2011 was SEK 2 billion.

The market support repos are offered at a fixed rate in relation to the Riksbank's repo rate. As we want the repo market to be handled as much as possible by the market actors themselves, this rate is lower than the Riksbank's repo rate. Market support repos are made today at a level 40 basis points below the repo rate.

The Debt Office's market support repos maintain a functioning repo market and offer a last resort for investors to obtain desired instruments. This limits the risk for investors in trading with government securities, which is important for a liquid market.

The demand for government securities varies greatly over the year, partly owing to the demand and situation in the financial markets, and also simply as a result of seasonal variations. The demand for government securities and other types of secure placements normally increases towards the end of the year.

FIGURE 18. MARKET SUPPORT REPOS IN GOVERNMENT BONDS, AVERAGE DAILY VOLUME



The daily average repo volume in government bonds has decreased somewhat during 2012, compared with the previous year. In our view, it is not necessary in the current situation to make any major changes to our market commitments. The conditions for market supporting repos in T-bills have changed during the autumn so as to contribute to better liquidity. Our overall assessment is that the repo commitment continues to have positive effects on market stability. It is important that the market functions well, even in times of unrest. This reduces the government's borrowing costs and helps us to maintain a good, long-term relationship with our investor base.

The repo market in Sweden is a very important element in the sound functioning of our fixed income market in an international perspective. The functioning repo market is a result of many factors, not least our dealers who for many years have contributed to the infrastructure. The Debt Office's market commitments are another important factor.

But good liquidity is a prerequisite for the Debt Office to be able to borrow cost-effectively on the market. In 2012, we offered the market at a couple of auctions the opportunity to exchange to the new ten-year benchmark bonds. We can thus increase the outstanding volume of benchmark bonds without affecting the borrowing requirement. Demand was strong in the exchanges and the Debt Office will continue to offer these exchanges in 2013.

### 7.3 The investors' perception of the Debt Office

For the ninth consecutive year, and upon commission of the Debt office, TNS Sifo Prospera has asked Swedish and

foreign investors and dealers how they perceive the Debt Office's borrowing activities. The survey was conducted during the period 19 November to 18 December 2012. A total of 8 dealers and 48 Swedish and foreign investors participated. The response frequency was 95 per cent, in line with the previous year's survey.

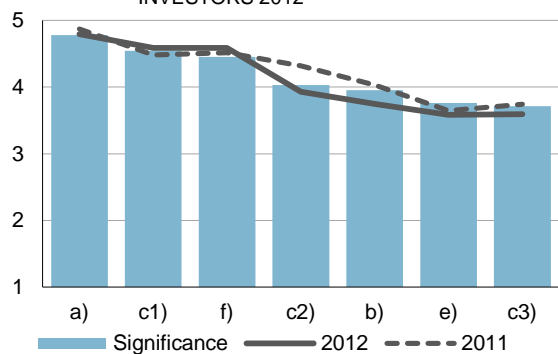
Confidence in the Debt Office's borrowing activities continues to be high and, for the second year in a row, the rating increased. The largest increase is noted among international investors and our dealers. The rating given by Swedish investors is in line with the previous year.

The Debt Office's clearest strengths are information about central government borrowing requirements and information about volumes and terms for government bonds. Swedish actors give the Debt Office high ratings for its responsiveness to the market and for its information concerning T-bills. The Debt Office also receives high ratings for market support in government security repos and information on inflation-linked bonds. The weaknesses primarily concern the contact with Swedish investors. A summary of the results of the survey can be found below.

- Clear information on central government borrowing requirements and financing is still deemed to be the most important element. The Debt Office was rated highly for forecasting central government borrowing requirements and financing. Next in line is information about government bonds and market support repos.
- The Swedish National Debt Office is rated higher for its transparency than debt offices in other countries. This is the opinion of the majority of dealers and foreign investors.
- Dealers highly rate the Debt Office's market support in repos with government securities and personal contact - an improvement compared with the previous year.
- Swedish investors do not think that the Debt Office is sufficiently responsive to the market and wish for closer contact. Foreign investors value the contacts highly and request more information on inflation-linked bonds.
- The investors continue to be satisfied with the liquidity in government bonds. The liquidity in the secondary market for T-bills and inflation-linked bonds has improved from a low level, compared with previous years.
- The Debt Office's website is still the most important and most common information channel for central government borrowing needs, financing, auction terms and results. It can, however, be improved in terms of clarity and ease of navigation.

Overall the impression of our borrowing activities is somewhat better than last year.

FIGURE 19. VALUATION OF THE DEBT OFFICE, SWEDISH INVESTORS 2012



Explanation: The grading system is a scale of 1 to 5. A value of 4 or above indicates an excellent rating, around 3.5 indicates "fair" and values below 3 indicate a less than satisfactory rating.

**Areas covered by the survey**

**Communication**

- a Clear information about borrowing requirement/financing
- b Good direct contact with dealers and investors

**Borrowing – Good information about volumes and other terms for**

- c1 government bonds
- c2 inflation-linked bonds
- c3 T-bills (Swedish actors)

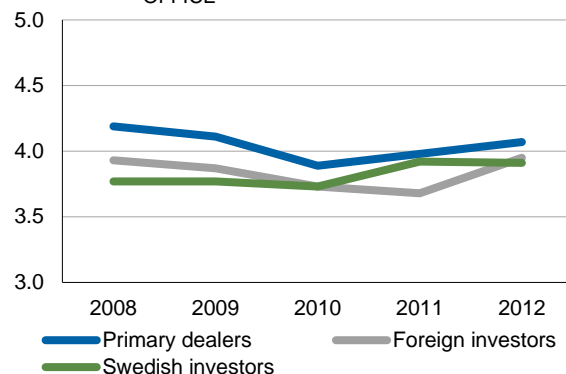
**Market support – Good market support via (dealers)**

- d1 repos in government securities
- d2 exchange of inflation-linked bonds

**General**

- e the market's wishes (Swedish actors)
- f clear/consistent action

FIGURE 20. WEIGHTED PROFILE SCORE FOR THE DEBT OFFICE



Explanation: The weighted profile score has been calculated based on the year's valuation, where the rating is in each case weighted by the importance of the respective factor. The grading system is a scale of 1 to 5. Values above 4 indicate an excellent rating; values under 3 indicate a less than satisfactory rating.

# 8 Goal fulfilment and results

The overall objective of central government debt management is to minimise the long-term cost of government debt without excessive risk-taking. We have developed strategies for this which, in our estimation, create the best conditions for achieving this goal. This is not simply a matter of strategies in terms of guidelines for the composition and maturity of central government debt. It is also a matter of principles for how we will act in order to secure long-term borrowing on attractive terms. For instance, we work actively with market support and endeavour to be open, clear and predictable in our work.

It is not possible to be 100% accurate in our evaluations regarding whether or not strategies will help us to achieve the overall goal. There is no one benchmark for evaluating decisions on guidelines. The Debt Office's proposed guidelines are based on our assessment of how the debt should be managed in order to achieve the goal. Since the system of annual guidelines was introduced in 1998, the Government has essentially followed our proposals. The Riksdag has thus far found that the Government guidelines have been in line with the goal. As it is the Riksdag that establishes and interprets the goal, this suggests that the Debt Office's work with the proposed guidelines has provided an important contribution to achieving the overall goal for central government debt management.

Furthermore, it is not possible to quantify the impact of our policy on market support, etc. On the other hand, we can, with the help of the annual survey, establish that the Debt Office has gained great confidence among both Swedish and foreign investors and this stands us in good stead compared with other central government borrowers. The measurement also reveals a high degree of goal fulfilment for our strategy.

FIGURE 21. TEN-YEAR GOVERNMENT BOND YIELD IN 2012



We can also see that the interest rates on Swedish government securities are low in relation to other government bond yields. The low rates are of course primarily a result of expectations of monetary policy key interest rates and central government finances, but without a functioning government

securities market and great confidence in our borrowing activities, demand for Swedish government securities would not have been so strong. Last year the Swedish ten-year rate saw a low of 1 per cent; see figure 11.

Overall, the Debt Office believes we have achieved the goals by following the principles that we and the Government have established for central government debt management. Here are a few examples:

## Operative management with consideration for the goals

We managed the central government debt in accordance with current guidelines for shares and maturities. Also within the framework of the guidelines, we planned the borrowing with consideration for the goal of long-term minimisation of costs. One example of this is our prioritisation of issues in government bonds over other borrowing, as the borrowing requirement was limited. In order to achieve the maturity goal for the nominal krona debt, we combined borrowing with rate swaps. The government securities market is our most important borrowing market and in order to ensure readiness in the future, it is important to maintain infrastructure and liquidity in this market.

In order to minimise the risks associated with financing and refinancing in the course of the management, we continuously manage loan maturities over a long period. We therefore distributed the borrowing evenly across the year in our regular auctions and within our liquidity management.

## Open and clear communication

The debt problems in Europe have placed a focus on the need for transparency in the reporting of central government debt and borrowing, in order to engender confidence among investors. We endeavour to be as open and clear as possible in our communication with the market. In the 2012 survey, the Debt Office once again received excellent ratings for clarity, communication and consistent action. The Debt Office is also rated higher than other central government debt offices in terms of transparency.

## Market support

We worked actively with market support measures throughout 2012. For example, we offered exchanges for government bonds on a number of occasions with the purpose of increasing the outstanding volume in the reference loan. We also changed the terms for market support repos in T-bills in order to contribute to better liquidity in the market. The value of the repo commitment was confirmed in the survey, where the Debt Office's market support in government securities repos received high ratings.

**Position-taking**

By taking derivative positions in foreign currency, we can adjust the debt's exposure in order to lower the cost of the debt. Over the last five years, we have saved an average of SEK 2.2 billion per year, mostly thanks to the position for a stronger krona that was built up during 2009. For the year of 2012 the result was a loss of SEK 2012 million.





Visiting address: Jakobsbergsgatan 13 • Postal address: SE-103 74 Stockholm • Tel: 08 613 45 00  
Fax: 08 21 21 63 • E-mail: riksgalden@riksgalden.se • Web: www.riksgalden.se