

# Central Government Borrowing

## Forecast and analysis 2016:3

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In *Central Government Borrowing - forecast and analysis 2016:3* the Debt Office presents forecasts for central government finances and borrowing in 2016 up until 2018. An assessment of the economic development is given in the first section. The following section presents annual and monthly forecasts for the budget balance and the underlying analysis. These forecasts serve as the basis for borrowing, which is discussed in the last section of the report.

Hans Lindblad  
*Director General*



## The Debt Office's mission

The Debt Office is the Swedish government's financial manager. Its mission includes central government borrowing and debt management. The objective is to do this at the lowest possible cost while avoiding excessive risk.

In *Central Government Borrowing – Forecast and Analysis*, which is usually published three times a year, the Debt Office presents forecasts for central government finances in the coming two years. On the basis of these forecasts, the Debt Office estimates how much the government needs to borrow and sets up a plan for borrowing which is also presented in the report.

On the fifth working day of each month, the central government budget balance (the net of all incoming and outgoing payments) for the previous month is published in a press release. This outcome is compared with the forecast from *Central Government Borrowing – Forecast and Analysis* and any deviations are explained. In connection with the monthly outcome, the Debt Office also presents the debt development in the report *Sweden's Central Government Debt*.

# Summary

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*The Debt Office expects a net borrowing requirement of SEK -80 billion in 2016. In 2017 the net borrowing requirement is expected to increase to SEK 33 billion. The main driver behind this development in 2016 and the change in 2017 is excess deposits in tax accounts. In 2018 the net borrowing requirement will decrease to SEK -20 billion. Central government borrowing decreases compared with the previous forecast on account of the lower net borrowing requirement. The Debt Office is reducing the issue volumes of all types of government securities and of T-bills especially. Borrowing in government bonds is reduced to SEK 3 billion per auction, corresponding to a decrease of SEK 11 billion per year.*

- The Swedish economy is in or close to balance from several macroeconomic perspectives, for example in terms of resource utilisation, unemployment and public finances. The clearest exception is monetary policy, which continues to be very expansive.
- GDP growth is continuing at a good rate this year, even though it will be lower this year than last year. The global recovery continues to be slow and Swedish growth is being driven by domestic demand. In 2017 and 2018 growth will dampen to a rate of about 2 per cent per year.
- The net borrowing requirement is estimated at SEK -80 billion in 2016. Next year the net borrowing requirement rises to SEK 33 billion. The main driver behind this development in 2016 and the change in 2017 is excess deposits in tax accounts.
- Excess deposits in tax accounts are an expensive form of borrowing for central government. The Debt Office estimates that the additional cost, compared with the Debt Office's regular borrowing, is around SEK 0.5 billion for 2016.
- As of 1 Jan 2017, the tax account interest rate will be lowered to zero. The view of the Debt Office is that this measure will probably not be sufficient, as there will continue to be strong incentives for companies to place money in tax accounts.
- In 2018 the net borrowing requirement decreases to SEK -20 billion. The forecast for 2018 contains an assumption of unfinanced reforms amounting to SEK 15 billion.
- Central government net lending, which is not affected by excess deposits in tax accounts, is estimated at 0.4 per cent as a proportion of GDP in 2016. The forecast for 2017 and 2018 is -0.1 and 0.5 per cent of GDP.
- The central government debt is estimated at SEK 1 350 billion at the end of 2016 and at SEK 1 372 billion and 1 342 billion at the end of 2017 and 2018. This corresponds to 28 per cent of GDP at the end of 2018.
- The Debt Office is reducing the issue volumes of all types of government securities, and of T-bills especially.
- The auction volume of government bonds decreases from SEK 3.5 to 3.0 billion per auction throughout the forecast period. This means that borrowing in government bonds will be SEK 81 billion this year and SEK 66 billion in 2017. The issue volume will remain unchanged at SEK 66 billion in 2018.
- Borrowing in T-bills decreases to SEK 10 billion per auction. The stock is estimated at around SEK 90, 110 and 80 billion on 31 December 2016, 2017 and 2018.
- Borrowing in inflation-linked bonds also decreases. The issue volume decreases from SEK 1 billion per auction to SEK 750 million, corresponding to an annual rate of SEK 13.5 billion in 2017 and 2018.
- As in the June forecast the Debt Office intends to only issue bonds in foreign currency to refinance on-lending to the Riksbank. This applies to the whole of the forecast period.

# Swedish economy close to balance

The Swedish economy continued to grow at a good rate this year, even though GDP growth will be lower this year than last year. The global recovery continues to be slow and Swedish growth is being driven by domestic demand. In 2017 and 2018 growth will slacken to a rate of about 2 per cent per year.

## Continued low global growth

### Lower long-term interest rates after the referendum result in the UK

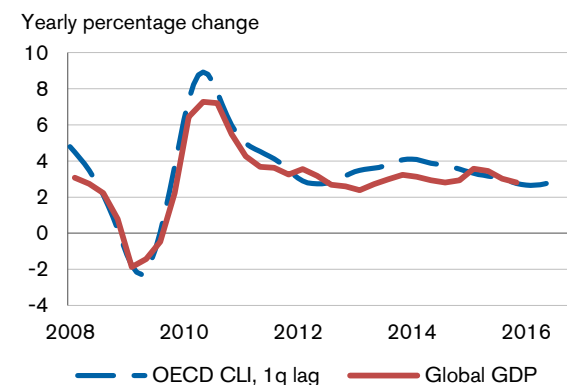
After the referendum in the UK on 23 June, when the country voted to leave the EU, the turbulence on financial markets increased. Share prices fell, long-term interest rates went down and sterling weakened. The situation in the market stabilised relatively quickly, but long-term interest rates have remained at a lower level than in the spring.

Interest rates have remained low in general and both central banks' own forecasts and the expectations of market participants indicate that policy rates will continue to be very low in the next few years.

### Marginally weaker forecast for global GDP

Preliminary GDP outcomes indicate that global growth in the first half of the year was weaker than at the end of last year. The growth of world trade has also declined and global industrial production is subdued. In the second half of the year global GDP is expected to grow more rapidly, and this is supported by, for instance, the OECD's leading indicators, see figure 1.

**Figure 1 Global GDP growth, outcome and indicators**



Source: OECD, IMF and Datastream.

The labour markets in several large economies, such as the US, UK and Germany, have long been performing with increasing strength without wage growth picking up. This is one reason why both inflationary pressure and domestic demand has been weaker than normal in this phase of the economic cycle.

The situation in both Russia and Brazil seems to have stabilised and these countries seem to be on their way out of deep and relatively protracted recessions. However, GDP is still shrinking in these countries, although slower than before. In China growth is declining, while it is increasing in India. The Debt Office assesses that global GDP will increase by 3.1 per cent this year and 3.4 per cent next year. The increase next year will mainly be driven by the development of the emerging economies while growth in developed countries is only expected to be moderate.

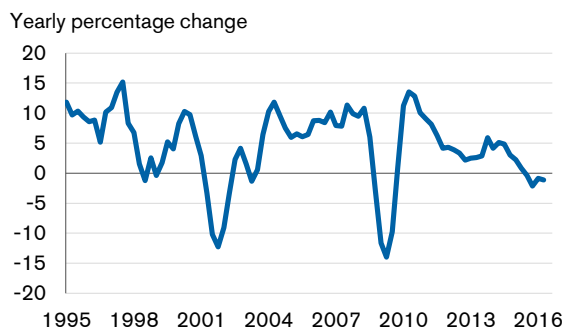
### Weak growth in the first half of the year in the US

The economy in the US; just as in many other countries, is still divided. The first half of the year was characterised by relatively weak GDP growth and low inflationary pressure, which can be interpreted as resource utilisation being low. At the same time, unemployment has continued to fall and is now down to levels close to the Federal Reserve's assessment of its equilibrium level. However, the development of unemployment has surprised many analysts in recent years and it is not unlikely that the assessments of the equilibrium level may have to be adjusted in the future.

Private consumption in the US is increasing at a relatively good rate and grew faster in the first half of this year than at the end of last year. Despite this strong consumption, the import of goods and services to the US has decreased for four successive quarters, a relatively rare occurrence, see figure 2. Lower exports affect not only the US net trade balance but also growth in a number of emerging economies that have the US as an

important export market. The Debt Office's forecast for GDP growth in the US is 1.6 per cent this year and 2.2 per cent next year.

**Figure 2 Imports of goods and services to the US**

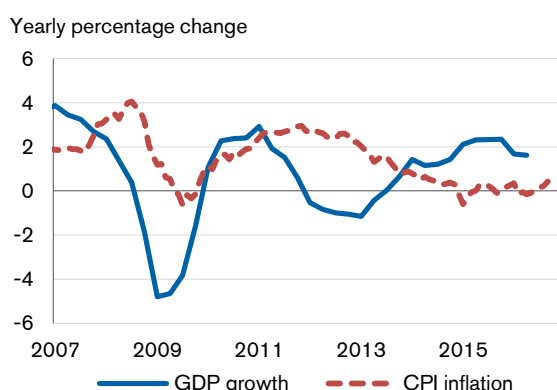


Source: BEA and Datastream.

**In the euro area growth remains slow and the prospects for the UK are characterised by uncertainty**

Developments in Europe in the first half of the year are reminiscent of developments in the US. Growth in the euro area in the first two quarters was only marginally stronger than in the US. At the same time, CPI inflation has been around zero for one and a half years, see figure 3. Unemployment is continuing to go down. Over a period of three years it has fallen from just more than 12 per cent to just more than 10 per cent. The Debt Office's forecast for GDP growth in the euro area is 1.7 per cent this year and 1.5 per cent in 2017.

**Figure 3 Growth and inflation in the euro area**



Source: Eurostat and Datastream

Several forecasters have made downward revisions of the economic prospects of the UK after the referendum. Uncertainty about the economy has also increased and this is judged to dampen companies' willingness to invest and consumers'

consumption of durable goods and investments in housing. This greater uncertainty will probably last for several years.

**Growth in Sweden is slowing down**

The picture of the Swedish economy is that it is in or close to balance from several macroeconomic perspectives. For example, GDP is close to its potential level, unemployment is close to its equilibrium level and public finances are close to the levels proposed in the amended fiscal policy framework (see the box on page 7). The clearest exception is still monetary policy, which continues to be very expansive.

Growth in Sweden was high in 2015 and GDP increased by 4.1 per cent. In the first half of this year growth slowed down, and looking forward this is expected to continue. Growth is expected to be 3.3 per cent this year and just less than 2 per cent in 2017 and 2018.

**Table 1 GDP and its components, constant prices**

Percentage change <sup>1</sup>	2015	2016	2017	2018
GDP	4.1 (4.2)	3.3 (3.2)	1.9 (2.2)	1.8
Household consumption	2.7 (2.7)	2.4 (2.6)	2.2 (2.1)	2.1
General gov't consumption	2.5 (2.6)	3.6 (3.2)	1.6 (2.0)	1.0
Gross fixed capital formation	7.2 (7.0)	7.3 (5.0)	2.1 (3.0)	1.5
Change in inventories <sup>2</sup>	0.3 (0.4)	0.2 (0.1)	-0.1 (0.0)	0.0
Exports	5.6 (5.9)	3.0 (3.6)	3.1 (3.5)	3.9
Imports	5.5 (5.5)	4.9 (4.3)	3.1 (3.8)	3.6
Net exports <sup>2</sup>	0.3 (0.4)	-0.7 (-0.1)	0.1 (0.0)	0.3
GDP (calendar adj.)	3.9 (3.9)	3.1 (3.0)	2.2 (2.4)	1.9

Note: Previous forecast in parentheses.

<sup>1</sup> Actual change compared with previous year..

<sup>2</sup> Change as percentage of GDP previous year.

On the whole, the GDP outcome for the second quarter of 2016 was in line with the Debt Office's forecast. But the composition of the GDP was not as expected. Household consumption and exports grew more weakly while investments grew more strongly.

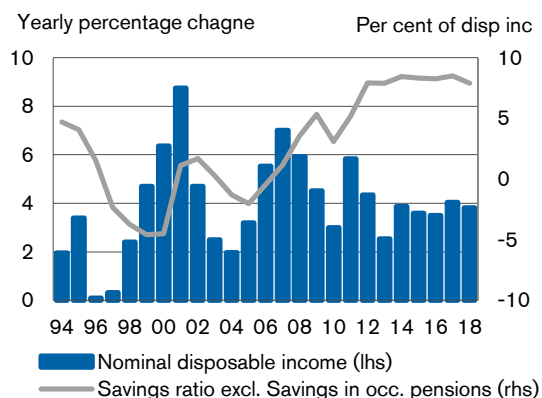
The Debt Office's picture of economic growth in 2016 and 2017 is broadly the same as in the previous forecast. GDP growth has been revised upwards by 0.1 of a percentage point this year but has been revised downwards by 0.3 percentage points next year. The lower growth next year is due to slightly lower growth of public consumption, exports and investments.

### Slightly weaker demand in the economy

Growth in the next few years will continue to be driven by domestic demand. Both household consumption and investments make noticeable contributions to GDP growth, while the growth of public consumption is stronger than normal.

Household consumption has grown strongly in recent years but there are now some indications of a decline in consumption growth. The outcome for the second quarter showed that consumption stood virtually still between the first and second quarters. In addition, retail statistics show ever lower growth in retailing and car sales have decreased in recent months. However, the latest tendency survey of households by the National Institute of Economic Research (NIER) indicates increased optimism among households. There is, moreover, still scope for households to consume more since interest rates are low, disposable income are rising and savings in the household sector are high. Looking forward, household consumption is expected to continue to grow at a steady rate. But the weak outcome for the second quarter results in a short-term dip in consumption growth.

**Figure 4 Disposable income and savings ratio**



Source: Statistics Sweden and Datastream

Public consumption grew by 2.5 per cent in 2015; this was due, in part, to demographic developments

and high expenditure for migration and integration. Public consumption is also expected to grow strongly in the coming years. Compared with its previous forecast the Debt Office has made a slight downward revision of its forecast since the number of asylum seekers is expected to be smaller.

Investments have increased rapidly in recent years and the outcome for the second quarter of 2016 was also high. This growth is mainly being driven by housing investments. Housing investments are expected to remain high, but their growth will slacken, partly because resource utilisation in the construction sector is getting more strained.

After a strong close to 2015 exports decreased in the first half of the year. However, the fall in exports is judged to be temporary and the gradual recovery of the international economy means that exports are expected to rise during the forecast period. Imports also increased at a relatively high rate last year and this growth has continued in the first half of the year. This year the contribution of net exports to GDP is expected to be negative and next year it is expected to be weakly positive.

### The labour market remains strong

The strong performance of the labour market continued in the first half of the year. The labour force will continue to grow in pace with the number of people of working age in the coming years. The assessment is that the labour force will grow by 0.9 per cent both this year and next year, and this is virtually the same assessment as made in the Debt Office's most recent forecast, see table 2. In the latter part of 2018 the supply of labour is assumed to increase, as some of the asylum seekers who have come to Sweden in recent years will enter the labour market. The labour force is also expected to increase by 0.9 per cent in 2018.

**Table 2 Labour market**

Perc. change. <sup>1</sup>	2015	2016	2017	2018
Labour force	0.8 (0.8)	0.9 (0.9)	0.9 (1.0)	0.9
Employment	1.4 (1.4)	1.5 (1.6)	1.3 (1.2)	0.8
Unemployment	7.4 (7.4)	6.8 (6.8)	6.4 (6.6)	6.5

Note: Previous forecast in parentheses.

<sup>1</sup>Calendar adjusted values.

Employment increased strongly in the first half of 2016 but the outcome for the third quarter was weak. A large part of employment growth has been in the public sector and the service sector. Various

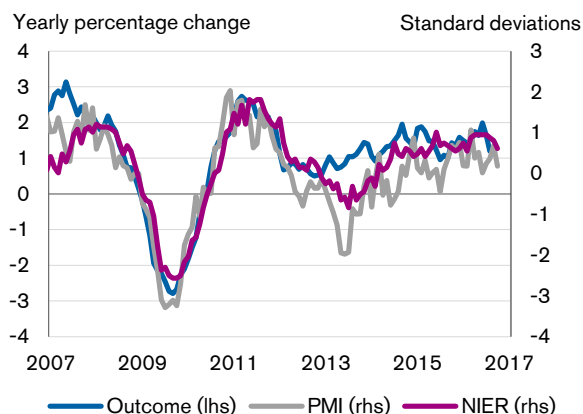


labour market indicators, such as the purchasing managers index and the NIER's Economic Tendency Survey point to a continued high growth rate of employment in the coming quarters, see figure 5.

The peak in yearly GDP growth was in late 2015 while employment growth is expected to peak this year. The forecast is that employment will increase by 1.5 per cent this year and 1.3 per cent next year.

Unemployment is expected to fall to 6.8 per cent this year and fall further to 6.4 per cent next year. In 2018 the labour force is expected to increase more than employment, and unemployment is expected to increase slightly.

**Figure 5 Employment, outcome and indicators**



Source: Statistics Sweden, SILF/Swedbank, NIER and Datastream.

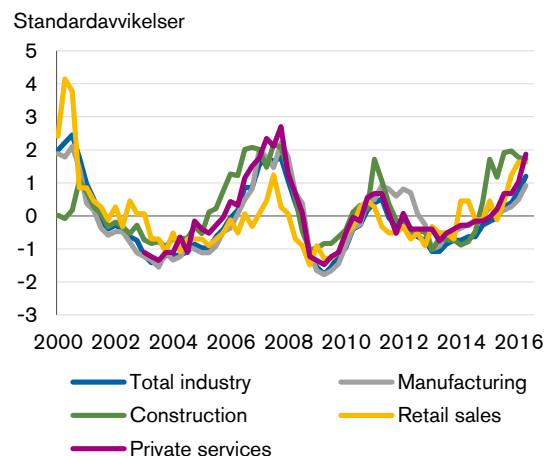
Even though the labour market has performed strongly in recent years, there are still imbalances. High resource utilisation means that matching problems are intensifying and the shortage of labour in certain industries is increasing. The proportion of companies reporting a shortage of labour in the NIER's Economic Tendency Survey continued to rise in the second quarter and is above the historical average, figure 6 shows normalised shortage figures for various industries.<sup>1</sup>

Matching in the labour market is also affected by the fact that the group of jobseekers classified by the Swedish Public Employment Service as being in a vulnerable situation, is increasing as a proportion of the total number of unemployed

<sup>1</sup> The point of normalising these series so that they have a mean of zero and a standard deviation of 1 is to make them easier to compare.

people.<sup>2</sup> The situation in the labour market, with poorer matching of unemployed and job vacancies, risks becoming even more problematic when the many asylum seekers who have come to Sweden in recent years enter the labour market.

**Figure 6 Labour shortage in the business sector**



Source: NIER and Datastream.

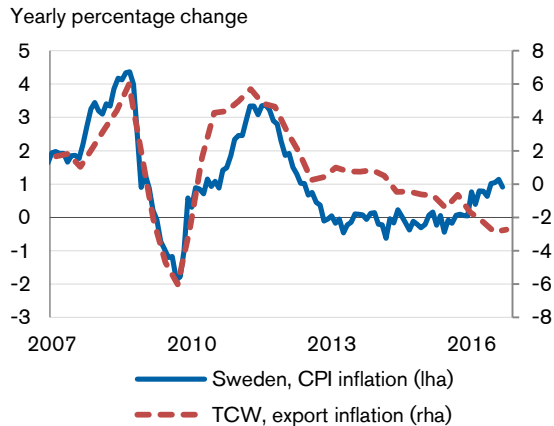
### Inflation is expected to rise

In 2014 and 2015 the trend in CPIF inflation was rising, but in 2016 this inflation has stabilised at an annual rate of between 1 and 1.5 per cent. If energy prices are excluded from CPIF, the break in the trend is even clearer. However, inflation expectations have continued to rise in the same period and the expectations regarding inflation in 5 years are now at the Riksbank's target level of 2 per cent. A moderate rise in inflation is expected during the forecast period on account of higher-than-normal resource utilisation. The Debt Office's forecast is that CPIF inflation will be 1.4 per cent this year and 1.7 and 2.0 per cent in 2017 and 2018.

One factor contributing to the low inflationary pressure in the Swedish economy is the low inflationary pressure internationally. Figure 7 shows inflation in Sweden and the price increases for the goods exported by our most important trading partners. The figure gives a good approximation of the external inflationary pressure seen from a Swedish perspective.

<sup>2</sup> This group consists of people with only pre-upper secondary education, people born outside Europe, people aged 55-64 years and people with disabilities resulting in impaired work capacity.

**Figure 7 Inflation in Sweden and international export price increases**



Source: Statistics Sweden, national sources and Datastream.

### Downside risks dominate

The main scenario in the Debt Office's forecast is that the global economy will continue to gain in strength. But the recovery is fragile and there is a risk of it halting. Chinese demand is an important driver of global growth. The prospects for the Chinese economy have improved slightly compared with the previous forecast, but there is a risk that China's rebalancing towards more domestically driven economic development will result in growth slowing down more quickly than expected. There are also considerable downside risks of in commodity exporting countries.

Political uncertainty in Europe has increased, partly on account of the result of the UK referendum. Even though the initial turmoil in financial markets after the referendum stabilised relatively quickly, uncertainty about the future shape of relations between the UK and the EU may hamper economic growth, especially in the UK. In several European countries, including Italy and Germany, the banking sector can be an increasing risk even for the development of the economy. Several banks have,

for example, problems with bad debts and weak profitability.

In Sweden the outcome for both household consumption and exports in the second quarter of 2016 was weaker than expected. Weaker development than in the main scenario, for example on account of more caution on the part of households and a weaker international recovery, may dampen the growth of demand in the economy. The high and growing debt of households is also a risk factor in the economy and can, for example, mean that the group of households with high indebtedness reacts more strongly to any downturn in housing prices. The recently introduced amortisation requirement for home mortgages could also result in lower consumption among households. However, low interest rates, good growth of disposable income and high savings mean that there is still scope for households to consume and their consumption can also be higher than expected.

The development of the Swedish economy also depends on how many asylum seekers come to Sweden. There has been a considerable decrease in the number of asylum seekers compared with last year, but great uncertainty is still associated with the forecasts of the inflow of refugees. In the short term migration flows mainly affect the development of public consumption, while one decisive factor for the longer-term development is how quickly new arrivals enter the labour market and how quickly and to what extent they obtain employment.

The Debt Office's overall assessment is that the risk for a weaker-than-forecast economic development is greater than that for a stronger.





## Changes in the fiscal policy framework

At the end of September the parliamentary Surplus Target Committee submitted its report. Seven of the eight parties in the Riksdag support the proposals in the report. The Committee proposes a number of changes to the fiscal policy framework, including

- altering the surplus target for general government net lending from one per cent to one third of a per cent of GDP over an economic cycle
- supplementing the framework with a benchmark, a debt anchor for general government consolidated gross debt (the 'Maastricht debt') of 35 per cent of GDP
- following up of the surplus target more stringently and giving the Swedish Fiscal Policy Council a more explicit role in the follow-up,

General government debt in Sweden has decreased sharply since the fiscal policy framework was introduced. At the same time, confidence in fiscal policy has been strengthened. In the view of the Committee, this, taken in combination with the fact that cost pressure will increase in Sweden in the next few years for demographic reasons, justifies a lower surplus target in the coming years than Sweden has at present. The Committee's calculations show that, given reasonable assumptions about interest rates and growth, fiscal policy will still be sustainable in the long term with the new surplus target. The Committee also takes the view that this target will continue to ensure that Sweden has sufficient safety margins to be able to handle deep recessions using an active fiscal policy without risking deficits so large that Sweden's credit rating is downgraded or that they come into conflict with the rules of the Stability and Growth Pact.

To reinforce the link of the fiscal policy framework to the fundamental objective of fiscal policy sustainability, the Committee proposes

supplementing the framework with a debt anchor for general government consolidated gross debt of 35 per cent of GDP. This level is compatible with a surplus target for net lending of one third of a per cent of GDP. The debt anchor should not be an operational target, but should be a benchmark that clearly expresses a desirable level of debt.

The reinforced follow-up of the fiscal policy framework proposed in the inquiry report also covers the reporting and follow-up of systematic deviations from the surplus target. The debt anchor is also intended to play a central role in the review of the surplus target that the Committee proposes should be conducted in every other electoral term.

In addition to the link of general government debt to the sustainability of fiscal policy, this debt is of central importance for the ability of central government to conduct an active fiscal policy during deep recession and economic crises. It is difficult to draw any conclusions on the basis of economic theory and empirical research about what is a reasonable level of general government debt in practice and what levels of this debt can cause problems in the economy in the form of lower growth, higher interest rates and a lower credit rating, for instance.<sup>3</sup> Moreover since economic crises can generate considerable increases in this debt, the safety margins in public finances should be substantial.

The Debt Office has previously stated that a central government debt of around 30-35 per cent of GDP can be reasonable in the long term.<sup>4</sup> This ensures that there is room for manoeuvre in fiscal policy during economic crises while providing considerable margins to the levels sometimes considered to be problematic in economic research. The Committee's proposal of a debt anchor for general government consolidated gross debt of 35 per cent of GDP is well in line with the Debt Office's assessment of a reasonable level of the central government debt.

<sup>3</sup> See the Debt Office's Focus Report *The role of the central government debt in the economy*, June 2016.

<sup>4</sup> See *Central government borrowing – Forecast and analysis 2016:2*

# Lower net borrowing requirement in 2016

The Debt Office expects a net borrowing requirement of SEK -80 billion in 2016. In 2017 the net borrowing requirement is expected to increase to SEK 33 billion. The main driver behind the development in 2016 and the change in 2017 is excess deposits in tax accounts. In 2018 the net borrowing requirement decreases to SEK -20 billion.

## Lower outcomes

The outcome figures for the net borrowing requirement have been much lower than estimated since the Debt Office's last forecast in June. The main explanation is that payments to tax accounts have been higher than forecast. The underlying growth of tax income is just as strong as it was when our assessment was made in June. The running charges of tax on wages, consumption and corporate profits have developed much as estimated. The difference since the previous forecast is mainly explained by higher payments of supplementary tax.

The Debt Office's interpretation is that this has largely to do with the present level of interest in tax accounts creating incentives both to make tax payments earlier and to use tax accounts as a form of savings. The Debt Office makes the assessment that excess deposits of about SEK 35 billion have been made in 2016 until and including September. The assessment is that a total of SEK 55 billion, that does not relate to taxes or contributions is placed in tax accounts.

The Government has made a proposal to the Riksdag that the lower limit for interest on tax accounts should be reduced to zero as of 1 January 2017. The Debt Office then expects most private individuals to gradually withdraw their extra funds. For companies, however, placing money in tax accounts will still be attractive. For further information about excess deposits in tax accounts, see the in-depth box on page 11.

## Turnaround in the net borrowing requirement

Next year the net borrowing requirement will increase compared with 2016. This is mainly explained by a decrease in central government tax income in actual terms of SEK 43 billion between the years, which is largely due to an estimated

decrease in excess deposits in tax accounts along with a partial reversal through withdrawals. However, the underlying development of tax income is weakly positive. For more information about the development of tax income, see page 13.

Expenditure in 2017 is expected to increase compared with 2016. This is partly because the level in 2016 is temporarily low since expenditure of approximately SEK 14 billion was brought forward to 2015. In addition, there is a relatively large increase in expenditure items including interest payments on the central government debt, government grants to local authorities and Sweden's contribution to the EU budget between these years.

For 2018 the net borrowing requirement is expected to be SEK -20 billion. Tax income will grow at a good rate while temporary effects from 2017 disappear. The forecast for 2018 contains an assumption of unfinanced reforms amounting to SEK 15 billion.

**Table 1 Central government net borrowing requirement**

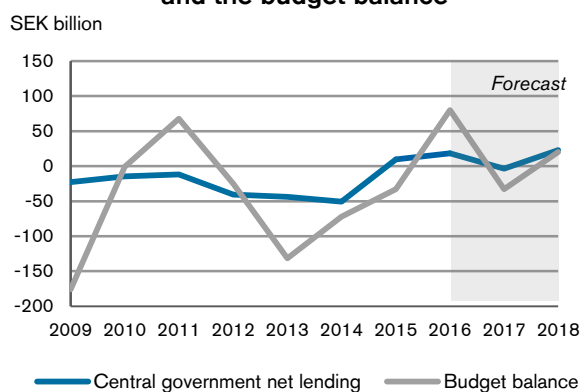
SEK billion	2016	2017	2018
<b>Primary net borrowing requirement</b>	<b>-81</b>	<b>21</b>	<b>-26</b>
of which net lending to agencies excl. on-lending	2	-1	2
of which net lending, on-lending	13	11	13
of which sales of state assets	0	0	0
of which income and expenditure excl. sales of assets	-97	10	-41
<b>Interest payments</b>	<b>2</b>	<b>12</b>	<b>6</b>
<b>Net borrowing requirement</b>	<b>-80</b>	<b>33</b>	<b>-20</b>

### More even development of central government net lending

Central government net lending is a better reflection of the underlying development of the economy than the net borrowing requirement since income and expenditure are accrued to the correct year. Nor is net lending affected by excess deposits in tax accounts.

The Debt Office estimates central government net lending at 0.4 per cent as a proportion of GDP in 2016. The forecast for 2017 and 2018 is -0.1 and 0.5 per cent of GDP.

**Figure 1 Central government net lending and the budget balance**



### Forecast changes since June

The net borrowing requirement for 2016 decreases by SEK 38 billion compared with the June forecast. This is mainly due to the sharp increase in payments to tax accounts, but lower expenditure is another factor

For 2017 the Debt Office estimates that the net borrowing requirement will decrease by SEK 10 billion compared with the previous forecast. Tax income will increase by SEK 5 billion, which is mainly due to higher income from consumption-based taxes and slightly higher payments of preliminary tax by companies. The remainder of the change in the forecast is explained by lower net lending to government agencies and slightly lower expenditure.

**Table 2 The largest changes in forecasts<sup>1</sup>**

SEK billion	2016	2017
<b>Forecast June 2016</b>	<b>-41</b>	<b>42</b>
Taxes	-22	-5
Government grants to local governments	0	0
Labour market	-2	-2
Social insurance	-2	0
Migration	0	-3
International aid	0	3
Dividends	0	0
Interest payments	-3	2
Net lending excl. on-lending	-2	-4
On-lending	1	1
Other	-9	-3
<b>Forecast October 2016</b>	<b>-80</b>	<b>33</b>
Sum of changes	-38	-10

<sup>1</sup> Changes in terms of net borrowing requirement. A minus sign means that the net borrowing requirement decreases and plus means that it increases.

### Record high capital gains for households

The preliminary outcome of tax assessments for 2015 indicates that households' capital gains will be about SEK 200 billion. This is the highest level ever.

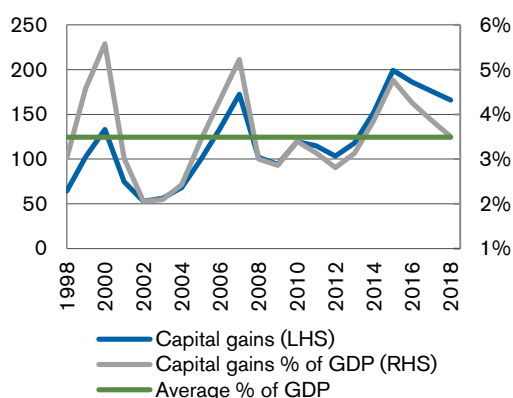
A large part of the increase is due to the development of house prices. In 2015 capital gains on securities also increased sharply even though the development of most stock exchanges was weak. This is deemed to be an effect of many people selling securities in order to move their savings to investment savings accounts.

Capital gains are very volatile, but follow the business cycle in the long term. The Debt Office's forecast is that capital gains will gradually decline to a level that corresponds to 3.5 per cent of GDP in 2018, or SEK 166 billion see figure 2.

As regards capital gains from home sales, their underlying growth will also be strong in 2016. But the gains realised are still expected to decrease compared with 2015 as an effect of the regulatory change for deferrals that is going to be put into effect. It is also likely that the changes in behaviour that gave rise to large sales of securities in 2015 will decrease in 2016.

**Figure 2 Household capital gains 1998-2018**

SEK billion



### High, but declining company profits

The first preliminary tax assessment outcomes are well in line with the Debt Office's assessment of company profits for 2015. This means that no great changes have been made to forecasts for years to come.

Profits in 2015 rose sharply on account of the strong growth in the Swedish economy, but were also affected by the fact that a single group of companies increased its tax charge by SEK 15 billion. The Debt Office assesses this as a one-time effect that will have no impact on coming years.

Profit growth in 2016-2018 is expected to remain good, but to decline as GDP growth slackens.

**Table 3 Tax income compared with previous forecast<sup>1</sup>**

SEK billion	2016	2017
Payroll taxes	6	1
Consumption taxes	-4	-6
Corporate taxes	-5	-3
Supplementary taxes	-19	3
<b>Total</b>	<b>-22</b>	<b>-5</b>

<sup>1</sup> Changes in terms of net borrowing requirement. A plus sign indicates a decrease in tax income and an increase in the net borrowing requirement.

**Table 4 Growth rates for tax forecast, current prices**

Percentage change	2016	2017	2018
Household consumption	3.6	3.8	4.5
Wage sum	4.6	4.3	4.1
Household taxable income	4.6	4.3	4.1
Income from interest and dividends	1.0	1.0	1.0
Deduction for interest on debts	-1.3	3.8	6.1
Household capital gains, net	-7.2	-5.9	-6.3
Corporate taxable income	-5.8	5.0	5.0

### Slightly lower income from payroll taxes

Payroll taxes decrease by SEK 6 billion in 2016 and SEK 1 billion in 2017 compared with the previous forecast. The main explanation of the revision this year is that payroll growth has been weaker than expected, as is confirmed by lower outcomes in the preliminary payments of tax on wages.

### Higher income from consumption taxes

Consumption taxes increase by SEK 4 and SEK 6 billion respectively for 2016 and 2017 compared with the previous forecast.

The main explanation of the increased income is higher income from excise taxes. Excise taxes have grown more strongly than forecast this year, and next year tax increases will result in higher income. Income from VAT increases marginally in both years.

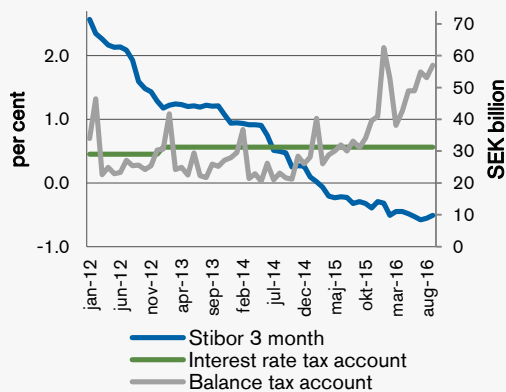


## Tax accounts as a form of savings – expensive borrowing

Since early 2015 it has become increasingly clear that tax accounts are being used for more than just tax payments. The interest paid on tax accounts, compared with market interest rates, has resulted in tax accounts being used as a form of savings.

The interest rate on money in tax accounts is limited by a floor that has been unchanged at 0.56 per cent since January 2013.<sup>1</sup> At the same time the Riksbank's repo rate was 1.00 per cent. The repo rate fell below the tax account interest rate for the first time in July 2014 when the Riksbank reduced the repo rate from 0.75 per cent to 0.25 per cent. Since then the repo rate has been gradually reduced to its present level of -0.50 per cent. The general level of interest rates has followed the repo rate and is very low. In this interest rate environment the tax account interest rate appears to be very attractive in relative terms. It is also matter of a risk-free investment, in the same way as if the deposits were made directly with the Debt Office.

### Companies' tax accounts balances, 3-month Stibor and tax account interest rate

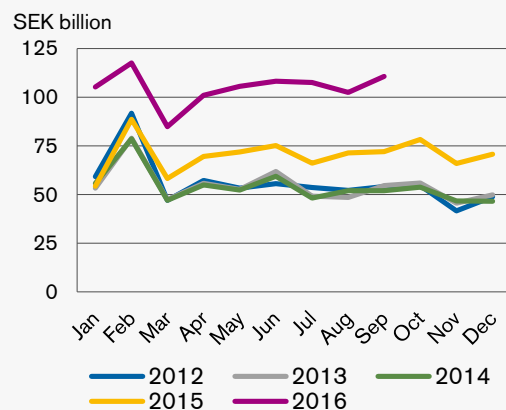


In the figure below left Stibor acts as an approximation of the interest rate faced by companies. As the interest rate difference to tax accounts has increased, the balance in tax accounts has risen.

Deposits by private individuals have increased in a similar way to those of companies. Private individuals do not face negative interest rates on bank deposits. The reduction to an interest rate of zero on tax accounts that will be put into effect at the start of next year will therefore reduce the incentives for private individuals to use their tax account for investments. The Debt Office expects most private individuals to withdraw their extra money when the interest rate is reduced.

For companies, however, placing money in tax accounts will still be attractive. The Debt Office therefore makes the assessment that companies will increase their investments in their tax accounts, even after the interest rate reduction. This means that the reduction to a zero interest rate will probably not be enough to solve the problem of excess deposits.

### Balance in tax accounts 2012-2016



The Debt Office estimates that, up to now, this year's excess deposits in tax accounts amount to about SEK 35 billion. Taking account of last year's excess deposits of around SEK 20 billion there is now SEK 55 billion in tax accounts that is made up of either pure savings or early deposits of future tax payments. Excess deposits are split relatively evenly between companies and private individuals.

### Expensive borrowing

Increased deposits in tax accounts reduce the borrowing requirement. As they do not reflect actual income, they represent an alternative form of borrowing that is involuntary and more expensive for central government since the Debt Office's borrowing requirement decreases to the same extent. The Debt Office estimates that the interest set on tax accounts results in an additional cost for central government of approximately SEK 0.5 billion for 2016 compared with if the Debt Office had borrowed the same amount directly in the market. Between 2015 and 2018 the additional cost is put at a total of about SEK 1.4 billion.

### Additional cost due to excess deposits in tax accounts

	2015	2016	2017	2018
Average excess deposits (SEK billion)	10	40	53	52
Spread (Tax account -T-bill 3 month)	0.9%	1.2%	0.8%	0.8%
Spread (SEK billion)	0.1	0.5	0.4	0.4

The calculation is based on an unchanged interest rate on 3-month T-bills and on assumptions about deposits and withdrawals of extra funds in tax accounts.

The excess deposits in tax accounts create added uncertainty in the management of the central government debt. Central government liquidity is more difficult to forecast. This may, in turn, lead to liquidity management becoming more difficult, resulting in increased costs. In addition, unexpected payments can result in the Debt Office being in a position where, instead of borrowing, it has to invest excess liquidity, and is therefore exposed to greater counterparty risks.

Moreover, excess deposits result in lack of clarity in financial reporting. This is because in practice they involve borrowing that is booked as income. The outcome of the net borrowing requirement is also misleading when analysing the state of public finances. There is an evident risk that excess deposits in tax accounts will be interpreted as real tax income. In addition, the central government debt reported will be lower than it actually is since tax accounts balances are, in practice, a debt for central government.



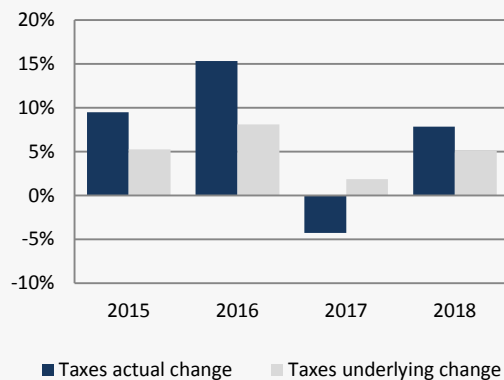


## Underlying growth of tax income, 2015-2018

Tax income is expected to increase by SEK 135 billion in 2016 compared with 2015. This corresponds to an increase of approximately 15 per cent, which is high from a historical perspective. Central government tax income is volatile, but in the long term it follows nominal GDP growth fairly well. The average increase since 1997 is 2.9 per cent. The actual growth in particular years is strongly influenced by factors including changes in tax regulations.

The underlying growth of tax income from consumption, wages and capital is fundamentally strong in 2016. But excess deposits in tax accounts, a large one-time payment of corporate tax and tax increases mean that the aggregate growth gives an exaggerated picture of how taxes are increasing compared with the general development of the economy.

### Central government tax income, changes between years<sup>1</sup>



Adjusted for these effects, tax income would have increased by about 8 per cent between 2015 and 2016, which is also high. Next year actual tax income will decrease by SEK 43 billion compared with 2016. Most of this is an effect of a decrease in excess deposits in tax accounts along with a partial reversal through withdrawals. However, adjusted for these effects tax income rises by approximately 2 per cent between these years. For 2018 actual tax income again rises more rapidly than its adjusted growth.

### Growth of central government tax income

	2015	2016	2017	2018
Tax income (actual change)	76	135	-43	76
<i>Of which:</i>				
Excess deposits tax account	20	34	12	12
Withdrawals tax account	0	-5	-15	0
Prepaid taxes	0	10	-10	0
One-off effect corporate tax	0	15	0	0
Tax raises	14	31	6	1
<b>Sum</b>	<b>34</b>	<b>85</b>	<b>-7</b>	<b>13</b>

<sup>1</sup> Changes refers to the previous year's tax rules.

### Dividends on state-owned shares decrease between the years

The assessment of central government income from share dividends is the same as in the previous forecast. These dividends are expected to be just less than SEK 13 billion in 2016 and to then decrease to SEK 9 billion per year in 2017 and 2018. The decrease is mainly due to a lower expected dividend from Telia. The company has changed its dividend target from at least SEK 3 per share to at least SEK 2 per share.

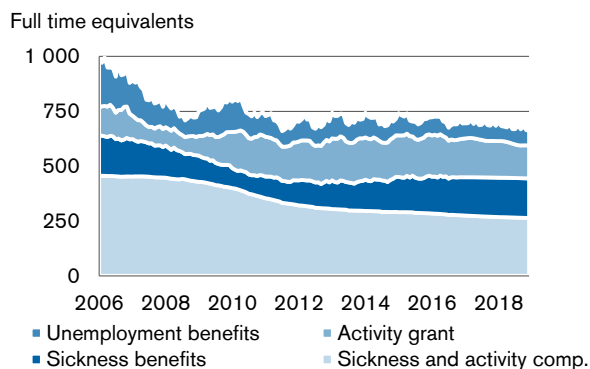
**Table 5 Dividends on state-owned shares**

SEK billion	2016	2017	2018
Akademiska hus AB	3.3	1.5	1.5
LKAB	0.0	0.2	0.5
TeliaSonera AB	4.8	3.2	3.2
Vattenfall AB	0.0	0.0	0.0
Sveaskog AB	0.8	0.9	0.9
Other corporations	3.7	3.1	3.1
<b>Total</b>	<b>12.6</b>	<b>8.9</b>	<b>9.2</b>

### Surprisingly low labour market expenditure

The labour market has performed strongly in 2016. In the most recent forecasts labour market-related expenditure has consistently been over-estimated even though the forecast has been well below the funds budgeted. For instance, the demand for various types of subsidised employment has been lower than estimated. As a result of low outcomes and continued favourable prospects for the labour market, expenditure has been revised downwards by about SEK 2 billion per year for 2016 and 2017 compared with the previous assessment.

**Figure 3 Volumes in the transfer systems for the labour market and ill health**



### Lower expenditure for migration in 2017

Expenditure for migration in 2016 is unchanged compared with the previous forecast. Although the

number of refugees coming to Sweden is decreasing, payments are still increasing as an effect of the large number of asylum seekers last year.

Next year expenditure is expected to decrease by SEK 3 billion compared with the previous forecast. This is due to a smaller number of asylum seekers in the forecast, which is only partly offset by increased appropriations in the Budget Bill for 2017. For example, the Swedish Migration Agency's administrative appropriation is increased.

In the Debt Office's first forecast for 2018 expenditure for migration will decrease by SEK 12 billion compared with 2017. The Debt Office's forecast for the number of new asylum seekers is in line with the Swedish Migration Agency's forecast of 25 July 2016.

If the number of refugees changes by 10 000 persons compared with forecast, this would, according to the Debt Office's calculation, change expenditure by approximately SEK 2 billion on a yearly basis.

### Higher development assistance

Expenditure for development assistance through Sida in 2016 is unchanged compared with the previous forecast. Next year expenditure is expected to increase by SEK 3 billion compared with the June forecast. This is mainly because lower expenditure for migration creates space for higher development assistance. Expenditure for 2018 is expected to increase by SEK 5 billion compared with 2017.

### Net lending by the Debt Office

The Debt Office's net lending to government agencies etc. is expected to amount to just more than SEK 15 billion in 2016 and SEK 10 billion in 2017. For 2017 this is a reduction of SEK 2 billion compared with the previous forecast. It is mainly because lending to the Swedish Transport Administration is expected to decrease.

For 2018 net lending is expected to total SEK 15 billion. This increase compared with 2017 is because lending to the Swedish Transport Administration is expected to increase again. In addition to this, currency losses increase in connection with the refinancing of loans raised on behalf of the Riksbank.



## Change in the net borrowing requirement between years

The table shows how the net borrowing requirement changes between 2014 and 2018 and how different parts of the net borrowing requirement affect this change.

The net borrowing requirement decreases by SEK 112 billion between 2015 and 2016. Tax income increases by SEK 135 billion between these years. This is due to excess deposits in tax accounts, a large one-time payment of corporate tax and tax increases. But it is also due to a strong domestic economy. Next year the effects of excess deposits in tax accounts will be reversed, and this means that tax income will decrease compared with 2016.

Expenditure for migration and development assistance increases sharply between 2014 and 2017 but goes down slightly again in 2018.

Government grants to local authorities increase by SEK 12 billion in 2017 compared with 2016. Many other items of expenditure also increase a great deal, contributing to the increase in the net borrowing requirement between these years.

Interest payments on the central government debt vary a great deal between years. In 2016 they are estimated at the record low amount of SEK 2 billion. Next year they are expected to increase by SEK 10 billion, and to then decrease again in 2018.

<i>SEK billion</i>	2014	2015	2016	2017	2018
<b>Net borrowing requirement, level</b>	<b>72</b>	<b>33</b>	<b>-80</b>	<b>33</b>	<b>-20</b>
Net borrowing requirement, change	-59	-40	-112	112	-53
<b>Explained by;</b>					
Taxes	-26	-76	-135	43	-76
Government grants to local governments	5	7	-9	12	0
Labour market	1	0	0	2	-1
Social Insurance	7	6	1	9	3
Migration & International aid	4	9	21	7	-8
Sales of state-owned assets	21	0	0	0	0
Share dividends	8	-7	7	4	0
EU contribution	5	-4	-6	5	2
Debt Office's net lending excl. on-lending	29	-19	1	-3	3
On-lending	-104	7	4	-2	2
Interest on government debt	-13	18	-20	10	-6
Other	6	19	23	25	28

### Historically low interest payments this year

Central government interest payments are estimated at SEK 2 billion this year and SEK 12 billion next year. For 2018 interest payments are expected to total SEK 6 billion.

Since the June forecast market interest rates have fallen considerably. This results in higher premiums in connection with issues of government bonds and leads to interest payments this year being SEK 3 billion lower than in the previous calculation.

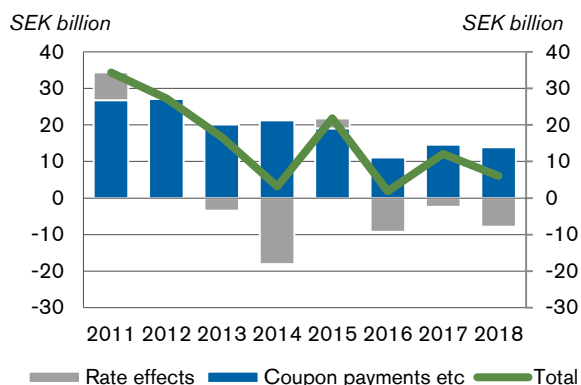
For 2017 the forecast for interest payments has been revised upwards by some SEK 2 billion mainly against the background of lower currency gains on account of a weaker krona. In addition, lower issue volumes of nominal government bonds contribute to lower premiums, all else equal.

**Table 6 Interest payments on the central government debt**

SEK billion	2016	2017	2018
Interest on loans in SEK	3.7	12.7	6.2
Interest on loans in foreign currency	0.5	-0.2	-0.1
Realised currency gains and losses	-2.6	-0.5	-0.1
<b>Interest payments</b>	<b>1.6</b>	<b>12.1</b>	<b>6.0</b>

Central government interest payments vary a great deal over time, as shown in figure 4. Between 2015 and 2016 these payments decrease by SEK 20 billion. This is explained by, first, more favourable rate effects in 2016 and, second, the fact that the Debt Office paid about SEK 5 billion in inflation compensation when an inflation-linked bond matured in 2015. There is no corresponding payment in 2016.

**Figure 4 Interest payments**



In 2017 and 2018 interest payments increase slightly compared with the very low level in 2016. Once again it is temporary rate effects that are the main cause, but the level in 2017 is also affected by the maturity of an index-linked bond with the associated payment of compensation for inflation.

The Debt Office uses cut-off rates in calculating central government interest payments and in measuring the Riksbank's foreign currency loans. The cut-off date for this forecast is 30 September.

**Table 7 Cut-off rates for interest rates, per cent**

Duration	3 mth	6 mth	2 yr	5 yr	10 yr	30 yr
Government bonds	-0.8	-0.8	-0.7	-0.5	0.1	1.4
Inflation-linked bonds	-1.5	-1.5	-1.8	-1.8	-1.3	-0.1
Swap interest rate SEK	-0.4	-0.5	-0.4	-0.1	0.6	0.0
Swap interest rate EUR	-0.3	-0.2	-0.2	-0.2	0.3	0.8
Swap interest rate USD	0.8	0.9	1.0	1.2	1.5	0.0

**Table 8 Cut-off rates for currency exchange rates**

Spot rates	2016-09-30
SEK/EUR	9.63
SEK/USD	8.56
SEK/CHF	8.30
SEK/JPY	0.08
SEK/GBP	11.13
SEK/CAD	6.52

### Budget balance and central government net lending

Central government net lending was 0.2 per cent as a proportion of GDP in 2015, which was in line with the Debt Office's most recent forecast. The forecast for 2016 is 0.4 per cent of GDP, the forecast for 2017 is -0.1 per cent of GDP and that for 2018 is 0.5 per cent of GDP.

The development of net lending has a more even profile than the budget balance and the net borrowing requirement during the forecast period. Central government net lending is generally a better indicator of the underlying central government finances than the net borrowing requirement or the budget balance. The budget balance is a cash flow measure that measures central government's incoming and outgoing payments. Net lending

accrues payment to the point in time when the economic activity took place.

Nor is central government net lending affected by excess deposits in tax accounts. It is counted as borrowing instead of tax income.

The deterioration of net lending between 2016 and 2017 is due to a slightly poorer underlying development of tax income at the same time as expenditure rises.

**Table 9 Central government net lending**

<i>SEK billion</i>	2014	2015	2016	2017	2018
<b>Budget balance</b>	<b>-72</b>	<b>-33</b>	<b>80</b>	<b>-33</b>	<b>20</b>
<b>Delimitations</b>	<b>-5</b>	<b>27</b>	<b>18</b>	<b>23</b>	<b>17</b>
Sale of limited companies	0	0	0	0	0
Extraordinary dividends	0	-9	-2	0	0
Parts of Debt Office's net lending	13	17	20	20	22
Other delimitations etc.	-18	19	0	2	-5
<b>Accruals</b>	<b>27</b>	<b>15</b>	<b>-80</b>	<b>7</b>	<b>-14</b>
Taxes	33	5	-53	11	-13
Interest payments etc.	-6	10	-26	-4	-1
<b>Central government net lending</b>	<b>-51</b>	<b>9</b>	<b>18</b>	<b>-4</b>	<b>23</b>
<b>Per cent of GDP</b>	<b>-1.3</b>	<b>0.2</b>	<b>0.4</b>	<b>-0.1</b>	<b>0.5</b>

## Monthly forecasts of the net borrowing requirement

The net borrowing requirement varies strongly between months. The following table presents monthly forecasts from October 2016 until and including December 2017.

Much of the variation between months is explained by how tax income, tax refunds and on-lending by the Debt Office are spread over the year. Some individual payments also impact on the monthly pattern, one example being the annual payment of premium pension funds.

The large net borrowing requirement in December is normal and is explained by the Debt Office's net lending (including the payment of premium pension funds), excess tax and interest payments on the central government debt.

**Table 10 Central government net borrowing requirement per month**

	Primary borrowing requirement excl. net lending	Net lending	Interest on central government debt	Net borrowing requirement
Oct-16	5.5	20.9	-3.3	23.1
Nov-16	-22.2	-20.5	-0.5	-43.2
Dec-16	42.3	34.3	5.9	82.5
Jan-17	4.3	-2.2	0.1	2.1
Feb-17	-48.4	-2.8	1.8	-49.4
Mar-17	-1.7	-3.7	3.6	-1.8
Apr-17	-0.9	2.0	-2.4	-1.3
May-17	-30.4	-4.9	3.1	-32.2
Jun-17	32.2	-5.2	3.3	30.3
Jul-17	12.5	-4.4	-0.7	7.4
Aug-17	-17.0	-0.9	1.2	-16.7
Sep-17	12.2	-2.6	-1.7	7.9
Oct-17	14.2	-2.6	-2.4	9.3
Nov-17	-16.4	0.5	0.0	-15.8
Dec-17	49.8	37.0	6.0	92.8



## Forecast comparisons

When it comes to the aggregate net borrowing requirement for 2016 and 2017, the differences between the forecasters are relatively small. But there are considerable differences in the distribution between these years. The Debt Office estimates a substantially lower net borrowing requirement for 2016 and a higher requirement for 2017. The difference in their assessments can probably be explained by different handling of the cash payments of tax and the excess deposits in tax accounts.

For 2018 there is great agreement between the assessments made by the Debt Office, the Government and the Swedish Financial Management Authority. The NIER has not yet published a forecast of the net borrowing requirement in 2018.

SEK billion	Debt Office (26 Oct)			Government (20 Sep)			NIER (31 Aug)			ESV (6 Sep)		
	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018
Net borrowing requirement	-80	33	-20	-30	-7	-21	-36	-10	-	-41	-13	-21
of which:									-			
Sales of state assets	0	0	0	-5	-5	-5	0	0	-	0	0	0
<b>Adjusted net borrowing requirement</b>	<b>-80</b>	<b>33</b>	<b>-20</b>	<b>-25</b>	<b>-2</b>	<b>-16</b>	<b>-36</b>	<b>-10</b>	<b>-</b>	<b>-41</b>	<b>-13</b>	<b>-21</b>



## Sensitivity analysis

The Debt Office does not produce any overall sensitivity analysis for the net borrowing requirement. Instead a partial analysis of the effects that changes in certain key variables have is presented.

The table shows an estimate of what different changes mean for net borrowing requirement on a one-year term

SEK billion	Effect on net borrowing requirement
Increase by one per cent/percentage point	
Gross wages <sup>1</sup>	-7
Household consumption in current prices	-3
Unemployment (ILO 15-74) <sup>2</sup>	3
Interest rate level in Sweden <sup>3</sup>	5
International interest rate level <sup>3</sup>	2
Asylum seekers, increase of 10 000	2

<sup>1</sup> Local government taxes on employment are paid to local authorities with a one-year time lag. This means that the effect on the net borrowing requirement in one year's time is bigger than the permanent effect

<sup>2</sup> Includes effects on unemployment insurance benefits, the job and development guarantee programme and the job guarantee scheme for young people.

<sup>3</sup> This relates to an effect on interest payments on government debt.



# Borrowing continues to decrease

Central government borrowing decreases compared with the previous forecast on account of the lower net borrowing requirement. The Debt Office reduces the issue volumes of all types of government securities and of T-bills especially. Borrowing in government bonds is lowered to SEK 3 billion per auction, corresponding to a decrease of SEK 11 billion per year.

## Lower issue volumes

A lower net borrowing requirement in combination with a lower refinancing requirement mean that central government needs to borrow less than in the June forecast. The refinancing requirement is lower because borrowing in the money market decreases in 2016, and this then results in a smaller volume maturing in 2017.

In total, the borrowing requirement is expected to be SEK 314 billion in 2016 and SEK 349 billion in 2017, see table 1. This is more than SEK 30 billion per year lower than in the June forecast. The Debt Office's first forecast for 2018 is a total of SEK 294 billion. The amount is lower in 2018 because no government bond matures in that year.

**Table 1 Gross borrowing requirement**

SEK billion	2016	2017	2018
<b>Net borrowing requirement</b>	<b>-80</b>	<b>33</b>	<b>-20</b>
Business day adjustment etc. <sup>1</sup>	2	0	0
Retail borrowing & collateral, net <sup>2</sup>	5	8	6
<b>Money market redemptions<sup>3</sup></b>	<b>284</b>	<b>158</b>	<b>202</b>
T-bills	141	90	110
Commercial paper	87	52	65
Liquidity management	56	16	27
<b>Bond redemptions, net switches and buy-backs</b>	<b>104</b>	<b>150</b>	<b>107</b>
Government bonds	53	73	5
Inflation-linked bonds	1	15	1
Foreign currency bonds	49	62	101
<b>Total gross funding requirement<sup>4</sup></b>	<b>314</b>	<b>349</b>	<b>294</b>

<sup>1</sup> Adjustment for the difference in reporting of borrowing and net borrowing requirement respectively. The differences refer to trade versus settlement date and the interest on money market instruments.

<sup>2</sup> Net change in retail borrowing and collateral.

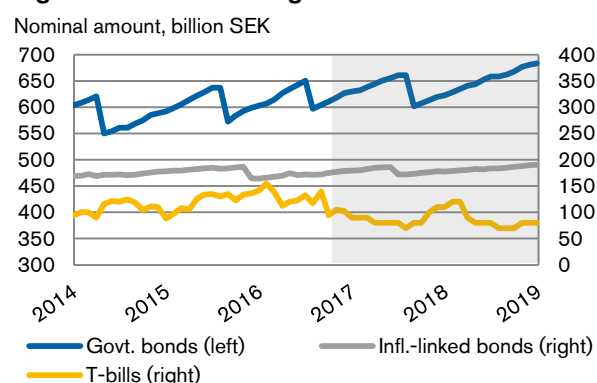
<sup>3</sup> Initial stock maturing within 12 months.

<sup>4</sup> Refers to borrowing requirement in the institutional market.

To address the lower borrowing requirement the issue volume of both government bonds, inflation-linked bonds and T-bills are reduced. Government bonds are the most important source of finance. The Debt Office therefore gives priority to issues of

government bonds in order to maintain liquidity in the market. The proportion of inflation-linked debt must not be too small to comply with the Government's guidelines. The largest reduction is therefore made in T-bills and the outstanding stock decreases during the forecast period. In contrast, the stock of government bonds increases since no bond matures in 2018, see figure 1.

**Figure 1 Stocks of government securities**



The issue volume of government bonds is lowered from SEK 3.5 to 3 billion per auction. This is a decrease of SEK 11 billion per year, see table 2. The number of auctions is retained.

**Table 2 New borrowing forecast**

SEK billion	2016		2017		2018
	Oct	(Jun)	Oct	(Jun)	Oct
<b>Money market funding<sup>1</sup></b>	<b>158</b>	<b>(188)</b>	<b>202</b>	<b>(223)</b>	<b>110</b>
T-bills	90	(120)	110	(130)	80
Commercial paper	52	(51)	65	(65)	0
Central Government	40	(40)	65	(65)	0
on behalf of the Riksbank	12	(11)	0	(0)	0
Liquidity management	16	(17)	27	(28)	30
<b>Bond funding</b>	<b>157</b>	<b>(159)</b>	<b>147</b>	<b>(161)</b>	<b>184</b>
Government bonds	81	(83)	66	(77)	66
Inflation-linked bonds	16	(18)	14	(18)	14
Foreign currency bonds	60	(59)	67	(66)	105
Central Government	0	(0)	0	(0)	0
on behalf of the Riksbank	60	(59)	67	(66)	105
<b>Total gross funding</b>	<b>314</b>	<b>(347)</b>	<b>349</b>	<b>(383)</b>	<b>294</b>

<sup>1</sup> Outstanding stock at year-end.

Borrowing in inflation-linked bonds is decreased by SEK 4 billion per year by reducing the issue volume from SEK 1 billion to SEK 750 million.

The auction volume of T-bills is reduced from SEK 15 to 10 billion. The outstanding stock is planned to be SEK 80 billion at the end of 2018.

**Table 3 Important dates 2016-2017**

Date	Time	Activity
12 Dec	09.30	Information on switches to SGB 1060
15 Dec	09.30	Information on switches to SGB IL 3113
25 Jan	11.00	Introduction of SGB 1060
26 - 31 Jan	11.00	Switches to SGB 1060
2 Feb	11.00	Introduction of SGB IL 3113
3 - 7 Feb	11.00	Switches to SGB IL 3113
22 Feb	09.30	Borrowing forecast 2017:1
18-22 May	11.00	Switches to SGB 1060

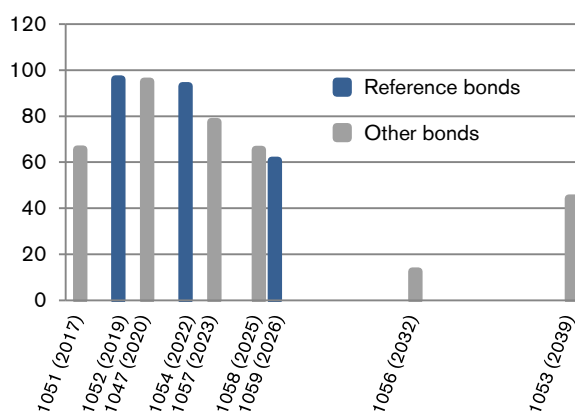
## Less borrowing in government bonds

Borrowing in government bonds decreases to SEK 81 billion this year and SEK 66 billion in 2017. The issue volume will remain unchanged at SEK 66 billion in 2018. The auction volume will be reduced from SEK 3.5 billion to SEK 3 billion in the auction on 2 November and then remain at that level throughout the forecast period.

At the bulk of these auctions the Debt Office has split the issue volume between two different maturities in order to meet the demand in different segments. The approach of using split auctions will also continue to be a common feature in the future.

**Figure 2 Outstanding government bonds**

SEK Billion, 30 September 2016



The Debt Office mainly issues reference bonds with maturities of ten and five years, while two-year bonds are sold to a lesser extent. The emphasis is on the ten-year segment in order to build up the volume of new bonds. Bonds that are not reference loans can also be considered if this is justified in order to maintain liquidity. Figure 2 and table 4 show the volume of outstanding government bonds and which bonds are reference loans.

There may also be individual issues in the existing 22-year bond SGB 1053, as well as in the 16-year bond SGB 1056 when there is demand for long bonds.

On 25 January 2017 the Debt Office plans to issue a new government bond in the ten-year segment, SGB 1060 X% 12 May 2028. As usual the Debt Office will offer switches to the new bond when it is introduced and also before the bond becomes a reference loan. For more information see table 3 about important dates in 2016-2017. The Debt Office also plans to issue a new ten-year government bond in 2018.

**Table 4 Reference bonds in the electronic interbank market**

Date of change (IMM date) <sup>1</sup>	2-year	5-year	10-year
Current reference bonds	1052	1054	1059
21 Jun 2016			1060
20 Dec 2016	1047	1057	

<sup>1</sup>Please see the fact box on reference loans.



## Reference bonds

The reference bond in electronic trading is the bond that is closest to two, five or ten years in terms of maturity. Reference bonds are only changed on the IMM date provided the new bonds are the bonds that are closest in terms of maturity to two, five or ten years on the subsequent IMM date. The underlying bond in a forward contract will always be the same as a reference bond during the last three months of the contract. The date of change of reference bonds refers to the settlement date. The first trading day for a new reference bond is normally the Monday preceding an IMM date.

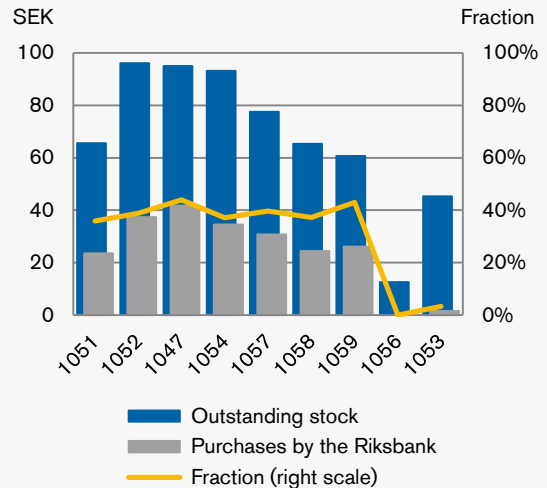


## The Riksbank's purchases of government bonds

The Riksbank purchased government bonds for about SEK 220 billion up until September and plans to purchase a further SEK 10 billion up to the end of the year. Focus has been on bonds with a maturity of up to 10 years. The Riksbank now owns about 40 per cent of the outstanding stock of these bonds, see the figure.

The free float of government bonds is smaller due to the Riksbank's purchases. This is one reason why the market has gradually become less liquid. Repo volumes have increased as a consequence, see the fact box about the Debt Office's repo commitment. Given that supply of government bonds is reduced, the scope for further purchases, in addition to those already announced by the Riksbank, decreases.

### Outstanding bonds and the Riksbank's purchases as on 30 September 2016

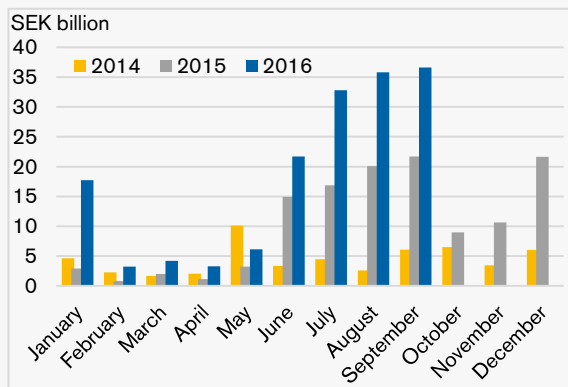


## The Debt Office's repo commitment.

Liquidity in the market for government bonds has deteriorated gradually, partly on account of new regulations and the Riksbank's purchases. The Debt Office's assessment is that the market for government bonds is still functioning well but that the situation has become slightly more strained. One sign of this is that the volume of the Debt Office's repos with primary dealers has increased.

At present the debt Office's repos of government bonds amount to about SEK 30 billion per day. This is more than in previous years, see figure.

### Government bond repos with the Debt Office



In recent months it is mainly Swedish investors that have sold to the Riksbank. Smaller holdings available for repos may be one explanation of why the repo market is functioning less well than in the past.

Repos are extra financing that the Debt Office has not planned for up to now. Since it involves relatively large sums, this can entail investment risks for central government. It is uncertain whether the demand for repos will persist but to avoid investment risks the Debt Office has assumed that repo volumes will remain at between SEK 20 and 30 billion for the time being. Repos are included in the Debt Office's forecast for instruments in liquidity management, see table 2. Note that the amount reported in the table refers to the net volume. This means that the gross financing, in repos for instance, can be larger.

Repos are an important part of the Debt Office's market commitment. This commitment sets the ground for a well-functioning repo market and thereby for a liquid government bond market. This facility is particularly important when there is shortage in the market.

## Reduced auction volume of T-bills

The auction volume of T-bills is reduced to SEK 10 billion per auction. Each T-bill is normally planned to reach SEK 20 billion. The Debt Office plans to issue SEK 15 billion on isolated occasions when the borrowing requirement is large.

The stock is estimated at around SEK 90, 110 and 80 billion on 31 December 2016, 2017 and 2018. On average the stock of T-bills is estimated at around SEK 88 and 83 billion in 2017 and 2018.

### Commercial paper borrowing

Borrowing in commercial paper is unchanged compared with the previous forecast. At the end of 2016 and 2017 the stock is expected to amount to SEK 52 billion and SEK 65 billion respectively. The forecast for 2018 assume that there will be no outstanding stock of commercial paper on 31 December.

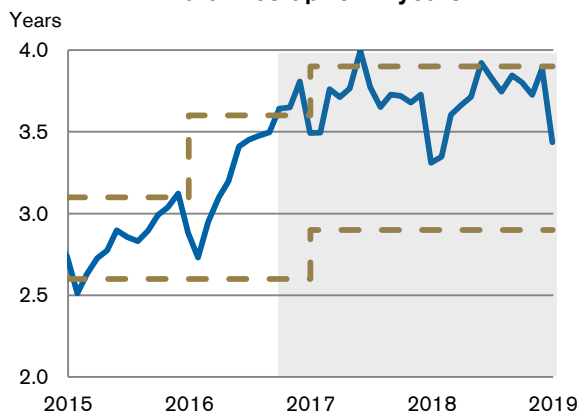
### Unchanged volume of interest rate swaps

The planned volume of interest rate swaps remains at SEK 10 billion per year in 2016 and 2017. For 2018 the volume planned is also SEK 10 billion.

The Debt Office uses interest rate swaps to steer the duration of the nominal krona debt within the interval stated in the Government's guidelines.

According to the Debt Office's proposed guidelines for 2017 the duration of the nominal krona debt with maturities up to 12 years is to be between 2.9 and 3.9 years, see figure 3. The Government takes its decision on the guidelines in mid-November, but the Debt Office bases its planning on the proposal submitted.

**Figure 3** Duration of the nominal krona debt, maturities up to 12 years



## Proposed guidelines 2017

In the Debt Office's proposed guidelines for 2017 the Debt Office analyses the correlation between the maturity and cost of the central government debt.

For many years it has been cheaper for central government to borrow at short rather than long maturities so the Debt Office has used interest rate swaps to shorten the maturity of the central government debt.

However, the Debt Office now makes the assessment that the advantage of short-term borrowing is smaller than in the past so the trade-off between that saving and the higher risk involved in short-term borrowing should be adjusted.

The Debt Office therefore proposes extending the maturity of the nominal krona debt by 0.3 years. This means that the present interval for the nominal krona debt of 2.6–3.6 years is increased to 2.9–3.9 years.

The average duration is in the upper part of the steering interval. The reason is a combination of the fall in market interest rates and the decrease in the borrowing requirement. Initially the adjustment to the lower borrowing requirement will be made in the money market since it takes longer to make an equivalent reduction in the capital market.

The maturity of the swaps corresponds to the average maturity of the government bonds issued. The swaps are spread relatively evenly over the year but with commercial flexibility regarding both time and maturity.

**Table 5** Change in outstanding swaps

SEK billion	2016		2017		2018
	Oct	(Jun)	Oct	(Jun)	Oct
Interest rate swaps <sup>1</sup>	10	(10)	10	(10)	10
Cross currency swaps <sup>2</sup>	0	(0)	0	(0)	0
<b>Swaps total</b>	<b>10</b>	<b>(10)</b>	<b>10</b>	<b>(10)</b>	<b>10</b>
Swaps maturing	38	(38)	39	(39)	28
<b>Swaps, net change</b>	<b>-28</b>	<b>-(28)</b>	<b>-29</b>	<b>-(29)</b>	<b>-18</b>

<sup>1</sup> Interest rate swaps from fixed to floating rate in SEK.

<sup>2</sup> Cross currency swaps from fixed SEK rate to floating rate in foreign currency.

The outstanding stock of swaps will decrease by just less than SEK 30 billion per year in 2016 and 2017, see table 5. In 2018 the stock is expected to decrease by just less than SEK 20 billion. The Debt Office does not normally close swaps previously entered into before they mature. The change in the stock is therefore due to the net of new and maturing swaps.

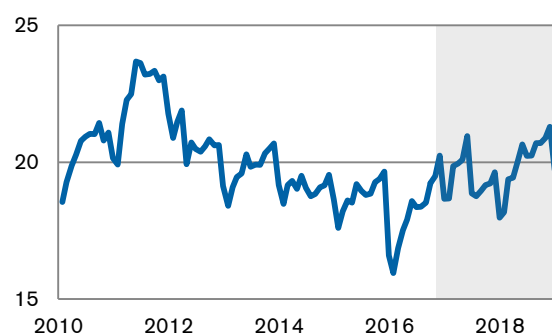
## Lower volumes of inflation-linked bonds

Borrowing in inflation-linked bonds decreases in the Debt Office's new forecast. The auction volume decreases from SEK 1 billion per auction to SEK 750 million as of the auction on 10 November and will then remain at that level throughout the forecast period. The number of auctions is the same as before. The planned annual volume for 2016 is SEK 16.4 billion. The annual volume planned for 2017 and 2018 is SEK 13.5 billion after having been SEK 18 billion in the June forecast.

In 2017 the Debt Office will issue in the ten-year segment in the first place, i.e. SGB IL 3109, SGB IL 3112 and the new ten-year bond SGB IL 3113 (see below), along with the three-year bond SGB IL 3110. There may also be issues of other inflation-linked bonds depending on the demand situation in the market.

**Figure 4 Proportion of inflation-linked debt<sup>1</sup>**

Per cent



### The next ten-year inflation-linked bond to be introduced in 2017

The Debt Office plans to introduce a new ten-year inflation-linked bond SGB IL 3113 X% 1 Dec 2027 in February next year with subsequent switches from other nearby inflation-linked bonds. See the table showing important events on page 20.

### Handling of short inflation-linked bonds

The Debt Office has a policy of not letting more than SEK 20 billion of an inflation-linked bond go to maturity. Since inflation-linked bonds often have a larger volume than that, the Debt Office usually offers switches to longer inflation-linked bonds when about two years remain to maturity.

At the end of 2017 and in spring 2018 the Debt Office will offer switches of SGB IL 3110, which matures on 1 June 2019 to longer inflation-linked bonds.

During the final year of the bond there are no issues or switches of the bond. Instead the Debt Office offers a restrictive buyback facility, where any buybacks are made at a premium.

### Adjusted pricing for switches of SGB IL 3102

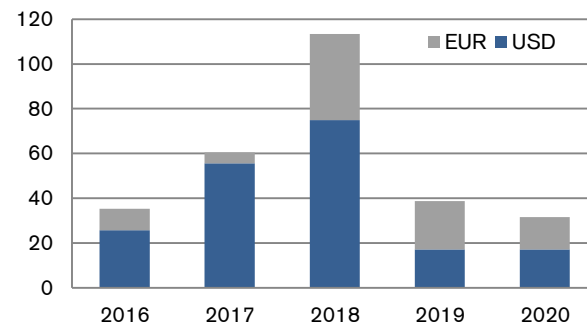
The Debt Office seeks to attain relatively even outstanding stocks of inflation-linked bonds in the long term. Over the next few years the Debt Office wants to avoid SGB IL 3102 becoming too large. The Debt Office will therefore apply less restrictive pricing in its continuous switch facility when primary dealers sell SGB IL 3102 in return for other inflation-linked bonds. For the same reason pricing will be more restrictive than before when primary dealers buy SGB IL 3102 in return for other inflation-linked bonds.

## Foreign currency borrowing only for the Riksbank

As in the June forecast the Debt Office only intends to issue bonds in foreign currency to refinance loans to the Riksbank. This applies to the whole of the forecast period.

**Figure 5 Maturity profile of foreign currency bonds**

Billion SEK, 30 September 2016



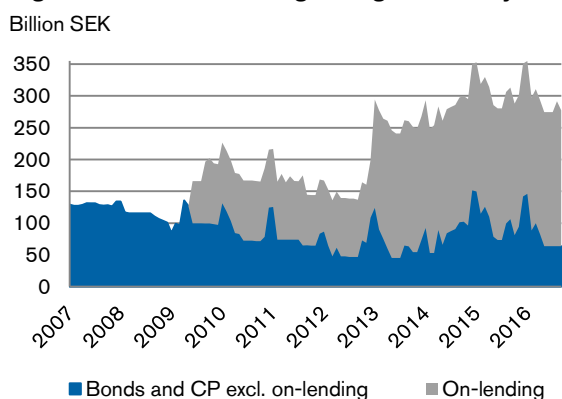
Borrowing to refinance maturing loans to the Riksbank is expected to be SEK 60 and 67 billion in 2016 and 2017 respectively. This is marginally higher than in the previous forecast since the krona has weakened slightly. Measured in foreign currency, the volume is unchanged.

In 2018 the Debt Office expects to borrow the equivalent of SEK 105 billion on behalf of the Riksbank.

### On-lending to the Riksbank

On-lending to the Riksbank amounted to SEK 247 billion on 30 September. The increase in the volume since the previous report is due to the weakening of the krona. The Debt Office expects that maturing loans will be replaced with new loans and that the volume in foreign currency will be maintained during the forecast period.

**Figure 6 Outstanding foreign currency loans**



This borrowing is concentrated on large benchmark loans in the capital market with maturities of up to five years. The choice of currency and maturity is based on the Riksbank's wishes and market conditions. Figure 6 shows outstanding bonds and commercial paper in foreign currency for on-lending to the Riksbank and on behalf of central government.

### Net borrowing and the development of the central government debt

Table 6 shows how the net borrowing requirement is financed using various instruments. Positive net borrowing means that the volume issued is greater than the volume maturing or bought back in switches.

The change in the central government debt is due not only to the net borrowing requirement but also to what are called debt adjustments. Debt adjustments consist mainly of accrued inflation compensation and exchange rate effects. Since the official measure of the central government debt is the gross debt, the Debt Office's money market assets (assets in debt management) are not deducted. These assets are funds temporarily invested in the money market until they are used to pay expenditure in the central government budget or maturing loans.

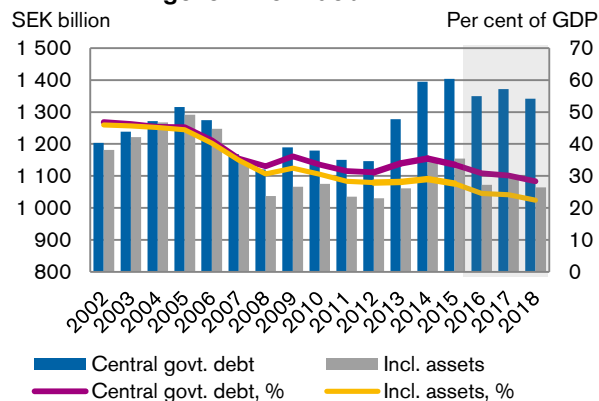
**Table 6 Net borrowing per calendar year**

SEK billion	2016	2017	2018
Net borrowing requirement	-80	33	-20
Business day adjustment <sup>1</sup>	2	0	0
<b>Net borrowing requirement</b>	<b>-78</b>	<b>33</b>	<b>-20</b>
<b>Retail funding &amp; collateral, net</b>	<b>-5</b>	<b>-8</b>	<b>-6</b>
<b>Net money market funding</b>	<b>-126</b>	<b>44</b>	<b>-92</b>
T-bills	-51	20	-30
Commercial paper	-35	13	-65
Liquidity management	-40	11	3
<b>Net bond market funding</b>	<b>53</b>	<b>-3</b>	<b>78</b>
Government bonds	27	-7	61
Inflation-linked bonds	15	-2	13
Foreign currency bonds	11	5	4
<b>Total net borrowing</b>	<b>-78</b>	<b>33</b>	<b>-20</b>

<sup>1</sup> Adjustment for the difference in reporting of borrowing and net borrowing requirement respectively. The differences refer to trade versus settlement date and the calculation of interest on money market instruments.

The central government debt at the end of 2018 is estimated at SEK 1 342 billion. This corresponds to a GDP share of 28 per cent. Figure 7 and table 7 show the development of the central government debt.

**Figure 7 Development of the central government debt**





The Debt Office also reports the net central government debt including assets. That figure includes not only assets in debt management but also assets in the form of claims from on-lending to foreign states and to the Riksbank. Measured in this way the debt is 22 per cent of GDP at the end of 2018.

This measure, 'central government debt including on-lending and assets in debt management', is used in the steering of the central government debt according to the guidelines adopted by the Government and in the Debt Office's internal risk management. On-lending is a claim for central government, but unlike assets in the money market it is not available for the payment of central government expenditure.

**Table 7 Net borrowing and the central government debt**

SEK billion	2011	2012	2013	2014	2015	2016	2017	2018
Net borrowing requirement	-68	25	131	72	33	-80	33	-20
Discrepancy between business and payment date <sup>1</sup>	23	-17	0	-4	0	2	0	0
<b>Net borrowing per business day</b>	<b>-45</b>	<b>8</b>	<b>131</b>	<b>68</b>	<b>32</b>	<b>-78</b>	<b>33</b>	<b>-20</b>
<b>A. Nominal amount including money market assets</b>	<b>1 113</b>	<b>1 121</b>	<b>1 253</b>	<b>1 321</b>	<b>1 353</b>	<b>1 275</b>	<b>1 308</b>	<b>1 287</b>
Inflation compensation	34	31	29	25	19	21	21	24
Exchange rate effects	-21	-29	-19	30	29	29	18	6
<b>B. Nominal amount to current exchange rate incl. inflation compensation and money market assets</b>	<b>1 126</b>	<b>1 123</b>	<b>1 262</b>	<b>1 376</b>	<b>1 401</b>	<b>1 325</b>	<b>1 347</b>	<b>1 317</b>
Assets under management	25	23	15	18	3	25	25	25
<b>C. Central government debt</b>	<b>1 151</b>	<b>1 146</b>	<b>1 277</b>	<b>1 394</b>	<b>1 403</b>	<b>1 350</b>	<b>1 372</b>	<b>1 342</b>
Assets under management	-25	-23	-15	-18	-3	-25	-25	-25
On-lending	-91	-93	-201	-233	-247	-252	-252	-252
<b>D. Central government debt incl. on-lending and assets under management</b>	<b>1 035</b>	<b>1 030</b>	<b>1 061</b>	<b>1 143</b>	<b>1 154</b>	<b>1 072</b>	<b>1 095</b>	<b>1 065</b>
Nominal GDP	3 657	3 685	3 770	3 937	4 181	4 375	4 549	4 744
<b>C. Central government debt, % of GDP</b>	<b>31</b>	<b>31</b>	<b>34</b>	<b>35</b>	<b>34</b>	<b>31</b>	<b>30</b>	<b>28</b>
<b>D. Central government debt incl. on-lending and money market assets, % of GDP</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>29</b>	<b>28</b>	<b>25</b>	<b>24</b>	<b>22</b>

<sup>1</sup> Adjustment for the difference in reporting of borrowing and net borrowing requirement respectively. The differences refer to trade versus settlement date and the calculation of interest on money market instruments.

# Market information

## Auction dates

### Government bonds, auction dates

Announcement date	Auction date	Settlement date
26-Oct-16	02-Nov-16	04-Nov-16
09-Nov-16	16-Nov-16	18-Nov-16
23-Nov-16	30-Nov-16	02-Dec-16
07-Dec-16	14-Dec-16	16-Dec-16
04-Jan-17	11-Jan-17	13-Jan-17
18-Jan-17	25-Jan-17	27-Jan-17
14-Dec-16	26-Jan-17*	30-Jan-17
14-Dec-16	27-Jan-17*	31-Jan-17
14-Dec-16	30-Jan-17*	01-Feb-17
17-Dec-16	31-Jan-17*	02-Feb-17
01-Feb-17	08-Feb-17	10-Feb-17
15-Feb-17	22-Feb-17	24-Feb-17
01-Mar-17	08-Mar-17	10-Mar-17
15-Mar-17	22-Mar-17	24-Mar-17
29-Mar-17	05-Apr-17	07-Apr-17
12-Apr-17	19-Apr-17	21-Apr-17
26-Apr-17	03-May-17	05-May-17
10-May-17	17-May-17	19-May-17
26-Apr-17	18-May-17*	22-May-17
26-Apr-17	19-May-17*	23-May-17
26-Apr-17	22-May-17*	24-May-17
24-May-17	31-May-17	02-Jun-17
07-Jun-17	14-Jun-17	16-Jun-17
21-Jun-17	28-Jun-17	30-Jun-17

\*Exchange auction

### Inflation-linked bonds, auction dates

Announcement date	Auction date	Settlement date
03-Nov-16	10-Nov-16	14-Nov-16
17-Nov-16	24-Nov-16	28-Nov-16
01-Dec-16	08-Dec-16	12-Dec-16
12-Jan-17	19-Jan-17	23-Jan-17
26-Jan-17	02-Feb-17	06-Feb-17
15-Dec-16	03-Feb-17*	07-Feb-17
15-Dec-16	06-Feb-17*	08-Feb-17
15-Dec-16	07-Feb-17*	09-Feb-17
09-Feb-17	16-Feb-17	20-Feb-17
23-Feb-17	02-Mar-17	06-Mar-17
09-Mar-17	16-Mar-17	20-Mar-17
23-Mar-17	30-Mar-17	03-Apr-17
20-Apr-17	27-Apr-17	02-May-17
04-May-17	11-May-17	15-May-17
01-Jun-17	08-Jun-17	12-Jun-17

\*Exchange auction

### T-bills, auction dates

Announcement date	Auction date	Settlement date
02-Nov-16	09-Nov-16	11-Nov-16
16-Nov-16	23-Nov-16	25-Nov-16
30-Nov-16	07-Dec-16	09-Dec-16
14-Dec-16	21-Dec-16	23-Dec-16
28-Dec-16	04-Jan-17	09-Jan-17
11-Jan-17	18-Jan-17	20-Jan-17
25-Jan-17	01-Feb-17	03-Feb-17
08-Feb-17	15-Feb-17	17-Feb-17
22-Feb-17	01-Mar-17	03-Mar-17
08-Mar-17	15-Mar-17	17-Mar-17
22-Mar-17	29-Mar-17	31-Mar-17
05-Apr-17	12-Apr-17	18-Apr-17
19-Apr-17	26-Apr-17	28-Apr-17
03-May-17	10-May-17	12-May-17
16-May-17	23-May-17	26-May-17
31-May-17	07-Jun-17	09-Jun-17
14-Jun-17	21-Jun-17	26-Jun-17
28-Jun-17	05-Jul-17	07-Jul-17

### Government bonds, outstanding amounts 30 September 2016

Maturity date	Coupon %	Bond no.	SEK Million
12-Aug-17	3.75	1051	65 526
12-Mar-19	4.25	1052	96 050
01-Dec-20	5.00	1047	95 054
01-Jun-22	3.50	1054	93 131
13-Nov-23	1.50	1057	77 477
12-May-25	2.50	1058	65 372
12-Nov-26	1.00	1059	60 647
01-Jun-32	2.25	1056	12 500
30-Mar-39	3.50	1053	45 250
Total government bonds			611 007

**Inflation-linked bonds, outstanding amounts 30 September 2016**

Maturity date	Coupon %	Bond no.	SEK Million
01-Jun-17	0.50	3107	14 958
01-Jun-19	0.125	3110	22 089
01-Dec-20	4.00	3102	35 514
01-Jun-22	0.25	3108	29 631
01-Jun-25	1.00	3109	22 750
01-Jun-26	0.13	3112	12 257
01-Dec-28	3.50	3104	30 614
01-Dec-28	3.50	3103	3
01-Jun-32	0.13	3111	7 231
Total Inflation-linked bonds			175 047

**T-bills, outstanding amounts 30 September 2016**

Maturity date	SEK Million
19-Oct-16	15 000
16-Nov-16	22 500
21-Dec-16	32 500
15-Mar-17	25 000
Total T-bills	95 000

**Rating**

Agency	Rating
Moody's	Aaa
Standard & Poor's	AAA
Fitch	AAA

## Primary dealers

Primary dealers	Government bonds	Inflation-linked bonds	T-bills	Telephone
Barclays	●			+44 207 773 8275
Danske Markets	●	●	●	+46 8 568 808 44
Handelsbanken Markets	●	●	●	+46 8 463 46 50
Nordea Markets	●	●	●	+45 33 3317 58 / +46 8 614 86 55
Royal Bank of Scotland	●			+44 207 805 0363
SEB	●	●	●	+46 8 506 231 51
Swedbank	●	●	●	+46 8 700 99 00

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