Central Government Borrowing

Forecast and analysis 2016:2

In *Central Government Borrowing - forecast and analysis 2016:2* the Debt Office presents forecasts for central government finances and borrowing in 2016 up until 2017. 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. The mission includes central government borrowing and debt management. The aim is to do this at the lowest possible cost while avoiding excessive risk.

In *Central Government Borrowing – Forecast and Analysis*, which is 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 included in the report.

On the fifth working day of each month, the central government budget balance (the net of all incoming and outgoing payments) is published for the previous month in a press release. The 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

The central government net borrowing requirement is estimated at SEK -41 billion in 2016 and SEK 42 billion in 2017. The low net borrowing requirement in 2016 is due to the strength of the domestic economy, as well as to a number of factors of a temporary nature. The increased net borrowing requirement next year is mainly explained by a decrease in central government tax income between years, partly due to the disappearance of temporary effects. In aggregate, the net borrowing requirement is SEK 27 billion lower compared with the previous forecast, which leads to decreased borrowing in government bonds. This decrease is made by reducing the auction volume from SEK 4 to SEK 3.5 billion. Issues of T-bills and inflation-linked bonds are left unchanged.

- The Swedish economy is growing at a good rate at present. Growth will slacken in 2016 and 2017 as resource utilisation, currently approximately normal, rises further. Global growth is expected to remain moderate and the Swedish economy will be driven by domestic demand. The Debt Office's forecast for GDP growth is 3.2 per cent in 2016 and 2.2 per cent in 2017.

- The low net borrowing requirement in 2016 is due to the strength of the domestic economy, as well as to factors of a temporary nature. These include large one-time payments of corporate tax, deposits of savings in tax accounts and a discount on Sweden's contribution to the EU budget.

- Next year the net borrowing requirement will increase substantially compared with 2016. One important explanation is the decrease in central government tax income between these years. This is mainly due to an expected reduction of the tax account interest rate to zero, lower capital gains and higher payments of local government tax.

- The Debt Office estimates central government net lending at 0.1 per cent as a proportion of GDP in 2015. The forecast for 2016 and 2017 is 0.0 and-0.5 per cent of GDP.

- The central government debt is estimated at SEK 1,376 billion at the end of 2016 and 1,411 billion at the end of 2017. This corresponds to 32 per cent of GDP for both years.

- Borrowing in government bonds decreases by SEK 5.5 billion this year and SEK 11 billion next year compared with the February forecast. Borrowing in government bonds is therefore SEK 83 billion this year and SEK 77 billion in 2017. The auction volume will be reduced from SEK 4 billion to SEK 3.5 billion in the auction on 22 June and then remain at that level throughout the forecast period.

- The issue volume of inflation-linked bonds remains at the same level as in the previous forecast. The Debt Office expects to issue an average of SEK 15 billion per auction. The stock is expected to be SEK 120 billion at the end of 2016 and SEK 130 billion at the end of 2017.

- The auction volume of inflation-linked bonds is unchanged from the previous forecast. The Debt Office will issue SEK 1 billion per auction, corresponding to an annual rate of SEK 18 billion both this year and in 2017.

- As in the February forecast the Debt Office only intends to issue foreign currency bonds to refinance on-lending to the Riksbank (the Swedish central bank). This applies to both this year and next year.

Strong Swedish economy slows down

The Swedish economy is growing at a good rate despite moderate assistance from the international economy. Strong domestic demand, supported by an expansive monetary policy, contributed to high GDP growth in 2015. The Debt Office expects this good growth to continue but to gradually slow down as resource utilisation in the economy rises. Employment is expected to grow fastest in 2016, putting upward pressure on inflation and pay increases. Compared with February, the GDP and employment forecasts have been revised slightly downwards.

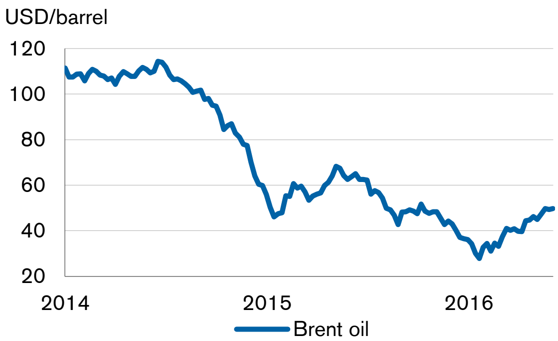
Continued moderate global growth

Low level of interest rates and expansive monetary policy

The situation in financial markets is characterised by the very low level of interest rates globally. Central banks are continuing to keep their key interest rates at low levels and they are also taking other measures in order to further increase economic activity so as to lift inflation from its low level, The latest example is the ECB which announced earlier this spring that it is increasing its limits for bond purchases and that its bond purchases now also include corporate bonds.

Commodity prices have continued to rise since the Debt Office's last forecast in February. For example, the oil price is back at around USD 50 per barrel, see figure 1 below.

Figure 1 Price of Brent oil



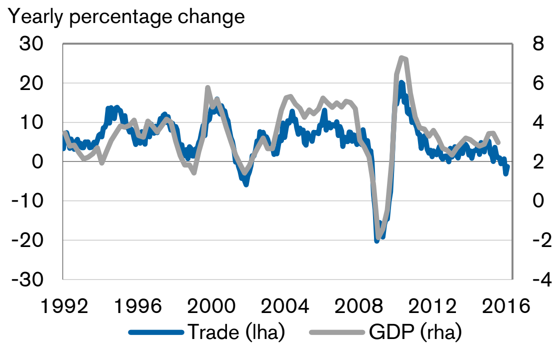
Source: ICIS Pricing.

Slightly poorer prospects for global growth

Global GDP growth showed a weak outcome for the fourth quarter of 2015 and growth for the whole of 2015 was slow from a historical perspective, see figure 2. The weak performance during the year was partly due to a sharp slowdown in the growth of investments in emerging economies, especially in countries exporting raw materials. World trade was also unusually weak during the year and was largely unchanged compared with the previous year.

The Debt Office's assessment now is that global growth in 2016 and 2017 will be 3.2 and 3.5 per cent, in line with the IMF forecast. This is 0.2 and 0.1 percentage points lower than in the previous forecast.

Figure 2 Global trade and growth



Source: CPB and IMF.

This forecast is based on a gradual improvement of growth in the emerging economies and on the expected shift from export-driven to consumer-driven growth in China only resulting in slightly lower growth.

Lower capital flows to emerging economies

One clear trend in recent years is a sharp decrease in capital flows to the emerging economies. This change in capital flows is one factor contributing to the weaker growth in these countries, even though they are now, generally speaking, better equipped to be able to handle large decreases in capital flows than they were in connection with the Asian crisis, for example. The emerging economies have also been affected by the major falls in raw material prices in recent years. These declines in prices have not only had a dampening effect on investment and export growth in several countries but have also resulted in weaker public finances in several cases, for example in Russia and Saudi Arabia.

Strong labour market and moderate pay growth in the US

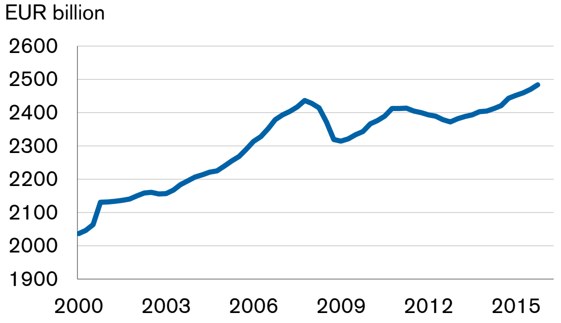
The decline noted in growth in the US in 2015 continued in the first quarter of this year. Several factors, for example the purchasing managers index, point to continued moderate growth in the coming quarters even though the situation looks a little better than in the opening months of the year. Growth in the US is estimated at 2.4 per cent in 2016 and 2.5 per cent in 2017, which is a downward revision of 0.2 and 0.1 percentage points since the previous forecast.

The labour market can still be described as strong, even though employment growth has slackened. As a proportion of the work force, the number of persons registered as unemployed has gone down to historically low levels and unemployment is now judged to be roughly in line with its equilibrium level. At present prices and pay are rising at a slightly lower rate than expected, given the situation in the labour market. Participants in financial markets expect an increase in the key US interest rate in the summer, even though the interest rate increase is how expected to come slightly later on account of weaker outcome figures for employment recently.

The level of GDP in the euro area is now higher than before the crisis

The economic recovery has continued in the euro area and growth in the first quarter was slightly higher than expected, mainly due to stronger growth of private consumption. However, growth has been low – and sometimes negative – in recent years. This is why it was not until last year that GDP rose above its 2008 level, see figure 3.

Figure 3 GDP in the euro area



Source: Eurostat.

In the longer term growth prospects in the euro area are limited by a continuing fall in the number of persons of working age in relation to the number of younger and older people. Growth in the euro area is estimated at 1.5 per cent in 2016 and 1.6 per cent in 2017, which is a downward revision of 0.2 and 0.1 percentage points since the previous forecast.

Strong Swedish economy slows down

At the end of 2015 growth in the Swedish economy accelerated and the outcome for the whole of 2015 was 4.2 per cent. This was stronger than in the Debt Office's most recent forecast, which was for 3.7 per cent. As expected, the outcome for the first quarter of 2016 showed slightly slower growth than in the previous quarters. The Debt Office's assessment is that Sweden's GDP will grow by 3.2 per cent this year and 2.2 per cent in 2017, see table 1. Like most analysts, the Debt Office judges that the GDP gap is roughly in balance at present and that the Swedish economy will have an increasingly positive GDP gap for more or less the entire forecast period.

Table 1 National accounts, constant prices

Percentage change	2015	2016	2017
GDP	4.2 (3.7)	3.2 (3.3)	2.2 (2.5)
Houshold consumption	2.7 (2.4)	2.6 (2.4)	2.1 (2.3)
General gov't consumption	2.6 (2.3)	3.2 (3.7)	2.0 (2.5)
Gross fixed cap. formation	7.0 (6.8)	5.0 (4.7)	3.0 (3.0)
Change in inventories[2]	0.4 (0.0)	0.1 (0.1)	0.0 (0.0)
Exports	5.9 (4.6)	3.6 (4.2)	3.5 (3.9)
Imports	5.5 (4.1)	4.3 (4.6)	3.8 (4.0)
Net exports[2]	0.4 (0.4)	-0.1 (0.0)	0.0 (0.1)
GDP (calendar adjusted)	3.9 (3.5)	3.0 (3.1)	2.4 (2.7)

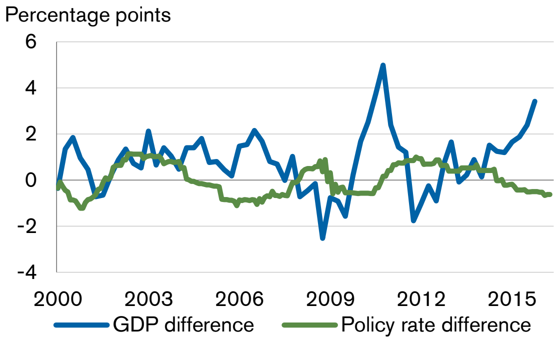
Note: Previous forecast in parenthesesis

1 Actual change compared with previous year

2 Change as a percentage of GDP previous year

For the past two to three years Sweden has shown faster economic growth than our most important trading partners while the key Swedish interest rate has moved lower and lower in relative terms. As is seen in figure 4, long periods of large differences in growth between Sweden and its trading partners are relatively unusual. The Debt Office's assessment is that the difference in growth will decrease in the future, mainly in line with a gradual slackening of the Swedish economy. From a Swedish perspective, the closing of the growth differential comes from a declining contribution from net exports, as well as from a gradual softening of domestic demand.

Figure 4 Sweden compared with its trading partners (TCW-weighted)



Source: National sources, Statistics Sweden and the Debt Office

The Debt Office's picture of economic growth in 2016 and 2017 is broadly the same as in the previous forecast. The growth forecast has been revised downwards by 0.1 percentage points for 2016 and 0.3 percentage points for 2017. The downward revision is mainly due to a lower forecast of the number of asylum seekers (see the next section) and slightly weaker growth internationally.

Continued high demand in the Swedish economy

Economic growth in the next few years will be driven by domestic demand. Demand in the economy is expected to continue to be broad and both consumption and investments are expected to make noticeable contributions to growth. There are, however, some factors that point to a slackening of growth, leaving it lower than in the closing quarters of last year. On the one hand, econometric models' forecasts point to growth more in line with historic averages and on the other hand, indicators, such as the NIER's consumer confidence indicator, indicating a moderate dampening ahead.

For a couple of years households have increased their consumption by more than 2 per cent per year, which is slightly above the historical average. But in the light of the strong growth of both disposable income and wealth, consumption growth could be described as somewhat cautious.

Households' savings ratios remain high, see table 2. In the short term there is uncertainty about how households will react to the introduction of the amortisation requirement. The rate of growth of household consumption is expected to decrease slightly as a result of the lower RMI tax deduction (ROT in Swedish).

Table 2 Savings ratio and disposable income

	2015	2016	2017
Real disposable income[1]	2.7	2.7	2.3
Savings ratio (excl. occupational pension)	7.7	7.8	7.9
Savings ratio	15.7	15.8	16
Nominal disposable income[1]	3.7	3.7	3.6

[1] Yearly percentage change

Public consumption grew strongly in 2015 and is expected to continue to do so, but at a somewhat slower pace. This strong growth is due partly to higher migration costs and partly to needs driven by demography. Compared with its previous forecast the Debt Office has made a slight downward revision of its assessment of public consumption, primarily since the number of asylum seekers is expected to be smaller.

Investments are expected to increase more slowly in the forecast period. One explanation for this slackening is that business investments have shown an unusually rapid increase in the most recent quarters and are now expected to return to more normal levels. A further explanation is the expected slackening of the very strong increase in housing investments in 2015. Part of the background to this assessment is that a large proportion of the industry is now reporting shortage of labour as an obstacle to increased construction.

In the light of weak international developments and shrinking market shares exports have done surprisingly well in recent years. But in 2016 and 2017 the situation is expected to return to normal and export growth is expected to be slightly slower. Imports are expected to increase slightly faster than exports and the net contribution from foreign trade will be about zero during the forecast period.

The labour market is at its strongest in 2016

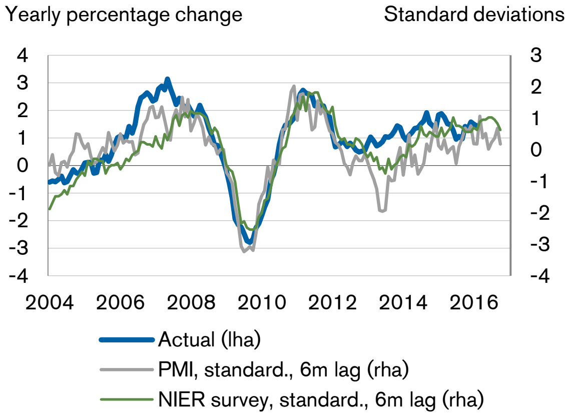
The workforce has increased at a historically rapid rate in the past 3–4 years. The background to this rapid increase is, first, an increase in the share of the population of working age and, second, an increase in the share available for work.

In broad terms, this trend is expected to continue during the forecast period, which means that the growth of the workforce will be of the same order as the growth of the population of working age. The

Debt Office assesses that the workforce will grow by 0.9 per cent this year and 1.0 per cent in 2017. A marginal downward revision has been made since February on account of new population and refugee forecasts.

For several years the number of people in employment has grown more rapidly than on average in recent decades, and this trend is expected to continue in view of the strength of the economy. Since GDP growth is judged to have peaked around the end of 2015 and beginning of 2016, employment growth is expected to be at its strongest in 2016. Various indicators of labour market trends, such as the purchasing managers index and the NIER's Economic Tendency Survey, point to a continued high growth rate in the next few quarters, see figure 5. The Debt Office expects employment to grow by 1.6 per cent this year and 1.2 per cent in 2017.

Figure 5 Employment, outcome and indicators

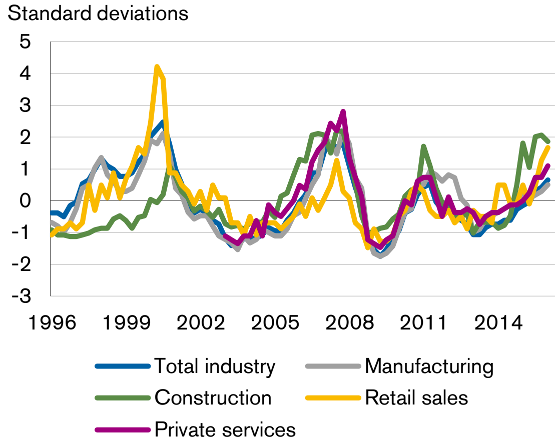


Source: Statistics Sweden, SILF/Swedbank, NIER and the Debt Office

Considering that employment growth is higher than the growth of the workforce, the Debt Office judges that unemployment will fall, from 7.4 per cent in 2015 to 6.8 per cent this year and that it will continue to fall to 6.6 per cent in 2017. Compared with the February forecast, this forecast has been revised upwards marginally because the downward revision of employment was slightly greater than that of the workforce

With higher resource utilisation matching problems will begin to be increasingly felt in the labour market. The business sector's own picture is that the shortage of labour will continue to grow, even though the differences vary between industries. Figure 6 shows normalised shortage figures for various sectors. The NIER's latest local government survey shows that the situation is much more strained than normal, with high shortage figures in both municipalities and county councils. The overall picture is that the total labour shortage in the economy is higher than normal and that the trend is rising.

Figure 6 Labour shortage in the business sector



Source: NIER and the Debt Office

The situation in the labour market, including the increasing difficulties of matching unemployed with job vacancies, is not due to the strong immigration last year. Those persons have still to enter the labour market. The large inflow of refugees in 2015 will affect the labour market for a long time, but this will only start in a year or two, which approximately is how long it will take before residence permits have been decided upon. Another fact that has a negative impact on matching in the labour market is that the group of jobseekers classified by the Swedish Public Employment Service (Arbetsförmedlingen) as being in a vulnerable situation is increasing all the time as a proportion of the total number of unemployed people.[1]

Inflation on the rise

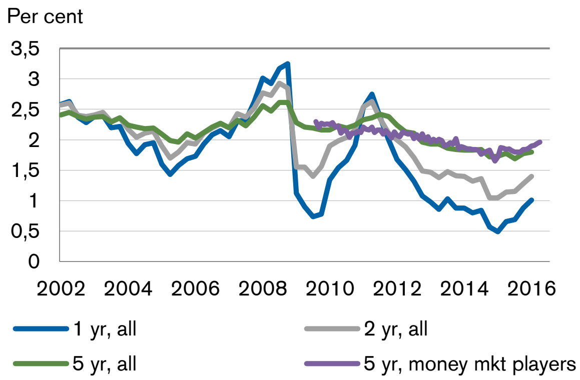
The inflationary pressure in the Swedish economy is continuing to rise. Inflation measured as CPIF has shown a rising trend for just under two years, partly on account of the expansionary monetary policy that has contributed to the weakening of the value of the Swedish krona in 2015. Increasing labour shortage and higher resource utilisation are expected to contribute to a rise in inflation during the forecast period. The outcome of this year's

[1] 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.

round of pay negotiations was in line with the Debt Office's expectations, but the short period of the pay agreements means that the round of wage bargaining will not quite be the anchor for pay growth and price pressure over a couple of years that it normally is.

At the same time, productivity is growing relatively slowly, at least from a historical perspective. Along with rising social security contributions for employers this means that unit labour costs are increasing faster. While productivity increased at a good rate last year, the overall picture since the financial crisis in 2008 is that productivity growth has been weak.

Figure 7 Inflation expectations



Source: Prospera

Recent statistics of inflation expectations have reinforced the picture of rising actual and expected price pressure. Inflation expectations have now been rising for about a year and a half, see figure 7. The rise in inflation expectations comes against a backdrop that includes the Riksbank's successive reductions of the repo rate down to -0.5 per cent and a rise in actual inflation. Money market participants expect an inflation rate of 2.0 per cent in 5 years.

Downside risks dominate

Internationally the downside risks dominate, the situation in the emerging economies being one example. The Debt Office's forecast for the emerging economies is based on a stabilisation of the situation in Russia and Brazil as well as on China managing a rebalancing towards a more domestically driven economy, without a clear dampening of GDP growth. The forecast is also based on an economic recovery in commodity exporting countries. In all these cases the situation is uncertain and downside risks dominate.

The referendum in the UK is also a clear source of uncertainty. As described in the in-depth box on page 8, an exit from the EU would have economic and political consequences for both the UK and Sweden. The effects for Sweden would probably not be dramatic in the short term. But if the result of the referendum is that the UK is to leave the EU, financial markets will experience a period of turbulence in the short term.

In Sweden there is a risk that the downturn in the economy will be faster than expected, for example if the development of housing prices is weaker than expected. A situation like that could result in households drawing down their consumption when their wealth decreases. The recently introduced amortisation requirement for home mortgages could also result in lower consumption among households. The high and growing debt of households is a risk factor in the economy and is expected to make, for example, that a group of households with high loan-to-value ratios react more strongly to a downturn in housing prices. Finally, there are a number of other indicators, for example the NIER's Business Tendency Survey, that already show what looks like the start of a dampening of the business cycle.

Domestic demand in Sweden, and therefore also economic growth, can also be higher than expected as there is still great uncertainty in the forecasts of the inflow of refugees. If more than forecast come to Sweden, this will increase domestic demand as a result of higher public consumption.

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

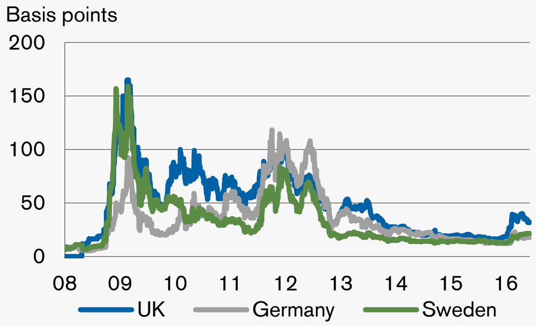
Consequences of a British exit from the EU

On 23 June a referendum will be held in the UK about whether the country should remain in or leave the European Union (EU). The consequences of a possible British exit from the EU are very hard to assess, but an exit risks affecting both the development of financial markets and the development of the real economy as well as the political climate in the EU.

Consequences for financial markets

Various parts of financial markets are already being affected today by the greater uncertainty associated with the referendum. The price of *credit default swaps* (CDS) for UK government bonds has increased since the end of 2015. The price that an investor has to pay as insurance against losses in a country's government securities is certainly lower than during the financial crisis, but the price of UK government securities is considerably higher than for other EU countries (see figure 1).

Figure *Credit default swaps* for the UK, Germany and Sweden



Source: Thomson Reuter Datastream.

Currency markets have also been affected. Since the end of 2015 the pound has been weakened by about 10 per cent in TCW terms and the exchange rate fluctuations have increased. If the result of the referendum in the UK is that the country is to leave the EU, this is expected lead to even greater uncertainty in financial markets.

Consequences for the real economy in the UK

An EU without the UK will be smaller and weaker, in both economic and geopolitical terms. The macroeconomic significance of a British exit from the EU is hard to quantify. If the UK leaves the EU, this risks having substantial adverse economic consequences for the UK economy, consequences that may also spill over into other countries. The assessments made of a British exit indicate that the UK's GDP risks being 3–5 per cent lower in the long term than if the country remains in the EU. [2]

Consequences for Sweden

The consequences for Sweden if the UK leaves the EU are both economic and political. There is a risk of somewhat greater uncertainty about questions concerning free trade, liberalisation and greater competition since, like Sweden, the UK has taken a lead advocating these issues.

Any long-term economic effects for Sweden will go via trade. The UK is Sweden's fourth largest trading partner and its third largest regarding trade in services. In the long term new trade agreements will be put in place between countries and it is not likely that a British exit will have major effects on the overall development of Sweden's GDP. The Debt Office therefore makes the assessment that it will not have any major effects on the net borrowing requirement in the future or on the Debt Office's planning during the forecast period.

[2] *See, for example, OECD: The Economic Consequences of Brexit: A Taxing Decision, OECD Economic Policy Paper No. 16* and HM Government: *HM Treasury analysis: the long-term economic impact of EU membership and the alternatives.*

Lower net borrowing requirement in 2016

The Debt Office expects a net borrowing requirement of SEK -41 billion in 2016. The low net borrowing requirement is due to the strength of the domestic economy, as well as to a number of factors of a temporary nature. Next year the net borrowing requirement rises to SEK 42 billion. The main reason for this increase is a decrease in central government tax income between these years, and this is partly due to the disappearance of temporary effects. In aggregate, the net borrowing requirement for 2016 and 2017 will be SEK 27 billion lower than in the previous forecast.

Stronger outcome figures

The outcome figures for the net borrowing requirement have been much lower than estimated since the Debt Office's previous forecast in February. The main explanation is the strong growth of tax income. This is mainly due to higher capital gains for households, but the continued use of tax accounts as a form of savings has also been a factor. The very expansive monetary policy has made the deposit interest rate on tax accounts attractive to both companies and private individuals. The Debt Office's assessment is that there are currently deposits of SEK 30–50 billion in tax accounts that do not relate to taxes or fees.

The Government has announced that the tax account interest rate will be reduced to zero per cent as of 1 January 2017. This should have the effect of reducing or stopping these deposits. The low interest rate should also result in taxpayers requesting repayments of parts of their deposits.

Reversal of the net borrowing requirement

The low net borrowing requirement in 2016 is due to the strength of the domestic economy, but also to factors of a temporary nature. These include large one-time payments of corporate tax, deposits of savings in tax accounts and a rebate on Sweden's contribution to the EU budget. In addition, households' capital gains are high and interest payments on the central government debt are at a historically low level.

For 2017 the net borrowing requirement will increase substantially compared with 2016. One important explanation is the decrease in central government tax income between these years. This is mainly due to the expected reduction of the tax account interest rate, lower capital gains and higher payments of local government tax. On the expenditure side, government grants to local authorities increase while the contribution to the EU budget returns to a more normal level.

Central government net lending peaked in 2015

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[3].

The Debt Office estimates central government net lending at 0.1 per cent as a proportion of GDP in 2015. The forecast for 2016 and 2017 is 0.0 and -0.5 per cent of GDP. This means that net lending was highest in 2015 and will fall slightly thereafter.

Table 1 Central government net borrowing requirement

SEK billion	2015	2016	2017
Primary net borrowing requirement	**11**	**-46**	**32**
of which net lending to agencies excl. on-lending	1	4	2
of which net lending, on-lending	10	12	10
of which sales of state assets	0	0	0
of which income and expenditure excl. sales of assets	0	-62	20
Interest payments	**21**	**5**	**10**
Net borrowing requirement	**33**	**-41**	**42**

Lower expenditure for migration

Expenditure on migration is expected to be lower than in the previous forecast, especially for 2017. In its previous forecast the Debt Office used the lower scenario for the number of asylum seekers

[3] *Net lending is not affected by savings in the tax account since it is considered as deposits and not tax income.*

published by the Swedish Migration Agency on 4 February. In its present forecast the Debt Office has used the Swedish Migration Agency's intermediate scenario, which was published on 27 April. Both scenarios are equivalent in terms of the total number of asylum seekers. But the number of unaccompanied refugee minors is lower in the Agency's latest forecast. Since the reception of unaccompanied minors is much more expensive, there is a decrease in expenditure, especially in 2017.

Forecast changes in the net borrowing requirement

The net borrowing requirement decreases by SEK 39 billion compared with the February forecast. The main reason is an increase of SEK 35 billion in tax income. This includes savings in tax accounts.

The outcome for tax income since the previous forecast, February until and including May, was SEK 18 billion higher than forecast. Most of this sum relates to supplementary tax payments, i.e. tax for previous years or tax that has not been debited on a preliminary basis. In addition, the strength of the domestic economy has contributed to higher than estimated income from consumption-based taxes.

Table 2 The largest changes in forecasts[1]

SEK billion	2016	2017
Forecast February 2016	**-3**	**31**
Taxes	-35	7
Government grants to local governments	0	10
Labour market	0	0
Social insurance	-2	-4
Migration	-1	-5
International aid	1	1
Dividends	0	2
Interest payments	4	2
Net lending excl. on-lending	2	1
On-lending	-2	-1
Other	-5	-2
Forecast June 2016	**-41**	**42**
Sum of changes	-39	11

[1] Changes in terms of net borrowing requirement. A minus sign means that the net borrowing requirement decreases and plus means that it increases.

For 2017 the Debt Office estimates that the net borrowing requirement will increase by SEK 11 billion compared with the previous forecast. Tax income decreases by SEK 7 billion, which is mainly due to larger advance outgoing payments of local government tax. Government grants to local authorities increase by SEK 10 billion. This is offset to some extent by lower expenditure for migration.

Higher capital gains for households

The higher supplementary payments in the spring can probably largely be explained by households' capital gains in 2015 being higher than previously estimated. The size of these capital gains does not become known until December, in conjunction with the definitive outcome of the tax assessment. Since the previous forecast some income statements have become available and they indicate higher gains. Capital gains already rose substantially in 2014 and will, probably, reach record levels in 2015.

Rising home prices and, to some extent, a higher level of sales explain the increase. The income statements give the sales prices but not the purchase values. So there is still great uncertainty about the final size of these gains. There is also uncertainty about how households will handle deferrals regarding previous home sales in their tax returns.

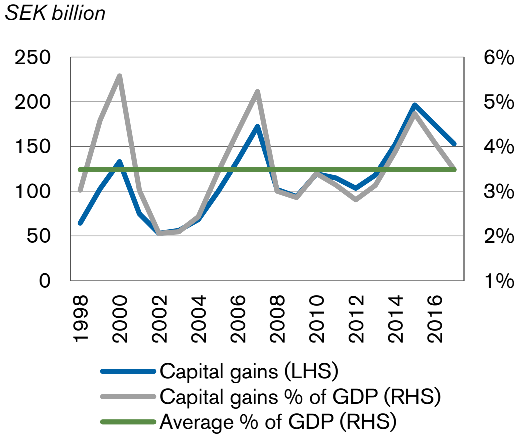
Table 3 Growth rates for the tax forecast, current prices

Percentage change	2015	2016	2017
Household consumption	5.1	3.6	3.5
Wage sum	4.3	4.7	4.3
Household taxable income	4.5	4.8	4.3
Income from interest and dividends	3.6	1.0	1.0
Deduction for interest on debts	-7.7	2.4	5.7
Household capital gains, net	29.5	-11.7	-13.1
Corporate taxable income	27.0	-5.8	5.0

Regarding securities it seems like sales were unusually high in 2015. One explanation could be that many people have chosen to sell unit trusts and shares and to transfer these savings to investment savings accounts instead.

Capital gains are very volatile, but follow the business cycle in the long term. The average of capital gains since 1998 corresponds to 3.5 per cent of GDP. The Debt Office's forecast for capital gains in 2016 and 2017 is that they decrease gradually towards that long term level.

Figure 1 Capital gains for households



The rules for tax accounts affect the borrowing requirement

The high deposit interest rate on tax accounts, compared with conventional bank accounts, has meant that both households and companies have started to use their tax account to place liquidity. This has been seen in high payments into – and rising balances in – tax accounts. In addition, the number of individuals and companies requesting repayment blocks on their accounts increased sharply in 2014 and 2015. As a result, considerable balances have been built up in tax accounts in recent years. Deposits began to increase when the Riksbank reduced the repo rate to below zero in February 2015. The Debt Office assesses that deposits corresponding to SEK 30–50 billion in tax accounts have been made for that reason.

The Government has announced that the tax account interest rate will be reduced to zero from the start of next year. This ought to make deposits in tax accounts less attractive, especially for households.

The Debt Office's forecast of tax income is therefore based on payments to tax accounts for placement purposes decreasing gradually in 2016 and virtually ending in 2017. Moreover, in 2017 households, in particular, are expected to start to request repayments from their tax accounts. For large companies the incentives for withdrawals are smaller since they get negative interest rates on alternative investments. The Debt Office has therefore made a cautious assessment of repayments of about SEK 10 billion next year.

Declining income from corporate taxes

The Debt Office's assessment of corporate profits for 2015 has been revised upwards slightly as a result of the strong growth of the Swedish economy at the end of last year.

The NIER's Economic Tendency Survey shows that optimism among companies is declining slightly even though the business confidence indicator is still above its historical average. The slow recovery of the global economy means that business will continue to be sluggish for export companies.

Profit growth is expected to decline in 2016 and 2017 as GDP growth slackens. At the same time, the low level of the government borrowing rate, which is a reference rate used In tax legislation, means that income from tax on pension fund yields will be at a historically low level in the forecast period.

Table 4 Tax income compared with previous forecast[1]

SEK billion	2016	2017
Payroll taxes	1	11
Consumption taxes	-5	-4
Corporate taxes	-4	0
Supplementary taxes	-27	0
Total	**-35**	**7**

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

Lower income from payroll taxes

Payroll taxes decrease by SEK 1 billion this year and SEK 11 billion next year compared with the previous forecast.

Payroll taxes have shown marginally weaker growth than estimated in early 2016. At the same time the strong growth in the labour market is expected to continue. The Debt Office's assessment is that the payroll will grow by 4.7 per cent in 2016 and 4.3 per cent in 2017. This is an upward revision of 0.1 percentage points per year. Pay agreements were in line with the Debt Office's expectations.

The decrease in payroll taxes in 2017 is due to increased payments of local government tax to the local authorities. The Government determines what advances local authorities will receive for next year. This calculation is based on the outcome for 2015 and a forecast of income growth for 2016 and 2017. In the Spring Fiscal Policy Bill the Government raised its forecast for the upward adjustment of income, and this result in higher advance payments to local authorities. These higher payments affect the net borrowing requirement for 2017. The sum will be settled in 2019 if the outcome differs from the Government's forecast.

Higher income from consumption taxes

Consumption taxes increase by SEK 5 and 4 billion respectively for 2016 and 2017 compared with the previous forecast.

The main explanation of the upward revision is a stronger than expected outcome for value added tax in early 2016. Household consumption in the first quarter was slightly higher than forecast.

Dividends on state-owned shares decrease between the years

The assessment of central government income from share dividends in 2016 is the same as in the previous forecast. These dividends are estimated at just less than SEK 13 billion.

For 2017 dividend income is estimated at SEK 9 billion, which is SEK 2 billion lower than in the previous forecast. 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.

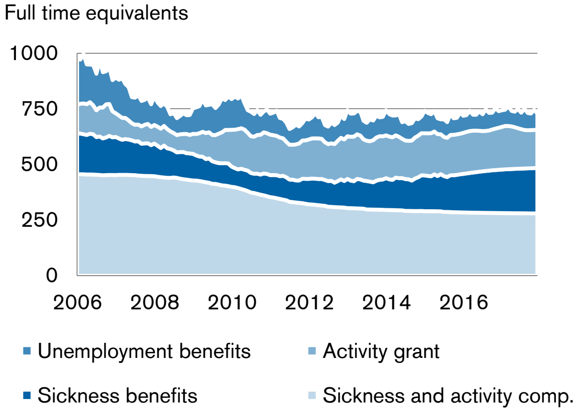
Table 5 Dividends on state-owned shares

SEK billion	2016	2017
Akademiska hus AB	3.3	1.5
LKAB	0.0	0.2
TeliaSonera AB	4.8	3.2
Vattenfall AB	0.0	0.0
Sveaskog AB	0.8	0.9
Other corporations	3.7	3.1
Totalt	**12.6**	**8.9**

Lower expenditure pressure in the social insurance system

Social insurance expenditure has been revised downwards by SEK 2 billion for 2016 and SEK 4 billion for 2017 compared with the previous forecast. It is mainly sickness benefit that is expected to be lower since the number of new sickness cases is increasing more slowly than previously forecast. In addition, expenditure for parental insurance and child allowance is also expected to decrease slightly, and this is due to a lower population forecast from Statistics Sweden.

Figure 2 Volumes in the transfer systems for the labour market and ill health



Lower expenditure for migration

Expenditure for migration is expected to be SEK 1 billion lower in 2016 and SEK 5 billion lower in 2017 than in the previous forecast.

In its previous forecast the Debt Office used the Swedish Migration Agency's lower scenario for the number of asylum seekers, which was published on 4 February. In its present forecast the Debt Office has used the Swedish Migration Agency's intermediate scenario, which was published on 27 April. Both scenarios are equivalent in terms of the total number of asylum seekers. But the number of unaccompanied refugee minors is lower in the latter forecast. Since the reception of unaccompanied refugee minors is much more expensive, there is a decrease in expenditure, especially in 2017.

In the spring the number of refugees seeking asylum in Sweden decreased considerably compared with the end of last year. This can be explained by a number of factors: Sweden introduced ID checks at certain major border crossings as of January this year; Turkey and the EU have signed an agreement that makes it more difficult to go from Turkey to Greece. In addition, several other EU countries have also introduced internal border controls and tightened the control of external borders.

On 20 July a temporary law enters into force that means that Swedish law will be adapted to the minimum level under EU law and international conventions for a limited period of three years. In general it will mean that it is more difficult to obtain a residence permit at the same time as the permits will be temporary.

The above factors will probably contribute to a further decrease in the number seeking asylum in Sweden.

If developments follow the Swedish Migration Agency's lower scenario, the assessment of the Debt Office is that this would decrease the net borrowing requirement by another SEK 2 billion in 2016 and SEK 6 billion in 2017.

Net lending by the Debt Office

The Debt Office's net lending to government agencies etc. is expected to amount to SEK 16 billion in 2016 and SEK 12 billion in 2017. This is broadly unchanged from the previous forecast.

During the forecast period net lending will consist to a great extent of currency exchange effects 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 2013 and 2017 and how different parts of the net borrowing requirement affect this change.

The net borrowing requirement decreases by SEK 74 billion between 2015 and 2016. Tax income increases by SEK 124 billion between these years. This is partly due to tax increases and large temporary effects, but is also explained by the strength of the domestic economy. In addition, interest payments on the central government debt decrease by SEK 17 billion between these years.

Most expenditure items continue to increase with the exception of the contribution to the EU budget, where Sweden receives a rebate in 2016. The expenditure increases are largely due to increased expenditure for migration and social insurance, but are also due to decisions in the Budget Bill for 2016.

The net borrowing requirement increases by SEK 84 billion between 2016 and 2017. Tax income decreases between these years at the same time as expenditure increases more quickly, mainly on account of higher government grants to local authorities but also because expenditure for migration and social insurance continues to rise.

In addition, the contribution to the EU budget increases from a temporarily low level in 2016.

SEK billion	2013	2014	2015	2016	2017
Net borrowing requirement, level	**131**	**72**	**33**	**-41**	**42**
Net borrowing requirement, change	106	-59	-40	-74	84
Explained by;					
Taxes	14	-26	-66	-124	26
Government grants to local governments	4	5	-3	2	12
Labour market	5	1	0	0	2
Social Insurance	2	7	6	4	7
Migration & International aid	3	4	9	22	7
Sales of state-owned assets	-21	21	0	0	0
Share dividends	1	8	-7	7	4
EU contribution	1	5	-4	-5	7
Debt Office's net lending excl. on-lending	-4	29	-19	3	-1
On-lending	101	-104	7	2	-2
Interest on government debt	-11	-13	18	-17	5
Other	11	6	19	32	17

Switches increase interest payments this year

Central government interest payments are estimated at SEK 5 billion this year and SEK 10 billion next year. This is SEK 4 billion and 2 billion higher than in the previous forecast.

The main reason why interest payments increase this year is capital losses in connection with switches of inflation-linked bonds carried out in April[4]. They were much larger than assumed by the Debt Office in its February forecast. This was offset to some extent because the premiums on the issue of inflation-linked bonds were also slightly higher than forecast in the period February to April. The main reason for this is that interest rates have fallen since the February forecast.

For next year, too, the upward revision of interest payments is due to changed switches of nominal bonds and inflation-linked bonds resulting in slightly higher capital losses than previously estimated.

Table 6 Interest payments on the central government debt

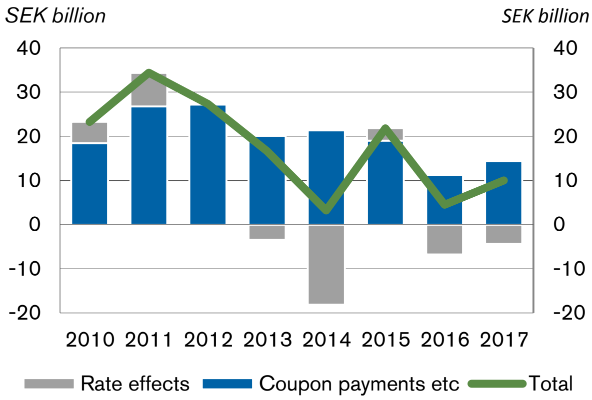
SEK billion	2016	2017
Interest on loans in SEK	6.2	11.9
Interest on loans in foreign currency	0.3	-0.1
Realised currency gains and losses	-1.9	-1.9
Interest payments	**4.5**	**9.9**

Central government interest payments vary a great deal over time, as shown in figure 3. Between 2015 and 2016 these payments decrease by more than SEK 17 billion. This is explained by, first, more favourable rate effects in 2016 and, second, by 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.

Between 2016 and 2017 the level of interest payments increases by SEK 5 billion. This is explained by slightly poorer rate effects in 2017 and by the maturity of an inflation-linked bond with the associated payment of inflation compensation.

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 31 May.

Figure 3 Interest payments[1]



[1] Rate effects include issues sold at a premium/discount, capital gains/losses in connection with switches/buybacks and currency exchange gains/losses realised.

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

Duration	3 mån	6 mån	2 år	5 år	10 år	30 år
Government bonds	-0.7	-0.7	-0.5	-0.1	0.7	2.3
Inflation-linked bonds	-1.4	-1.4	-1.6	-1.6	-1.0	0.4
Swap interest rate SEK	-0.5	-0.5	-0.3	0.3	1.1	0.0
Swap interest rate EUR	-0.3	-0.2	-0.2	0.0	0.6	1.2
Swap interest rate USD	0.7	0.8	1.1	1.4	1.7	0.0

Table 8 Cut-off rates for currency exchange rates

Spotrates	2016-05-31
SEK/EUR	9.30
SEK/USD	8.35
SEK/CHF	8.30
SEK/JPY	0.08
SEK/GBP	12.16
SEK/CAD	6.39

Budget balance and central government net lending

The Debt Office estimates central government net lending at 0.1 per cent as a proportion of GDP in 2015. The forecast for 2016 and 2017 is 0.0 and -0.5 per cent of GDP.

The development of net lending therefore has a different profile from the budget balance and the net borrowing requirement. Net lending was at its highest in 2015 and is then expected to decrease slightly as a proportion of GDP. The budget balance is at its highest in 2016 and then shows a relatively large deterioration in 2017.

[4] A capital gain/loss is in an economic sense not a cost. If the Debt Office realizes a capital loss this means that the Debt Office pays a lower interest rate on the new loan issued which corresponds to the capital loss. I.e., the capital loss can be viewed as an interest payment in advance.

The difference in the development of these two measures is partly due to the fact that large tax payments in 2016 refer to income year 2015. In addition, the budget balance is affected by the use of tax accounts as a form of savings. But savings in tax accounts do not affect net lending, since they are counted as deposits instead of tax income. The deterioration of net lending in 2016 and 2017 is also due to a slightly poorer underlying development of tax income at the same time as expenditure for migration and other purposes rises.

Table 9 Central government net lending

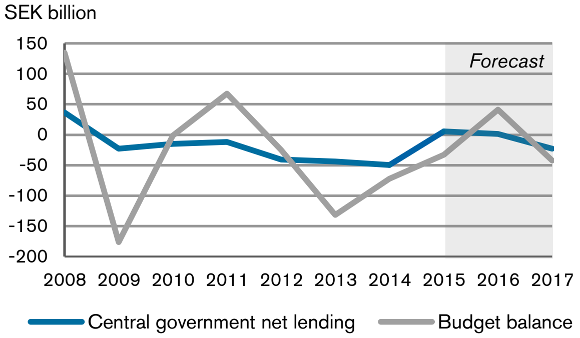
SEK billion	2013	2014	2015	2016	2017
Budget balance	**-131**	**-72**	**-33**	**41**	**-42**
Delimitations	**52**	**-4**	**19**	**17**	**18**
Sale of limited companies	-21	0	0	0	0
Extraordinary dividends	0	0	-9	-2	0
Parts of Debt Office's net lending	99	13	17	20	21
Other delimitations etc.	-27	-16	11	-1	-3
Accruals	**35**	**26**	**20**	**-57**	**1**
Taxes	26	32	10	-34	4
Interest payments etc.	9	-6	10	-23	-2
Central government net lending	**-44**	**-49**	**6**	**2**	**-23**
Per cent of GDP	**-1.2**	**-1.3**	**0.1**	**0.0**	**-0.5**

Net lending is a better indicator of the underlying central government finances than the net borrowing requirement and the budget balance. The budget balance is a cash flow measure that measures central government's incoming and outgoing payments. Net lending accrues payments to the point in time when the economic activity took place.

Net lending is also adjusted for payments that do not affect central government's financial wealth. If, for example, central government sells financial assets such as shares, this does not affect net lending. Central government just redistributes assets in its balance sheet, as shares are exchanged for cash. However, when the payment is made, the budget balance is affected and the central government debt decreases. Amortising the central government debt does not affect the net asset position of central government either since the assets decrease just as much.

In the same way, net lending is not affected by lending to the Riksbank. This is because, in its balance sheet, central government receives an asset (a claim on the Riksbank) that corresponds to the increased indebtedness incurred in order to finance lending to the Riksbank. On the other hand, the budget balance and central government debt are affected.

Figure 4 Central government net lending and the budget balance



Monthly forecasts

The net borrowing requirement varies strongly between months. The following table presents monthly forecasts from June 2016 until and including May 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.

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
Jun-16	25.2	-5.6	1.8	21.3
Jul-16	5.8	-3.9	-0.2	1.7
Aug-16	-18.1	-3.5	1.0	-20.6
Sep-16	5.7	0.3	-1.9	4.0
Oct-16	5.7	-5.6	-3.2	-3.1
Nov-16	-20.0	5.2	-0.3	-15.2
Dec-16	51.4	34.5	5.9	91.9
Jan-17	17.2	-1.9	-1.4	13.9
Feb-17	-47.1	-2.5	1.8	-47.8
Mar-17	-4.3	-3.4	3.4	-4.4
Apr-17	2.1	1.9	-2.3	1.7
May-17	-31.5	-4.4	1.8	-34.2

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.

Forecast comparisons

For 2016 the Debt Office forecasts a much lower net borrowing requirement than other forecasters. This is mainly explained by higher tax income, some of which is judged to be of a temporary character. Since the other forecasters published their forecasts in March and April, they have not been able to take account of the high outcome figures for tax income in recent months.

For 2017 all authorities except the Government expect the net borrowing requirement to increase between these years. The Debt Office forecasts a higher net borrowing requirement than other forecasters. One important explanation is that the Debt Office assumes that the expected reduction on the tax account interest rate will result in larger repayments from tax accounts. Another possible explanation is that the Debt Office assumes higher payments to local authorities.

	Debt Office (15 Jun)		Government (13 Apr)		NIER (23 Mar)		ESV (6 Apr)	
SEK billion	2016	2017	2016	2017	2016	2017	2016	2017
Net borrowing requirement of which:	-41	42	12	-29	-9	24	-19	3
Sales of state assets	0	0	-5	-5	0	0	0	0
Adjusted net borrowing requirement	**-41**	**42**	**17**	**-24**	**-9**	**24**	**-19**	**3**

Reduced borrowing in government bonds

Borrowing in government bonds decreases by SEK 5.5 billion this year and SEK 11 billion next year compared with the February forecast. This decrease is made by reducing the auction volume from SEK 4 to SEK 3.5 billion. The issue volume of inflation-linked-bonds is unchanged at SEK 18 billion per year. Borrowing in T-bills is also unchanged.

Lower borrowing requirement

The total borrowing requirement decreases during the forecast period on account of the lower net borrowing requirement and a smaller refinancing requirement. The refinancing requirement is lower because money market borrowing decreases in 2016. This then leads to a smaller volume of redemptions in 2017.

In total, the borrowing requirement is SEK 347 billion in 2016 and SEK 383 billion in 2017, see table 1. This is a decrease of SEK 44 billion and 34 billion compared with the previous forecast.

Table 1 Gross borrowing requirement

SEK billion	2015	2016	2017
Net borrowing requirement	**33**	**-41**	**42**
Business day adjustment etc. [1]	**0**	**1**	**0**
Retail borrowing & collateral, net [2]	**31**	**2**	**8**
Money market redemptions [3]	**256**	**284**	**188**
T-bills	88	141	120
Commercial paper	124	87	51
Liquidity management	44	56	17
Bond redemptions, net switches and buy-backs	**160**	**102**	**145**
Government bonds	75	53	69
Inflation-linked bonds	31	0	14
Foreign currency bonds	54	49	62
Total gross funding requirement [4]	**479**	**347**	**383**

[1] *Adjustment for the difference between settlement day and business day. The net borrowing requirement is cashflow-based (settlement day) as opposed to funding and outstanding debt. An adjustment is also made for the difference between accounting of government debt and accounting of the net borrowing requirement with respect to interest payments on money market instruments.*

[2] *Net change in retail borrowing and collateral.*

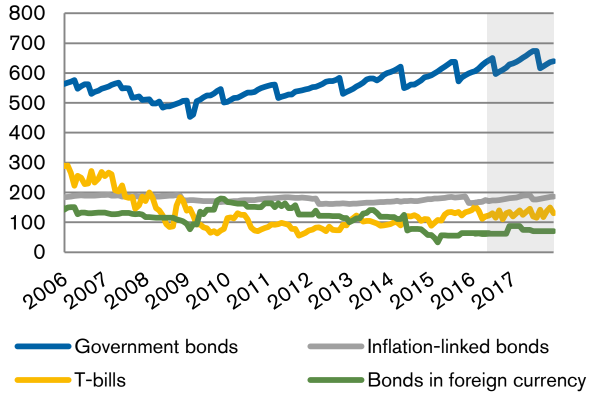
[3] *Initial stock maturing within 12 months.*

[4] *Refers to borrowing requirement in the institutional market.*

The Debt Office's policy is to handle short-term fluctuations in the borrowing requirement by adjusting borrowing in foreign currency and in the money market. This makes it possible to have an even issue volume of government bonds so as to maintain a liquid bond market, see figure 1.

Figure 1 Stock of government securities and foreign currency bonds[1]

Nominal amount, billion SEK



[1] *Excluding foreign currency bonds issued on behalf of the Riksbank.*

The borrowing requirement has been revised downwards for several successive forecasts. After having previously cut back on other borrowing the Debt Office is now reducing the issue volume of government bonds as of the auction on 22 June. This borrowing decreases by SEK 5.5 billion this year and SEK 11 billion next year. The Debt Office is also planning to borrow less in liquidity management.

The issue volume of T-bills remains at the same level as in the previous forecast. T-bill borrowing was reduced already in February to respond to the lower borrowing requirement. The Debt Office has also stopped bond borrowing in foreign currencies apart from issues to finance on-lending to the Riksbank.

The issue volume of inflation-linked bonds is unchanged compared with the February forecast. This borrowing is relatively limited and is needed to prevent the proportion of inflation-linked debt becoming too small in relation to the Government's guidelines.

Table 2 shows how borrowing is distributed between different instruments. The figures in brackets give the distribution according to the February forecast.

Table 2 Borrowing according to new forecast

SEK billion	2016 Jun	2016 (Feb)	2017 Jun	2017 (Feb)
Money market funding [1]	**188**	**(226)**	**223**	**(244)**
T-bills	120	(120)	130	**(130)**
Commercial paper	51	(52)	65	**(65)**
on behalf of Central Government	40	(40)	65	**(65)**
on behalf of the Riksbank	11	(12)	0	**(0)**
Liquidity management	17	(54)	28	**(49)**
Bond funding	**159**	**(166)**	**161**	**(173)**
Government bonds	83	(88)	77	**(88)**
Inflation-linked bonds	18	(18)	18	**(18)**
Foreign currency bonds	59	(60)	66	**(67)**
on behalf of Central Government	0	(0)	0	**(0)**
on behalf of the Riksbank	59	(60)	66	**(67)**
Total gross funding	**347**	**(392)**	**383**	**(417)**

[1] Outstanding stock as at year-end.

The slight decrease in borrowing on behalf of the Riksbank is because the Swedish krona strengthened during the period. The volumes measured in foreign currency are the same as in the previous forecast.

Reduced borrowing in government bonds

Borrowing in government bonds decreases to SEK 83 billion this year and SEK 77 billion in 2017. The auction volume will be reduced from SEK 4 billion to SEK 3.5 billion in the auction on 22 June and then remain at that level throughout the forecast period.

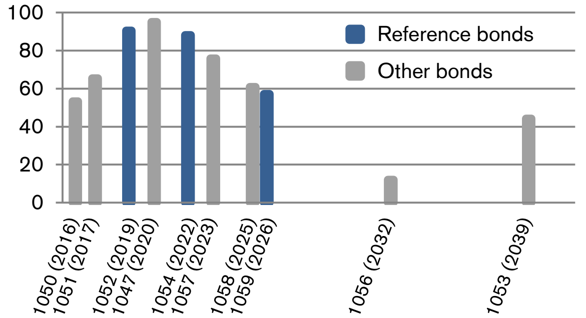
At the majority of these auctions the Debt Office has split the issue volume between two different maturities in order to meet the demand in different segments. The approach of using split auctions will continue to be a common procedure in the future.

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 bonds can also be considered if this is justified in order to maintain liquidity. Figure 2 and table 3 show the volume of outstanding government bonds and which bonds are reference bonds.

There may also be individual issues in the existing 23-year bond SGB 1053, as well as in the 16-year bond SGB 1056 when there is demand for long-dated bonds.

Figure 2 Outstanding government bonds

SEK Billion, 31 May 2016



The introduction of a new ten-year government bond previously planned for the end of 2016 is being moved to the beginning of 2017. This is because the issue volume has been revised downwards and the Debt Office wants to have time to build up a large enough volume of the present ten-year bond. As usual the Debt Office will offer switches to the new bond when it is introduced and also before the bond becomes the 10-year reference bond.

Table 3 Reference bonds in the electronic interbank market

Date of change (IMM date)[1]	2-year	5-year	10-year
Current reference bonds	1052	1054	1059

[1] See fact box on reference bonds

Reference bonds

The reference bond in electronic trading is the bond that is closest to two, five or ten years of maturity. Reference bonds are only changed on the IMM date provided the new bonds are the bonds that are closest to two, five or ten years of maturity 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 Friday preceding an IMM date.

The Riksbank's purchases of government securities

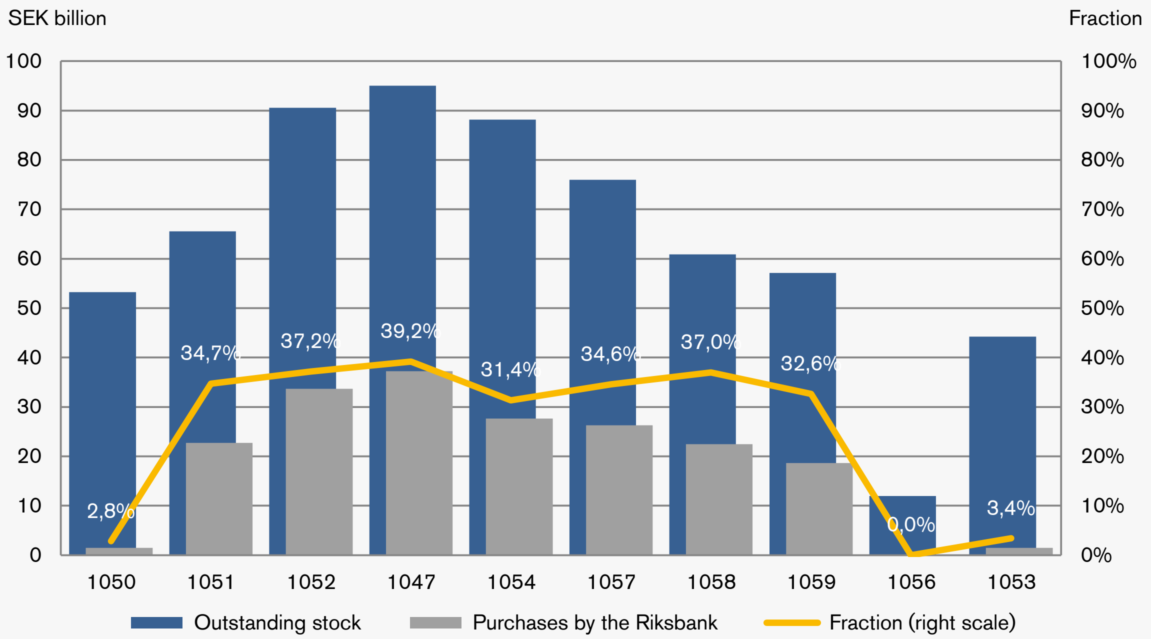
In April the Riksbank decided to purchase government bonds for a further SEK 45 billion in the second half of 2016. Its purchases cover both government bonds and inflation-linked bonds corresponding to SEK 30 billion and SEK 15 billion respectively.

If the purchases announced are carried out as planned the Riksbank's holdings will total SEK 245 billion at the end of 2016. The Riksbank will then own more than a third of the outstanding stock of government bonds and just under a tenth of the stock of inflation-linked bonds.

The Riksbank's purchases do not affect the Debt Office's issue planning, which is based on the central government borrowing requirement and the guidelines for management of the central government debt. Neither the borrowing requirement nor the debt management strategy is changed due to these purchases.

However, the Riksbank's purchases do change the size of the outstanding stock of bonds traded actively on the market. So far the bond market has functioned well, but it cannot be ruled out that liquidity will be affected in the future when the Riksbank continues to purchase bonds.

Figure Outstanding government bonds and Riksbank's purchases as on 31 May 2016



Unchanged auction volume of T-bills

The auction volume of T-bills stays at SEK 15 billion on average throughout the forecast period. As before, the Debt Office plans to occasionally issue SEK 17.5 billion when the borrowing requirement is large.

The stock is estimated to be about SEK 120 billion in December 2016 and to then grow to SEK 130 billion at the end of 2017. On average the stock of T-bills is expected to be around SEK 130 billion in 2016 and 2017.

Commercial paper borrowing[5]

Commercial paper borrowing on behalf of central government is unchanged compared with the previous forecast. At the end of 2016 and 2017 the stock is expected to amount to SEK 40 billion and SEK 65 billion respectively.

[5] *Commercial paper is short securities in foreign currency that the Debt Office issues under English law.*

Treasury bill policy

Every third month, the Debt Office issues a new six-month bill, maturing on an IMM date (the third Wednesday in March, June, September or December). A new three-month bill is introduced in the other months.

Accordingly, there are always at least four outstanding maturities of up to six months. As a rule, there is also a bond with a shorter maturity than twelve months on the market. Normally, the majority of the issued amount is borrowed in the new T-bill that is introduced in the auction. The remainder is borrowed in one of the outstanding IMM T-bills.

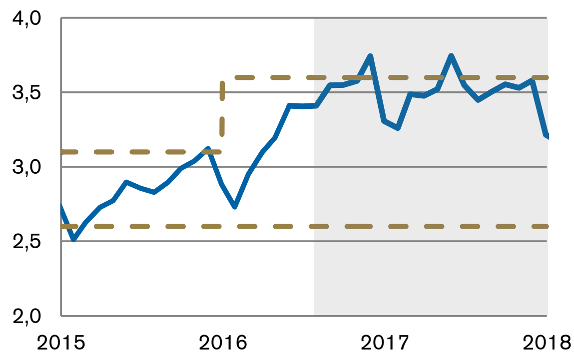
Within the liquidity management, the Debt Office may issue T-bills in the shortest maturities, beside the auctions. The Debt Office may also issue T-bills with tailor-made maturities (liquidity bills).

Slightly larger volume of interest rate swaps

The planned volume of interest rate swaps increases from SEK 5 billion to SEK 10 billion this year compared with the February forecast. For next year the volume is unchanged at 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. The proportion of short financing is smaller than in the previous forecast, and this makes the duration of the nominal krona debt longer. The volume of interest rate swaps increases slightly in order to compensate for that extension.

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



According to the current guidelines the duration of the nominal krona debt with maturities up to 12 years is to be between 2.6 and 3.5 years, see figure 3.

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. The Debt Office may deviate from the planned volume.

Table 4 Change in outstanding swaps

SEK billion	2016 Jun	2016 (Feb)	2017 Jun	2017 (Feb)
Interest rate swaps [1]	10	(5)	10	(10)
Cross currency swaps [2]	0	(0)	0	(0)
Swaps total	**10**	**(5)**	**10**	**(10)**
Swaps maturing	38	(38)	39	(39)
Swaps, net change	**-28**	**-(33)**	**-29**	**-(29)**

[1] *Interest rate swaps from fixed to floating rate in SEK.*
[2] *Cross currency swaps from fixed SEK rate to floating rate in foreign currency.*

The outstanding stock of swaps will decrease by just under 30 billion per year during the forecast period, see table 4. The Debt Office does not normally close swaps previously entered into. The change in the stock is therefore due to the net of new and maturing swaps.

Part of the outstanding currency exposure in the central government debt has previously been created by the Debt Office swapping SEK borrowing into foreign currency using what are called basis swaps. According to the guidelines for the management of the central government debt, the foreign currency exposure in the central government debt is to decrease gradually. This means that the Debt Office is not planning any new basis swaps in order to create exposure in foreign currency.

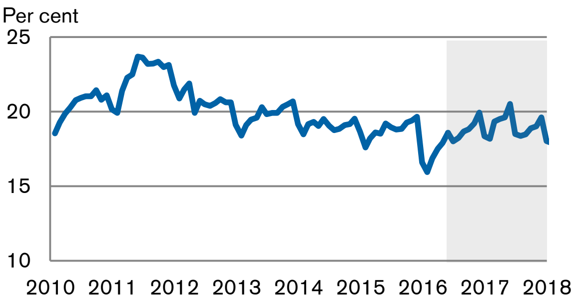
Inflation-linked bond borrowing is unchanged

Borrowing in inflation-linked bonds is unchanged from the previous forecast. The planned annual volume is SEK 18 billion for both 2016 and 2017. The issue volume will remain at SEK 1 billion per auction throughout the forecast period.

In 2016 the Debt Office will issue in the ten-year segment in the first place, i.e. SGB IL 3109 and SGB IL 3112, along with the four-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 Share of inflation-linked debt[1]



[1] In the long term the inflation-linked debt is to be 20 per cent of the central government debt.

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

As previously announced, the Debt Office plans to introduce a new ten-year inflation-linked bond next year, with subsequent switches from nearby bonds.

The volume of SGB IL 3104 has been reduced

The Debt Office's long-term ambition is for the number of maturities to be large enough to avoid excessive concentrations of volume. The objective is for no single bond to exceed 30 per cent of the inflation-linked bond index.

In the past year SGB IL 3104 has made up a large share of the inflation-linked bond index with a weight of more than 30 per cent. This has created problems for investors who track the index and are unable to allocate more than 30 per cent to a single issue under investment rules in place.

For three days in April the Debt Office therefore offered to switch SGB IL 3104 to other inflation-linked bonds. Market participants showed great interest in taking part. The share of the inflation-linked bond index for SGB IL 3104 decreased substantially and was 28 per cent on 1 June.

Handling of short inflation-linked bonds

The Debt Office has a policy of letting about SEK 20 billion of an inflation-linked bond go to maturity. 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.

Inflation-linked bonds have often had a volume of more than SEK 20 billion about two years before maturity. To reduce the outstanding volume the Debt Office usually offers switches to longer inflation-linked bonds. In May the Debt Office offered switches of SGB IL 3107, which matures on 1 June 2017, to a longer inflation-linked bond. As on 31 May the outstanding volume of SGB IL 3107 had decreased to SEK 15 billion.

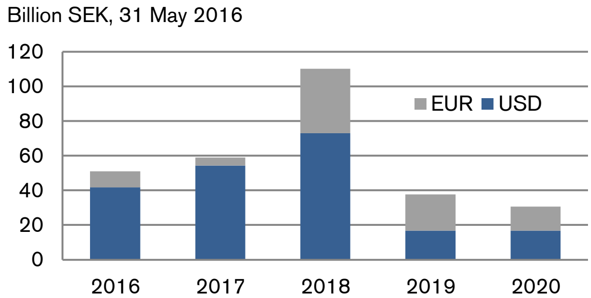
Foreign currency bonds only for the Riksbank

As in the February forecast the Debt Office only intends to issue foreign currency bonds on behalf of the Riksbank. This applies to both this year and next year.

Borrowing to refinance loans to the Riksbank reaching maturity is expected to be SEK 59 billion in 2016, which is SEK 1 billion lower than in the previous forecast. The decrease is because the krona has strengthened slightly against the dollar. Measured in foreign currency, the volume is unchanged.

In 2017 the Debt Office expects to borrow the equivalent of SEK 66 billion on behalf of the Riksbank. The fact that the volume is SEK 2 billion lower than in the previous forecast is again due to exchange rate effects.

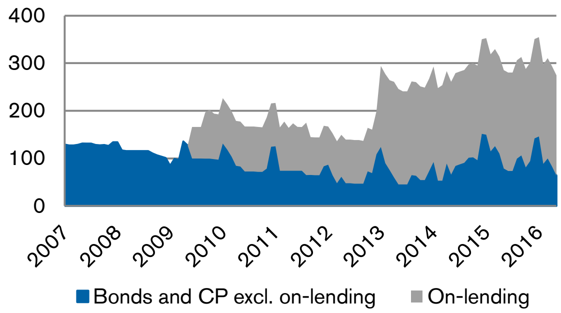
Figure 5 Maturity profile of outstanding bonds in foreign currency



On-lending to the Riksbank

On 31 May on-lending to the Riksbank totalled SEK 240 billion. The reason why the volume has decreased since the previous report is that the krona has strengthened against the US dollar. 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. The Debt Office's borrowing in the SEK market is not affected since this financing takes place in foreign currency

Figure 6 Outstanding stock in foreign currency



This borrowing is concentrated on large benchmark bonds 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 central government debt

Table 5 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 and bought back in switches.

Table 5 Net borrowing per calendar year

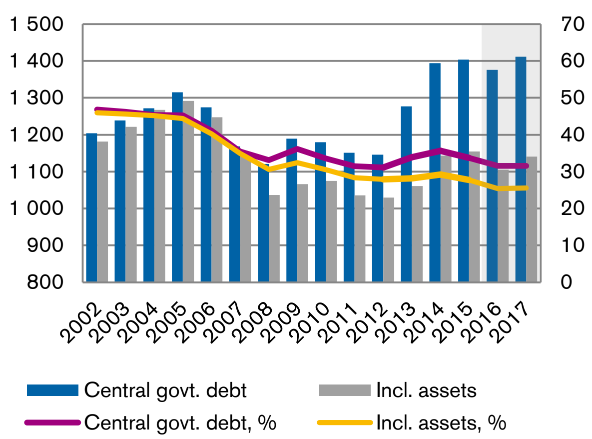
SEK billion	2015	2016	2017
Net borrowing requirement	33	-41	42
Business day adjustment [1]	0	1	0
Net borrowing requirement	**32**	**-41**	**42**
Retail funding & collateral, net	**-31**	**-2**	**-8**
Net money market funding	**29**	**-96**	**34**
T-bills	53	-21	10
Commercial paper	-37	-35	14
Liquidity management	12	-39	11
Net bond market funding	**35**	**57**	**16**
Government bonds	11	29	8
Inflation-linked bonds	-14	18	4
Foreign currency bonds	37	10	4
Total net borrowing	**32**	**-41**	**42**

[1] *Adjustment for the difference between settlement day and business day. The net borrowing requirement is cashflow-based (settlement day) as opposed to funding and outstanding debt. An adjustment is also made for the difference between accounting of government debt and accounting of the net borrowing requirement with respect to interest payments on money market instruments.*

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.

The central government debt at the end of 2017 is estimated at SEK 1,411 billion. This corresponds to a GDP share of 32 per cent. Figure 7 and table 6 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 will be 26 per cent of GDP at the end of 2017.

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 6 Net borrowing and the central government debt

SEK billion	2010	2011	2012	2013	2014	2015	2016	2017
Net borrowing requirement	1	-68	25	131	72	33	-41	42
Discrepancy between business and payment date [1]	25	23	-17	0	-4	0	1	0
Net borrowing per business day	**26**	**-45**	**8**	**131**	**68**	**32**	**-41**	**42**
A. Nominal amount including money market assets	**1,158**	**1,113**	**1,121**	**1,253**	**1,321**	**1,353**	**1,312**	**1,355**
Inflation compensation	31	34	31	29	25	19	20	21
Exchange rate effects	-28	-21	-29	-19	30	29	18	10
B. Nominal amount to current exchange rate incl. inflation compensation and money market assets	**1,161**	**1,126**	**1,123**	**1,262**	**1,376**	**1,401**	**1,351**	**1,386**
Assets under management	18	25	23	15	18	3	25	25
C. Central government debt	**1,179**	**1,151**	**1,146**	**1,277**	**1,394**	**1,403**	**1,376**	**1,411**
Assets under management	-18	-25	-23	-15	-18	-3	-25	-25
On-lending	-86	-91	-93	-201	-233	-247	-245	-245
D. Central government debt incl. on-lending and assets under management	**1,075**	**1,035**	**1,030**	**1,061**	**1,143**	**1,154**	**1,105**	**1,141**
Nominal GDP	3,520	3,657	3,685	3,770	3,918	4,159	4,355	4,468
C. Central government debt, % of GDP	**34**	**31**	**31**	**34**	**36**	**34**	**32**	**32**
D. Central government debt incl. on-lending and money market assets, % of GDP	**31**	**28**	**28**	**28**	**29**	**28**	**25**	**26**

[1] *Adjustment for the difference between settlement day and business day. The net borrowing requirement is cashflow-based (settlement day) as opposed to funding and outstanding debt. An adjustment is also made for the difference between accounting of government debt and accounting of the net borrowing requirement with respect to interest payments on money market instruments.*

Measuring central government debt

The Central government debt is calculated as the value of outstanding debt instruments, mainly bonds and treasury bills, at the reporting date, calculated in accordance with established principles, see below. Within the framework of debt management are also certain assets. There are funds temporarily invested in the money market until they are used to pay expenses in the state budget or maturing loans. The assets mean that the actual liability is less than the sum of outstanding debt instruments.

Nominal amount or face value (A in the table above) is the sum of the amounts that the Debt Office is committed to paying when a debt instrument matures and receives at maturity if it is an asset. The amount is reported in SEK at the exchange rate at the time of borrowing.

The next step (in B above) is to report the nominal amounts at the current exchange rate and add the accrued inflation compensation for outstanding inflation-linked government bonds (this measure is called the uplifted amount at current exchange rate). These measures show the government debt when assets under management are taken into account.

The official measure of government debt (in C above) is defined based on principles laid down at EU level. It accounts for the Central government gross debt, without the assets. To obtain this measurement, we add the financial assets to measure B.

The Debt Office also reports "Central government debt including on-lending and assets under management" (under D above). This includes not only the assets under management but also certain other financial assets, namely on-lending to the Riksbank and foreign states. This measure is used in the management of government debt in accordance with guidelines adopted by the government and in our internal risk management. On-lending is a government claim, but not in the same manner as assets under management available for payment of government spending.

Liabilities are reported with a positive sign and assets with a negative sign.

Market information

Auction dates

Government bonds, auction dates

Announcement date	Auction date	Settlement date
15-Jun-16	22-Jun-16	27-Jun-16
03-Aug-16	10-Aug-16	12-Aug-16
17-Aug-16	24-Aug-16	26-Aug-16
31-Aug-16	07-Sep-16	09-Sep-16
14-Sep-16	21-Sep-16	23-Sep-16
28-Sep-16	05-Oct-16	07-Oct-16
12-Oct-16	19-Oct-16	21-Oct-16
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

Government bonds, outstanding amounts 31 May 2016

Maturity date	Coupon %	Bond no.	SEK Million
12-Jul-16	3.00	1050	53,239
12-Aug-17	3.75	1051	65,526
12-Mar-19	4.25	1052	90,550
01-Dec-20	5.00	1047	95,054
01-Jun-22	3.50	1054	88,131
13-Nov-23	1.50	1057	75,977
12-May-25	2.50	1058	60,872
12-Nov-26	1.00	1059	57,147
01-Jun-32	2.25	1056	12,000
30-Mar-39	3.50	1053	44,250
Total government bonds			642,746

Inflation-linked bonds, auction dates

Announcement date	Auction date	Settlement date
11-Aug-16	18-Aug-16	22-Aug-16
25-Aug-16	01-Sep-16	05-Sep-16
08-Sep-16	15-Sep-16	19-Sep-16
22-Sep-16	29-Sep-16	03-Oct-16
06-Oct-16	13-Oct-16	17-Oct-16
20-Oct-16	27-Oct-16	31-Oct-16
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

Inflation-linked bonds, outstanding amounts 31 May 2016

Maturity date	Coupon %	Bond no.	SEK Million
01-Jun-17	0.50	3107	16,598
01-Jun-19	0.125	3110	19,744
01-Dec-20	4.00	3102	32,791
01-Jun-22	0.25	3108	28,951
01-Jun-25	1.00	3109	21,407
01-Jun-26	0.13	3112	12,325
01-Dec-28	3.50	3104	31,874
01-Jun-32	0.13	3111	7,636
Total Inflation-linked bonds			171,326

T-bills, auction dates

Announcement date	Auction date	Settlement date
22-Jun-16	29-Jun-16	01-Jul-16
27-Jul-16	03-Aug-16	05-Aug-16
10-Aug-16	17-Aug-16	19-Aug-16
24-Aug-16	31-Aug-16	02-Sep-16
07-Sep-16	14-Sep-16	16-Sep-16
21-Sep-16	28-Sep-16	30-Sep-16
05-Oct-16	12-Oct-16	14-Oct-16
19-Oct-16	26-Oct-16	28-Oct-16
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

T-bills, outstanding amounts 31 May 2016

Maturity date	SEK Million
15-Jun-16	20,000
20-Jul-16	30,000
17-Aug-16	32,500
21-Sep-16	7,500
Total T-bills	122,500

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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For more information:
Thomas Olofsson, Head of Debt Management — +46 8 613 47 82
Mattias Persson, Chief Economist — +46 8 613 46 99

What is a reasonable level of the central government debt?

In connection with the financial crisis many European countries had major fiscal problems, raising the question of what implications these growing debts may have for the economy. This box, which is based on the Debt Office's Focus Report *The role of the central government debt in the economy (Statsskuldens roll i ekonomin)* discusses what role the central government debt has in the economy, from both a theoretical and an empirical perspective.

One of the most important tasks of the central government debt is to provide a buffering variable and parry upturns and downturns in economic activity when the economy is exposed to shocks. One central conclusion in many theoretical economic models is that central government should conduct an economic policy intended to minimise efficiency losses from the tax system by evening out tax rates as far as possible over time. To be able to hold tax rates constant, some other variable must vary with the development of the economy and central government debt should have that task. This applies both when the economy is subjected to war or disasters and during booms and recessions as well as in periods of demographically favourable or unfavourable conditions.

The fundamental economic models do not imply that there is an optimal level of central government debt or a long-term level on which the debt converges. On the contrary, the level of central government debt is often of no importance in these models. Irrespective of which level of debt a country has, central government should seek to minimise efficiency losses from the tax system rather than reducing the debt. This is even though it is better, in relative terms, to have a low than a high debt since interest expenditure must also be financed with distortionary taxes.

It is difficult to draw any conclusions about how the level of central government debt affects economic development in the light of economic theory and there is, for this reason, a large body of research literature that tries to analyse this issue empirically instead. Two areas are in focus in this empirical research: how central government debt affects economic growth and how it affects the level of interest rates in the economy.

Despite extensive empirical research it is difficult to draw any unambiguous conclusions about how central government debt affects economic growth. In many studies the authors take the view that a high level of debt leads to lower economic growth. In several cases it is only when the debt exceeds a certain level, a threshold, that the relationship between the variables is negative. This threshold for central government debt is usually between 80 and 100 per cent of GDP.[6]

Other studies question these results, chiefly on empirical grounds.[7] One major challenge in empirical analyses in economics is that it is often difficult, or impossible, to establish causality. The links found often reflect pure correlations and even if there is causality it can be difficult to know in which direction it goes. It does not have to be the case that a high debt leads to lower growth; it can also be the case that low growth leads to a higher debt instead. To remedy these problems use is made of special statistical methods and techniques in these analyses, but some researchers take the view that the data problems are too large for reliable results to be obtained. Nor is there any broad consensus in the empirical literature about how central government debt affects a country's government bond yields, but the empirical results in this area must be held to be slightly stronger than for the link between debt and growth.[8]

[6] *See, for example, Cecchetti, S.G., Mohanty, M.S. & Zampolli, F. (2011) och Checherita-Westphal, C. & Rother, P. (2012). Detailed information about these references is given in the Debt Office's Focus Report.*

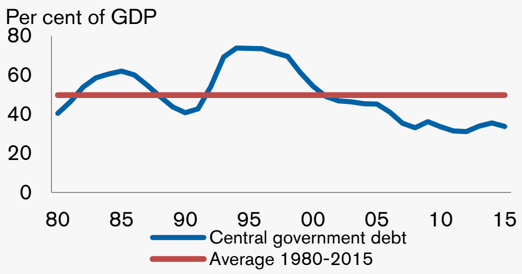
[7] *See , for example, Panizza, U. & Presbitero, A.F. (2014).*

[8] *Two research reviews in the area are : Gale, W.G. & Orszag, P.R. (2003) and Engen, E. & Hubbard, R.G. (2004).*

Several studies argue that there is a positive link between the level of debt and the yield, and that the yield rises when the debt rises. Hence, one problem with debt crises is that they risk being self-fulfilling. If expectations arise that a state is going to suspend payments, investors demand compensation for this in the form of higher yields and this then increases the probability of a debt crisis. This self-fulfilling element may be one of the reasons why studies of the link between central government debt and yield find a positive link between the variables. This link often depends on how high the government debt is. The threshold for when the level of government debt affects yield is often between 60 and 70 per cent of GDP.

Economic crises and financial crises can have major effects on the borrowing needs of countries. In one study of how economic variables are affected by financial crises Carmen Reinhard and Kenneth Rogoff show, for example, that the real value of public debt has increased by an average of 86 per cent three years after a banking crisis.[9] So a banking crisis can almost double central government debt. Other overviews show that historically public debt has increased on average by 25–30 percentage points of GDP in connection with financial crises.[10] In certain cases the debt increases have been even higher.

Figure 1 Sweden's central government debt 1980-2015



Sources: Debt Office and Statistics Sweden.

Figure 1 shows Sweden's central government debt between 1980 and 2015. During this period the central government debt has, on average, been about 50 per cent of GDP. In the past 10 years the central government debt has oscillated between 30 and 40 per cent of GDP and it is currently just under 35 per cent of GDP.[11]

On the basis of economic theory and empirical results it is difficult to draw any conclusions about what is a reasonable level of central government debt in practice. Empirical research provides some support for the view that excessive debt can lead to higher interest rates and lower economic growth. However, there is great uncertainty about what levels of central government debt can be problematic for the economy. The uncertainty about the position of any such limit means that under normal conditions central government debt should be kept at a level that provides sufficient room for manoeuvre when the economy is hit by crises. The large fluctuations in the central government debt that can be caused by economic and financial crises mean that the safety margins in public finances should be substantial.

All together, the analysis suggests that a central government debt around 30-35 per cent of GDP appears to be a reasonable long-term level[12] It is a level close to the present one of around 35 per cent of GDP. It provides a substantial margin to a central government debt of 80–100 per cent of GDP, the level sometimes identified as problematic in empirical research, and to the costs that financial crises could cause according to Reinhard and Rogoff. It also provides a good margin to the reference level of 60 per cent of GDP included the EU Stability and Growth Pact.

[9] *Reinhart, C.M. & Rogoff K.S. (2009).*

[10] *Laeven, L. & Valencia, F. (2008, 2012).*

[11] *The central government debt including assets in debt management and on-lending to the Riksbank is today about 28 per cent of GDP.*

[12] *The question of how big the Swedish central government debt should be is discussed by Fredrik NG Andersson and Lars Jonung in Ekonomisk Debatt (Economic Debate) 4/2016 The authors argue that under normal circumstances an appropriate level of the central government debt should be 20-30 per cent of GDP*

RIKSGÄLDEN
SWEDISH NATIONAL DEBT OFFICE

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