RIKSGÄLDEN
SWEDISH NATIONAL DEBT OFFICE

Central Government Borrowing

Forecast and analysis 2017:2

In *Central Government Borrowing - forecast and analysis 2017:2* the Debt Office presents forecasts for central government finances and borrowing in 2017 and 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*.

RG 2017/229

Summary

The central government budget will show a deficit – a net borrowing requirement – of SEK 17 billion this year and this will then turn into a surplus of SEK 124 billion for 2018. The large surplus next year is because the Debt Office assumes that the loans raised for the Riksbank (the Swedish central bank) in order to strengthen the foreign currency reserve will begin to be repaid. This will greatly reduce central government borrowing in foreign currencies. Apart from the effect of the reduced lending to the Riksbank, the changes in the forecast of the budget balance and central government borrowing are small. Central government net lending, which is a better indicator of the underlying central government finances than the budget balance, shows a surplus of 0.3 per cent of GDP this year and 0.2 per cent in 2018.

- The Swedish economy is expected to continue to grow at a good pace, even though growth will slacken during the forecast period. The international recovery will contribute to good export growth in the near term. Exports and domestic demand contribute to growth to approximately the same extent during the forecast period. GDP is expected to grow by 2.3 per cent this year and 2.1 per cent in 2018.

- Both the labour force and employment are expected to grow rapidly in 2017. However, the growth rate will decrease gradually in line with the deceleration of GDP growth, but also because the effects of the major inflow of refugees decline. Unemployment will be 6.5 per cent during the forecast period.

- The forecast changes for 2017 are small. The net borrowing requirement is expected to be SEK 17 billion, which is SEK 3 billion lower than in the previous forecast.

- The net borrowing requirement for 2018 decreases because it is assumed that lending to the Riksbank (the Swedish central bank) will be phased out. The net borrowing requirement in 2018 is expected to be SEK -124 billion. This is a decrease of SEK 107 billion compared with the February forecast, and this is entirely due to the decrease in lending to the Riksbank.

- Central government net lending is expected to be 0.3 per cent of GDP in 2017 and 0.2 per cent in 2018. Central government net lending is not affected by on-lending to the Riksbank. As a result, the proposed repayment does not create any scope for reforms.

- The central government debt is expected to be SEK 1 354 billion at the end of 2017 and 1 217 billion on 31 December 2018. This corresponds to 30 and 26 per cent of GDP respectively.

- The borrowing requirement including refinancing of maturing loans is unchanged for 2017 compared with the previous forecast. In contrast, the borrowing requirement for 2018 is expected to be SEK 106 billion lower than in the previous forecast.

- In line with the Government's proposal the Debt Office expects not to renew maturing foreign currency loans to the Riksbank. Instead the Debt Office plans to issue foreign currency bonds on its own behalf corresponding to about SEK 17 billion.

- The auction volume of government bonds will remain at SEK 2.5 billion per auction throughout the forecast period. This means that borrowing in government bonds will remain at SEK 52 billion this year and SEK 50 billion in 2018.

- Borrowing in inflation-linked bonds is unchanged. The issue volume remains at SEK 750 million per auction, corresponding to an annual rate of SEK 13 billion in 2017 and 2018.

- Borrowing in T-bills decreases from SEK 10 to 7.5 billion per auction as of the end of February 2018. The stock is expected to be around SEK 110 billion at the end of 2017. At the end of 2018 the stock is expected to be SEK 60 billion, which is SEK 20 billion lower than in the previous forecast.

Continued good growth in the Swedish economy

The Swedish economy is growing at a good pace and is expected to continue doing so, even though growth will slacken during the forecast period. A clearer international recovery will contribute to good export growth in the next few quarters. Domestic demand will also continue to be important for growth, and GDP growth is expected to be 2.3 per cent this year and 2.1 per cent in 2018. The labour force and employment will continue to grow at a rapid, but declining, pace and unemployment is expected to level out at 6.5 per cent.

Clearer international recovery

The international recovery is judged to continue and growth will be slightly stronger this year than expected in the Swedish National Debt Office's previous forecast in February. The prospects for the euro area have improved

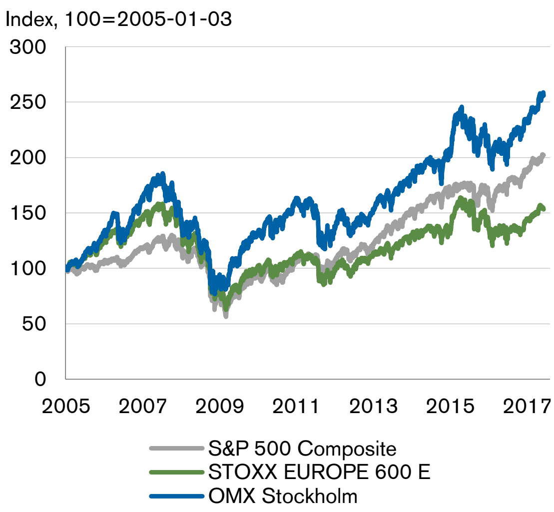
Since 2015 global growth has weakened. But economic outcomes, and especially various types of leading indicators, suggest a gradual rise in global growth. This picture has been reinforced slightly since the previous forecast.

Financial factors also strengthen the picture of a continuing international recovery. Even though monetary policy as a whole is assumed to be slightly less expansive in 2017 and 2018, it will continue to support economic developments. The ECB and the Bank of England have continued to conduct an expansive monetary policy in the spring. Market participants expect the ECB to only begin reducing its asset purchases in 2018 and do not expect interest rates in Europe to be increased until the latter part of 2018. In contrast, the Federal Reserve has increased its key interest rate further, but market participants believe that coming interest rate increases will be made at a slow pace.

Moreover, optimism in financial markets has increased during the spring. Various measures of risk in financial markets are historically low and stock exchanges have risen further since February, see figure 1. This is mainly due to signals of a clearer recovery in the world economy, but is also due to a slight decrease in the great political uncertainty.

The stronger international growth in the future is chiefly assumed to come from emerging economies, but the contribution of developed economies has been adjusted upwards since February. The cyclical recovery in manufacturing in developed countries is an important factor behind the continued international recovery. Confidence indicators among developed countries have remained at high levels in recent months. This optimism is partly based on expectations of a more expansive fiscal policy in the US.

Figure 1 Stock indices in US, euro area and Sweden



Source: Datastream.

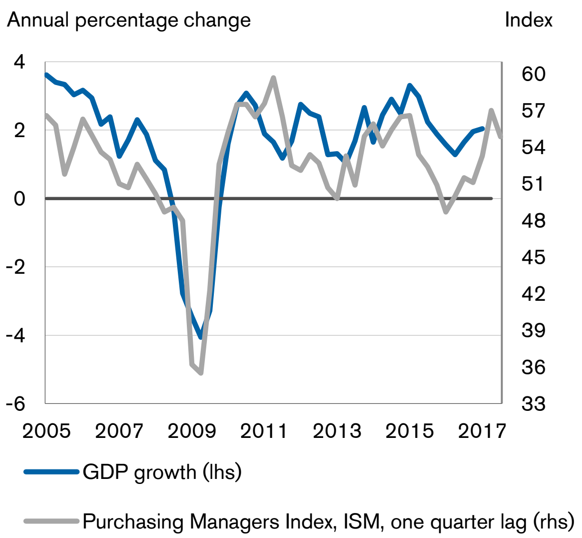
Emerging economies are growing slower than historically

A continued recovery in several countries exporting raw materials, after previous falls in raw materials prices, is assumed to contribute to faster growth in emerging economies. For instance, the prospects for the Russian economy have improved considerably on account of a rising oil price. But even though growth has strengthened, it will still be lower than it has been historically. This is a consequence of raw materials exporters having to adapt to lower raw materials prices than in the past, high indebtedness and geopolitical tensions. A further contributing factor is the rebalancing from investment-driven to more consumption-driven, and therefore slower, growth that the Chinese economy has been undergoing for several years. But Chinese growth continues to be supported by an economic policy that still contributes to a rapid expansion of credit and large public investments. Overall, the Debt Office judges that global GDP will increase by 3.5 per cent in 2017, which is slightly more than in the previous forecast, and 3.6 per cent in 2018.

The US is growing faster

The US economy grew by 2.6 per cent in 2015. Since then the growth rate has fallen considerably and was 1.6 per cent last year. However, growth has increased in recent quarters. The US labour market has continued to develop well. Unemployment has fallen further since the previous forecast and employment is continuing to grow at a good rate historically. American consumers also continue to be optimistic. The purchasing managers index from ISM also indicates good growth in coming quarters, see figure 2.

Figure 2 GDP and Purchasing Managers Index in US



Note: Values for purchasing managers index are quarterly averages. The last observation for purchasing managers index is based on values for April and May.

Sources: Datastream and Swedish National Debt Office.

US growth is assumed to rise during the forecast period. Important underlying drivers are cyclical stock building, stronger consumption and an assumption of a more expansive fiscal policy. The Debt Office expects US GDP to grow by 2.3 per cent in 2017 and 2.5 per cent in 2018, which is the same assessment as in the previous forecast.

Continued slow recovery in the euro area

The euro area continues to be burdened by the effects of high public and private indebtedness. Like the US, the euro area grew more slowly in 2016 than in 2015. Growth fell from 2.0 per cent to 1.7 per cent. However, OECD's indicator of business confidence in the euro area indicates stronger future growth. At the same time, the underlying inflationary pressure in the euro area continues to be weak.

As in the previous forecast, the recovery in the euro area is expected to continue to be slow. Factors supporting the recovery include the continuation of an expansive monetary policy and a fiscal policy that is expected to be weakly expansive, a weak euro and expected positive effects of a more expansive US fiscal policy. But growth prospects are dampened by political uncertainty linked to coming elections in Germany and elsewhere and to question marks surrounding the future relationship between the UK and the euro area. Growth in Germany, Italy and Spain is expected to fall slightly during the forecast period, while the French economy will grow a bit more quickly instead. In aggregate, the GDP of the euro area is assumed to grow by 1.7 per cent in 2017 and 1.6 per cent in 2018. The forecast for the present year has been increased marginally.

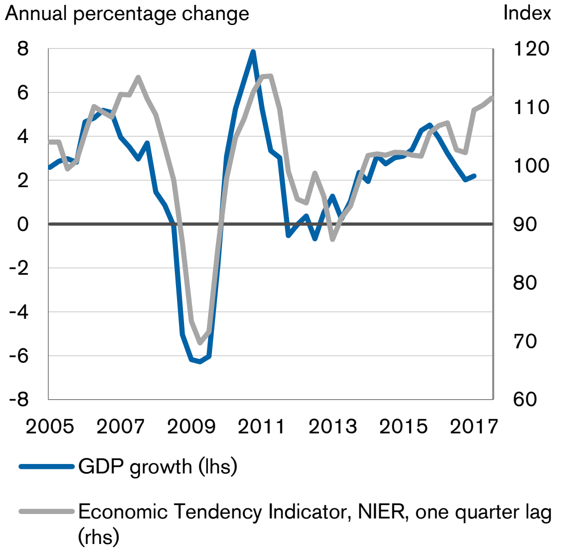
Growth is driven by both domestic demand and exports

Since the Debt Office's previous forecast in February the growth prospects for Sweden have become slightly stronger. Swedish GDP is expected to grow at a good pace in the next few quarters. But an unexpectedly weak GDP outcome in the first quarter of this year means that aggregate growth this year is expected to be the same as in the previous forecast. In 2018 the economy will grow marginally faster than previously expected and it is mainly exports and investments that are expected to grow faster than what were expected in the previous forecast. The stronger export growth means that GDP growth is driven approximately equally by domestic demand and exports, while the contribution from net exports is relatively small.

The level of resource utilisation in the Swedish economy is somewhat difficult to assess. Indicators of resource utilisation in terms of GDP point to a better situation than normal. The picture for the labour market is more fragmented. Shortage figures suggest high resource utilisation while the difference between the actual and potential number of hours worked points to moderate levels. In an overall assessment, resource utilisation is nevertheless judged to be higher than normal.

GDP growth on a quarterly basis was strong in 2015 but fell substantially at the start of 2016. But the growth rate rose gradually during the course of 2016. Even though growth in the first quarter of the year was surprisingly weak, the prospects for higher growth in the near future are good. International economic developments look slightly better, as does the financial situation. In addition, several leading indicators, such as NIER's Economic Tendency Indicator, are at high levels in early 2017, see figure 3.

Figure 3 GDP, calendar adjusted and economic tendency indicator



Note: Values for the confidence indicator are quarterly averages. The last observation for the confidence indicator is based on values for April and May.

Sources: Datastream and Swedish National Debt Office.

The financial situation in Sweden also suggests a continuation of favourable conditions for the real economy. A composite stress index including volatility on the stock exchange and in the currency market and risk premiums in the housing bond and interbank interest rate market indicates a low stress level, which has historically accompanied good economic growth. The interest rates met by households and companies have also continued to be historically low. Rising house and share prices have led to a further increase in households' wealth in the spring. Finally, various model estimates point to strong growth in the second and third quarters of 2017.

Table 1 GDP by expenditure, constant prices

Percentage change[1]	2016	2017	2018
GDP	3.2	2.3 (2.3)	2.1 (1.9)
Household consumption expenditure	2.4	1.9 (2.2)	2.1 (2.1)
General government consumption expenditure	2.9	0.1 (1.2)	1.0 (1.0)
Gross fixed capital formation	5.3	5.2 (3.0)	2.9 (2.3)
Stockbulding[2]	0.0	-0.1 (-0.2)	-0.1 (-0.1)
Exports	3.5	3.3 (3.5)	4.4 (3.9)
Imports	3.8	2.9 (2.7)	4.3 (3.6)
Net exports[2]	0.0	0.3 (0.5)	0.2 (0.3)
GDP (calendar adjusted)	2.9	2.6 (2.6)	2.2 (2.1)

Note: Previous forecast in parenthesis.

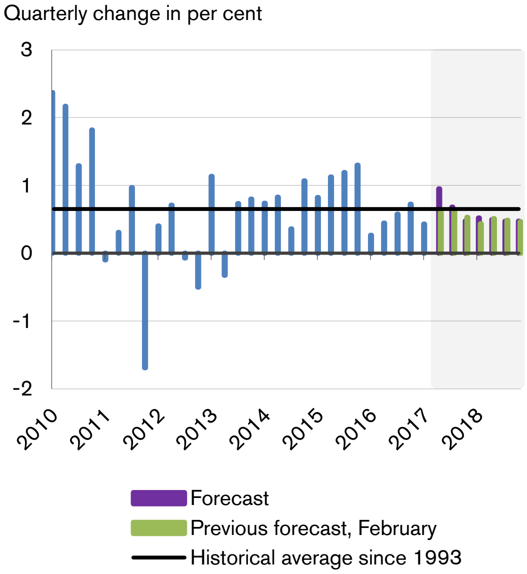
[1] Actual change compared to previous year.

[2] Change in percent of GDP previous year.

Sources: Datastream and Swedish National Debt Office.

GDP growth is assumed to be 2.3 per cent in 2017 and to then fall to 2.1 per cent in 2018, see table 1. The forecast for GDP growth this year is unchanged. For 2018 the forecast has been increased by 0.2 percentage points, see figure 4. Part of the reason why growth is expected to fall gradually during the forecast period is that resource utilisation is assessed as being higher than normal.

Figure 4 GDP, outcome and forecast

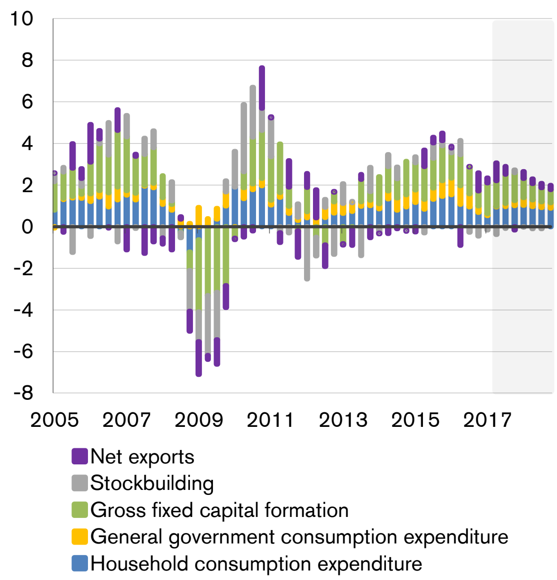


Sources: Datastream and Swedish National Debt Office.

Domestic demand and exports drive growth

The GDP outcome for the first quarter of 2017 was surprisingly weak. For example, net exports performed much less well than expected, driven by weak export growth. However, exports are expected to recover and to grow at a good pace for the rest of the year, as a result of better international growth. But since imports are expected to grow faster, the contribution to growth from net exports will be limited. Strong export growth also benefits investments, which continue to grow rapidly in the next few quarters. Cautious consumers mean that household consumption continues to grow at the historical average rate during the forecast period. Overall, growth is driven approximately equally by domestic demand and exports, while the contribution from net exports is relatively small, see figure 5.

Figure 5 Contribution to annual GDP growth, calendar adjusted



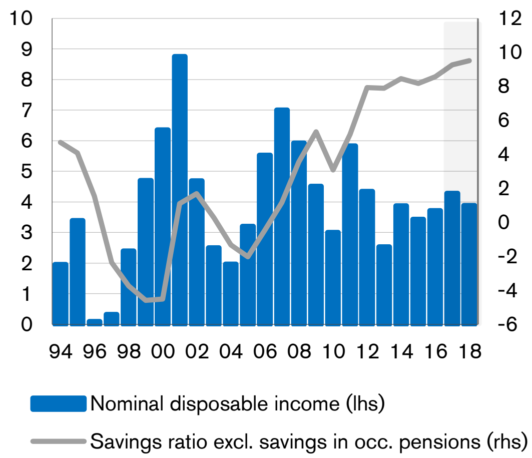
Sources: Datastream and Swedish National Debt Office.

Consumption is growing at its average historical rate

Since 2015 household consumption has grown at a slightly slower rate. In the past three quarters consumption has grown at around, or slightly below, its historical average. This growth has been slightly weaker than expected. For instance, leading indicators have suggested stronger growth. For example, since September 2016 the NIER's household confidence indicator has shown stronger than usual consumer confidence,

The Debt Office's view of household consumption is largely unchanged from the previous forecast. A continuation of low mortgage interest rates, good wealth growth and optimism about the economic situation indicate strong growth in the next few quarters. Factors pointing in the opposite direction are a moderate increase in disposable income and continued high precautionary savings, see figure 6. Households are assumed to retain high savings, partly in order to have a margin for the risk of rising interest rates and/or falling house prices. The quarterly growth of household consumption is judged to be around the historical average and to fall slightly in 2018. Slightly weaker than expected outcome figures mean that the full-year figure for 2017 has been revised downwards.

Figure 6 Disposable income and savings ratio



Sources: Statistics Sweden and Swedish National Debt Office.

Public expenditure rises again

Public expenditure rose rapidly in autumn 2015 and spring 2016 in connection with the major wave of refugees. Since then it has fallen. As before, it is assumed that the growth of public expenditure will now be normalised, and then fall gradually in 2018. The forecast for the whole of 2017 has been revised downwards on account of unexpectedly weak outcome figures.

Investments benefit from exports in 2017

Investments grew more slowly in 2016 than in the previous year. But they have begun to rise faster again in the past three quarters, Investments have increased faster than expected, particularly in the first quarter of this year. Housing investments have continued to rise at a rapid pace.

Expected good export growth in the coming quarters is assumed to also affect investments in a positive direction. A continuation of low interest rates during the forecast period, at the same time as capacity utilisation becomes more strained, also points to strong investment growth. The Debt Office's forecast for investments has been revised upwards. Investments are expected to grow at a good pace in 2017. After that the assessment is that they will grow much more slowly than their historical level. This is partly because housing investment will slacken as it may become more difficult for companies to find the right type of labour.

More stability in the international economy results in good export growth in the near term

Exports fell in the first half of 2016 and they grew again at a good pace in the second half of the year. In the first quarter of 2017 exports fell surprisingly. Overall, export growth has been weaker than expected since the previous forecast.

Indicators of export order bookings suggest roughly the same strong situation as in February. However, Business Sweden's export managers index has risen substantially during the second quarter of the year and suggests an even better situation than before. A clearer international recovery in the future, including important export partners for Sweden like the UK and the euro area, also points to a better situation for exports. Exports are therefore expected to grow at a good pace in 2017. After that quarterly growth will fall below a historical average. The Debt Office's full-year forecast for exports in 2017 has been revised downwards on account of weak outcome figures, but its full-year figure for 2018 is higher than before.

Given that the import content of both exports and investments is high, this results in imports also showing stronger growth than in the previous forecast. This also means that even though net exports grow, their contribution to GDP growth will be relatively limited.

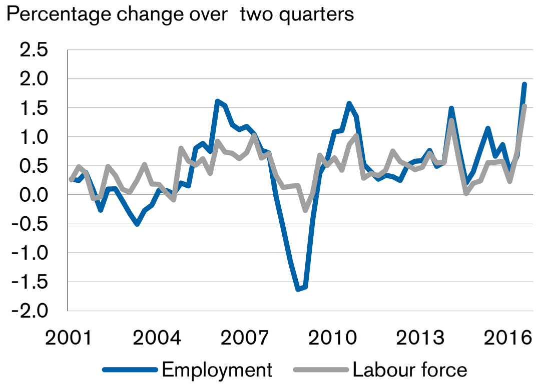
Strong development in the labour market

In the past two quarters the increase in both the labour force and the number of people employed has been very strong. At the same time there are two sides to the picture of resource utilisation in the labour market, with shortage figures and the 'hours gap' pointing to high and just under normal resource utilisation respectively.[1] Pay rises are still growing relatively slowly and are moderate from a historical perspective.

Recently the labour force has increased faster than at any time in the past 15 years, see figure 7. In the past half year this has meant growth that is about four times faster than the historical average. A large part of this development is explained by more and more people getting residence permits in Sweden. People born in Sweden have made a very small contribution to the increase in the labour force.

In the coming years the growth of the labour force is expected to decline as the contribution from people born in Sweden is expected to continue to be small at the same time as the number of new residence permits will fall. The Debt Office expects the growth of the labour force to be 1.6 per cent this year and 0.8 per cent in 2018. This is 0.6 percentage points higher than in the previous forecast for this year, largely on account of the strong outcome for the first quarter. The forecast for 2018 is unchanged.

Figure 7 Employment and labour force



Sources: Statistics Sweden and Datastream.

The number of people in employment has grown at a very fast rate in the past half year, see diagram 7. This picture probably stands up well even if the measurement problems in the LFS are taken into account (see the in-depth box on page 9). The increase in recent years has mainly been in the public sector, but there has also been an increase in the private sector. Both models and indicators, such as resource utilisation and shortage figures, point to this strong growth continuing, but at a lower rate.

[1] The hours gap is the difference between the actual and the potential number of hours worked in the economy.

According to the NIER survey, the shortage figures are distinctly higher than normal in all industries examined. This breadth of the current upturn is unusual compared with previous cyclical peaks in shortage figures. At the same time, the number of job vacancies is at historically high levels, which points to a continuing high demand for labour. The Debt Office now expects employment to increase by 2.1 per cent this year, which is 0.7 percentage points higher than in the previous forecast, and by 0.8 per cent in 2018.

Table 2 Labour market key figures

Percentage change	2016	2017	2018
Labour force	1.0	1.6 (1.0)	0.8 (0.8)
Employment	1.5	2.1 (1.4)	0.8 (0.8)
Unemployment	6.9	6.5 (6.6)	6.5 (6.6)

Sources: Statistics Sweden and Swedish National Debt Office.

Unemployment has continued to fall as employment has grown more rapidly than the labour force and was 6.6 per cent in the first quarter of this year, according to the LFS. Employment is also expected to grow more quickly than the labour force in the coming quarters, which means a continued fall of unemployment for a few more quarters. The forecast is that, on average, unemployment will be 6.5 per cent both this year and next year, which is marginally lower than the previous forecast for both years.

So, at present companies are experiencing difficulty in finding the right personnel, but statistics show that they are nevertheless employing personnel at a high pace at the same time as pay increases are very moderate from a historical perspective. One possible explanation that is consistent with these observations is that what is happening here is an increase in the supply of labour that is taking place at roughly the same time as the demand for labour is rising in the economic upturn, but that the increase in supply is not spread evenly across different categories of labour, giving rise to high shortage figures. If this development continues, it could be an indication that the labour market works better than what shortage figures imply.

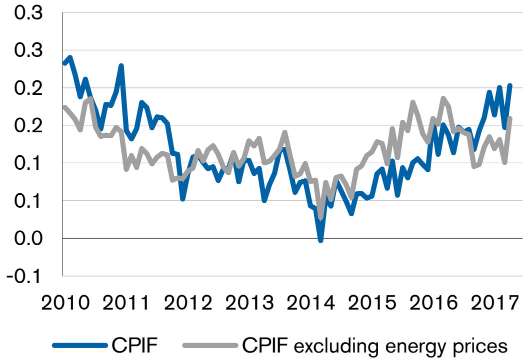
This is also a possible explanation of why the picture of resource utilisation in the labour market varies between different indicators. Both the Riksbank's and the NIER's 'hours gap' indicates that the situation is slightly quieter than normal, while, for example, NIER's shortage figures point to resource utilisation being distinctly higher than normal. However, these measures are in agreement in the sense that they indicate that the situation has gradually become more strained in recent years.

This somewhat fragmented picture is also seen in the development of the two main measures of pay; short-term wage statistics and pay according to the National Accounts (NA). NA pay which, unlike the short-term wage statistics, contains several components that may be cyclically dependent, has risen faster in the past period of just under two years. But both measures show a historically moderate growth rate for pay. As resource utilisation in the labour market is expected to increase further, the pace of pay increases will rise. But, just as was noted in the previous report, the rate of pay growth in the slightly longer term will still be moderate, not least on account of the recent collective agreements made at central level.

Rising inflation

Inflationary pressure has risen continuously for about the past three years. But in the past period of just over a year it has primarily increased on account of rising energy prices see figure 8.

Figure 8 Inflation, CPIF including and excluding energy prices



Sources: Statistics Sweden and Datastream.

The underlying upward trend in inflation is being driven by the stronger economy. As the economy continues to strengthen, inflation is expected to increase further with a certain lag. However, inflation will be moderate during the forecast period as a whole, not least because of moderate pay growth. Nor is the relatively slow international growth expected to lead to any significant inflationary pressure. The Debt Office's forecast for CPI inflation is 1.4 per cent this year and 1.8 per cent next year.

Balanced risks

As in the previous forecast, the risks of a better and worse outcome than in the main scenario are balanced on the whole. A summary and somewhat simplified picture of the risks is that several of them may involve a more characteristic cyclical turnaround, i.e. growth in the near term will be stronger but that it will be weaker in the slightly longer term.

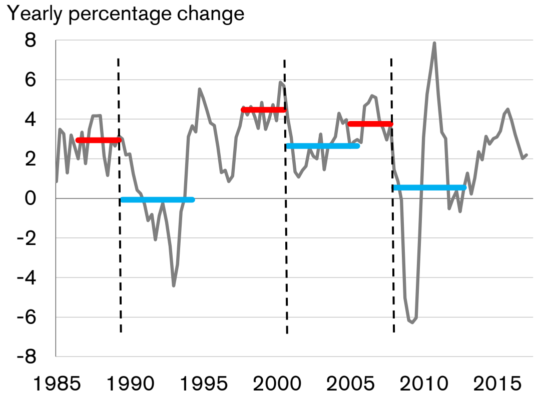
Recently the development of the international economy has been slightly better than expected. In both the US and the euro area there is some tension between 'soft data' (surveys) and hard data (statistics collected). This forecast places more reliance on the statistics collected, so if developments are more like the brighter picture in the confidence surveys, growth will be higher than expected.

At the same time there are still risks of weaker developments in the somewhat longer term, partly on account of the trade and security policies of the new US administration. In several European countries, Germany and Italy for example, banks have problems with weak profitability and impaired loans, which can ultimately also be a downside risk for the economic situation.

In Sweden a number of indicators of both GDP and the labour market also point to a strong development in the near future. If realised, this would result in higher growth of employment and GDP than is contained in the forecast.

There is relatively good agreement between the Debt Office and other forecasters that Sweden is close to a cyclical peak, expressed as a turning point in the development of the GDP gap. Historically, cyclical turnarounds both in Sweden and internationally have often been characterised by both clear and lasting shifts in GDP growth, see figure 9. So there is a risk that growth beyond the expected turning point in the economic cycle will be lower than expected, which would mainly affect developments at the end of the forecast period.

Figure 9 Average GDP growth before and after business cycle turning points



Note: Vertical black, dotted lines indicate business cycle turning points defined as GDP gap peaks according to the National Institute of Economic Research. Horizontal red and blue lines indicate average GDP growth just before and after respective turning points.

Source: Statistics Sweden, National Institute of Economic Research, Datastream and Swedish National Debt Office.

One possible reason for such a development could be a significant change in the development of the housing market. Historically, simultaneous turning points for house prices and housing construction have often been a clear signal of distinctly lower GDP growth to come. After a long period of relatively moderate activity, housing construction in Sweden has really taken off in recent years and is now at historically high levels. House prices have also increased rapidly for several years and the average rate of growth in the past three years is also at a historically high level. In combination with household indebtedness, a deterioration of the situation in the housing market could result in a considerably weaker development than expected.

LFS overestimates employment due to newly arrived migrants

In recent years a large number of asylum seekers and their close relatives have come to Sweden, contributing to an ever faster rise in the Swedish population. From May 2015 to February 2017 the population rose by a total of about 240 000, which is roughly equivalent to the number of new residence permits during that period. This population increase is the fastest in the past 50 years by a good margin. The rise in the number of new arrivals granted asylum has led to the Labour Force Survey (LFS) overestimating employment.[2]

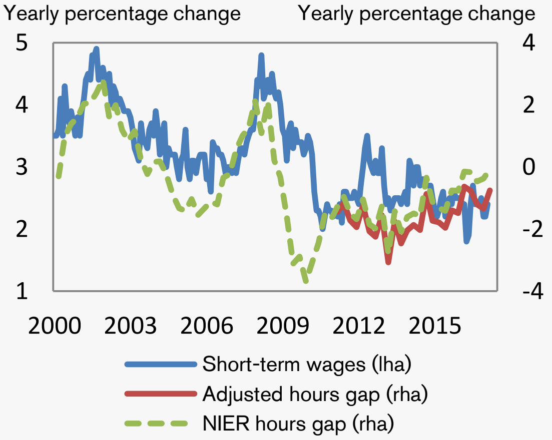
On the basis of statistics of new residence permits from the Swedish Migration Agency and information about how new arrivals gradually enter the LFS sample and the register of the total population, it is possible to approximate the size of the error. For 2016 it involves an average of just over 30 000 persons, corresponding to about 0.7 per cent of the number of people in employment. The error has got larger as the number of new arrivals seeking asylum has increased, but will decrease in the coming years, provided that the number of asylum seekers develops in line with the Swedish Migration Agency's forecasts. Since the size of the error has grown over time in line with the number of asylum seekers, the effect is relatively small when it comes to changes in employment between years. The change in the error between 2015 and 2016 is approximately some 6 000 persons.

The effects on unemployment are more difficult to estimate for several reasons. Measured in percentage points, the effect on relative unemployment is less than the effect on employment and the size of the error is dependent upon the speed with which the new arrivals enter the labour force in the first years after being granted residence permits.

The error is in the LFS but it also affects the number of hours worked in the national accounts (NA), for example.

The difference between the actual and potential number of hours worked, the 'hours gap', is a common measure of resource utilisation in the labour market.[3] Since the actual number of hours worked probably has been overestimated, the 'hours gap' has been too positive by an equal percentage. Thus, it is also possible to make a rough estimate of the size of the effect on the 'hours gap', see the figure below. Pay growth in recent years appears to be unusually slow from certain perspectives, but the lower resource utilisation – which an adjusted 'hours gap' would imply – means that the low pay rises do not appear to be quite as abnormal.

Short-term wages and 'hours gap', actual and with adjustment for overestimation



Source: National Mediation Office, Statistics Sweden, National Institute of Economic Research, Datastream and Debt Office.

The above discussion is an example of how the overestimate in the LFS can affect the analysis. However, it should be stressed that a large number of sources are used in the forecast process and this means that the effects of the incorrect measurement in the LFS are manageable to a great extent. The ongoing analysis of the error in the LFS is complicated, and the estimates made here are based on a number of assumptions. But even though the estimates of the error are associated with considerable uncertainty, activity in the labour market is probably overestimated.

[2] *For a description of how the incorrect estimate arises, see Statistics Sweden's report "Över- och undertäckning i AKU - en registerbaserad studie".*

[3] *Se. for example, the report of the National Institute of Economic Research (NIER) The Swedish Economy March 2017 for current estimates of the hours gap.*

The Riksbank's repayment reduces the net borrowing requirement in 2018

The net borrowing requirement in 2017 is expected to be SEK 17 billion. This is SEK 3 billion lower than in the previous forecast. The underlying change compared with the Debt Office's previous forecast is also marginal for 2018. But the net borrowing requirement for 2018 decreases sharply because it is assumed that lending to the Riksbank is to be phased out. The net borrowing requirement in 2018 is therefore expected to be SEK -124 billion, which is a decrease of SEK 107 billion compared with the February forecast. The entire change is due the phasing out of the Riksbank's foreign currency loans. Central government net lending, which is not affected by lending to the Riksbank, shows small surpluses for both forecast years and is expected to be 0.3 per cent of GDP in 2017 and 0.2 per cent in 2018.

Small forecast change in 2017, but lower borrowing requirement in 2018

Since the forecast in February the outcome for the net borrowing requirement has been higher than expected. The accumulated deviation is about SEK 15 billion and is mainly explained by lower tax income. Expenditure has also been lower, but this is countered by higher net lending to government agencies. The Debt Office's assessment is that the differences can largely be explained by shifts in payments and that the net borrowing requirement will be lower in the remaining months of the year. The forecast of the net borrowing requirement for 2017 has been adjusted downwards by a total of SEK 3 billion. This is mainly due to lower expenditure.

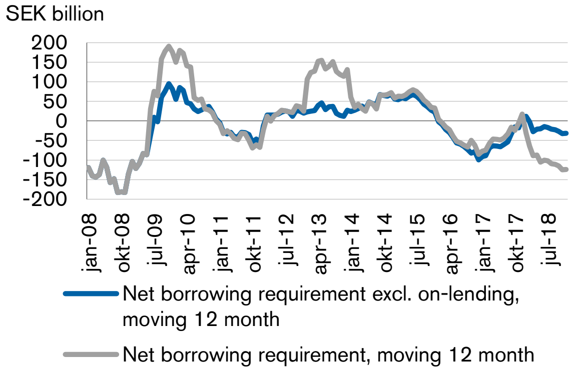
Phase out of on-lending to the Riksbank reduces the borrowing requirement in 2018

In a draft proposal to the Council on Legislation the Government has proposed phasing out the temporary on-lending to the Riksbank in order to strengthen the foreign currency reserve. The proposal made is that the whole repayment takes place on one occasion by transferring securities from the Riksbank to the Debt Office. However, a transfer of securities gives rise to a number of issues and demarcation problems. For example, it is currently unclear what will be transferred and how these securities will be valued. This means that it is difficult to calculate and make more exact forecasts of the cash flows that would arise and therefore the effects on the net borrowing requirement.

The Debt Office has therefore chosen to make a technical assumption for its calculations to the effect that on-lending will be phased out gradually instead, as the individual loans mature. This makes it much simpler to assess what amounts are to be paid back. In addition, the net borrowing requirement and the central government debt are affected at the same time, which is not the case with a transfer of securities.

The calculation is also based on the assumption that the loans maturing in autumn 2017 will be refinanced in the capital market. With these assumptions, on-lending to the Riksbank decreases by SEK 106 billion in 2018, which, in principle, explains the entire forecast change in the net borrowing requirement next year?

Figure 1 Net borrowing requirement with and without on-lending to the Riksbank



The reduction of on-lending does not affect central government net lending. The repayment of the Riksbank's loans means that the claims on the Riksbank decrease. At the same time the payments are used to amortise central government debt to the same extent. This means that the repayment does not create any new scope for reforms in terms of net lending.

Assessment of excess deposits in tax accounts unchanged

The Debt Office's assessment is that the level of excess deposits in tax accounts is unchanged from the February forecast. Overall, this means that the inflow is judged to have been about SEK 40 billion in 2016, which will turn into an outflow of SEK 10 billion in 2017. For 2018 the forecast is an inflow of about SEK 10 billion (for more detailed information about excess deposits in tax accounts, see Central Government Borrowing-Forecast and analysis 2016:3).

The excess deposits by private individuals in tax accounts have levelled out and possibly been reversed slightly in the spring. For companies it is not equally clear that the inflow has decreased. For many companies an interest rate of zero per cent is still attractive. The Debt Office continues to assume an inflow of about SEK 1 billion per month during the forecast period from companies.

Nor do excess deposits in tax accounts affect central government net lending since the excess deposits are borrowing in practice and not tax income.

Table 1 Central government net borrowing requirement

SEK billion	2016	2017	2018
Primary net borrowing requirement	**-87**	**5**	**-135**
of which net lending to agencies excl. on-lending	0	0	3
of which net lending, on-lending	14	12	-92
of which sales of state assets	0	0	0
of which income and expenditure excl. sales of assets	-101	-7	-47
Interest payments	**1**	**12**	**11**
Net borrowing requirement	**-85**	**17**	**-124**

Great variations in the net borrowing requirement

The net borrowing requirement rises substantially in 2017, compared with 2016. This is because tax income was much affected by temporary effects in 2016, such as excess deposits in tax accounts and large one-time payments of corporate tax. Expenditure is also judged to have been low temporarily. These effects are reversed in 2017, which means that the borrowing requirement increases.

Between 2017 and 2018 the net borrowing requirement also decreases when adjusted for on-lending to the Riksbank. This is mainly because tax income starts to grow again, at the same time as migration and other expenditure items decrease between the years.

For 2018 the Debt Office has an unchanged assumption of SEK 15 billion in new unfinanced reforms.

Forecast changes since February

The changes since the February forecast are small. The net borrowing requirement for 2017 is expected to decrease by SEK 3 billion compared with the previous assessment. Tax income has been revised downwards by SEK 6 billion, but this is offset by lower expenditure

In principle the forecast for 2018 is unchanged apart from on-lending to the Riksbank.

Declining capital gains for households

Households' capital gains are expected to decrease gradually during the forecast period. The latest tax assessment outcome is for income year 2015, when the gains were just over SEK 200 billion. The statistics available suggest a slightly lower level for 2016. House prices continued to rise in 2016, but this is offset by a fall in sales on the housing market. In addition, new deferral rules apply to home sales as of June 2016, and this will decrease the tax on income of capital. For 2017 and 2018 the level is assumed to decrease to 3.5 per cent of GDP.

According to income statements for 2016 household's interest income and dividends are continuing to rise relatively strongly. It is chiefly dividends to close companies that are rising. This has led to an upward revision of interest income from the previous forecast.

Households' interest expenditure is estimated to have been lowest in 2016 and is then expected to increase slightly in 2017 and 2018. The increase is due to greater lending to households. This is unchanged from the previous forecast.

Table 2 The largest changes in forecasts[1]

SEK billion	2017	2018
Forecast February 2017	**20**	**-17**
Taxes	6	2
Government grants to local governments	0	0
Labour market	-2	0
Social insurance	-2	-1
Migration	1	1
International aid	3	0
Dividends	1	-1
Interest payments	-1	1
Net lending excl. on-lending	0	1
On-lending	-1	-106
Other	-8	-4
Forecast June 2017	**17**	**-124**
Sum of changes	-3	-107

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

Marginally lower income from corporate taxes

Central government income from corporate taxes has been revised downwards marginally since the previous forecast. This is primarily due to a small downward revision of company profits for income year 2016. The outcomes of preliminary tax payments and companies' tax adjustments in the spring suggest that profits were slightly lower.

Table 3 Tax income compared with previous forecast[1]

SEK billion	2017	2018
Payroll taxes	0	3
Consumption taxes	-3	-1
Corporate taxes	2	1
Supplementary taxes	7	-1
Total	**6**	**2**

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.

Slightly weaker growth of payroll taxes

The forecast for central government income from payroll taxes in 2017 is unchanged from the previous forecast. For next year there is marginal downward revision of the forecast.

Higher income from consumption taxes

Consumption taxes increase by SEK 3 million for 2017 and SEK 1 billion for 2018 compared with the previous forecast, even though household consumption in current prices has been revised slightly downwards. Instead the higher income is mainly due to high investments, especially in the housing sector.

Table 4 Growth rates for tax forecast, current prices

Percentage change	2016	2017	2018
Household consumption	3.5	3.5	3.6
Wage sum	5.0	4.5	4.1
Household taxable income	5.0	4.6	4.2
Income from interest and dividends	8.9	0.9	0.9
Deduction for interest on debts	-1.7	2.6	2.5
Household capital gains, net	-6.6	-5.7	-8.9
Corporate taxable income	-5.0	8.0	5.0

Slightly higher dividends on state-owned shares in 2018

Central government income from share dividends is expected to be SEK 9 billion in 2017 and to increase to SEK 10 billion in 2018. The main reason for the increase is that Vattenfall AB is expected to pay a dividend again after several years without a dividend on account of large impairment losses.

Table 5 Dividends on state-owned shares

SEK billion	2017	2018
Akademiska hus AB	1.4	1.5
LKAB	0.0	0.5
Telia Company	3.2	3.2
Vattenfall AB	0.0	1.0
Sveaskog AB	0.8	0.9
Other corporations	3.2	3.0
Total	**8.6**	**10.1**

Lower social insurance expenditure

Expenditure for social insurance is expected to be SEK 2 billion lower than in the previous forecast this year and 1 billion lower in 2018. This year it is expenditure for assistance allowance in particular that decreases compared with the previous forecast. The reason for this decrease is that fewer users are being granted benefits than in the past.

Slightly higher expenditure for migration[4]

Expenditure for migration is expected to increase by SEK 1 billion in both 2017 and 2018 compared with the previous forecast. This expenditure has increased slightly more than expected this year. One reason for the increase next year is that a larger proportion of unaccompanied minors from Afghanistan are assumed to be granted residence permits following a judgment by the Migration Court of Appeal.

[4] The forecast is based on information from the Swedish Migration Agency's "Operational and expenditure forecast" ["Verksamhets- och utgifts-prognos"] from 26 April 2017.

Higher development assistance this year

Expenditure for development assistance through Sida is estimated to increase by SEK 3 billion in 2017 but to be unchanged in 2018 compared with the previous forecast. This expenditure so far this year has been much higher than forecast. At the same time these appropriations have been increased in the spring amending budget, as the set-off against refugee costs decreases.

Repayment by the Riksbank reduces the Debt Office's net lending.

The forecast for the Debt Office's net lending to government agencies etc. is unchanged in broad outline apart from on-lending to the Riksbank.

There is a proposal to phase out on-lending to the Riksbank, as described above (see page 10). The Debt Office has made a technical assumption for its calculations that this phase-out will take place gradually as the individual foreign currency loans mature. The last loans mature in 2021. In addition, the calculation is based on the assumption that loans maturing in autumn 2017 will be refinanced in the capital market.

With these assumptions, on-lending decreases by SEK 106 billion in 2018 compared with the previous forecast.

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 increases by SEK 103 billion between 2016 and 2017, on account of both falling income and rising expenditure. Tax income increases by SEK 47 billion between these years. This is largely because 2016 was affected by excess deposits in tax accounts, a large one-time payment of corporate tax and tax increases. In 2017 the one-time effect disappears at the same time as the impact of excess deposits in tax accounts is reversed.

Expenditure for migration and development assistance increased strongly between 2014 and 2017, but will fall back in 2018, mainly on account of a lower inflow of asylum seekers. Government grants to local authorities increase by SEK 12 billion in 2017 compared with 2016. Other items of expenditure also increase, 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, which depends on the issue plan set by the Debt Office and interest rate and exchange rate fluctuations. The outcome for 2016 was SEK 1 billion, a record low. They are expected to increase by SEK 11 billion this year, and then decrease again in 2018.

Between 2017 and 2018 the net borrowing requirement decreases by as much as SEK 142 billion. This is almost largely explained by the expected decrease in on-lending to the Riksbank by SEK 103 billion between the years. The net borrowing requirement also decreases when adjusted for this on-lending. This is mainly because tax income increases by SEK 68 billion.

SEK billion	2014	2015	2016	2017	2018
Net borrowing requirement, level	**72**	**33**	**-85**	**17**	**-124**
Net borrowing requirement, change	-59	-40	-118	103	-142
Explained by;					
Taxes	-26	-76	-145	47	-68
Government grants to local governments	5	7	-9	12	0
Labour market	1	0	-1	1	0
Social Insurance	7	6	0	5	4
Migration & International aid	4	10	26	7	-14
Sales of state-owned assets	21	0	0	0	0
Share dividends	8	-7	7	4	-2
EU contribution	5	-4	-5	-2	9
Debt Office's net lending excl. on-lending	29	-19	-1	0	3
On-lending	-104	7	4	-2	-103
Interest on government debt	-13	19	-20	11	-2
Other	6	18	28	20	31

Continued low interest payments

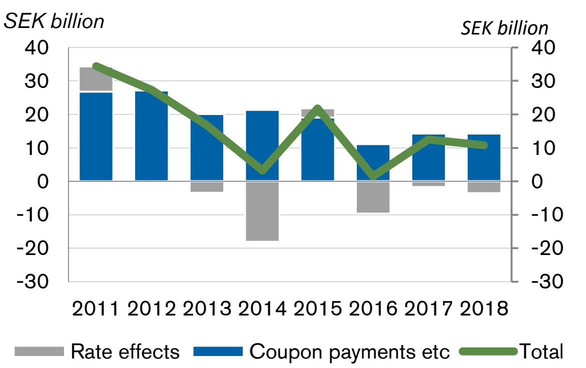
Central government interest payments are expected to be SEK 12 billion this year, which is a downward revision of SEK 1 billion compared with the February forecast. The lower level is primarily due to higher premiums on account of the slight fall in interest rates since February.

Table 6 Interest payments on the central government debt

SEK billion	2017	2018
Interest on loans in SEK	12.7	10.5
Interest on loans in foreign currency	-0.3	0.0
Realised currency gains and losses	0.0	0.1
Interest payments	**12.4**	**10.6**

Next year interest payments are expected to be just less than SEK 11 billion. This is about SEK 1 billion higher than the assessment in February. The upward revision is mainly due to higher capital losses in connection with repurchases of nominal government bonds.

Figure 2 Interest payments



The cash flow measure of *interest payments on the central government* debt varies a great deal over time, as shown in figure 3. This measure is sensitive to the Debt Office's choice of issue plan and to movements in market interest rates and currency exchange rates.

Interest payments increase by around SEK 11 billion between 2016 and 2017. The main reason is that issue premiums are expected to be lower in 2017. The downturn between 2017 and 2018 is mainly explained by slightly more favourable rate effects in 2018, as shown in figure 3.

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 2017.

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	-0.7	-0.2	0.6	1.9
Inflation-linked bonds	-2.3	-2.3	-2.3	-2.0	-1.3	-0.1
Swap interest rate SEK	-0.5	-0.5	-0.3	0.2	1.1	0.0
Swap interest rate EUR	-0.4	-0.3	-0.2	0.2	0.8	1.5
Swap interest rate USD	1.2	1.3	1.5	1.8	2.2	0.0

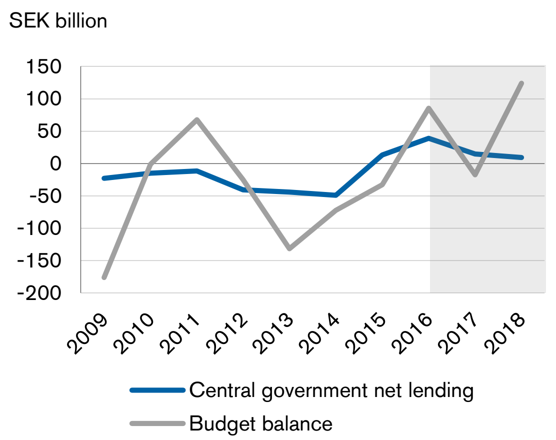
Table 8 Cut-off rates for currency exchange rates

Spot rates	2017-05-31
SEK/EUR	9.75
SEK/USD	8.67
SEK/CHF	8.96
SEK/JPY	0.08
SEK/GBP	11.20
SEK/CAD	6.42

Budget balance and central government net lending

Central government net lending shows a more even development than the net borrowing requirement and the budget balance, which are cash flow measures. Net lending is estimated at 0.3 per cent as a proportion of GDP in 2017 and 0.2 percent in 2018.

Figure 3 Central government net lending and the budget balance



Net lending is generally a better indicator of the underlying central government finances than the net borrowing requirement and the budget balance. 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 merely redistributes assets in its balance sheet, i.e. 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 decreases 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.

As the Riksbank repays loans to the central government, the central government's claim decreases and the underlying loans are repaid.

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

Table 9 Central government net lending

SEK billion	2014	2015	2016	2017	2018
Budget balance	**-72**	**-33**	**85**	**-17**	**124**
Delimitations	**-4**	**35**	**11**	**19**	**-88**
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	16	20	-83
Other delimitations etc.	-16	27	-3	-1	-5
Accruals	**27**	**11**	**-58**	**13**	**-27**
Taxes	33	11	-46	15	-30
Interest payments etc.	-6	0	-12	-2	4
Central government net lending	**-49**	**13**	**39**	**15**	**9**
Per cent of GDP	**-1.2**	**0.3**	**0.9**	**0.3**	**0.2**

Monthly forecasts of the net borrowing requirement

The net borrowing requirement varies strongly between months. The following table presents monthly forecasts until and including May 2018.

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. As of January 2018 net borrowing will be affected a great deal by the Riksbank's repayment. 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 part of the explanation is 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 require-ment excl. net lending	Net lending	Interest on central govern-ment debt	Net borrowing require-ment
Jun-17	24.9	-11.6	4.2	17.5
Jul-17	6.6	-4.2	-0.4	2.0
Aug-17	-17.8	-0.5	1.7	-16.6
Sep-17	11.9	-2.6	-1.6	7.6
Oct-17	11.8	-2.5	-1.7	7.5
Nov-17	-17.3	1.0	0.7	-15.5
Dec-17	55.3	37.1	6.0	98.4
Jan-18	1.0	-57.1	-1.2	-57.4
Feb-18	-52.9	-21.6	-1.3	-75.8
Mar-18	-15.1	-3.6	2.7	-16.0
Apr-18	-0.2	-2.4	-0.1	-2.7
May-18	-33,8	-21,7	0,9	-54,6

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 Increase by one per cent/percentage point	Effect on net borrowing requirement
Gross wages [1]	-7
Household consumption in current prices	-3
Unemployment (ILO 15-74) [2]	3
Interes rate level in Sweden [3]	5
International interest rate level [3]	2

[1] 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

[2] Includes effects on unemployment insurance benefits, the job and development guarantee programme and the job guarantee scheme for young people.

[3] This relates to an effect on interest payments on government debt.

Forecast comparisons

The Debt Office expects a higher net borrowing requirement in 2017 than other forecasters The differences in these assessments can probably be accounted for by differences in tax accruals, so that the tax payments are lower in cash flow terms in the Debt Office's forecast.

For 2018 the Debt Office forecasts a much lower net borrowing requirement than other authorities. In principle, the whole difference can be explained by the fact that the other forecasters have not yet taken account of the phasing out of on-lending to the Riksbank.

	Debt Office (20 Jun)		Government (18 Apr)		NIER (29 Mar)		ESV (16 Jun)	
SEK billion	2017	2018	2017	2018	2017	2018	2017	2018
Net borrowing requirement	17	-124	-2	-51	-17	-21	-20	-20
of which:								
Sales of state assets	0	0	-5	-5	0	0	0	0
Adjusted net borrowing requirement	**17**	**-124**	**3**	**-46**	**-17**	**-21**	**-20**	**-20**

Foreign currency borrowing decreases sharply

In 2018 bond issuance in foreign currencies for the Riksbank, the Swedish central bank, is assumed to end. Instead the Debt Office intends to issue foreign currency bonds on its own behalf corresponding to about SEK 17 billion. The issue volume of T-bills will therefore be reduced from SEK 10 to 7.5 billion per auction at the end of February 2018. In contrast, the issue volume of both nominal and inflation-linked government bonds will be kept unchanged.

The borrowing requirement decreases in 2018

The borrowing requirement including refinancing of maturing loans is expected to be SEK 327 billion this year, see table 1. This is the same figure as in the February forecast. For 2018 the borrowing requirement will only reach SEK 188 billion, which is a substantial downward revision on account of the fact that the Debt Office's lending to the Riksbank is assumed to end, see the fact box Borrowing on behalf of the Riksbank is assumed to end. Otherwise the borrowing requirement is largely the same as in the previous forecast, even for 2018. For more information, see the section on the net borrowing requirement.

Table 1 Gross borrowing requirement

SEK billion	**2016**	**2017**	**2018**
Net borrowing requirement	**-85**	**17**	**-124**
Business day adjustment etc. [1]	**-7**	**7**	**0**
Retail borrowing & collateral, net [2]	**6**	**12**	**11**
Money market redemptions [3]	**284**	**144**	**195**
T-bills	141	84	110
Commercial paper	87	12	40
Liquidity management	56	48	45
Bond redemptions, net switches and buy-backs	**104**	**146**	**107**
Government bonds	53	69	6
Inflation-linked bonds	1	15	0
Foreign currency bonds[4]	49	62	101
Total gross funding requirement	**302**	**327**	**188**

[1] A difference occurs as borrowing is reported by business date while net borrowing requirement is reported by settlement date.

[2] Net change in retail borrowing and collateral.

[3] Initial stock maturing within 12 months.

[4] Calculated with the original issuance exchange rate.

The planned volume of borrowing in government bonds is unchanged with an annual volume of SEK 52 and 50 billion this year and next year respectively, see table 2. The auction volume remains at SEK 2.5 billion throughout the forecast period.

Borrowing in inflation-linked bonds is also kept unchanged compared with the February forecast.

In 2017 the Debt Office is continuing, as in the past, to refinance on-lending to the Riksbank. However, for 2018 the Debt Office has assumed that this lending will end. Instead the Debt Office is planning to issue foreign currency bonds corresponding to SEK 17 billion on its own behalf. This is being done in order to retain a presence in the international capital market.

Table 2 New borrowing forecast

	2016	2017		2018	
SEK billion	Outcome	Jun	(Feb)	Jun	(Feb)
Money market funding [1]	**144**	**195**	**(195)**	**108**	**(126)**
T-bills	84	110	(110)	60	(80)
Commercial paper	12	40	(40)	0	(0)
Central Government	0	40	(40)	0	(0)
on behalf of the Riksbank	12	0	(0)	0	(0)
Liquidity management	48	45	(45)	48	(46)
Bond funding	**157**	**132**	**(132)**	**80**	**(168)**
Government bonds	81	52	(52)	50	(50)
Inflation-linked bonds	16	13	(13)	13	(13)
Foreign currency bonds	61	68	(68)	17	(105)
Central Government	0	0	(0)	17	(0)
on behalf of the Riksbank	61	68	(68)	0	(105)
Total gross funding	**302**	**327**	**(327)**	**188**	**(294)**

[1] Outstanding stock as at year-end.

At the end of 2018 the supply of T-bills will decrease from SEK 10 to 7.5 billion on average per auction. The reduction is being made in order to provide scope for the Debt Office to resume bond borrowing in foreign currencies on its own behalf. At the end of 2018 the outstanding stock of T-bills will therefore be SEK 20 billion lower than in the previous forecast, see table 2.

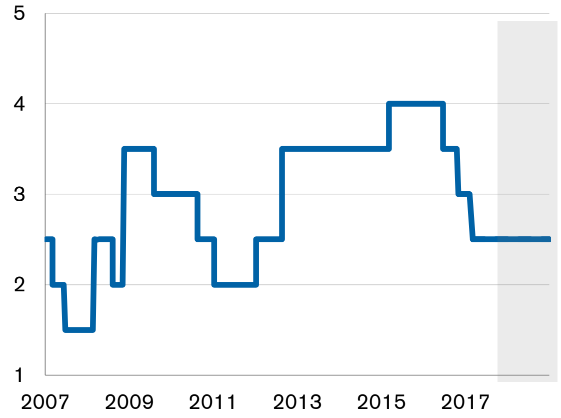
Table 3 Important dates 2017

Date	Time	Activity
25 Oct	09.30	Borrowing forecast 2017:3
10 Nov	09.30	Info on switches from SGB IL 3110
8–11 Dec	11.00	Switches from SGB IL 3110

Unchanged borrowing in government bonds

Borrowing in government bonds remains at the same level as in the previous forecast. This issue volume planned is SEK 52 billion this year and SEK 50 billion next year. The auction volume will continue to be SEK 2.5 billion throughout the forecast period, see figure 1. Number of auction dates unchanged.

Figure 1 Auction volumes of government bonds



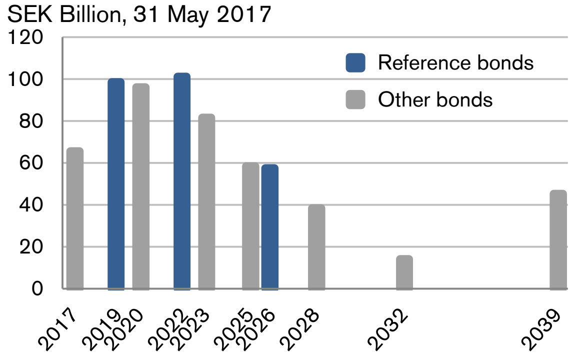
As usual, the bulk of the issues are made in ten-year reference loans in order to build up the volume of new bonds, see table 4 and figure 2. Thereafter, issues will be made of five-year and two-year bonds. The volume of bonds that are not reference loans may also be topped up if this is justified in order to maintain the liquidity of the bonds.

Table 4 Reference bonds it the electronic interbank market

Date of change (IMM date) [1]	2-year	5-year	10-year
Current reference bonds	1052	1054	1059
21 Jun 2017			1060
20 Dec 2017	1047	1057	

[1] *Please see the fact box on reference bonds*

Figure 2 Outstanding government bonds



The next new ten-year government bond will be introduced in 2018.

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 (third Wednesday in March, June, September and December) 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.

Lower volume of T-bills in 2018

In 2017 and at the beginning of 2018 the Debt Office plans to issue government bonds for SEK 10 billion per auction. On occasion this volume may be increased to SEK 15 billion when the borrowing requirement is great.

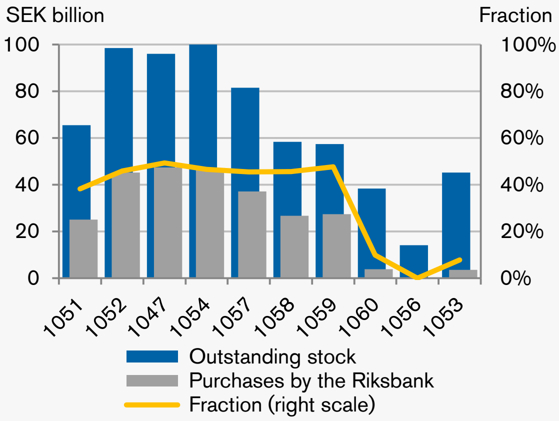
To create scope for the Debt Office to issue foreign currency bonds (see below) the auction volume of bills will be reduced from SEK 10 billion per auction to SEK 7.5 billion from the end of February 2018. The level will then be unchanged for the rest of the year. Normally every bill will then reach an outstanding volume of SEK 15 billion.

The total stock of T-bills is expected to be about SEK 110 billion at the end of 2017, which is unchanged from the previous forecast. At the end of 2018 the stock is expected to be SEK 60 billion. This is SEK 20 billion lower than in the February forecast. The average size of the stock is expected to be around SEK 75 billion throughout the forecast period.

The Riksbank's bond purchases and the Debt Office's market commitment

Up until May 2017 the Riksbank has bought government bonds for about SEK 291 billion. Its purchases have mainly been nominal bonds with maturities of up to 10 years. The Riksbank owned just over 45 per cent of the stock of these bonds at the end of May 2017.

Outstanding nominal bonds and the Riksbank's purchases as on 31 May 2017



In April the Riksbank decided to buy bonds for a further SEK 15 billion in the second half of 2017. In addition, during the year the Riksbank will reinvest funds amounting to about SEK 30 billion from coupon payments and maturities.

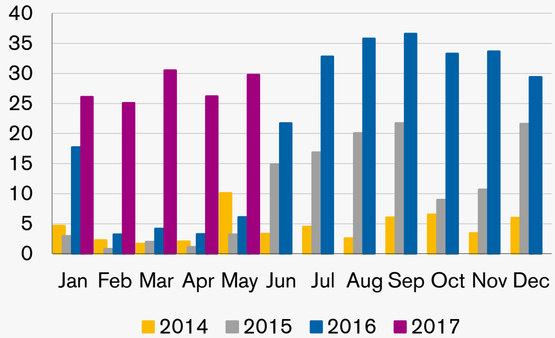
The share of the bond stock being traded actively has decreased on account of the Riksbank's purchases. Along with increased regulation this has contributed to a gradual deterioration of liquidity in the government bond market. The Debt Office's assessment is that the market for government bonds is still functioning satisfactorily but that the situation has become more strained. One sign of this is that the volume of the Debt Office's repos with primary dealers has increased.

Repos are an important part of the Debt Office's market commitment. This commitment creates the conditions for a well-functioning repo market and therefore for a liquid government bond market. This facility is particularly important when a shortage situation arises in the market.

In the past year the Debt Office has been repoing out government bonds for about SEK 30 billion per day. This is significantly more than in previous years.

The Debt Office's standing repo facility in government bonds

SEK billion, montly averages of settlement amounts



These repos are extra financing over and above the financing that the Debt Office normally plans for. To avoid long periods of surpluses the Debt Office has therefore taken account of the greater repo volumes in its planning of other borrowing. The repos are included in the forecast of instruments in liquidity management, see table 2. Note that the amount in the table is reported net, which means that the gross financing in, for instance, repos can be larger.

The reason why the Debt Office has chosen to reduce T-bill borrowing is that it is judged to be important to resume foreign currency borrowing on its own behalf given that borrowing on behalf of the Riksbank is assumed to end. The alternative of reducing bond borrowing is judged to be less appropriate, partly because the issue volume of government bonds is already low and because the Debt Office wants to maintain liquidity on the bond market, see the fact box about the Riksbank's bond purchases and the Debt Office's market commitment.

Commercial paper borrowing

The Debt Office uses commercial paper as a complement to T-bill borrowing in periods when the borrowing requirement is high.

At the end of 2017 the stock of commercial paper is expected to be SEK 40 billion. The outstanding stock is expected to be zero at the end of 2018. This is unchanged from the previous forecast.

Unchanged volume of interest rate swaps

The Debt Office uses interest rate swaps to shorten the duration of the debt. Historically this has led to the cost of the debt being lower. At present, however, the cost saving is judged to be small, so the volume of swaps has been reduced.

The planned volume of interest rate swaps remains at SEK 5 billion per year in 2017 and 2018, see table 5. The swaps are spread relatively evenly over the year but with some commercial flexibility.

Table 5 Change in ourstanding swaps

SEK billion	2016 Outcome	2017 Jun	2017 (Feb)	2018 Jun	2018 (Feb)
Interest rate swaps [1]	10	5	(5)	5	(5)
Cross currency swaps [2]	0	0	(0)	0	(0)
Swaps total	**10**	**5**	**(10)**	**5**	**(5)**
Swaps maturing	38	39	(39)	29	(29)
Swaps, net change	**-28**	**-34**	**-(29)**	**-24**	**-(24)**

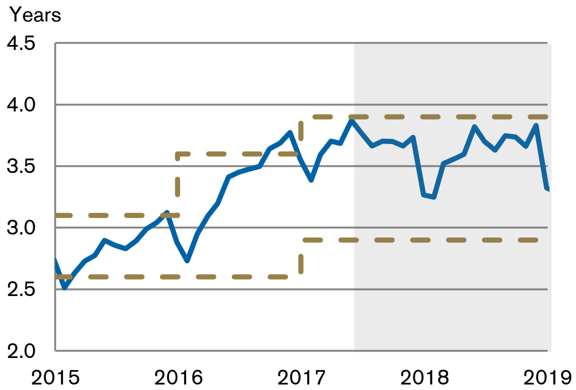
[1] *Interest rate swaps from fixed to floating rate in SEK.*

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

The outstanding stock of swaps decreases by SEK 34 billion in 2017 and SEK 24 billion in 2018. 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.

The duration of the nominal krona debt is slightly higher than in the February forecast, see figure 3. This is primarily due to a slight fall in market-interest rates.

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



Unchanged borrowing in inflation-linked bonds

The planned annual volume of SEK 13 billion is unchanged from the February forecast for both 2017 and 2018. The issue volume will remain at SEK 750 billion per auction throughout the forecast period.

In 2017 and 2018 the Debt Office will issue in the ten-year segment in the first place, i.e. SGB IL 3112 and the new ten-year bond SGB IL 3113. The plan also includes a few issues of SGB IL 3109, which has eight years to maturity. There may also be issues of other inflation-linked bonds depending on the demand situation in the market.

Handling of short inflation-linked bonds

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

At the end of 2017 the Debt Office will offer switches of SGB IL 3110, which matures on 1 June

2019, to longer inflation-linked bonds, see table 3 for further information.

Pricing of switches of inflation-linked bonds

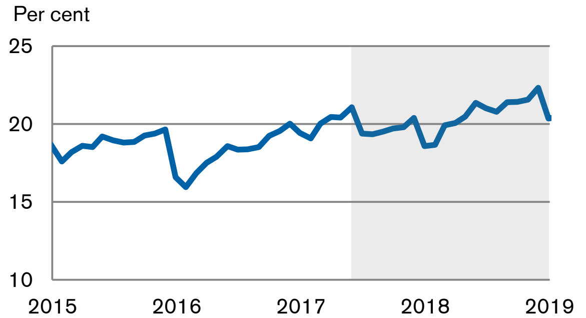
Primary dealers are able to switch inflation-linked bonds via the Debt Office. The switch interest rates are based on current market rates and demand plus a certain premium.

The Debt Office seeks to ensure that the inflation-linked bonds are of the same size in the long term and wishes to avoid outstanding stocks of individual bonds being too large or too small. The Debt Office is therefore able to apply more generous pricing in its continuous switch facility when primary dealers want to sell bonds whose stock is too large. In the same way, a more restrictive price can be set to counter high demand for inflation-linked bonds whose stock is already large.

During the final year of the inflation-linked bond there are neither issues nor switches of the bond. Instead the Debt Office offers a buyback facility, where any buybacks are made at a premium.

Under the guidelines for central government debt management the share of inflation-linked debt is to be 20 per cent of the total debt. Figure 4 shows the expected development of the inflation-linked debt during the forecast period. The share of inflation-linked debt is expected to be 20 per cent on average.

Figure 4 Proportion of inflation-linked debt



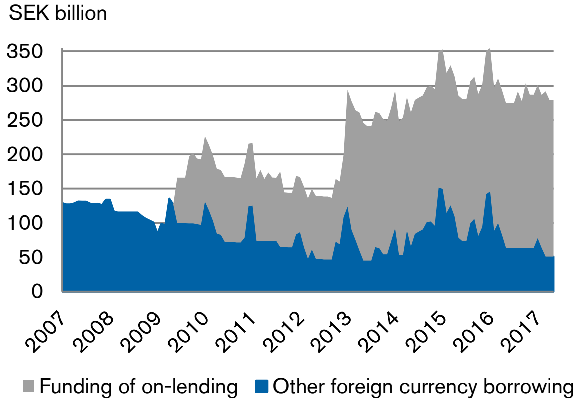
Foreign currency borrowing decreases in 2018

As in the February forecast the Debt Office intends to issue foreign currency bonds in 2017 to refinance loans to the Riksbank.

A piece of news in this forecast is that on-lending to the Riksbank will probably end as of 2018, which means that maturing loans will not be replaced with new loans, see also the fact box Borrowing on behalf of the Riksbank is assumed to end.

On-lending to the Riksbank amounted to SEK 249 billion on 31 May, which is unchanged from the previous report. With the present maturity profile the last bond will mature in September 2021. Figure 5 shows outstanding bonds and commercial paper in foreign currency for on-lending to the Riksbank and on behalf of central government.

Figure 5 Outstanding stock of commercial paper and foreign currency bonds



The Debt Office will raise foreign currency loans on its own behalf

In the international capital market the Debt Office is able to borrow large sums in a short space of time if this is needed. However, for this to be possible, international investors must have good knowledge of the Swedish State as an issuer and the Debt Office must have the ability to carry out such borrowing. To ensure that this is the case, there is reason to borrow regularly in foreign currency even when the borrowing requirement is small.

Against this background the Debt Office is planning to issue foreign currency bonds in 2018 corresponding to about SEK 17 billion.

Net borrowing and central government debt

Table 6Table 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.

Borrowing on behalf of the Riksbank is assumed to end

In a draft proposal to the Council on Legislation the Government has presented proposals intended to strengthen the financial independence of the Riksbank. One of these proposals clarifies the rules for borrowing for the foreign currency reserve.

In brief, the proposal is that the Riksbank be given a statutory right to raise loans in order to reinforce the foreign currency reserve, but that this right only comes into effect when the reserve has been used for liquidity support. If there are extraordinary reasons the Riksbank would be able to reinforce the foreign currency reserve through early borrowing of up to SEK 50 billion. Any further reinforcement would require the permission of the Riksdag.

The Government proposes that the changes enter into effect on 1 January 2018. This means that the Debt Office will stop borrowing on behalf of the Riksbank. Moreover, the Riksbank is to transfer assets to the Debt Office corresponding to the currency loans raised on behalf of the bank. The intention is for the Debt Office to manage the assets until they mature and to use the payments on maturity to pay off foreign currency loans. The nominal value of these loans at the end of May 2017 was USD 22.5 billion and EUR 5.5 billion respectively.

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.

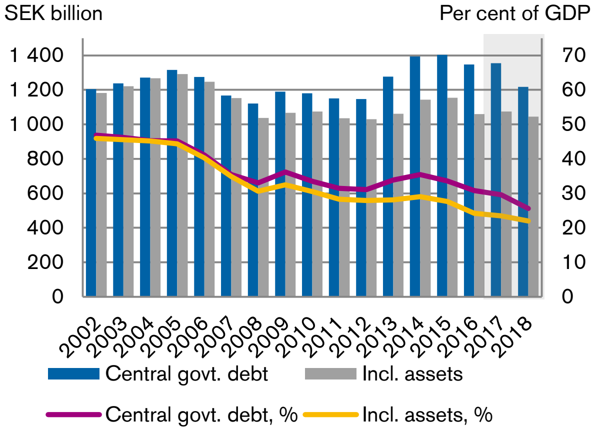
Table 6 Net borrowing per calendar year

SEK billion	2016	2017	2018
Net borrowing requirement	-85	17	-124
Business day adjustment [1]	-7	7	0
Net borrowing requirement	**-92**	**25**	**-124**
Retail funding & collateral, net	**-6**	**-12**	**-11**
Net money market funding	**-140**	**51**	**-87**
T-bills	-57	26	-50
Commercial paper	-75	28	-40
Liquidity management	-8	-4	3
Net bond market funding	**54**	**-14**	**-27**
Government bonds	27	-17	44
Inflation-linked bonds	15	-2	13
Foreign currency bonds	11	6	-83
Total net borrowing	**-92**	**25**	**-124**

[1] *A difference occurs as borrowing is reported by business date while net borrowing requirement is reported by settlement date.*

The central government debt at the end of 2018 is estimated at SEK 1 217 billion. This corresponds to a GDP share of 26 per cent. Figure 6 and table 7 show the development of the central government debt.

Figure 6 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.

The 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	-85	17	-124
Business day adjustment etc. [1]	23	-17	0	-4	0	-7	7	0
Net borrowing per business day	**-45**	**8**	**131**	**68**	**32**	**-92**	**25**	**-124**
A. Nominal amount including money market assets	**1 113**	**1 121**	**1 253**	**1 321**	**1 353**	**1 261**	**1 285**	**1 161**
Inflation compensation	34	31	29	25	19	21	23	25
Exchange rate effects	-21	-29	-19	30	29	40	21	7
B. Nominal amount to current exchange rate incl. inflation compensation and money market assets	**1 126**	**1 123**	**1 262**	**1 376**	**1 401**	**1 321**	**1 329**	**1 192**
Assets under management	25	23	15	18	3	26	25	25
C. Central government debt	**1 151**	**1 146**	**1 277**	**1 394**	**1 403**	**1 347**	**1 354**	**1 217**
Assets under management	-25	-23	-15	-18	-3	-26	-25	-25
On-lending	-91	-93	-201	-233	-247	-263	-255	-148
D. Central government debt incl. on-lending and assets under management	**1 035**	**1 030**	**1 061**	**1 143**	**1 154**	**1 059**	**1 075**	**1 044**
Nominal GDP	3 657	3 685	3 770	3 937	4 181	4 372	4 574	4 757
C. Central government debt, % of GDP	**31**	**31**	**34**	**35**	**34**	**31**	**30**	**26**
D. Central government debt incl. on-lending and money market assets, % of GDP	**28**	**28**	**28**	**29**	**28**	**24**	**23**	**22**

[1] *A difference occurs as borrowing is reported by business date while net borrowing requirement is reported by settlement date.*

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).

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. The account is based on business day.

Market information

Auction dates

Government bonds, auction dates

Announcement date	Auction date	Settlement date
16-Aug-17	23-Aug-17	25-Aug-17
30-Aug-17	06-Sep-17	08-Sep-17
13-Sep-17	20-Sep-17	22-Sep-17
27-Sep-17	04-Oct-17	06-Oct-17
11-Oct-17	18-Oct-17	20-Oct-17
08-Nov-17	15-Nov-17	17-Nov-17
22-Nov-17	29-Nov-17	01-Dec-17
06-Dec-17	13-Dec-17	15-Dec-17

Government bonds, outstanding amounts 31 May 2017

Maturity date	Coupon %	Bond no.	SEK Million
12-Aug-17	3.75	1051	65 526
12-Mar-19	4.25	1052	98 550
01-Dec-20	5.00	1047	96 054
01-Jun-22	3.50	1054	101 131
13-Nov-23	1.50	1057	81 477
12-May-25	2.50	1058	58 376
12-Nov-26	1.00	1059	57 391
12-May-28	0.75	1060	38 365
01-Jun-32	2.25	1056	14 000
30-Mar-39	3.50	1053	45 250
Total government bonds			656 120

Inflation-linked bonds, auction dates

Announcement date	Auction date	Settlement date
24-Aug-17	31-Aug-17	04-Sep-17
07-Sep-17	14-Sep-17	18-Sep-17
21-Sep-17	28-Sep-17	02-Oct-17
05-Oct-17	12-Oct-17	16-Oct-17
19-Oct-17	26-Oct-17	30-Oct-17
02-Nov-17	09-Nov-17	13-Nov-17
16-Nov-17	23-Nov-17	27-Nov-17
30-Nov-17	07-Dec-17	11-Dec-17
10-Nov-17	08-Dec-17*	12-Dec-17
10-Nov-17	11-Dec-17*	13-Dec-17

**Exchange auction*

Inflation-linked bonds, outstanding amounts 31 May 2017

Maturity date	Coupon %	Bond no.	SEK Million
01-Jun-19	0.125	3110	24 116
01-Dec-20	4.00	3102	35 177
01-Jun-22	0.25	3108	28 281
01-Jun-25	1.00	3109	24 179
01-Jun-26	0.125	3112	13 940
01-Dec-27	0.125	3113	6 954
01-Dec-28	3.50	3104	29 693
01-Jun-32	0.125	3111	8 742
Total Inflation-linked bonds			171 082

T-bills, auction dates

Announcement date	Auction date	Settlement date
14-Jun-17	21-Jun-17	26-Jun-17
28-Jun-17	05-Jul-17	07-Jul-17
26-Jul-17	02-Aug-17	04-Aug-17
09-Aug-17	16-Aug-17	18-Aug-17
23-Aug-17	30-Aug-17	01-Sep-17
06-Sep-17	13-Sep-17	15-Sep-17
20-Sep-17	27-Sep-17	29-Sep-17
04-Oct-17	11-Oct-17	13-Oct-17
18-Oct-17	25-Oct-17	27-Oct-17
01-Nov-17	08-Nov-17	10-Nov-17
15-Nov-17	22-Nov-17	24-Nov-17
29-Nov-17	06-Dec-17	08-Dec-17
13-Dec-17	20-Dec-17	22-Dec-17

T-bills, outstanding amounts 31 May 2017

Maturity date	SEK Million
21-Jun-17	14 385
19-Jul-17	20 000
16-Aug-17	20 000
20-Sep-17	17 500
Total T-bills	71 885

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 8379
Danske Markets	●	●	●	+46 8 568 808 44
Handelsbanken Markets	●	●	●	+46 8 463 46 50
Nordea Markets	●	●	●	+45 3333 1609 / +46 8 614 91 07
NatWest Markets	●			+44 207 805 0363
SEB	●	●	●	+46 8 506 231 51
Swedbank	●	●	●	+46 8 700 99 00

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

Next Report (preliminary date):

2017:3 25 October 2017

For more information:

Thomas Olofsson, Head of Debt Management +46 8 613 47 82

Mårten Bjellerup, Acting Chief Economist +46 8 613 46 61

-

RIKSGÄLDEN
SWEDISH NATIONAL DEBT OFFICE

Visits: Jakobsbergsgatan 13 • Postal address: SE-103 74 Stockholm, Sweden • Telephone: Tel. +46 8 613 45 00
Fax: +46 8 21 21 63 • Email: riksgalden@riksgalden.se • Website: www.riksgalden.se