# **RIKSGÄLDEN**

25 October 2018

CENTRAL GOVERNMENT BORROWING

Forecast and analysis 2018:3

# BEER BEER

### The Debt Office's assignment

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 the macroeconomic development and the central government finances in the coming two years. On the basis of these forecasts, the Debt Office calculates 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 for the previous month is published 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*.



# Preface

In *Central Government Borrowing - forecast and analysis 2018:3* the Debt Office presents forecasts for central government finances and borrowing in 2018 up until 2020. An assessment of the macroeconomic 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

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# Summary

- The Swedish boom continues this year, but the economy is close to peaking. In recent years investments have been one of the most important drivers of the economy. Steep falls in housing prices lead to lower investment growth in the forecast period. GDP growth therefore also moderates gradually. Employment growth fades as economic activity slows down; this contributes to unemployment levelling out and then slowly turning upwards.
- The Debt Office's forecast indicates that the budget surplus will be SEK 96 billion this year and SEK 62 billion next year. This means small changes from the June forecast. The Debt Office sees a deficit of SEK 12 billion for the new forecast year of 2020. Then capital investments in tax accounts are judged to decrease by SEK 50 billion after having increased every year since 2015. In contrast, central government net lending, which is not affected by capital investments in tax accounts, shows a more even development and is estimated to decrease gradually to 1.1 per cent as a proportion of GDP. The decline in net lending reflects the economic slowdown being forecast by the Debt Office.
- The issue volume of government bonds will remain at SEK 1.5 billion per auction throughout 2019. Then, when the volume of maturing loans increases and the central government budget shows a deficit, the issue volume is raised to SEK 2 billion per auction in 2020. Borrowing in T-bills also increases then. The central government debt continues to decrease and is estimated at 22 per cent of GDP in 2020.

Previous forecast in italics	2017	2018		2019		2020	
Swedish economy and government finances							
GDP (%)	2.1	2.4	2.8	1.9	1.8	1.8	-
Unemployment (% of labour force)	6.7	6.3	6.3	6.5	6.5	6.6	-
Budget balance (SEK billion)	62	96	90	62	69	-12	-
Central government net lending (% of GDP)	1.8	1.5	1.2	1.3	0.8	1.1	-
Central government debt (% of GDP)	29	26	26	23	22	22	-
Central government borrowing, SEK billion							
Government bonds	51	32	32	30	30	40	-
Inflation-linked bonds	12	9	9	9	9	9	-
Money market funding (outstanding stock at year-end)	88	20	20	20	20	40	-
Foreign currency bonds	61	88	88	44	44	56	-
on behalf of the Riksbank	61	88	88	44	44	56	-

### Table 1. Key figures for the economy, government finances and borrowing

# The boom in the Swedish economy will continue for a while longer

The Swedish boom will continue this year, but the economy is close to peaking. In recent years investments have been one of the most important drivers of the economy. Steep falls in house prices lead to lower investment growth in the forecast period. As a result, GDP growth also moderates gradually and is below its trend level despite an upward revision of household consumption. GDP grows by 2.4 per cent in 2018, 1.9 per cent in 2019 and 1.8 per cent in 2020 according to the Debt Office's forecast. The labour market continues to be characterised by the group of people born abroad accounting for the main part of the increase in both employment and the labour force. Employment growth fades as economic activity slows down; this contributes to unemployment levelling out and then slowly turning upwards.<sup>1</sup>

# International economic environment continues to be good overall

As before, the global economy is expected to continue to expand, but trade barriers and economic turbulence in a number of emerging economies have worsened the prospects for growth. Moreover, growth prospects have become less synchronised between countries and regions. For instance, growth in the euro area is expected to be weaker than in the Debt Office's previous forecast in June.<sup>2</sup> However, the growth of the world economy will continue to benefit from low interest rates and low risk premiums on financial markets for a further period.

### Favourable financial conditions but more storm clouds

In broad outline the situation in the financial markets remains as favourable as in the June forecast, even though the risk of a deterioration has increased.

Monetary policy is continuing to move in a less expansionary direction. The Federal Reserve increased the target range for its key interest rate to 2.00–2.25 in September and market expectations indicate that the cycle of rises will continue. The ECB now expects to end its asset purchases at the end of the year, and market expectations suggest that the interest rate on deposits will be increased in autumn 2019. The development of monetary policy is making an impression on government bond yields, where, for instance, the yield on ten-year US government bonds has been rising for a long time and is much higher than its European equivalents, see figure 1. From a global perspective the process of making monetary policy less expansionary will take time. So low interest

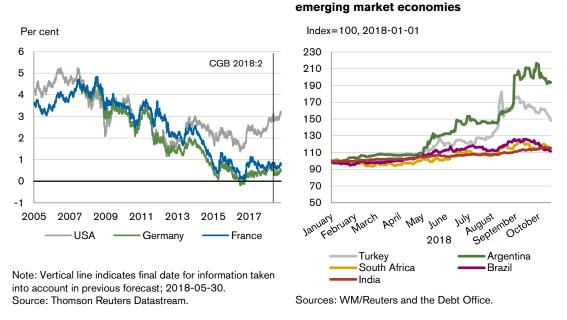
<sup>&</sup>lt;sup>1</sup> Information until and including 26 September has been taken into account in work on this forecast.

<sup>&</sup>lt;sup>2</sup> Central Government Borrowing 2018:2.

rates will continue to benefit the world economy during the forecast period, although to a lesser extent.

At the same time more and larger storm clouds have gathered over financial markets after the summer. The risks to the development of the international economy that are in focus in financial markets are rapidly increasing interest rates in the US, the escalating trade conflict between the US and China, the tough Brexit negotiations, the budget turbulence in Italy and economic development in emerging market economies such as Turkey, Argentina, Brazil, India and South Africa.

Figure 2. Exchange rate against US dollar,

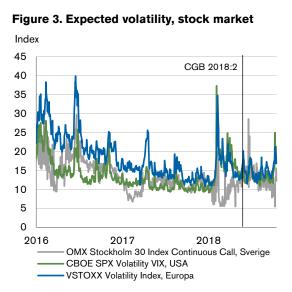


For instance, several emerging market economies have large USD loans and are therefore adversely affected by rising US interest rates and a stronger dollar. The uncertainty about the future solvency of these countries has, for example, been reflected in depreciating exchange rates, see figure 2. In the case of Turkey, this development has been accentuated by concern that the independence of its central bank is questioned and by a diplomatic conflict with the US. This has resulted in a rapid depreciation of the Turkish lira and a strong rise in borrowing rates for the Turkish State. There is also concern about contagion spreading to, for instance, Italian and Spanish banks that have strong links to the Turkish banking sector.

Despite this, stock markets have generally been characterised by some optimism and have largely followed macroeconomic developments. The US stock market has risen somewhat since the previous forecast, while the performance of European stock markets has been weaker. Volatility measures for stock markets indicate that the concern for major future price fluctuations is moderate, see figure 3.

### Figure 1. Government bond yields, 10 year

The risk premiums for European corporate bonds and for CDS contracts<sup>3</sup> for banks have risen since the beginning of the year, but nevertheless the risk premiums on these markets in general remain at historically low levels. Risk premiums for lending to Italy, Spain and Portugal, measured as the borrowing cost spread compared with Germany, have increased during the year. The generally low risk premiums in asset markets also mean that the risk of falling asset prices must be regarded as elevated. Large falls in prices and rising risk premiums can, for example, lead to banks having problems with their market funding, which then results in less lending to households and companies.



### Figure 4. GDP in US and euro area



Note: Vertical line indicates final date for information taken into account in previous forecast; 2018-05-30. Sources: Thomson Reuters Datastream, Chicago Board Options Exchange and STOXX.

### Sources: Bureau of Economic Analysis and Eurostat.

### Low borrowing rates in Sweden

As is the case globally, financial conditions in Sweden are favourable for the development of the real economy. The aggregate level of stress in Swedish financial markets is only slightly above historically normal levels.<sup>4</sup> Decreasing house prices have during the past year been a source of some concern for market participants, but the decline now seems to have moderated. At the same time, the Riksbank's first interest rate increase is judged to be getting closer. The Riksbank's interest rate path indicates that it will make its first interest rate increase either in December or in February next year. This is roughly what market participants also expect.<sup>5</sup> As before, market expectations point to a slowly rising repo rate that only passes zero around the end of next year. This means that the

<sup>&</sup>lt;sup>3</sup> Credit default swaps aim to transfer credit risk from one party to another.

<sup>&</sup>lt;sup>4</sup> Measured by a 'stress index" that includes volatility on the stock market and currency market and risk premiums on the interbank and housing bond market.

<sup>&</sup>lt;sup>5</sup> According to the pricing of Riksbank futures.

borrowing rates faced by households and companies can be assumed to remain low throughout the forecast period.

### The international expansion continues but negative effects of trade barriers

The cyclical upturn in the world economy continues, but after a strong end to 2017 growth has been weaker in the first half of 2018. On an annual basis, trade-weighted international growth has fallen from 2.3 per cent at the end of 2017 to 1.9 per cent in the second quarter of this year.<sup>6</sup> Global trade has moderated, for instance, and there is still uncertainly about US trade policy. The import tariffs that the US and China have introduced so far are judged to have some negative effects on international growth. There is also a risk of further escalation of the trade conflict.

Moreover, international growth has become less synchronised. For example, US GDP has continued to grow strongly while the performance of the euro area has been weaker than expected, see figure 4. The performance of the emerging market economies also diverges. Emerging market economies that are raw materials exporters are benefiting from a higher oil price at the same time as factors including rising US interest rates and a stronger dollar are putting pressure on countries dependent on foreign USD loans. The prospects for emerging market economies such as Argentina, Turkey, Brazil, India and South Africa have deteriorated considerably.

Overall, global growth is judged to be slightly weaker than in the previous forecast. Despite this, it is assumed that global growth will keep its momentum in the coming years with favourable investment growth. Even though monetary policy will become less expansionary during the forecast period, financial conditions continue to support the real economy.

### Resource utilisation more strained in the US

The US economy has continued to grow rapidly, but the higher import tariffs have worsened its prospects slightly compared with the previous forecast. GDP growth was 2.9 per cent in the second quarter compared with the same period in the preceding year and unemployment is at a historically low level. Both households and companies also continue to be optimistic about the future. Production is expected to continue to exceed its potential during the coming year.<sup>7</sup> Effects of the large fiscal stimulus is countered to some extent by a less expansionary monetary policy and higher import tariffs. The fiscal stimulus causes the large US government debt to grow faster, which means that the likelihood of future problems with the public finances increases. Growth slackens towards the end of the forecast period as resource utilisation becomes more strained and the fiscal stimulus unwinds. The Debt Office's assessment is that GDP growth in the US will be 2.9 per cent in 2018, 2.5 per cent in 2019 and 2.0 per cent in 2020. Compared with the previous forecast, growth for 2019 has been revised downwards by 0.2 percentage points.

### Poorer prospects for the euro area

Growth in the euro area has been weaker than expected. Peak growth in the euro area now seems to have been passed and economic activity in both Germany and France slowed in the first half of

<sup>&</sup>lt;sup>6</sup> According to TCW.

<sup>&</sup>lt;sup>7</sup> Based on the IMF assessment of potential production.

the year. Both companies and households have also become less optimistic about the economic performance of the euro area, even though leading indicators remain at high levels. However, the continuation of a very expansionary monetary policy throughout the forecast period will support economic growth. It is assumed that growth will begin to decrease and that production will approach its potential level.<sup>8</sup> GDP growth in the euro area is expected to be 2.0 per cent in 2018, 1.9 per cent in 2019 and 1.7 per cent in 2020. This is a downward revision by 0.4 percentage points for 2018 and 0.1 percentage points for 2019.

### Continued rebalancing towards more consumer-driven growth in China

The prospects for the Chinese economy have also deteriorated slightly on account of the import tariffs introduced but are largely unchanged otherwise. GDP growth has been relatively stable on a lower level for some time and was 6.5 per cent in the third quarter. There are signs of weaker domestic demand since new regulatory measures have dampened credit growth, but fiscal policy is expected to be slightly more expansionary in response to this and to the expected effects of the US import tariffs. Negative effects of the higher import tariffs can also be countered to some extent by a weaker exchange rate. It is assumed that the rebalancing towards a more consumer-driven economy with gradually more moderate growth rates will continue. China's GDP growth is expected to be 6.6 per cent in 2018, 6.2 per cent in 2019 and 6.2 per cent in 2020. Compared with the previous forecast, growth for 2019 has been revised downwards by 0.2 percentage points.

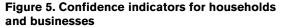
### Household consumption the backbone of Swedish growth

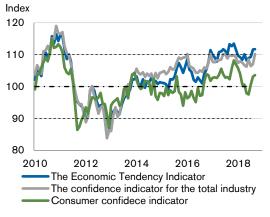
Growth in the Swedish economy remains good in 2018. Following the economic upswing, several indicators show that resource utilization is high. For example, the Riksbank's RU indicator as well as capacity utilisation in industry are at the highest levels since the global financial crisis. That picture is also visible in the labour market. The proportion of companies experiencing labour shortage is high and the labour market gap - the difference between actual and potential number of hours worked - continues to rise. Meanwhile, historical revisions of the statistics gave a partially new view of the resource situation. The revisions lowered the GDP level 2016 and 2017, which in turn means that the overheating in the Swedish economy is less than previously stated. This rhymes well with the modest price and wage increases in recent years. The National Debt Office finds that the assessment of the resource situation is uncertain, but overall, the Swedish economy is expected to be close to a turnaround in the economy in the sense that GDP growth is forecast below trend growth in 2019 and 2020. Historically, wages have risen rapidly at this stage of the business cycle. The Debt Office expects, however, that the deviations from historical relationships that have occurred in recent years will persist. Price and wage increases remain relatively moderate in the coming years.

<sup>8</sup> Based on the IMF's assessment of potential production.

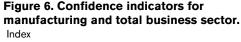
### Growth in the second quarter in line with Debt Office's forecast

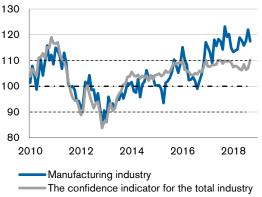
The Swedish economy showed good growth in the second quarter, and GDP grew by 0.8 per cent compared with the preceding quarter. This growth rate was higher than the average for EU countries and clearly above the average for the past ten years of 0.4 per cent. Growth was driven by stock investments and household consumption, while gross fixed capital formation and net exports decreased. Investments, which have grown strongly since 2014, fell back by 0.5 per cent in the second quarter. The decline in investments was broad and included lower housing investments. The weak growth of investments was countered by strong household consumption, which was, in turn, driven by a temporary increase in sales of new cars ahead of the new tax regulations that entered into force on 1 July. In the second quarter foreign trade again drew down GDP growth, chiefly because goods imports rose faster than goods exports. Overall, the outcome for GDP was in line with the Debt Office's June forecast.





Note: The Economic Tendency Indicator has been standardized to mean 100 and standard deviation 10. Source: National Institute of Economic Research.





Note: The confidence indicators have been standardized to mean 100 and standard deviation 10. Source: National Institute of Economic Research.

### Companies are taking a bright view of the future.

The mood in the Swedish economy remains very upbeat. The NIER's summary confidence indicator has risen slightly since the summer and points to a very strong situation, see figure 5. In terms of the different parts of the confidence indicator, all sectors point to a strong or very strong mood. The mood is most upbeat in the manufacturing industry even though that industry reported in September that finished stocks were currently slightly too large. Optimism in the manufacturing industry is also clearly higher than in the business sector as a whole, see figure 6. At the same time, the consumer confidence indicator shows an upward trend and rose in September for the fourth successive month, mainly driven by the more optimistic view households take their private finances. Other measures, such as the purchasing managers index, show that both the manufacturing industry and the services sector are in a growth phase, but that the strength of the economy is declining gradually.

### GDP growth slackens temporary but a downshift is also under way in the longer term

GDP growth is expected to moderate in the second half of 2018, see figure 7. The slowdown is due to slower growth of household consumption, partly because of an expected falling back of sales of new cars, and to the slowing of stockbuilding. The assessment for stocks is that the substantial stockbuilding in the summer largely reflects the strong level of orders to be filled in manufacturing, but there are also indications that finished stocks are slight too large at present. A recoil of both household consumption and stock investments is therefore likely in the short term.

Table 2. GDP and its components, constantprices, forecast

Percentage change <sup>1</sup>	2018	2019	2020
GDP	2.4	1.9	1.8
Household consumption	2.3	2.3	2.2
General gov't consumption	0.9	1.1	1.1
Gross fixed cap. formation	3.6	1.4	1.4
Change in inventories <sup>2</sup>	0.4	0.0	0.0
Exports	3.3	4.3	4.1
Imports	4.0	4.1	4.0
Net exports <sup>2</sup>	-0.2	0.3	0.2
GDP (calendar adjusted.)	2.5	1.9	1.5

# Table 3. GDP and its components, revisionscompared to previous forecast

Percentage points	2018	2019	2020
GDP	-0.4	0.1	-
Household consumption	0.0	0.2	-
General gov't consumption	0.1	0.1	-
Gross fixed cap. formation	-1.9	0.0	-
Change in inventories <sup>2</sup>	0.2	0.0	-
Exports	-0.9	0.1	-
Imports	-0.5	0.1	-
Net exports <sup>2</sup>	-0.2	0.0	-
GDP (calendar adjusted.)	-0.4	0.1	-

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

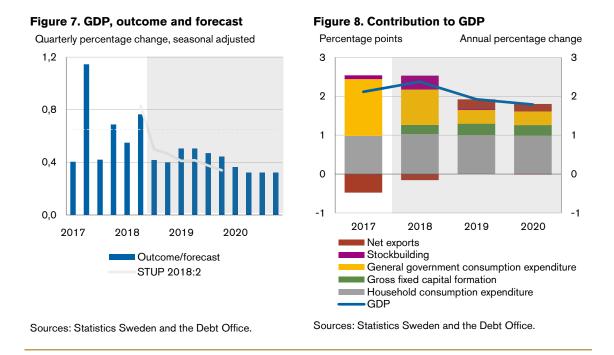
<sup>2</sup> Change as a percentage of GDP previous year.

Sources: Statistics Sweden and the Debt Office.

Quarterly growth figures rise again as soon as at the start of next year, mainly on account of stronger household consumption. The fundamentals for robust consumption growth remain in place and the fact that the growth of house prices also seems to have stabilised improves these conditions even more. However, GDP growth measured as an annual average slackens and GDP grows at slightly less than its trend rate in 2019-2020. The main reason why the cycle peaks is that the momentum of the upturn in investments fades when housing investments fall. In all, GDP grows by 2.4 per cent in 2018, 1.9 per cent in 2019 and 1.8 per cent in 2020. The forecast for 2018 has been revised downwards by 0.4 percentage points compared with the assessment in June. For 2019 the forecast has been revised upwards by 0.1 percentage points. See table 2.

### Volatile household consumption in the short term

When the momentum of investments slackens, household consumption assumes a more dominant role for growth. In recent years, household consumption has grown at close to its historical average. This has meant that households have made important contributions to GDP growth alongside investments. After weaker growth at the start of 2018 household consumption was strong in the second quarter, showing its highest growth rate for more than two years. It was mainly transport consumption that accelerated, when households brought forward large purchases of capital goods ahead of the new tax rules for private cars and light trucks (bonus/malus) that entered into force on 1 July. Consumption of clothing and footwear and of leisure and entertainment also increased, but to a much smaller extent. In contrast, housing, which is the largest single item of consumption, decreased. During the third quarter, in particular, consumption is expected to be weaker temporarily, as is also shown by the monthly statistics of car and retail sales. Stronger consumption is expected again after this, as is suggested by, for instance, consumer replies in the NIER's consumer

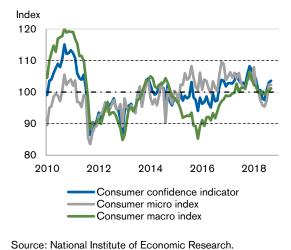


confidence index. The total index of consumer confidence rose in September for the fourth successive month and the indicator is at strong levels.

The fall in housing prices seems to have moderated in 2018, see figure 10. Assuming that this stabilisation continues, the assessment made is that consumers' confidence in the future may increase further, and therefore support consumption. Households' disposable income is expected to grow at a relatively high rate in 2018, compared with its growth over the past five years. This increase is mainly a result of strong employment growth, but fiscal policy measures targeted at households have also contributed. In addition, interest rates are low and the household savings ratio is high, which generally suggests great scope for consumption. Viewed from an international perspective, the Swedish savings ratio is among the highest in the EU. Moreover, calculated since the global financial crisis. Swedish households have increased their savings ratio more than other EU countries. In an overall assessment, the view taken of the growth of consumption has been revised upwards compared with the previous forecast. Household consumption is expected to grow by 2.3 per cent in 2018, 2.3 per cent in 2019 and 2.2 per cent in 2020.

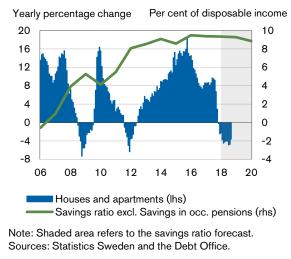
### Fiscal policy and demography drive public consumption

Public consumption grew roughly as expected in the second quarter. Public consumption increased at a quarterly rate of 0.3 per cent, which is slightly above the long-term average. Both municipalities and county councils increased their consumption expenditure while central government consumption expenditure decreased. In recent quarters the effect of migration on public consumption has weakened and there has also been a shift from central government agencies to municipal authorities in the past year. At the same time, demographic trends, with more young and older people in the economy, mean that the demand for welfare services is increasing. Overall, the revisions from the June forecast are small, partly because a new central government budget has still to be presented. Looking ahead, public consumption is expected to grow at close to a historical average rate and increase by 0.9 per cent in 2018, 1.1 per cent in 2019 and 1.1 percent in 2020.



# Figure 9. Consumer confidence indicator incl. micro and macro index

# Figure 10. House prices and household's savings ratio



### Fall in housing investments leads to weaker investment growth

Investment growth is on the way to slowing down. The weak outcome in the second quarter contributes to the downward revision of investments in 2018. After that the fall in housing investments is the main reason for the slower growth of investments and their contribution to GDP.

Housing investments have accounted for a large part of the growth of investments in recent years. The turning point is now judged to be close at hand and housing investments show steep falls in the future according to the Debt Office's forecast. However, so far housing investments have stood up well despite a smaller number of building permit applications along with hard-to-sell newly built projects. This is because many housing construction projects were started in 2017 and it takes more than 1.5 years to complete a dwelling. During that period the investments appear in the national accounts continuously. One complicating factor is that there is some lag in reporting that means that the statistics are often revised retrospectively. This makes the transition between the construction statistics available and the investments more difficult. In all, housing investments are expected to increase by 3.5 percent in 2018 and fall by around 4.0 percent in 2019 and 2020.

Investments continue to rise in the business sector. This is why gross fixed capital formation continues to go up during the forecast years despite the decline in housing investments. In the case of business sector investments the indicators generally suggest a great need for investments. In manufacturing, in particular, business confidence is at historically high levels. A high proportion of industrial companies are still reporting that their machinery and plant capacity is the main obstacle to greater production. Another measure that reflects the need for investment is capacity utilisation. Various measures of capacity utilisation have risen further since last summer; the levels are often high and exceed historical averages. The prospects in the euro area have been dampened but demand in important trading countries is still being maintained at decent levels. In combination with the weak krona this means that export-oriented manufacturing industry is expected to continue investing in order to meet international demand.

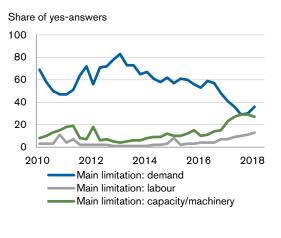


Figure 11. Main limitation to production

# Figure 12. Building permits, building starts and investment in new housing



Source: National Institute of Economic Research.

### Strong imports a drag on foreign trade

In recent years foreign trade has made negative contributions to GDP, but stronger exports are expected in the future according to our forecast. The indicators for export orders received point in different directions to some extent but, in an overall assessment, the picture look robust at present. According, for instance, to Business Sweden's export managers index, export orders received are at historically high levels and, according to the NIER's Business Tendency Survey, export orders received have risen since the summer but from lower levels. Further considerations are the weakness of the Swedish krona and the fact that growth prospects in Sweden's most important export markets have not changed materially since the June forecast. Exports are expected to be slightly under their historical average in the coming quarters, which means moving to a higher level than the more subdued levels of export growth in recent quarters. The forecast for exports has been revised downwards for 2018 and upwards for 2019 compared with the previous forecast. Exports are now expected to grow by 3.3 per cent in 2018, 4.3 per cent in 2019 and 4.1 per cent in 2020.



### Figure 13. Global growth and Swedish exports

Sources: Statistics Sweden, national sources and the Debt Office.

### Figure 14. Export order growth



Sources: National Institute of Economic Research and Business Sweden.

Note: Global growth is TCW-weighted.

Imports have shown stable growth in recent years. Unlike the more volatile exports, imports have increased for eight successive quarters, and imports continue to rise in the forecast years. Both business investments and Swedish export goods have a relatively high import content. So relatively good prospects for both business investments and the export-oriented manufacturing industry therefore suggest that imports may grow rapidly in the forecast years. Compared with the June forecast imports have been revised downwards for 2018 and upwards for 2019. In terms of the contribution of foreign trade to GDP a negative contribution is expected in 2018 and positive contributions are expected in 2019 and 2020.

# More people in employment but an upturn in unemployment

The labour force and employment continue to grow at a good pace even though the annual rates are slightly lower than a year ago. The somewhat slower growth is mainly attributable to a lower contribution from people born abroad and takes place in the wake of slightly lower demand.

# Table 4. Key numbers: labour market, prices and wages

Percentage change	2017	2018	2019	2020
Labour force	2.0	1.2	0.9	0.6
Employment	2.3	1.6	0.7	0.5
Unemployment <sup>1</sup>	6.7	6.3	6.5	6.6
CPIF	2.0	2.2	2.2	1.7
Hourly wage (NA)	2.7	3.2	3.2	3.4
Wage sum	4.7	5.2	4.2	3.9

### Table 5. Key numbers: labour market, prices and wages; revisions compared to previous forecast

Percentage points	2017	2018	2019	2020
Labour force	0.0	0.1	0.1	-
Employment	0.0	0.1	0.1	-
Unemployment <sup>1</sup>	0.0	0.0	0.0	-
CPIF	0.0	0.4	0.2	-
Hourly wage (NA)	0.0	-0.3	0.0	-
Wage sum	0.0	0.2	0.0	-

<sup>1</sup> Per cent of the labour force

Sources: Statistics Sweden and The Debt Office..

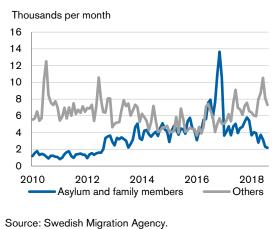
### Slower labour force growth in the future

The labour force has grown slightly faster than expected since the previous report. The increase so far in 2018 is roughly twice the average rate of growth since 2001. Just as before, people born abroad who make the biggest contribution, now around three-quarters of the increase. More and more people have made their way to Sweden, which can be seen in the increase in the number of new residence permits since the 1980s.

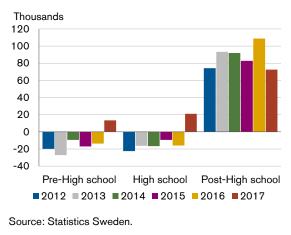
The analysis of the labour market is complicated by the fact that the reasons why people make their way to Sweden vary over time. Those who receive residence permits for labour market reasons are in a completely different situation for obtaining employment from, for example, family members of asylum seekers. Even though the number of new residence permits has been relatively constant in the past 5-10 years, the aggregate figures conceal more mixed developments. Figure 15 illustrates developments for two groups among recipients of new residence permits: a first group made up of people given asylum and family members of people given asylum and a second group consisting of other recipients, i.e. those who had labour market reasons or are, for example, students or visiting researchers. The development of both groups is relatively volatile and illustrates why more uncertainty is associated with this part of the forecast than if it had, for example, been dominated by more stable demographic changes of the group of people born in Sweden.

In the coming years migration is expected to decrease slightly, which, along with a marginal negative contribution from group of people born in Sweden, means that the labour force will gradually grow more slowly. The Debt Office's forecast of the growth of the labour force is 1.2 per cent in 2018, 0.9 per cent in 2019 and 0.6 per cent in 2020. This means an upward revision of 0.1 percentage points for 2018 and 2019, see table 4 and table 5.

# Figure 15. New residence permits for asylum seekers and others



### Figure 16. Employment and level of education



### Harder to find the right skills - slower employment growth

Employment has also grown faster than expected since the previous report. Several indicators, for example the 'labour market gap' and shortage figures, have pointed for some time to a strained labour market. At the same time, wages are growing at a relatively slow rate, which is a deviation from historical correlations. A possible explanation for the deviation would be improved matching on the labour market. But although the steady high rate growth of employment speaks in favour of such an interpretation, the Beveridge curve, that is the relationship between the vacancy rate and unemployment, speaks in favour of the opposite.

One way of supplementing the analysis of the extent to which resources are actually strained is to study whether employers are forced to reduce their skill requirements when hiring new employees. Figure 16 illustrates the change in employment from 2012 to 2017, divided up by level of education. As is seen, there was a trend break in 2017. First, there was an increase compared with previous years in the groups with a lower level of education, and, second, there was a relative decrease in the group with a higher level of education.<sup>9</sup> In terms of time, this coincides with the period when shortage figures accelerated and employment increased most; taken together, these observations reinforce the picture of a strained labour market.

So resource utilisation in the labour market is high at the same time as indicators and the increase in employment have both started to decrease slightly for the past year or so. This overall picture is in line both with the broad picture of a cyclical turnaround and an incipient slowdown of activity in the

<sup>&</sup>lt;sup>9</sup>This change in the composition of the education of people in employment is matched relatively well by a change in the composition of the labour force, but not by a change in the composition of the educational requirements of the new jobs.

labour market. In the coming years employment is expected to grow more slowly in pace with a gradually lower level of activity in the economy as a whole. Employment is expected to grow by 1.6 per cent in 2018, 0.7 per cent in 2019 and 0.5 per cent in 2020, which is an upward revision of 0.2 and 0.1 percentage points for 2018 and 2019 respectively.

### Slow upturn in unemployment

Unemployment increased slightly less than expected compared with the previous report. Unemployment usually varies in pace with the economic situation, and the moderate increase this year is well in line with the broad picture of the economy. During the next one to two years however, unemployment will grow slightly faster than it otherwise would, due to the fact that a previous measurement error fades out successively. The reason for this is that the large number of asylum seekers who received residence permits in 2016 meant a temporary underestimation of unemployment (and overestimation of employment).<sup>10</sup> This measurement error will disappear after a couple of years, given that the number of new residence permits granted to asylum seekers does not increase markedly. This then means that the previous overestimate of employment is now decreasing. Uncertainties are associated with these calculations, so it is difficult to determine both its timing and it scope. But this year and next year unemployment ought, for this reason, to increase by one or a couple of tenths more than it would otherwise have done. In addition, growth of the labour force and of employment is mainly due to the increase in people born abroad, who have, on average, higher unemployment, which also contributes to a less favourable development of unemployment. Unemployment is expected to be 6.3 per cent in 2018, 6.5 per cent in 2019 and 6.6 per cent in 2020, which is the same as in the previous forecast.

### Wages and prices increase somewhat faster

### The payroll grows in pace with the economy as a whole.

Despite the relatively strained resource situation in the labour market, wages are continuing to grow at a moderate rate both according to short-term wage statistics and wages in the national accounts. The outcomes since the previous report have been marginally lower than expected. However, the forecast for the coming years is largely unchanged and wages are still expected to increase faster when the strained situation on the labour market gradually spills over into substantial wage drift, i.e. wage increases over and above the central pay agreements. The payroll has grown slightly more strongly than forecast in the previous report; this is because the number of hours worked increased faster than expected and therefore compensated for the slightly slower wage growth. In the coming years the payroll is expected to gradually grow more slowly as the economy as a whole slows down. The forecast is 5.2 per cent for 2018, and 4.2 and 3.9 per cent for 2019 and 2020 respectively, which is an upward revision of the forecast for 2018 by 0.2 percentage points.

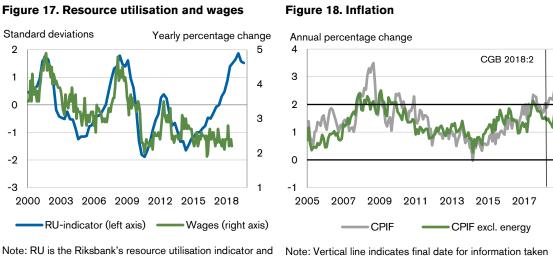
### Higher energy prices raise inflation temporarily

CPIF inflation has been slightly higher than expected. Since May CPIF inflation has been above 2 per cent and in September it was 2.5 per cent. One important explanation for the present price increases is the rapid rise in energy prices. The dry summer resulted in low levels in hydropower reservoirs, which has raised electricity prices and resulted in unexpectedly high inflation. Fuel prices

<sup>&</sup>lt;sup>10</sup> See Central Government Borrowing 2017:2.

have also risen as a result of a higher oil price. In contrast, if energy price are excluded, inflation is much weaker, see figure 16.

Prices of services, which have contributed to the rise in CPIF inflation in recent years, are now also increasing more slowly. This is a sign that the underlying price pressure in the economy is moderate all the same.



Note: RU is the Riksbank's resource utilisation indicator and is lagged 5 quarters. Wages are short term wages. Sources: Riksbank and Statistics Sweden. Note: Vertical line indicates final date for information taken into account in previous forecast; 2018-05-30. Source: Statistics Sweden.

Remaining effects of previous energy price increases will contribute to a further rise in CPIF inflation in the coming quarters. However, this effect is temporary. Forward pricing of electricity indicates that the electricity price will fall gradually in the longer term.<sup>11</sup> Moreover, international prices of energy raw materials are assumed to rise at a slower rate than previously. These factors contribute to an eventual dampening of the inflationary pressure.

But it is assumed that the development of the krona will also contribute to the dampening of inflation as of 2019. The Swedish krona has continued to be weak, partly as a result of concern about the outcome of the election but also on account of the international turbulence concerning Turkey and Italy. The krona is expected to strengthen in the forecast period. It is assumed that the Riksbank will start to increase the repo rate around the end of the year, and this will strengthen the krona. Factors such as strong public finances and relatively high growth in Sweden continue to indicate that the krona ought to appreciate.

The dampening effects of energy prices and the exchange rate will be countered to some extent by higher than normal resource utilisation. The overall assessment is that CPIF inflation will be just under 2 per cent around June 2019 and will then stabilise at that level. Model estimates also suggest moderate inflationary pressure in the longer term. The Debt Office's forecast is that CPIF inflation will average 2.2 per cent in 2018 and in 2019, and will thereafter decrease to 1.7 per cent.

<sup>&</sup>lt;sup>11</sup> Nasdaq OMX.

### **Risks still balanced**

Recent international developments have demonstrated a number of incidents that can be viewed as downside risks in the future. This applies not least to developments in the emerging economies and especially to the currency problems seen in Turkey and Argentina. If these problems get deeper or spread, there is a distinct risk of rising risk premiums in financial markets, which may then spill over into the real economy. The negotiations between the EU and the UK will enter a more intensive phase in the autumn and winter. In the short term a 'hard Brexit' may make companies and households take a more negative view of the economy, over and above the actual long-term impacts such as reduced trade. One important and closely related, but more indirect, risk concerns the trade war between the US and China. At the same time, it is worth noting that this concern is often not actually realised in a bad outcome and that it is sometimes replaced by positive developments. One such example concerning trade agreements comes from the new NAFTA agreement between the US, Canada and Mexico.

One possible impact of a more uncertain international station is that Swedish companies will become doubtful about new investments. The shift contained in the present forecast from housing investments to other investments in the business sector, will be less pronounced if a long period of greater uncertainty were to begin. On the other hand, the most recent publication of the national accounts gives a partly new picture of the development of the economy in recent years, with a clearly lower growth rate than was previously known. Against that background and with, for instance, the continuation of a very expansionary monetary policy, it is possible that the present economic upturn will take a more protracted course with higher growth for a longer period.

In the labour market the growth of the labour force is still harder to assess than it normally is since it is driven to such a great extent by migration. In addition, the composition of the groups receiving residence permits has varied greatly in the past 5-10 years, amplifying this uncertainty. But even though the labour force has grown faster than expected, there has been a clear shift in 2017 with a distinct fall in the educational level of new employees. It is difficult to know where a line may be drawn. But if employers have increasing difficulty getting hold of the skills wanted, this may lead both to lower employment growth and to higher wage growth.

# Strong central government finances but outflows from tax accounts in 2020

A strong Swedish economy results in the surplus in the central government budget being estimated at SEK 96 billion in 2018 and SEK 62 billion in 2019. The Debt Office's first forecast for 2020 points to a budget deficit of SEK 12 billion. The turnaround in the budget balance is chiefly an effect of capital investments in tax accounts being judged to decrease by SEK 50 billion, but is also due to slightly weaker economic growth. In contrast, central government net lending, which is not affected by capital investments in tax accounts, shows a surplus of 1.1 per cent as a proportion of GDP for 2020.

### Small forecast changes in 2018 and 2019

The Debt Office's new forecast indicates that the budget balance for 2018 will be SEK 96 billion. Compared with the previous forecast this means that the balance will be SEK 6 billion higher. For 2019 the budget balance is estimated at SEK 62 billion, which is SEK 6 billion lower than in the previous forecast. Monthly outcomes have been well in line with forecasts from June to September. The macroeconomic forecast that forms part of the basis for calculating the budget balance has only been changed to a small extent since the previous round of forecasts.

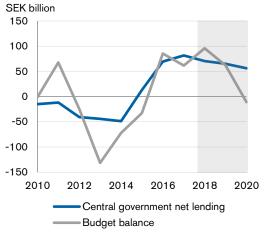
SEK billion	2018	2019	2020
Primary balance	111	90	29
SNDO Net lending	-2	-8	-14
of which on-lending	-11	-3	-3
Interest payments	-13	-20	-27
Budget balance	96	62	-12
Budget balance excl. capital investments in tax accounts	78	56	39

Table 1. Budget balance forecast

with opposite sign.







The Debt Office has made a slight downward revision of its assumption about capital investments in tax accounts compared with the previous forecast for 2018 and 2019. Previously the Debt Office assumed that capital investments would increase by SEK 2 billion per month in 2018 and the first half of 2019, and this has been revised downward to SEK 1 billion per month as of the second half of this year. In 2020 the Debt Office expects a withdrawal of capital investments from tax accounts

of SEK 50 billion, see figure 3. There are expectations of higher interest rates, which, if realised, will make it relatively less attractive to invest money in tax accounts. This contributes to the Debt Office's first forecast for the budget balance in 2020 showing a deficit of SEK 12 billion. The assessment of future capital investments is associated with great uncertainty.

SEK billion	2018	2019
Forecast June 2018	90	69
Primary balance	6	-6
Of which:		
Tax income excl. capital investments in tax accounts	4	8
Capital investments in tax accounts	-6	-6
Dividends	0	0
Government grants to local governments	0	0
Labour market	1	0
Social insurance	0	-1
Migration	-1	0
International aid	0	-1
Other	9	-6
SNDO Net lending	0	-1
Of which:		
On-lending	0	-1
Interest payments	-1	0
Forecast October 2018	96	62
Sum of changes	6	-6

### Table 2. The largest forecast changes

Note: The table shows changes in terms of budget balance. A positive amount means that the budget balance improves and vice versa.

Despite the budget deficit estimated for 2020, the underlying central government finances are strong throughout the forecast period. Central government net lending, which is not affected by capital investments in tax accounts, shows a smoother development than the budget balance and is estimated at 1.5 per cent as a percentage of GDP in 2018, 1.3 per cent in 2019 and 1.1 per cent in 2020. The decline in net lending reflects the economic slowdown being forecasted by the Debt Office.

As the budget for 2019 has still to be presented, the estimates are based on the fiscal policy in the Budget Bill for 2018. In addition, the Debt Office has assumed further fiscal policy reforms that have a negative impact on the budget balance of SEK 10 billion in 2019 and SEK 15 billion in 2020. The Debt Office makes no assessment of whether these reforms will affect expenditure or income.

### Budget outcome in June to September in line with the forecast

The outcome of the budget balance in the period June to September 2018 has been close to the forecasts. The total deviation for the four-month period is SEK 2 billion. Tax income has been a total of around SEK 2 billion lower than forecast and expenditures by central government have been around SEK 4 billion lower than estimated. Capital investments in tax accounts are judged to have increased at a slightly slower rate than estimated in the June forecast, see page 23 for further

information. Tax income from companies has been slightly higher than forecast, while other types of tax have been line in with or slightly weaker than their estimate.

### Higher forecasts for consumption and exports

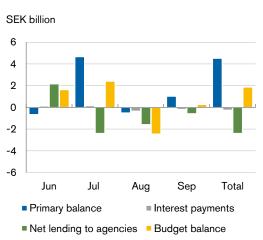
GDP growth in current prices provides a good approximation of tax base growth. Since the previous round of forecasts there have only been small changes in the macroeconomic environment. GDP growth has been revised slightly downwards for 2018 compared with the previous round of forecasts and is estimated at 4.7 per cent in current prices. Growth is expected to slow down slightly up until 2020. GDP growth in current prices is estimated to be 4.0 per cent next year and to decrease marginally to 3.9 per cent in 2020.

Since the previous forecast some changes have been made to the composition of GDP, and this affects the estimates of the budget balance. Investments are judged to grow more slowly, while household consumption is judged to increase slightly more than before. Exports have also been revised upwards. This mainly affects the central government budget balance through an increase in income from consumption taxes and corporate taxes. Inflation is judged to rise faster, and this increases the price base amount, leading to higher expenditure for central government.

### Underlying increase in tax income in 2018 and 2019

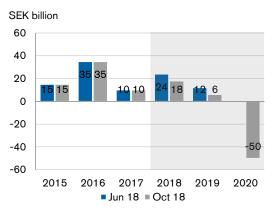
The budget balance for 2018 increases by SEK 6 billion compared with the June forecast and is estimated at SEK 96 billion. A slightly stronger development of corporate and consumption taxes contributes to a higher balance. In contrast, lower supplementary payments, due in part to a slightly lower inflow of capital investments in tax accounts, slow down the increase in the underlying tax income.

For 2019 the budget balance is estimated at SEK 62 billion, which is SEK 6 billion lower than in the previous forecast. Underlying tax income continues to increase while supplementary tax income is estimated to decrease compared with the previous forecast. Higher expenditure, for instance, Sweden's contribution to the EU budget, also contributes to a lower estimate of the budget balance for 2019 than in the previous forecast.



# Figure 2. Deviations monthly forecast, June - September

# Figure 3. The Debt office's assessment of net capital investment flows to the tax accounts

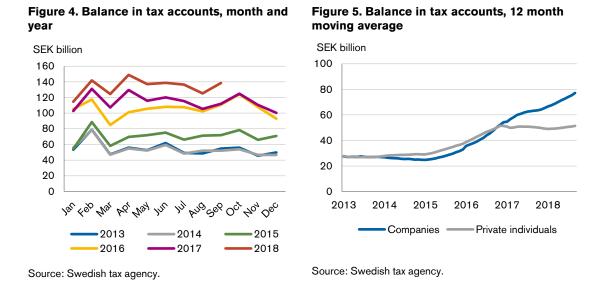


Source: Statistics Sweden, Swedish tax agency and the Debt Office.

### Slightly lower capital investments in tax accounts and supplementary tax

Supplementary tax is estimated to decrease by SEK 7 billion in 2018 and SEK 9 billion in 2019 compared with the previous forecast. This is mainly because of a slightly lower inflow of capital investments in tax accounts than previously estimated. In June the Debt Office assumed that companies would continue to increase their capital investments in tax accounts by SEK 2 billion per month until and including the first half of 2019. That assessment has now been reduced to SEK 1 billion per month from the second half of 2018 until and including the first half of 2019.

A slightly lower inflow since the previous forecast in combination with a slightly higher withdrawal mean that the tax account balance has not increased quite as much as previously estimated. At the same time, company profits and household capital gains for 2017 are judged to be slightly higher than before, which means that a larger part of payments into tax accounts will be debited than previously estimated.



For 2020 the Debt Office assumes that capital investments in tax accounts will decrease by SEK 50 billion. The background to the assumption of a decrease in capital investments is expectations of higher interest rates. A relevant interest rate with which to compare the tax account interest rate, especially for companies, is Stibor for 3 months. Future interest rate expectations can be estimated using forward contracts for Stibor. According to these, Stibor for 3 months will rise above zero per cent in the second half of 2019 and approach 0.25 per cent at the start of 2020. This means that interest rate expectations are roughly the same as in the Debt Office's most recent forecast.

It is not certain at which interest rate it will be sufficiently attractive to move money from tax accounts to other investment alternatives. The Debt Office makes the assessment that, in addition to the interest rate conditions for tax accounts, the low credit risk and the ease of making large deposits and withdrawals have meant that balances have increased. The Debt Office judges that around 0.25 per cent for Stibor is where most companies start to consider that it is profitable enough to withdraw money from tax accounts. This assessment is, of course, uncertain; many companies and private individuals may turn out to have other preferences. Great uncertainty is also

associated with the assumption of what amounts will be withdrawn and how they will be spread over time.

### Capital investments in tax accounts

The low interest rate situation has meant that tax accounts are being used as a form of savings by both private individuals and legal persons. To reduce the inflow, the interest rate on tax accounts was reduced from 0.56 per cent to 0 per cent as of 1 January 2017. Despite this, tax accounts are still an attractive form of investment, especially for companies.

The incentives for companies to invest money in tax accounts are greater than for private individuals. Private individuals are able to obtain a positive interest rate in a savings account with deposit insurance. For companies, which face negative interest rates on investments, tax accounts are attractive since the interest rate is higher; but there are also other advantages. The risk in investing money in a tax account is the same as for buying T-bills.

Tax accounts are also a much more liquid asset than T-bills and other fixed-income instruments. Depositing a particular sum in a tax account or making a withdrawal is relatively quick matter. In practice the account functions as a bank account with an unlimited deposit guarantee from central government.

Capital investments in tax accounts are an expensive and involuntary form of loan for central government. The Debt Office estimates that capital investments in tax accounts result in an additional cost for central government of around SEK 1.7 billion for 2015–2019, compared with if the Debt Office had borrowed the same sum directly in the market.

The Debt Office considers that it is important to limit the possibility of investing capital in tax accounts. An investigation should be conducted of whether it is possible to find a design that removes the incentive to invest large sums without putting tax collection at risk on that account. One possibility may be to have a floor interest rate of zero per cent that only applies up to a certain monetary limit so as to avoid private individuals and small businesses being affected by negative rates. For more information, see Central government debt management-Proposed guidelines 2019-2022.

### Higher income from corporate taxes on account of strong economy

Central government income from corporate taxes has been revised upwards by SEK 3 billion for 2018 and SEK 2 billion for 2019 compared with the June forecast, see table 3.

The strong growth in recent years has led to higher profits in the business sector. Domestic demand is continuing to rise, mainly driven by consumption. Exports are also expected to increase in 2019 and 2020. This provides good conditions for further positive growth of profits.

Forward indicators, such as the export managers index and the purchasing managers index, show that companies remain optimistic even though these indicators are at a lower level than at the start of the year. This strengthens the picture of further good profit growth, but at a slightly more moderate pace than before. The forecast of profit growth in 2018 is unchanged compared with the

previous forecast. In contrast, the preliminary outcome of tax assessments suggests that the outcome for 2017 was slightly higher than estimated. This means that the levels for 2018 and 2019 will also be slightly higher.

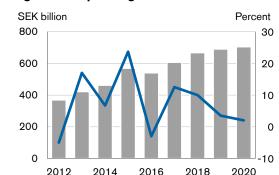
As the growth of the economy wanes, profit growth for companies decreases. Profit growth is judged to already fall back in 2019 and to be below its historical average. However, profit growth in 2019 is judged to be slightly higher than in the previous forecast. In 2020 profit growth is estimated to fall even further.

### Higher income from payroll taxes in 2019

Central government income from payroll taxes decreases by SEK 1 billion in 2018 and increases by SEK 3 billion in 2019, compared with the previous forecast. The change for 2019 is mainly due to lower payments of local government taxes than previously estimated. Outgoing payments of local government taxes are based on taxable earned income two years previously and 'adjustment factors'. Taxable earned income for 2017 is estimated to be slightly lower than previously, which affects payments of local government taxes in 2019 and the final settlement between central government and the local authorities for 2017.

# Table 3. Tax income, change from previous forecast

SEK billion	2018	2019
Payroll taxes	-1	3
Consumption taxes	2	6
Corporate taxes	3	2
Supplementary taxes	-7	-9
Total	-2	2



Tax assessment (left axis) Annual change (right axis)

Figure 6. Corporate gains

Note: The table shows changes in terms of budget balance. Source: Swedish tax agency and the Debt Office.

### Higher income from consumption taxes

Income from consumption taxes is judged to rise by SEK 2 billion in 2018 and SEK 6 billion in 2019, compared with the previous forecast. One reason for this revision is that household consumption is judged to increase faster than before.

### Higher capital gains for households

The preliminary outcome for 2017 indicates that households' capital gains will be just over SEK 200 billion. This is slightly more than assumed by the Debt Office in its previous forecast and is also an upswing compared with 2016. Capital gains for financial assets increased most between these years. Capital gains from home sales remained high even though the increase between these years appears to be moderate. This means that the slowdown in the housing market that started in 2017 did not have time to have that much effect on gains for the whole year.

For 2018 and 2019 the Debt Office judges that gains from home sales will decrease. This is an effect of the decline seen in prices but also of a lower number of sales than before. Capital gains for 2020 are expected to level out at around 3 per cent of GDP.

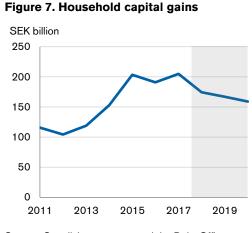
### Dividends on state-owned shares rise

Dividends from state-owned enterprises are judged to continue to rise during the forecast period. This leads to higher income from share dividends for central government. Dividend income is judged to be at around the same level for 2018 and 2019 as in the previous forecast. Prices of iron ore products have risen, which is judged to increase LKAB's profit. Vattenfall has adopted a new dividend policy, and its dividends are judged to increase between 2018 and 2019.

In total, central government income from share dividends is estimated at just under SEK 15 billion in 2018, just under SEK 18 billion in 2019 and just over SEK 18 billion in 2020. The forecast for dividends from state-owned enterprises is associated with uncertainty and may be affected by decisions to sell assets.

### Table 4. Dividends on state owned shares

SEK billion	2018	2019	2020
Akademiska hus AB	1.6	1.6	1.6
LKAB	2.9	3.6	4.0
Telia Company AB	3.7	3.9	4.0
Vattenfall AB	2.0	4.0	4.5
Sveaskog AB	0.9	0.9	0.9
Other corporations	3.5	3.6	3.4
Total	14.6	17.6	18.4



Source: Swedish tax agency and the Debt Office.

### Unchanged expenditure for sickness benefit

Expenditure in social insurance is judged to be unchanged in 2018 and to increase by SEK 1 billion in 2019 compared with the previous forecast. The Debt Office mainly bases its expenditure forecasts of social insurance on information from the Swedish Social Insurance Agency's (Försäkringskassan). Expenditure for sickness benefit is judged to be at about the same level between 2018 and 2020. Historically the level of sickness absence has varied a great deal in Sweden. The variation is difficult to explain on the basis of factors such as public health, demography and the economic situation. This makes the forecast of sickness benefit uncertain, especially towards the end of the forecast period.

Child allowances were raised on 1 March 2018, which means that some of the increase will not be seen in the figures until 2019. The number of children is expected to increase, and this also means that child allowance expenditure rises during the forecast period.

### Unchanged forecast for labour-market related expenditure

Labour-market related expenditure, such as expenditure for unemployment benefits and labour market programmes, is marginally lower for 2018 than in the previous forecast. However, a move of expenditure from the migration area to the labour market area in the Budget Bill for 2018 increase the expenditure by just over SEK 4 billion compared with 2017.

For 2019 the expenditure forecast is unchanged both compared with the previous forecast and compared with the previous year. Expenditure then increases in 2020 compared with 2019.

### Net lending by the Debt Office unchanged in 2018, but slightly higher in 2019

The Debt Office's net lending to government agencies and other parties is estimated at just less than SEK 2 billion in 2018. This forecast includes the just less than SEK 6 billion that the Swedish Export Credit Agency (EKN) has to move from currency accounts with commercial banks to an account at the Debt Office before the end of the year. Compared with the previous forecast, in June, net lending is virtually unchanged.

### Net lending by the Debt Office

Net lending by the Debt Office to government agencies and other parties is an item on the expenditure side of the central government budget. This means that if Debt Office net lending increases, the budget balance is weakened. This can also be expressed by saying that the net borrowing requirement increases.

Net lending to government agencies and other parties is not financed by appropriations and does not come under the expenditure ceiling. Net lending consists of the change of all lending from and deposits in the central government's internal bank, which is in the Debt Office. Net lending covers both ongoing central government activities – such as student loans, deposits in the premium pension system and lending to infrastructure investments – and temporary items, such as on-lending to the Riksbank and to other countries. The temporary items may be decided at short notice, and they contribute to strong variations in net lending from year to year.

Net lending by the Debt Office affects the budget balance and central government debt. In contrast, central government net lending is only affected by certain parts of the Debt Office's net lending. For example, the payment and amortisation of student loans affect net lending by the Debt Office, but not central government net lending.

For 2019 Debt Office net lending is expected to total SEK 8 billion. This is slightly more than in the previous forecast, the explanation being that a weaker krona exchange rate results in higher onlending to the Riksbank. The increase of just less than SEK 7 billion compared with 2018 is explained by lower deposits since the deposit by the Swedish Export Credit Agency (EKN) was only a one-off item and payments to the resolution reserve get smaller. The smaller payments to the resolution reserve are explained both by the fact that the aggregate statutory levy is lower and by Nordea's move to Finland. The lower deposits are partly offset by lower lending, mainly due to lower planned lending to the Riksbank. For 2020 Debt Office net lending is expected to total SEK 14 billion. This is an increase of SEK 5 billion compared with 2019, the reason being that lending to the Swedish Transport Administration increases at the same time as payments to the resolution reserve decrease.

### **Changes between years**

The table shows how the budget balance changes between 2016 and 2020 and how different parts affect this change. The budget balance increases by SEK 34 billion between 2017 and 2018. The strong economic situation, with considerable capital investments in tax accounts, leads to an increase of SEK 75 billion in tax income. This is countered by an increase in some expenditure, for example in social insurance.

Between 2018 and 2019 the budget balance is judged to weaken by SEK 34 billion. The main factor behind this decline is the economic slowdown and slower growth of tax income. The inflow of capital investments to tax accounts is judged to fall off in 2019 and is judged to be around a third of the inflow in 2018.

Between 2019 and 2020 the budget balance is estimated to fall substantially and shift over to a small deficit. One contributing factor is that an outflow of capital investments from tax accounts amounting to SEK 50 billion is assumed for 2020.

SEK billion	2016	2017	2018	2019	2020
Budget Balance	85	62	96	62	-12
Change from previous year	118	-24	34	-34	-73
Primary balance:	101	-31	41	-20	-61
Of which					
Tax income	145	4	75	23	-33
Government grants to local governments	9	-12	-5	-6	-5
Labour market	1	0	-4	0	-2
Social insurance	0	4	-14	0	-2
Migration & International aid	-26	-5	12	8	3
Sales of state-owned assets	0	0	2	-2	0
Share dividends	-7	-4	6	3	1
EU contribution	5	2	-4	-10	-2
Other	-27	-20	-26	-36	-22
Debt Office's net lending excl. on-lending	1	7	2	-14	-6
On-lending	-4	10	-7	8	0
Interest on government debt	20	-9	-3	-7	-7

### **Higher interest payments**

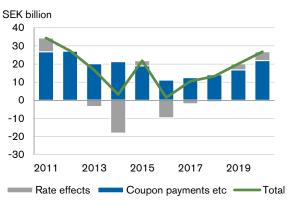
Central government interest payments are estimated at SEK 13 billion this year, SEK 20 billion in 2019 and SEK 27 billion in 2020, see table 5 below. The forecast for this year is an upward revision by about SEK 1 billion compared with the previous report. This is chiefly due to higher capital losses in conjunction with repurchases in the Debt Office's switch facility for inflation-linked bonds.

Between 2018 and 2019 interest payments increase by around SEK 7 billion. The increase is mainly explained by currency exchange losses arising when a foreign currency bond matures and by capital losses in conjunction with switches of inflation-linked bonds. Over and above this, the Debt Office will also pay about SEK 1 billion in accrued inflation compensation when an inflation-linked bond matures in June 2019. There is no corresponding payment in 2018.

# Table 5. Interest payments on centralgovernment debt

SEK billion	2018	2019	2020
Interest on loans in SEK	12.7	16.1	25.1
Interest on loans in foreign currency	-0.4	0.1	0.0
Realised currency gains and losses	0.9	3.6	1.9
Interest payments	13.3	20.0	27.0

Figure 8. Interest payments, 2011-2020



In December 2020 another inflation-linked bond, SGB IL 3102, matures. In conjunction with that maturity the Debt Office will pay around SEK 10 billion in accrued inflation compensation. This is the main reason for the increase in interest payments between 2019 and 2020.

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 28 September 2018.

### Table 6. Cut off rates for interest rates, per cent

Duration	3 mth	6 mth	2 mth	5 mth	10 mth	30 mth
Government bonds	-0.8	-0.8	-0.5	0.1	0.7	1.8
Inflation-linked bonds	-1.3	-1.3	-2.2	-1.9	-1.3	-0.2
Swap interest rate SEK	-0.4	-0.4	0.0	0.6	1.3	
Swap interest rate EUR	-0.4	-0.3	-0.1	0.4	1.0	1.6
Swap interest rate USD	2.4	2.6	3.0	3.1	3.1	

### Table 7. Cut-off rates currency exchange

Spot rates	2018-09-28
SEK/EUR	10.33
SEK/USD	8.89
SEK/CHF	8.69
SEK/JPY	0.08
SEK/GBP	11.60
SEK/CAD	6.88

### **Central government net lending**

Net lending is generally a better indicator of the underlying central government finances than the budget balance. This is partly because net lending accrues payments to the point in time when the economic activity took place. The budget balance and the net borrowing requirement are cash flow measures. This means that central government net lending shows a more even development over time than these measures.

Net lending is estimated at 1.5 per cent in 2018 and 1.3 per cent in 2019 as a proportion of GDP. This is a stronger development than in the previous forecast. In 2020 net lending is expected to be 1.1 per cent as a proportion of GDP.

Net lending is also adjusted for payments that do not affect central government's financial wealth. If, for example, central government sells financial assets, this does not affect net lending since there is only a reallocation of assets in its balance sheet. 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 wealth position of central government in net terms either since its assets decrease just as much.

Nor is central government net lending 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.

But savings in tax accounts ought not to affect net lending, since they are counted as deposits instead of tax income.

SEK billion	2016	2017	2018	2019	2020
Budget balance	85	62	96	62	-12
Delimitations	34	19	4	14	18
Sale of limited companies	0	0	2	0	0
Extraordinary dividends	-2	0	0	0	0
Parts of Debt Office's net lending	16	-2	4	10	10
Other delimitations etc.	20	20	-1	5	8
Accruals	-50	1	-30	-11	49
Taxes	-38	1	-34	-18	37
Interest payments etc.	-12	1	4	7	13
Central government net lending	70	82	70	65	56
Per cent of GDP	1.6	1.8	1.5	1.3	1.1

### Table 8. Central government net lending

### **Monthly forecasts**

The budget balance varies strongly between months. The following table presents monthly forecasts until and including December 2020.

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. For example, the large deficit in December is explained by the payment of premium pension funds, excess tax and interest payments on central government debt.

SEK billion	Primary balance	Net lending	Interest on central government debt	Budget Balance
Oct-18	6.9	2.9	0.5	10.3
Nov-18	19.8	6.1	-1.0	24.8
Dec-18	-35.5	-35.3	-8.2	-79.0
Jan-19	4.9	2.2	1.2	8.3
Feb-19	49.2	2.9	1.0	53.2
Mar-19	-4.1	2.9	-3.8	-5.0
Apr-19	3.3	2.6	-1.1	4.7
May-19	47.7	2.0	-3.7	45.9
Jun-19	-25.6	5.1	-5.1	-25.7
Jul-19	5.7	2.9	0.4	9.0
Aug-19	24.0	3.6	0.6	28.2
Sep-19	0.5	2.8	0.1	3.4
Oct-19	3.4	2.6	1.2	7.3
Nov-19	24.7	3.1	-3.0	24.8
Dec-19	-43.5	-41.0	-7.5	-92.0
Jan-20	-7.5	2.1	1.2	-4.2
Feb-20	46.5	1.5	-2.6	45.5
Mar-20	-6.1	3.5	-1.1	-3.7
Apr-20	-2.5	2.4	-2.5	-2.5
May-20	44.0	-0.8	-1.8	41.4
Jun-20	-29.9	5.0	-3.9	-28.8
Jul-20	1.4	4.4	0.4	6.2
Aug-20	20.2	3.5	0.3	24.0
Sep-20	-4.9	2.6	0.8	-1.5
Oct-20	-2.6	2.6	0.6	0.7
Nov-20	18.7	1.4	-1.8	18.3
Dec-20	-48.7	-41.8	-16.6	-107.0

### Table 9. Budget balance per month, SEK billion

### Sensitivity analysis

The Debt Office does not produce any overall sensitivity analysis for the budget balance. 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 the budget balance on a one-year term.

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

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

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

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

### **Forecast comparisons**

The Debt Office continues to forecast a higher budget balance for 2018 than the other forecasters. Much of the variation is explained by differences in the assessment of capital investments in tax accounts. The Debt Office estimates that the inflow of capital investments to tax accounts continue in 2018 and at a lower rate in 2019. In 2020, an outflow of capital investments from the tax accounts is expected.

For 2019 the Debt Office, the National Institute of Economic Research (NIER) and the Government expect relatively large surpluses. The Swedish Financial Management Authority (ESV) differs in their assessment and expects a lower surplus in 2019 following an outflow of capital investments from tax accounts.

able 10. Estimates of the budget balance from different forecasters, SEK Billion											
						(10	NIER Octob	er)	(31	ESV I Augu	st)
2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020
96	62	-12	74	67	50	81	58	-	70	27	55
2	0	0	5	5	5	2	0	-	2	0	0
94	62	-12	69	62	45	79	58	-	68	27	55
	De (25 2018 96 2	Debt offi (25 Octob 2018 2019 96 62 2 0	Debt office (25 October)           2018         2019         2020           96         62         -12           2         0         0	Debt office (25 October)         Go (17)           2018         2019         2020         2018           96         62         -12         74           2         0         0         5	Debt office (25 October)         Governme (16 April 2018           2018         2019         2020         2018         2019           96         662         -12         74         67           2         0         0         5         5	Debt office (25 October)         Government (16 April)           2018         2019         2020         2018         2019         2020           96         62         -12         74         67         50           2         0         0         5         5         5	Debt office (25 October)         Government (16 April)         Model           2018         2019         2020         2018         2019         2020         2018           96         62         -12         774         677         500         811           2         0         00         55         55         52	Debt office (25 October)         Government (16 April)         NIER (10 October)           2018         2019         2020         2018         2019         2020         2018         2019         2020         2018         2019         2010         2019	Debt office (25 October)         Government (16 April)         NIER (10 October)           2018         2019         2020         2018         2019         2020         2018         2019         2020         2018         2019         2020         2018         2019         2020         2018         2019         2020         2018         2019         2020         2018         2019         2020         2018         2019         2020         2018         2019         2020	Debt office (25 October)       Government (16 April)       NIER (10 October)       NIER (10 October)       (31         2018       2019       2020       2018       2019       2020       2018       2019       2020       2018         96       62       -12       74       67       50       81       58       -       70         2       0       0       55       5       5       2       0       -       2	Debt office (16 April)       NIER (10 October)       ESV (31 Augustic (16 April)         2018       2019       2020       2018       2019       2020       2018       2019       2020       2018       2019       2019       2010       2018       2019       2020       2018       2019       2019       2018       2019       2019       2019       2018       2019 </td

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# **Increased issue volume in sight**

The central government borrowing requirement increases towards the end of the forecast period when a larger volume of loans matures and the budget balance turns round from a surplus to a deficit. The Debt Office therefore expects to raise the issue volume of government bonds from SEK 30 billion to SEK 40 billion as an annual rate in 2020, which would be the first increase in five years. Borrowing in T-bills is also estimated to increase in 2020. For this year and next year, the issue plan is the same as before. The central government debt decreases to 22 per cent of GDP at the end of 2020.

### Issue volume raised in 2020 from record low level

The issue volume of government bonds stays at SEK 1.5 billion per auction, or an annual rate of SEK 30 billion, throughout 2019. Then, when the volume of maturities increases and the budget surplus turns into a deficit in 2020 as a result of greater withdrawals from tax accounts and slightly weaker growth, the issue volume can be raised for the first time since 2015. The Debt Office then expects to sell SEK 2 billion of government bonds per auction, corresponding to an annual rate of SEK 40 billion, see table 1. The number of T-bill auctions rises in 2020 and the stock grows from SEK 20 billion to SEK 40 billion.

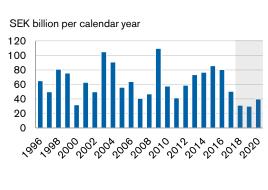
	2017	201	8	201	9	202	0
SEK billion	Outcome	Oct	(Jun)	Oct	(Jun)	Oct	(Jun)
Money market funding <sup>1</sup>	122	23	(29)	81	(85)	186	(-)
T-bills	88	20	(20)	20	(20)	40	(-)
Liquidity management	35	3	(9)	61	(65)	146	(-)
Bond funding	124	128	(128)	83	(83)	104	(-)
Government bonds	51	32	(32)	30	(30)	40	(-)
Inflation-linked bonds	12	9	(9)	9	(9)	9	(-)
Foreign currency bonds	61	88	(88)	44	(44)	56	(-)
Central Government	0	0	(0)	0	(0)	0	(-)
on behalf of the Riksbank	61	88	(88)	44	(44)	56	(-)
Total gross funding	246	151	(156)	164	(167)	290	(-)

### Table 1. New borrowing forecast

<sup>1</sup>Outstanding stock as at year-end. Commercial paper is included in Liquidity management.

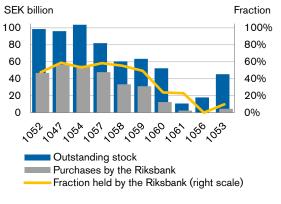
Borrowing in all types of government securities has decreased in the past two years on account of unexpectedly large budget surpluses, which are partly due to the use of tax accounts for investing money. In the spring issue volumes went down to a level at which the Debt Office made the assessment that a further decrease was not appropriate since it would worsen liquidity in the government securities market in what was already a strained situation. Borrowing in government bonds, which is central government's most important source of funding, has been more than halved

since 2016, see figure 1. At the same time the Riksbank has been buying government bonds in the market since 2015 and now owns almost half of the outstanding stock, see figure 2.



### Figure 1. Issue volume of government bonds Figu

Figure 2. Riksbank holdings of outstanding government bonds



Since the previous issue plan remains in place, the Debt Office will handle the fluctuations in the budget outcome next year in liquidity management. Then, when the borrowing requirement increases, the issue volume of government bonds will be adjusted gradually. The Debt Office's strategy is to act in a clear and predictable way and to avoid large or rapid revisions of the supply of government bonds. The objective is to contribute to a well-functioning market that results in lower borrowing costs for central government over the longer term.

SEK billion	2017	2018	2019	2020
Net borrowing requirement	-62	-96	-62	12
Business day adjustment etc. <sup>1</sup>	4	4	0	0
Retail borrowing & collateral, net <sup>2</sup>	14	12	5	1
Money market redemptions <sup>3</sup>	144	122	23	81
T-bills	84	88	20	20
Liquidity management	60	35	3	61
Bond redemptions, net switches and buy-backs <sup>4</sup>	145	108	198	196
Government bonds	69	5	99	103
Inflation-linked bonds	15	2	12	23
Foreign currency bonds4	62	101	87	70
Total gross borrowing requirement	246	151	164	290

### Table 2. Gross borrowing requirement

<sup>1</sup>Borrowing is reported by business date while net borrowing requirement is reported by settlement date.

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

<sup>3</sup> Initial stock maturing within 12 months. Commercial paper is included in Liquidity management.

<sup>4</sup>Calculated with the original issuance exchange rate.

As shown in table 2, the total borrowing requirement, including maturities, is expected to be SEK 151 billion in 2018, SEK 164 billion in 2019 and SEK 290 billion in 2020. The main reason why the

borrowing requirement is so much higher in 2020 is the turnaround of the budget balance. The volume of maturities in the money market increases at the same time.

The Debt Office expects to continue to have an unusually large cash surplus in its liquidity management this year, but then this surplus shrinks and reaches a normal level at the end of 2019. Cash holdings decrease gradually as more bonds mature and since part of the refinancing for the Riksbank is to be taken from cash funds. The latter is described in more detail in the section on foreign currency borrowing below.

### Ten-year government bonds given priority

As before, issues will focus on the ten-year government bonds in order to build up the outstanding volume of newer bonds. The other auctions will mainly be held in the five-year segment, but other maturities may be also offered to support liquidity of the bond market.

No new bonds will be introduced in 2019. The next ten-year bond is planned for 2020.

### Table 3. Important dates

Table 4. Reference loans in intrabank market

Date	Time	Activity	Date of change (IMM date)	2-yr	5-yr	10-yr
8 Nov	09.30	Info on switches to SGB 1061	Current reference bonds	1047	1057	1060
29 Nov-	11.00	Switches to SGB 1061	19 Dec 2018			1061
3 Dec			19 Jun 2019	1054	1058	
8 Feb	09.30	Terms for switches from SGB IL 3102		1004	1000	
20 Feb	09.30	Borrowing forecast 2019:1				
8-11 Mar	11.00	Switches from SGB IL 3102				
15 Mar	09.30	Terms for switches from SGB IL 3102				
5–8 Apr	11.00	Switches from SGB IL 3102				

### **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.

### More auctions of T-bills in 2020

The rate of borrowing in T-bills is the same as before in 2018 and 2019. This means that the Debt Office issues SEK 5 billion per month, corresponding to an outstanding stock of SEK 20 billion. In

the second half of 2020 the number of auctions is increased from one to two per month. This means that the outstanding stock grows and will be SEK 40 billion at the end of 2020.

Since the Debt Office cut the number of auctions to one per month there have, on a few occasions, only been three outstanding T-bills since the shortest one had reached maturity before a new one was introduced. To ensure that there are always at least four issues the Debt Office is going to hold planned future auctions two weeks earlier. Doing so means that there will be time to introduce new bills before the shortest ones mature. New auction dates for autumn 2018 are shown in table 3 on page 35.

### Unchanged borrowing in inflation-linked bonds

The issue volume of inflation-linked bonds is the same as in the previous forecast. The Debt Office plans to sell SEK 500 million of inflation-linked bonds per auction, corresponding to SEK 9 billion per year, until and including 2020. Just as with nominal bonds, the bulk of these issues are made in the ten-year maturity segment in order to increase the volume of the new bonds.

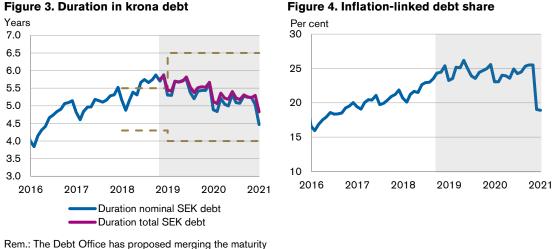
As a result of the reduction of the borrowing requirement, the issue volume of inflation-linked bonds has been drawn down to a level that is small, both in historical terms and in relation to the outstanding stock. Despite this, the Debt Office has chosen to retain the maximum volume of the facility where primary dealers can make switches between inflation-linked bonds. This means that ongoing switches of this kind may potentially have a relatively large effect in relation to issues and make it more difficult for the Debt Office to steer the distribution between outstanding stocks.

The Debt Office nevertheless makes the assessment that this facility is important in supporting the market and that the maximum value should continue to be SEK 500 million per week and primary dealer. The pricing of the facility is also left unchanged for the time being. A price adjustment may, however, be made if the facility is used in a way that is not in line with the Debt Office's planned borrowing. For instance, the Debt Office seeks to build up the volume in new issues and wishes to avoid topping up bonds that already account for a large part of the inflation-linked debt or are approaching maturity.

### Interest rate swaps help to steer duration of the krona debt within the proposed interval

The Debt Office has proposed that the Government make an amendment to the guidelines for the management of the central government debt as of 2019 that means merging the maturity steering of the nominal and inflation-linked krona debt. The proposal is that the duration of the entire krona debt should be 4–6.5 years. With the new issue plan duration will be within that interval throughout the forecast period, see figure 3.

The duration of the nominal part of the krona debt is partly adjusted using interest rate swaps. In 2018 the Debt Office intends to enter into interest rate swaps totalling SEK 15 billion. The proportion of short-term borrowing then increases gradually as the cash surplus decreases, and this results in a shortening of the average duration. Then the Debt Office does not need to use interest rate swaps to the same extent and the planned volume is therefore being reduced to SEK 5 billion per year as of 2019, see table 3.



steering of the total SEK debt in the guidelines for 2019.

The inflation-linked debt's share of the total central government debt will decrease in the forecast period and reach the benchmark of 20 per cent at the end of 2020, see figure 4. The fact that the borrowing requirement has been so limited in recent years has led to a greater need to prioritize borrowing in nominal bonds in order to safeguard that market. Against that background, the share of inflation-linked debt may need to be reduced in the longer term unless there are strong cost or risk arguments for retaining it at its present level. The Debt Office is going to analyse the share of inflation-linked debt in next year's proposed guidelines.

	201	8	201	9	202	0
SEK billion	Oct	(Jun)	Oct	(Jun)	Oct	(Jun)
Interest rate swaps in SEK <sup>1</sup>	15	(15)	5	(15)	5	(-)
Swaps, total	15	(15)	5	(15)	5	(-)
Swaps, maturing	29	(29)	41	(41)	31	(-)
Swaps, net change	-14	-(14)	-36	-(26)	-26	(-)

### Table 5. Change in outstanding swaps

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

### Swapped cash replaces part of foreign currency borrowing

The Debt Office plans to sell SEK 44 billion of foreign currency bonds in 2019 and SEK 56 billion in 2020. All foreign currency borrowing regards refinancing of on-lending to the Riksbank.

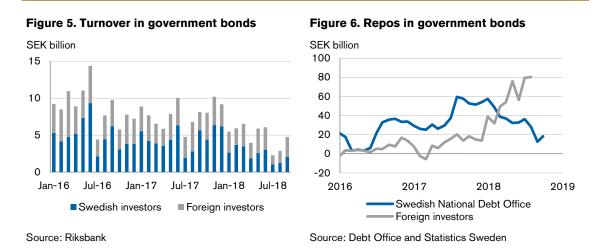
As previously communicated, the Debt Office expects to refinance part of its on-lending to the Riksbank by swapping kronor from its cash surplus to the currency needed by the Riksbank. The forecast contains an assumption that half of the refinancing needed for the Riksbank in 2019 – corresponding to about SEK 44 billion – will be arranged in this way. How on-lending is refinanced will be determined in each specific instance on the basis of market conditions at the time.

### Increased activity in repo market and secondary market

Liquidity in the market for government bonds is an issue that has been in focus for some time. In the wake of greater financial market regulation, the Riksbank's extensive bond purchases and reduced supply at the Debt Office's auctions, liquidity has deteriorated gradually. Market turnover has decreased at the same time as the need for repos has increased. Investors and primary dealers testify to the fact that the market works well for small volumes but that there can be problems if there is any form of disturbance and a need to buy or sell large volumes.

The Debt Office's standing repo facility has played an important role for the functioning of the market and the use of this facility has increased steadily in recent years. However, in 2018 investors have increasingly repoed out their holdings so the need for the Debt Office's repos has decreased. The fact that more and more participants are active in the repo market is confirmed both by the Debt Office's primary dealers and by statistics of repo transactions by foreign investors, see figure 6. Even though the demand for the Debt Office's repos has decreased, the unlimited facility is still judged to provide important support for the market.

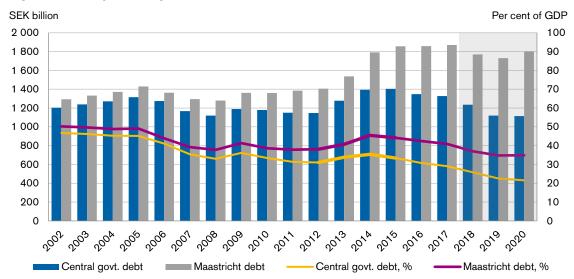
Turnover of government bonds is still lower than in previous years but there are signs that this activity is on the way to increasing. After record low levels in the summer, turnover has increased and is approaching the volume at the corresponding time last year. One explanation may be that an interest rate increase by the Riksbank is expected to be approaching and that participants in the interest rate market are changing their exposure on account of this.



### **Central government debt continues to decrease**

The central government debt is estimated at SEK 1 236 billion at the end of 2018, SEK 1 119 billion at the end of 2019 and SEK 1 114 at the end of 2020. This corresponds to a GDP share of 26 per cent, 23 per cent and 22 per cent. When assets in central government liquidity management decrease, the decline of the central government debt accelerates, see the fact box on page 41.

The Debt Office's forecast for the development of the central government debt means that debt according to the Maastricht measure will reach the 'debt anchor' of 35 per cent of GDP at the end of 2019. See the fact box on the next page for more information about different measures of central government debt.



### Figure 7. Development of government debt

The Debt Office reports the unconsolidated central government debt. The Maastricht debt covers the whole of the public sector and is a measure of consolidated debt. See the fact box Different measures of government debt in statistics.

### Table 6. Net borrowing and central government debt

SEK billion	2016	2017	2018	2019	2020
Net borrowing requirement	-85	-62	-96	-62	12
Business day adjustment etc. <sup>1</sup>	-7	4	4	0	0
Net borrowing per business day	-92	-58	-91	-62	12
A. Nominal amount including money market assets	1 261	1 203	1 112	1 050	1 062
Inflation compensation	21	23	29	25	14
Exchange rate effects	40	11	25	19	14
B. Nominal amount to current exchange rate incl. inflation compensation and money market assets	1 321	1 237	1 166	1 094	1 089
Assets under management	26	91	70	25	25
C. Central government debt	1 347	1 328	1 236	1 1 1 9	1 114
Assets under management	-26	-91	-70	-25	-25
On-lending	-263	-238	-257	-258	-258
D. Central government debt incl. on-lending and assets under management	1 059	999	909	836	832
Nominal GDP	4 372	4 565	4 781	4 971	5 167
C. Central government debt, % of GDP	31	29	26	23	22
D. Central government debt incl. on-lending and money market assets, percentage share of GDP	24	22	19	17	16

<sup>1</sup>A difference occurs as borrowing is reported by business date while the net borrowing requirement is reported by settlement date.

### Different measures of central government debt

There are different ways of measuring central government's debt. The Debt Office reports the *central government unconsolidated debt*. This measure shows central government gross debt and includes all loans raised by the Debt Office on behalf of central government, irrespective of who owns the claims on the central government. The debt is reported at its nominal terminal value according to the principles applied in the EU.

Some government agencies own government bonds and T-bills. This kind of intragovernment ownership is deducted in the *central government consolidated debt*. That measure gives an overall picture of the financial position of central government and is used in the Government's budget bill and in the annual report for the central government. The consolidated debt is calculated by the Swedish National Financial Management Authority.

One debt measure often used in international comparisons is *general government consolidated gross debt*, which is also called the *Maastricht debt*. This debt is larger than the central government debt since it covers the whole of the public sector, i.e. including municipalities, county councils and the pension system. Its calculation is based on conditions in the Maastricht Treaty. According to the EU's government debt criterion the Maastricht Debt must not exceed 60 per cent of GDP. The Maastricht Debt is also the measure that is used in the budgetary framework and that forms the basis for the debt anchor of 35 per cent that the Parliament has decided will be in force as of 2019. General government consolidated gross debt is published by Statistics Sweden.

### When the cash surplus shrinks debt falls more quickly

When central government receives more money than is needed for outgoing payments, the surplus is invested in the money market until needed to pay for expenditure or maturing loans. Since these investments – or assets in liquidity management – are not deducted when the central government debt is reported, the debt is higher than it would have been if the money had been used for amortisation instead. When assets in liquidity management increase, the central government debt therefore decreases at a slower rate. And the other way round: when assets in liquidity management decrease, the decline in debt is greater.

The cash surplus was built up in 2017 when central government tax income was much higher than forecast, partly because of capital deposits in tax accounts. Despite a reduced issue volume, the Debt Office had, at the end of the year, borrowed more than was needed to finance central government expenditure and maturing loans. Increased demand for the Debt Office's standing repo facility also contributed to more money being received to invest.

The increase in assets in liquidity management in 2017 meant that the central government debt only decreased by SEK 19 billion even though the budget surplus for that year was SEK 62 billion. Now that assets in liquidity management are beginning to decrease, the decline in central government debt is even greater, on the other hand. Next year the Debt Office expects the central government debt to decrease by SEK 116 billion even though the budget surplus is only SEK 62 billion.

# **Market information**

### Table 7. Government bonds, auction dates

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

### Table 8. Outstanding government bonds

Maturity date	Coupon %	Bond no.	SEK million
12-Mar-19	4.25	1052	98 550
01-Dec-20	5.00	1047	96 054
01-Jun-22	3.50	1054	103 631
13-Nov-23	1.50	1057	81 885
12-May-25	2.50	1058	60 376
12-Nov-26	1.00	1059	63 391
12-May-28	0.75	1060	53 318
12-Nov-29	0.75	1061	11 400
01-Jun-32	2.25	1056	18 000
30-Mar-39	3.50	1053	45 250
Total government bonds			631 855

Outstanding volume as of 28 September 2018.

\*Switch auction

### Table 9. T-bills, auction dates

Announcement	Auction date	Settlement date
31-Oct-18	07-Nov-18	09-Nov-18
28-Nov-18	05-Dec-18	07-Dec-18
02-Jan-19	09-Jan-19	11-Jan-19
30-Jan-19	06-Feb-19	08-Feb-19
27-Feb-19	06-Mar-19	08-Mar-19
27-Mar-19	03-Apr-19	05-Apr-19
30-Apr-19	07-May-19	09-May-19
05-Jun-19	12-Jun-19	14-Jun-19
03-Jul-19	10-Jul-19	12-Jul-19

### Table 10. Outstanding T-bills

Maturity date	SEK million
17-Oct-18	5 000
21-Nov-18	5 000
19-Dec-18	5 000
20-Mar-19	5 000
Total T-bills	20 000

Outstanding volume as of 28 September 2018.

		<b>.</b>
Announcement	Auction date	Settlement date
01-Nov-18	08-Nov-18	12-Nov-18
15-Nov-18	22-Nov-18	26-Nov-18
29-Nov-18	06-Dec-18	10-Dec-18
17-Jan-19	24-Jan-19	28-Jan-19
31-Jan-19	07-Feb-19	11-Feb-19
14-Feb-19	21-Feb-19	25-Feb-19
28-Feb-19	07-Mar-19	11-Mar-19
08-Feb-19	08-Mar-19*	12-Mar-19
08-Feb-19	11-Mar-19*	13-Mar-19
14-Mar-19	21-Mar-19	25-Mar-19
28-Mar-19	04-Apr-19	08-Apr-19
15-Mar-19	05-Apr-19*	09-Apr-19
15-Mar-19	08-Apr-19*	10-Apr-19
25-Apr-19	02-May-19	06-May-19
09-May-19	16-May-19	20-May-19
05-Jun-19	13-Jun-19	17-Jun-19

### Table 11. Inflation-linked bonds, auction dates

# Table 12. Outstanding inflation-linked bonds

Maturity date	Coupon %	Bond no.	SEK million
01-Jun-19	0.125	3110	15 450
01-Dec-20	4.00	3102	38 856
01-Jun-22	0.25	3108	33 827
01-Jun-25	1.00	3109	23 831
01-Jun-26	0.125	3112	16 032
01-Dec-27	0.125	3113	9 790
01-Dec-28	3.50	3104	27 750
01-Jun-32	0.125	3111	14 790
Total Inflation-linked bonds			180 326

Outstanding volume as of 28 September 2018.

\*Switch auction

### Table 13. Rating

Rating company	Debt in SEK	Foreign currency debt
Moody's	Aaa	Aaa
Standard & Poor's	AAA	AAA
Fitch	AAA	AAA

### Table 14. Primary dealers

Primary dealer	Government bonds	Inflation-linked bonds	T-bills	Telephone no.
Barclays	•			+44 207 773 8379
Danske Markets	•	•	•	+46 8 568 808 44
Handelsbanken Markets	•	•	•	+46 8 463 46 50
NatWest Markets	•			+44 207 805 0363
Nordea Markets	•	•	•	+45 3333 1609
				+46 8 614 91 07
SEB	•	•	•	+46 8 506 231 51
Swedbank	•	•	•	+46 8 700 99 00

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### Next report

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The Swedish National Debt Office is the central government financial manager and the national resolution and deposit insurance authority. The Debt Office thus plays an important role in the Swedish economy as well as in the financial market.



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