18 February 2020



CENTRAL GOVERNMENT BORROWING

Forecast and analysis 2020:1

BEEGE BEE

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, 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 that is also included in the report. The Debt Office borrows to cover deficits in the central government budget (the net borrowing requirement), in part to repay maturing loans.

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 2020:1, the Debt Office presents forecasts for central government finances and borrowing in 2020 through 2021. An assessment of the macroeconomic development is given in the first section. The next section presents 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.

The report takes into account developments up to 3 February 2020.

Hans Lindblad Director General

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Summary

Weak growth is expected for the Swedish economy this year. Next year, economic growth is expected to be stronger as domestic demand recovers and the international economy regains some strength. Overall, the Swedish economy is approaching a more normal state, though growth is below the historical average throughout the forecast period. The ongoing slowdown means that resource utilisation is declining, which contributes to unemployment continuing to rise. Wages are also expected to rise at a relatively slow pace, which is an important contributor to inflation falling below the target of 2 per cent over the entire forecast period.

A deficit in the central government budget is expected this year and the next. That is a major reversal compared with the large surplus from last year, which was, however, largely driven by temporary events. This year, the ongoing slowdown in the Swedish economy means that the central government's income from taxes grows more slowly than in the previous year. GDP growth is expected to rise again at the end of the forecast period, which also leads to faster growth in income from taxes. However, the expected net outflows of capital investments from tax accounts weigh on the budget balance this year and the next. The budget deficit will be smaller than the Debt Office previously estimated as a result of both higher tax income and lower spending.

However, this upward revision does not prompt a change in the central government borrowing plan, and the Debt Office continues to gradually increase the issuance volume of nominal government bonds. The Debt Office's policy is to adjust the issuance volume in stages, and there is currently no reason to review the underlying development of central government finances and the weakening from the cyclical slowdown. The only change made concerns treasury bills, for which the auction volume is temporarily increased at the end of 2020 in connection with bond redemptions. As previously, the Debt Office expects to issue a green bond in 2020 without affecting the current borrowing plan.

Previous forecast in italics	2019)	2020		2021	
Swedish economy and government finances					-	
GDP (%)	1.2	1.3	1.0	1.1	1.8	1.6
Unemployment (% of labour force)	6.8	6.7	7.2	7.1	7.4	7.2
Budget balance (SEK billion)	112	113	-14	-17	-14	-27
Central government net lending (% of GDP)	1.0	0.8	0.7	0.5	0.3	0.2
Central government debt (% of GDP)	22	22	21	21	21	21
Central government borrowing, SEK billion						
Government bonds	30		51	51	60	60
Inflation-linked bonds	8		9	9	9	9
Money market funding (outstanding stock at year-end)	20		55	40	68	68
Foreign currency bonds	19		59	60	48	49
on behalf of the Riksbank	19		59	60	48	49

Key figures for the economy, government finances and borrowing

The Swedish economy is growing slowly

Weak growth is expected for the Swedish economy this year. Next year, a return to somewhat stronger economic growth is expected as domestic demand recover and the international economy regains strength. Overall, the Swedish economy is approaching a more normal state although growth remains below the historical average throughout the forecast period. The ongoing slowdown means that resource utilisation decreases and that unemployment is expected to continue to rise. Wages are expected to continue to increase relatively slowly and is an important reason why inflation remains below the target of two per cent over the entire forecast period.

Moderate growth in developed economies despite low interest rates

Global growth has continued to slow since the previous report in October. The sentiment in the financial markets has nevertheless improved, mainly because several central banks have lowered their policy rates, which is expected to support the real economy. Growth prospects remain largely unchanged from the previous forecast.

Viewed from a long-term perspective, fluctuations in economic development have declined for a considerable time and volatility in GDP growth in many countries is now at historically low levels. Exchange rates and yields on government bonds have followed the same trend. If this development persists, the cyclical fluctuations will continue to be small and economic forecasts less volatile. The exception would be economic and financial crises, which significantly increase volatility (see indepth box *Is the Great Moderation ongoing*? on page 9).

Favourable financial conditions continue to support the real economy

The sentiment in the financial markets improved in the second half of 2019, resulting among other things in lower volatility in both stock markets and the foreign exchange market. This is mainly because monetary policy has become more expansionary globally, thereby reducing the risk of a deeper economic downturn, which is also suggested by the recent outcome of a number of confidence indicators.

Several central banks around the world have lowered their policy rates, including the European Central Bank (ECB), the US Federal Reserve (Fed), the Reserve Bank of Australia, and the central banks of Brazil, Russia, and China¹. For example, the Fed has lowered the range for its policy rate three times. While the Bank of Norway and the Riksbank in fact raised their policy rates at the end of 2019, they, too, continued to signal that their policy rates will remain low for quite some time.

¹ For all of 2019, a total of 67 central banks lowered their policy rates while 17 raised them.

Expectations of market participants also indicate continued low and unchanged policy rates in the coming years, in line with the central banks' forward guidance (see Figure 1). The expansionary monetary policy is expected to continue to support the real economy.

In addition, the US and China have signed a first partial agreement in the trade negotiations, and the UK is leaving the EU (Brexit) with a transition agreement that, among other things regulates the country's economic relationship with the EU for the rest of the year. Both of these factors have helped mitigate the uncertainty in financial markets.



Note: Implied rates based on market pricing on 4 February 2020.



Note: Indices are Nasdaq OMXS, S&P500, STOXX600 and FTSE respectively. Source: Macrobond.

An effect of the improved sentiment has been increased demand for riskier assets. Yields on emerging economies' government bonds have for example declined to their lowest levels in several years and stock exchanges in several countries have reached historically high levels (see Figure 2). Furthermore, the global fall in government bond yields observed in the first half-year shifted to an upturn and the interest rate differential between safe and riskier assets decreased during autumn. Nevertheless, uncertainty has increased somewhat since the beginning of the year and risk premia have risen again. This is partly linked to the US–Iran conflict that escalated in the beginning of the year, and partly to the outbreak of the new coronavirus and the uncertainty about the economic consequences that will result from the outbreak.

Some recovery in global growth ahead

Global growth has been slowing for quite some time, partly as a result of the US–China trade dispute, poor development in the automotive industry and weaker demand in China. The slowdown has also been evident in the euro area, while the US economy has been more resilient.

At the same time, the more expansionary monetary policy and the decreased uncertainty have improved the outlook for the world economy. Confidence in the manufacturing industry has

stabilised, albeit at low levels (see Figure 3). The drop in confidence indicators for the service sector has also subsided, implying that it is unlikely that the business cycle will continue to weaken. The latest data in some cases even point to a degree of recovery. Global growth is expected to become somewhat stronger during the forecast period and remain slightly below the historical average (see Table 1). Growth is mainly driven by a gradual recovery in economies that have developed slowly in recent years, for example Brazil, India, Mexico, Russia, and Turkey.

In China, the balancing act of economic-policy continues, i.e. maintaining high growth while simultaneously mitigating the risks of high indebtedness. However, the outbreak of the new corona virus constitutes a risk for a weaker development. In the National Debt Office's forecast, the economic effects of the coronavirus in China are expected to be noticeable, albeit transitory. However, if the spread of the virus becomes more extensive it will have consequences for global growth. In recent decades, China has gradually become increasingly important to the world economy and for several years, it has been the single largest contributor to global growth (See Figure 4).

Growth in developed countries remains moderate although some recovery is taking place in, for instance, the euro area. Just as previously, household consumption is expected to grow at a relatively good pace, supported by low unemployment and low interest rates. However, in the near future, exports and investments are expected to develop poorly.



Table 1. GDP-growth in a selection of countries and areas, forecast

Percentage change	2018	2019	2020	2021
Euro area	1.9	1.2 (0.1)	1.2 (0.0)	1.4 (0.0)
USA	2.9	2.3 (0.0)	1.8 (0.0)	1.7 (0.0)
China	6.6	6.1 (0.0)	5.9 (-0.1)	5.9 (-0.1)
Global	3.6	2.9	3.3	3.4

Note: Revisions compared to previous forecast in parenthesis.

Sources: National sources and the Debt Office.

Note: Vertical line indicates final date for information taken into account in previous forecast: 2019-09-24. Sources: ISM, Markit and Swedbank.

The US economy continues to slow

US growth has abated, but the economy still remains relatively strong. In the fourth quarter of 2019, GDP growth was 2.3 per cent compared with the corresponding period the previous year. Growth was driven mainly by household and public sector consumption, whereas imports and investments had a negative effect on growth.

Growth in the US economy is expected to continue to weaken during the forecast period. The trade dispute and the slowdown in the global economy are expected to continue to weigh on investments

and exports, which is also what confidence indicators for the manufacturing industry suggest (see Figure 4). Fiscal policy will also be tighter in the periods ahead, which will dampen growth.

Households, though, have a positive outlook on future economic development. Consumption is therefore expected to continue to develop relatively well, supported by solid wage increases and a strong labour market, in which unemployment is at the lowest level since the 1960s (see Figure 5). The expansionary monetary policy also helps to keep interest rates down for households and businesses.





Figure 5. Unemployment and consumer confidence, USA



Sources: Bureau of Labor Statistics, U.S. Department of Labor, The Conference Board and the Debt Office.

Moderate but gradually rising growth in the euro area

Sources: IMF, the Riksbank and the Debt Office.

Growth in the euro area declined relatively quickly in 2018 but stabilised again in 2019. Growth in the fourth quarter was moderate and amounted to 1.0 per cent compared with the corresponding period the previous year. During some time, household consumption has been an important factor behind growth. European households have, like US households, benefitted from a strong labour market and solid wage increases.

However, the German automotive industry continues to burden the development in the euro area. Among other things, the automotive industry in Germany has seen a decline in demand due to weaker growth in the rest of the world. At the same time, the global automotive industry is facing a structural transformation in the form of the conversion from internal combustion engines to electric motors. Since the beginning of 2018, the problems in the German automotive industry have caused German industrial production to fall by about five per cent. The development in the German industry is expected to stabilize, which confidence indicators also suggest. But recovery is thereafter expected to be slow.

In the forecast period, the euro area economy is expected to grow at a moderate but increasing rate. Resource utilisation is expected to continue to remain close to normal. Household consumption is expected to grow somewhat more slowly as the labour market gradually becomes less strained. At the same time, growth is supported by the expansionary monetary policy and a somewhat expansionary fiscal policy.

Is the Great Moderation ongoing?

In the early 1980s, in many economies there was a significant and sustainable decrease in variation in both GDP growth and inflation rate (see Figure 6). This phenomenon – called the Great Moderation – was increasingly noted, analysed and discussed during the beginning of the 21st century, both by academic economists and policy makers.



Figure 7. Volatility in central government net lending requirement



Note: Volatility is a five year rolling standard deviation of an unweighted average of the countries GDP growth, measured as yearly percentage change

Sources: OECD Economic Outlook and the Debt Office.

Note: The net lending requirement is measured excluding on-lending and sale of state assets. Volatility is a five year rolling standard deviation of the net lending requirement as a percentage of GDP.

Sources: Statistics Sweden, Swedish National Financial Management Authority and the Debt Office.

The analysis and debate were in regard to the effects of the reduced variation as well as the reasons behind it. The effects were essentially described as positive, mainly because the change entailed a reduction in uncertainty. The explanations included good luck, structural changes, and better economic policy. The latter was emphasised by the central banks themselves.¹

In the wake of the decreased volatility in the real economy, financial markets also saw decreasing volatility and risk premia. This increasingly inconspicuous and, in many respects, favourable economic development ended abruptly, just as the debate around the Great Moderation did, with the outbreak of the great financial crisis in 2007–2008.

However, volatility in GDP growth continued to decline when the acute phase of the financial crisis was over, while volatility in inflation has mostly remained at these low levels. Several cases of the historically low level of volatility can also be seen in fixed income and foreign exchange markets.

Why is this important? For one, the trend is once again raising the question of what drives the change and whether the ever-lower volatility should still be seen as almost unequivocally positive. Another reason is that it puts today's development in a historical context. For instance, the low and stable growth we are currently seeing in many countries is part of a long-term trend. Additionally, if the trend persists, it may mean that future economic forecasts will also become less volatile.

A final reason, which is of significant importance for the Debt Office, is that the same trends can also be seen in Swedish economy. In Sweden, volatility in GDP and employment growth in recent years have also been down to historically low levels. This, together with the fiscal policy framework, has led to historically low levels of volatility in the net borrowing requirement today. (see Figure 7).² Nevertheless, it is important to emphasise that macroeconomic development is just one of several determinants of the net borrowing requirement. However, should the downward trend in volatility in economic activity persist, it will likely continue to moderate fluctuations in the net borrowing requirement.

¹ See, for example, Ben Bernanke's speech *The Great Moderation* (2004).

² Figure 7 illustrates the net borrowing requirement as a share of GDP, but the same downward trend and historically low volatility also apply to the net borrowing requirement in level.

Weak growth in the Swedish economy despite recovery next year

After several years of strong growth, the Swedish economy slowed down. The slowdown, which began about a year ago, is expected to continue in the coming quarters. Indicators such as the Purchasing Manager's Index (PMI) for the manufacturing industry and the service sector, among others, point to low growth in the short term. The National Institute of Economic Research's (NIER) Economic Tendency Indicator has also fallen, although not quite to the same extent as the PMI. The Riksbank's measure of resource utilisation, the RU indicator, has fallen over the past four quarters and now shows near normal resource utilisations

The economic developments both globally and in Sweden have been well in line with the Debt Office's forecasts from October (see 0 and Table 3). As a result, the changes to the forecast are slight and the overall assessment is that growth will be relatively weak this year. A recovery in household consumption and eventually also a stabilisation in housing construction indicate that GDP will grow somewhat faster next year and that the Swedish economy will also benefit from the international economy strengthening to some extent. Overall, the Swedish economy is moving towards a more normal business cycle, but growth is still below the historical average throughout the forecast period. GDP is expected to grow by 1.0 per cent in 2020, and 1.8 per cent in 2021 (see Table 2).

The Swedish economy is thus in a weak growth phase in both the short and the long term. The most recent and upcoming quarters are expected to show low GDP growth. From a long-term perspective, the years 2019–2021 will be the first three-year period since the crisis of the 1990s in which GDP growth is below 2 per cent for all three years, if the forecasts prove correct. Thus, the low volatility in economic development discussed in previous sections is expected to continue.

Table 2. GDP and its components, constant prices, forecast

Table 3. GDP and its components, revisions compared to previous forecast

2018

-0.1

0.1

0.0

-0.4

0.0

0.1

-0.1

0.1

-0.1

2019 2020

-0.2 -0.2

-0.1

-0.3

0.1

0.0 0.0

-0.6

-0.2

-0.2

-0.1

-0.1

-0.0

-0.3

-0.1

0.6

0.3

0.1

-0.1

2021

0.2

0.1

0.0

0.5

0.3

0.3

0.0

0.2

Percentage points

Household consumption

General gov't consumption

Gross fixed cap. formation

Change in inventories²

GDP (calendar

adjusted)

GDP

Export

Import Net exports²

Percentage change ¹	2018	2019	2020	2021
GDP	2.2	1.2	1.0	1.8
Household consumption	1.7	1.0	2.0	2.0
General gov't consumption	0.4	0.4	0.8	1.0
Gross fixed cap. formation	4.2	-1.2	0.4	1.8
Change in inventories ²	0.4	-0.2	0.0	0.0
Export	3.2	4.6	2.1	3.7
Import	3.6	2.2	2.6	3.7
Net exports ²	-0.1	1.2	-0.1	0.1
GDP (calendar adjusted)	2.3	1.2	0.8	1.6

¹Actual change compared with previous year.

²Change as a percentage of GDP previous year.

Sources: Statistics Sweden and the Debt Office.

Modest contribution from exports to growth ahead

Last year, weak domestic demand was offset by strong foreign trade. Swedish exports proved resilient to both weaker economic conditions globally and a decline in world trade. The weak Swedish Krona probably contributed to this.

Above all, services exports increased strongly, driven by factors including the ongoing implementation of 5G networks and consumption by foreign nationals in Sweden. Services exports account for about 30 per cent of total exports, while the corresponding share for Germany is just under 18 per cent. Goods exports, on the other hand, have been more muted, especially in basic industry, which more closely reflects the economic downturn globally. Overall, however, exports of goods have so far been relatively resilient, which may indicate a favourable composition.

Outcome data and indicators show weak outlook for goods exports in the short term, at the same time as services exports continue to grow. During the second half of 2020, demand at the global level is expected to gradually increase. In combination with the weak Swedish krona, this provides more favourable prospects for Swedish exports; the correlation between export growth and the krona exchange rate has been strong in recent years. As an annual average, export growth slows from 4.6 per cent in 2019 to 2.1 per cent in 2020 and then grows by 3.7 per cent in 2021. After accounting for the largest contribution to growth last year, the contribution from net exports to GDP is expected to be small in the years ahead. Imports are expected to grow roughly in line with exports in 2020 and 2021.

Industry's investments are still in decline

For more than a year, the economy has seen an appreciable decrease in domestic demand. A major contributing factor is that investment pressure in the business sector has diminished, driven by a decline in housing investments (see Figure 8) However, public sector and service sector investments have prevented a major decline in investments.

Most factors indicate that investments by industrial enterprises will fall in the coming quarters. Industry has long shown resilience to the slowdown in the global economy – but in the autumn, the Purchasing Manager's Index fell sharply, to subsequently recover somewhat (see Figure 9). Industrial production plans have also fallen rapidly. Industrial production is still showing a moderate decline, but the decrease is evident in basic industry and the machinery industry. The weak state of the manufacturing sector will cause industrial investment to fall in 2020. At the same time, there are indications that the industrial economy is recovering internationally and that the decline in industrial production will be short-lived. This means that the outlook is good for Swedish industrial investments to grow stronger again in 2021.







Housing investments have so far fallen by around 12 per cent from the peak levels of 2017. This can be compared with a 22 per cent decline in housing investments in 2011–2013 and a 35 per cent decrease in 2007–2009. Statistics on building permits and housing starts, combined with an upswing in housing prices, indicate stabilisation in late 2020. The same applies to construction companies' responses in NIER's survey. According to the Debt Office's forecast, housing investments are thus levelling off at a relatively high level.

At the same time, investments within service industries continue to rise. In the public sector, investments will continue to rise in the coming years, driven by central government infrastructure projects and defence initiatives. Altogether, gross investment falls by 1.2 per cent in 2019, level off this year and rises by just under 2 per cent in 2021. Thus, according to the Debt Office's forecast, the low volatility trend in investments of recent years will continue.



Figure 10. Passenger car sales and registrations



Figure 11. Consumer confidence

Note: The Micro index summarises consumer's view of their personal finances and the Macro index summarises consumer's view of the Swedish economy Source: National Institute of Economic Research.

Household consumption recovers

GDP growth during the forecast period is mainly driven by household consumption. Following the weak development at the end of 2018 and beginning of 2019, consumption was stronger around the turn of the year 2019/20, according to actual data and indicators. Increased purchases of cars and other consumer goods were among the drivers of the growth (see Figure 10). The fact that new car registrations increased sharply in December 2019 is, however, largely related to further changes in the bonus malus system, which makes the development difficult to interpret. The regulatory changes introduced at the end of the first half of 2018 have, in time, led to more extensive effects than expected, and it cannot be ruled out that similar developments would not be materialised also going forward.

Households' view of the economic development grew more pessimistic in 2019, according to NIER's survey, whose confidence indicator for households fell rapidly. The pessimistic view from households was mainly towards the Swedish economy and the labour market. The decline in recent months has ceased, mostly because the view of one's own finances has improved somewhat (see Figure 11). One explanation could be that this year, as in 2019, households benefit from tax cuts. At the same time, net wealth has developed favourably due to rising share prices and housing prices. Overall, this points to accelerated growth in consumption in the coming quarters. Household consumption is expected to grow by 1 per cent in 2019 and 2 per cent in both 2020 and 2021. Household consumption is again expected to account for the largest contribution to GDP growth, especially this year. At the same time, household income is expected to increase slightly faster, entailing a rising saving rate.

Public sector consumption has risen slightly in recent years and the contribution to GDP growth has been modest. Looking ahead, public sector consumption is expected to grow somewhat faster. On the one hand, many municipalities and regions have been facing an increasingly strained economic situation, which is restricting consumption. On the other hand, demand for public services is high,

and it appears as though the municipal sector will be given increased government subsidies in connection with the Government's Spring Budget Bill.

Unemployment rises as the labour market continues to decline

Recent development in the labour market is in line with the current economic downturn. Unemployment has risen while both wages and prices have grown at a moderate rate (see 0 and Figure 12). This trend is expected to continue over the next few years despite a less certain picture of the labour market than usual resulting from revisions to and problems with the statistics.

Statistical revisions have changed the view of the labour market

As with other economic variables described in previous sections, volatility in employment has also gradually decreased for quite some time. However, this pattern was broken at the same time as problems emerged with the collection of the statistics in the Labour Force Survey (LFS) and the subsequent revisions. In response to the problems with reliability, Statistics Sweden chose to halve the sample size, which has increased both volatility and uncertainty. Furthermore, the revisions have in many cases been large and created significantly different development in the series for the just over one-year period in guestion.²

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

Percentage change	2018	2019	2020	2021
Labour force	1.4	1.1	0.9	0.5
Employment	1.8	0.7	0.5	0.3
Unemployment ¹	6.3	6.8	7.2	7.4
CPIF	2.1	1.7	1.6	1.7
Hourly wage (NA)	2.2	2.7	2.5	3.3
Wage sum	4.8	3.8	3.0	3.6

1Per cent of the labour force.

Sources: Statistics Sweden, Swedish Tax Agency and the Debt Office.



Perhaps the most important change is in employment. Since mid-2018, the employment trend is more or less the opposite of the picture provided by the LFS prior to revision. Upon revision, a sharp slowdown can be seen, followed by an acceleration in employment in the last roughly twelve months, which deviates from the patterns that normally arises in a downturn. Another factor, which also deviate from historical patterns is the weak period during autumn 2018 and spring 2019 that contrasts with the trend in companies' employment plans. The observations in red in Figure 13 show that the four quarters which coincide with Statistics Sweden's collection problems, also constitute the largest unexpected negative outcomes in over 20 years. Thus, during these four quarters

² A few days before the publication of the previous report, Statistics Sweden announced that there were errors in the Labour Force Survey. This led to revisions of the statistics for the period July 2018–September 2019, which were published in mid–November in association with the publication of the LFS for October.

employment plans in the private sector have shown a distinctly better development than normal, while the outcome has in fact become clearly worse than normal. It is possible that these four redmarked observations, despite their apparent deviation from historical patterns, are variations within the norm. However, regardless, they are a reminder that the LFS is currently suffering from twice as much uncertainty as usual.

The labour market continues to weaken in the forecast period

Even though the LFS is currently less reliable than usual as a result of the problems discussed above, the statistical picture can be complemented by other sources. As a result, the uncertainty predominantly relates to the LFS statistics themselves, rather than to the labour market as a whole. The forecast is largely unchanged since the previous report and the revisions that have nevertheless occurred are mostly in response to the revisions to the LFS.





Note: Both series are normalised for 1996-2019. Employment is yearly percentage change in the private sector. Red outcomes are Q3 2018 to Q2 2019. Sources: National Institute of Economic Research, Statistics Sweden and the Debt Office.



Yearly percentage change



Note: Indicator is a sum of yearly percentage change of hours worked in the whole economy according to the LFS and the wage growth according the short-term wage statistics.

Sources: Statistics Sweden, Swedish Tax Agency and the Debt Office.

As expected, falling labour shortage figures and rising unemployment are some of the indicators that point to a continued decline in labour market resource utilisation, a decline that is expected to continue as the economy slows. In the shorter term, other indicators, such as companies' employment plans, clearly suggest a decrease in employment growth. Correspondingly, the relatively weak economy is expected to lead to slower growth in the labour force, to which the gradual decline in migration is also contributing. The slowdown in employment will be somewhat greater than in the labour force, leading to rising unemployment in the forecast period. The increase in unemployment is relatively slow, though, reflecting the mild slowdown in GDP growth described in previous sections.

Wages are still rising at a relatively moderate rate

Wage development according to short-term wage statistics shows that the rate of wage growth has continued to fluctuate around 2.5 per cent, similar to the past five years. Important factors behind this trend include low and diminishing expectations of future wage increases along with central collective agreements on an increase of approximately 2 per cent. The upcoming wage negotiations

are expected to result in slightly higher levels for the central agreements. Accordingly, wages are expected to increase faster in the coming years.

In line with the forecast in the previous report, payroll growth continued to slow at the end of last year. In line with historical patterns, payroll growth is expected to follow the overall economic trend during the forecast period. This means that it will be the slowest this year and then grow faster in 2021.

The payroll growth statistics are also an example of statistics that partially contradicts the picture provided by the LFS. This can be illustrated by creating an indicator for payroll growth in which the rate of wage increases according to short-term wage statistics is added to the annual change in the number of hours worked from the LFS (see Figure 14). This indicator occasionally deviates from the Swedish Tax Agency's payroll growth statistics. But viewed over a longer period, the covariance is relatively high. As the figure shows, the difference between the two series is unusually large over the past roughly twelve-month period, even though the wage increases has remained mostly unchanged.

Few signs of rising inflation

CPIF inflation is moderate, and has also been lower than expected recently. Measures of underlying inflation also indicate relatively weak price pressure (see Figure 15). CPIF inflation is expected to remain moderate and close to a historical average in the forecast period. Measured since 1995, CPIF inflation has averaged 1.6 per cent.

Figure 15. Inflation



Note: UND24 is calculated by the Riksbank and is constructed such that goods and services which vary a lot in price recieve a lower weight in the index. Dotted line shows average value since 2017 for respective series. Vertical line indicates final date for information taken into account in



Figure 16. The Swedish krona exchange rate

previous forecast of September 24, 2019.



Note: Vertical line indicates final date for information taken into account in previous forecast of September 24, 2019. Sources: Macrobond, Prospera and the Debt Office.

Sources: Statistics Sweden, the Riksbank and the Debt Office.

Several factors indicate modest price pressure during the forecast period as well. Resource utilisation in the Swedish economy is expected to continue to decline towards normal levels and wages are expected to increase relatively slowly. Inflation expectations have also continued to

decline, pointing to price increases of around 1.7 per cent in two years. Model estimates also indicate that inflation will be moderate in the long term.

In addition, the Swedish krona is expected to strengthen slowly, easing inflationary pressure. A slightly less expansionary monetary policy relative to the rest of the world and an improved sentiment at the global level are conducive to the appreciation. According to money market participants, the krona is expected to strengthen against both the US dollar and the euro (see Figure 16).

During recent years energy prices have tended to periodically increase the inflationary pressure. Now, energy prices are instead expected to dampen price increases during the forecast period. As a result of the mild weather this winter, Swedish electricity prices have fallen sharply. Electricity futures point to relatively low electricity prices in the coming years as well. In addition, oil futures indicate that global market prices will decline somewhat going forward.

Increased economic activity next year and balanced risks

In summary, the Swedish economy has developed roughly in line with the Debt Office's assessment in its previous forecast, although the revisions to the labour market statistics make the comparison somewhat difficult. Consequently, only relatively minor revisions have been made to the forecasts.

The scenario of economic activity continuing to slow in the near future remains intact and is also supported by several indicators of the expectations of businesses and households. Thus, weak development in the Swedish economy is expected for this year followed by somewhat more rapid growth in 2021.

Some risks have diminished since the previous report

Some of the risks discussed in the previous report have decreased in recent months. For example, the US–China trade dispute has eased and a partial deal, the Phase 1 agreement, has recently been signed. In addition, the UK has left the EU with an agreement regulating short-term relations with the EU, which has reduced uncertainty. There have been several indications that confidence has improved, which entails the possibility that the economic development in the UK could be stronger than projected. Should uncertainty surrounding the trade dispute between the US and China and the UK's upcoming agreement on relations with, above all, the EU, subsides faster than expected, the economy may be strengthened more than in the baseline forecast scenario.

Similarly, in Sweden, uncertainty towards the statistics in the Labour Force Survey has diminished now that Statistics Sweden has identified the error and also revised the statistics. Nevertheless, a large amount of uncertainty due to the halved sample size remains.

Risks that have increased- Corona virus in focus in the short term

A risk that has instead increased is that from the tense situation between Iran and the US. Since the previous report was published, the level of conflict has escalated significantly. If tensions in the area grow, oil prices will likely rise and risk premia in the financial markets will increase.

A new risk is the outbreak and spread of the coronavirus in China. The impact this will have on the international economy depends on how extensive the spread is and how long it will take to gain control of the virus. In order to get an approximate idea of the size of the economic consequences, several analyst have studied the development in connection with the outbreak of the coronavirus SARS in the early 2000s. In that case, GDP growth fell relatively sharply initially in the countries most affected, but recovered rapidly when the virus was under control.

In the Debt Office's main scenario, growth in China will be affected in the coming quarters. Closed production facilities and restrictions that limit trade and travel will leave an imprint on the Chinese economy. In addition, the service sector constitutes a larger part of the Chinese economy today than at the time of the SARS outbreak. To some extent, the limited production in China this has already spread to other countries, which have also had to cut production as a result of lower demand from China and partly the lack of input goods from China.

Compared to the SARS outbreak, the risk of spreading the new coronavirus is greater, partly because more people are traveling today. The risk of economic spread is also greater, even if the outbreak is limited to China. Today, China is a larger part of the world economy than fifteen years ago, and thus a more important engine for global growth (see Figure 4). These two proliferation risks may, in turn, cause the outbreak to have greater impacts on the global economy than assumed in the main scenario.

Balanced risks – but risks associated with low interest rates remain

The risk picture is mainly balanced, given the forecast period as a whole. However, the clearest and greatest risks are different in nature. The downside risk in the form of the corona virus is more short-term, while the upside risks in the form of the declining trade conflict and a more orderly Brexit than expected are more long-term.

However, the risks associated with the low interest rate situation persist. The policy rates of central banks in both Sweden and large parts of the world remain low, and both the central banks' own forecasts as well as the expectations of market participants indicate that they will continue to be low in the coming years. The low interest rates have led to increased risk taking in the financial markets and squeezed risk premia to very low levels. If something were to cause financial market participants to re-evaluate the price of risk, risk premia could thereby rise rapidly and asset prices could fall sharply in several markets. This could, in turn, have an adverse effect on the development of the real economy.

Budget deficits in both 2020 and 2021

A deficit in the central government budget is expected this year and the next. That is a major reversal compared with the large surplus from last year, which was, however, largely driven by temporary events. The ongoing slowdown in the Swedish economy means that the central government's income from taxes grows more slowly this year than last year. GDP growth is expected to rise again at the end of the forecast period, which, among other things, also leads to faster growth in income from taxes. However, net outflows of capital investments from tax accounts weigh on the forecast for the budget balance this year and the next. The budget deficit will be smaller than the Debt Office previously estimated, especially next year, both due to higher tax income and lower spending.

Surplus turns into a deficit 2020

After four years of surpluses, the budget balance shifts to a deficit for both 2020 and 2021. The weaker economy has left its mark on central government finances in the form of, for example, slower growth in income from taxes for the central government, while the interest rate environment contributes to increased withdrawals of capital investments from tax accounts. Nevertheless, there is considerable uncertainty in regard to the timing of these impending withdrawals.

The rapid change in the budget to a deficit for the current year is mainly due to temporary factors. In 2019, the budget balance was largely driven by the Riksbank having chosen to not refinance foreign currency loans equivalent to SEK 69 billion. This contributed to more than half of the surplus.

67 -22 112	-7 -27 -14	(-25) (-25) (-17)	-7 -6 -14	(-21) (-8) (-4) (-27)
67	-7	(-8)	-7	(-8)
		· · ·		. ,
00	15	(20)	20	(21)
69	-19	(-23)	-20	(-21)
65	32	(31)	12	(-1)
come	Feb	(Oct)	Feb	(Oct)
2019		2020		2021
	come	come Feb	come Feb (Oct) 65 32 (31)	come Feb (Oct) Feb 65 32 (31) 12

Table 1. Central government budget balance, 2019-2021

¹The primary balance is the net of the central governments income and expenditure excluding interest payments and the SNDO net lending.

²The SNDO net lending entails the net of government agencies and others loans and deposits in the Debt office. The net lending includes both current central government operations and temporary occurrences which can be decided on short notice.

³The budget balance corresponds to the net borrowing requirement with the opposite sign. The Table shows net lending and interest payments with opposite sign compared to Tables 4 and 5.

Next year, the budget balance is expected to remain essentially unchanged from this year. Although the primary balance is weakened, it is completely offset by lower expenditure for interest payments on central government debt. For 2021, the Debt Office expects unfunded fiscal reforms of

SEK 15 billion to partially contribute to the weakening of the primary balance. In aggregate, the Debt Office expects a central government budget deficit of SEK 14 billion for 2020 and SEK 14 billion for 2021 (see Table 1).³

What drives the primary balance?

The Debt Office divides the central government budget balance into a primary balance, net lending, and interest payments on central government debt. The primary balance is the difference between the central government's incoming and outgoing payments excluding interest payments and the Debt Office' net lending.

Fiscal policy determines, among other things, the framework for expenditure and tax regulations through the central government budget. However, the state of the economy is also an important factor in the Debt Office's forecast work. The current macroeconomic situation affects mainly tax income for the central government. When the economy is strong, corporate profits, for example, increase and a strong labour market boosts income from wages. When the economy is weaker, tax income decreases or grows at a slower rate. GDP growth in current prices offers a good indication of the growth in tax bases.

The state of the economy also affects central government finances through interest rates. One such effect is that the low interest rate environment of recent years has resulted in companies and private individuals using their tax accounts as a form of savings account. An outflow from tax accounts is expected when interest rates rise in the periods ahead. This outflow can be seen as an inverse macroeconomic effect. As interest rates rise, the primary balance will decrease as companies and private individuals are expected to withdraw funds from their tax accounts when higher returns will likely be available elsewhere.

The primary balance decreases as the outflow of capital investments in tax accounts grows

The weaker business cycle contributes to a slower increase in aggregate income for the central government compared with the corresponding period the previous year. A weaker labour market contributes to slower payroll growth this year and consequently also in central government tax income from wages. Central government income from corporate taxes is also expected to develop more slowly this year as a result of a somewhat weaker profit trend in the business sector compared with the previous year. Household consumption, however, is strengthened during the year, which contributes to higher tax income from value-added tax and selective taxes (excise duties).

By 2021, the economy is expected to strengthen again and, correspondingly, tax income from wages and companies are too. In addition, the slightly higher interest rate level contributes to a reduction in capital investments in tax accounts in the coming years. For 2021, the primary balance

³ For a forecast comparison between the Debt Office and other forecasters, see Appendix, Table A5.

will also be burdened by SEK 15 billion in unfunded fiscal reforms, which is unchanged compared with last forecast.

In the forecast period, the primary balance decreases from a surplus of SEK 65 billion in 2019 to just over SEK 32 billion in 2020 and SEK 12 billion in 2021. The falling primary balance between the years is a consequence of the outflow of capital investments from tax accounts and budgetary policy reforms such as the abolition of the austerity tax.

The primary balance is thus revised upwards by SEK 1 billion in 2020 and by SEK 13 billion in 2021 (see Table 2). The Debt Office now expects an outflow of capital investments from tax accounts of SEK 10 billion already in 2020. This is offset by higher dividends from state-owned companies and somewhat lower expenses for, among other things, the labour market. The upward revision for 2021 is mainly a result of the fact that the outflow of capital investments is expected to be SEK 10 billion lower than what the Debt Office estimated in October.

SEK billion	2020	2021
Forecast October 2019	-17	-27
Primary balance	1	13
Of which:		
Tax income excl. capital investments in tax accounts	6	5
Capital investments in tax accounts	-10	10
Dividends	5	0
Government grants to local governments	0	0
Labour market	3	0
Social insurance	2	2
Migration	1	0
International aid	0	0
Other	-6	-4
SNDO Net lending	4	1
Of which:		
On-lending	1	1
Interest payments	-2	-2
Forecast October 2019	-14	-14
Sum of changes	3	13

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.

Income from corporate taxes picks up as exports recover

Outcome data and indicators point to above all a weak development for goods exports this year, contributing to expectations of slower growth in corporate profits than in the previous year.

In the second half of 2020, global demand is expected to gradually strengthen – which, coupled with the weak Swedish krona, is expected to favour Swedish export (see Chapter 1). Therefore, profits are expected to pick up again at the end of the forecast period and central government income from corporate taxes is expected to rise slightly faster than in the current year. Stronger growth in GDP and exports at the end of the forecast period contribute to income from corporate taxes being revised upwards somewhat for both 2020 and 2021 compared with the previous forecast (see Table 3).

Dividends on state-owned shares

Dividends on state-owned shares are higher in the current forecast for 2020 compared with the forecast from October last year (see Table 2). Mainly, shares from Vattenfall have been revised upwards substantially as the company has proposed a dividend of over SEK 7 billion for the financial year 2019. In the previous forecast, the Debt Office's assessment was that the dividends would remain at the same level as in the financial year 2018 (see Table A6 in the appendix).

Increased withdrawals from tax accounts contribute to expectations of lower supplementary taxes

Companies and private individuals make supplementary payments to the Swedish Tax Agency, mainly concerning previous tax years. As growth subsides, supplementary payments to the Swedish Tax Agency are expected to drop. This is due to, among other things, private individuals' capital gains being expected to decrease in the period.

These supplementary tax payments also include deposits and withdrawals of capital investments in tax accounts. The inflow of capital investments in tax accounts increased drastically in 2015 as a result of the positive interest rate differential that has existed, between tax accounts and other comparable investment options (see Figure 1). Capital investments in tax accounts has been an expensive form of borrowing for the central government. In addition, deposits in tax accounts can become a detriment to the functioning of the money market.



Figure 1. Balance in tax account

Figure 2. Assessment of capital investment flows to the tax account

In the previous forecast, the Debt Office calculated total withdrawals of capital investments in tax accounts for 2021 to be SEK 25 billion. The Riksbank raised its policy rate in December, which was not expected according to market pricing when the previous forecast was made. This reduces incentives, for companies in particular, to keep funds in tax accounts. Accordingly, the Debt Office has, among other things, revised its assessment for withdrawals to be SEK 10 billion in 2020 and SEK 15 billion in 2021 (see Figure 2). The assessment is subject to great uncertainty.

Taxes from wage income remain essentially unchanged

Income from wage-based taxes is expected to increase at the same rate as in the previous forecast. Payroll development, which is the most important assumption in the forecast is expected to increase marginally this year but slightly faster next year. At the same time, the tax reductions implemented at year-end such as the removal of the upper cut-off point for state tax, and a tax cut for pensioners, were included in the previous forecast.

Slightly higher income from consumption taxes

Income from value-added tax was slightly higher at the end of 2019 than forecast. This means that the level calculated for both this year and the next increases somewhat, even though consumption is not expected to increase faster. Selective taxes (excise duties) also increase slightly more than in the previous forecast, as does income from road tax.

Table 3. Tax income, changes from previous forecast

SEK billion	2020	2021
Payroll taxes	-1	-1
Consumption taxes	5	5
Corporate taxes	2	1
Supplementary taxes	-10	10
Total	-4	15

Note: The table shows changes in terms of budget balance.





Sources: The Swedish Tax Agency and the Debt Office.

Social insurance expenditure is increasing at a slower rate

In 2020 and 2021, social insurance expenditure is expected to be somewhat lower compared with the previous forecast (see Table 2). The forecast is lowered for many benefits, but the majority of the individual changes are small and the aggregate effect is therefore only SEK 4 billion for both years combined.

-10

Among other things, expenditure is decreasing because social insurance is expected to cover slightly fewer individuals, thereby causing the daily allowance to decrease in total. The adjustment of the forecast is also due to a somewhat weaker outcome than expected. The average number of hours within the state assistance allowance has been lower than expected, and development for pension-related benefits that weigh on the central government budget has also been weaker than expected.

The contributing factors to the downward revision of the forecast for 2020 are, to a certain extent, countered by expenditure within childcare and child carer's allowance being postponed from 2019 to 2020. The postponement is due to the childcare allowance being abolished, to be replaced by the child carer's allowance. The downward revision is also counterbalanced by a somewhat higher inflation forecast. The majority of insurance benefits are, in fact, indexed to the price base amount, which is adjusted upwards with inflation.

Continued lower labour-market-related expenditure in 2020

Compared with the previous forecast, labour market-related expenditure is expected to be lower during 2020. However, neither the unemployment trend, nor the new political proposals offer the most important explanation for this. Even though unemployment benefit expenditure increased in

2019 compared with the year before in light of the economic downturn, the latest outcomes have been close to projections, hence only marginal forecast revisions have been made.

The primary reason for the reduction in expenditure, just as in 2019, is instead the reformation of the Swedish Public Employment Service (Arbetsförmedlingen) that has begun. Arbetsförmedlingen has, however, been given instructions in its spending authorisation for 2020 that include broadening its local presence, which is expected to increase expenditure when carried out. In total, the lower level of expenditure is expected to remain during the beginning of 2020 and then gradually return to the level of the budget towards the end of the year.

The cumulative effect is that overall labour-market expenditure decreases in 2020. In 2021, labourmarket-related expenditure is expected to be in line with what is proposed in the central government budget, and no revision has been made to the forecast.

able 4. The Debt Office's net lending to government agencies and others						
SEK billion	2019	2020	2021			
Lending	-62.5	22.2	23.2			
Of which:						
Swedish board of student finance	7.3	7.4	8.7			
Swedish Transport Administration	-1.6	4.2	4.6			
On-lending to the Riksbank	-67.4	6.9	7.0			
Other	-0.8	3.6	2.8			
Deposits	3.9	3.5	3.1			
Of which:						
Swedish board of student finance, credit reserve etc.	1.2	1.5	2.0			
Resolution reserve	5.8	3.3	3.4			
Premium pension system, net ¹	-3.1	-1.5	-2.8			
Other	0.0	0.1	0.4			
Net lending	-68.8	18.7	20.1			

Table 4. The Debt Office's net lending to government agencies and others

¹ Premium pension refers to the net of pension fees, payments to funds and management fees.

Debt Office net lending decreases somewhat

In 2019, net lending by the Debt Office to government agencies and other parties was SEK -69 billion. This increase in the budget balance was almost exclusively due to the Riksbank choosing to not refinance large foreign currency loans that matured. In 2020 and 2021, net lending is expected to amount to SEK 19 billion and SEK 20 billion, weakening the budget balance. The largest amount of lending is expected to be to the Swedish Board of Student Finance (CSN) and the Swedish Transport Administration (Trafikverket).

However, lending is less than the Debt Office calculated in its previous forecast. The revisions are largely attributable to lower outcomes, mainly from lower lending for infrastructure investments in 2019. In addition, the Swedish krona has recently strengthened somewhat, which means that onlending to the Riksbank decreases in kronor when foreign currency loans that mature in the forecast period can be refinanced at a more favourable exchange rate. Furthermore, deposits from the premium pension system are expected to be greater and net lending thereby lower, because the share of payroll funds that the Debt Office has allocated to premium pensions has been adjusted upwards by 0.1 percentage point for 2020. The forecast for payroll growth is lowered for 2020 but raised for 2021, respectively reducing and increasing deposits to the Debt Office. However, the regulatory changes for premium pensions are the largest contributing factor to the total effect in 2020.

Net lending by the Debt Office

Net lending by the Debt Office to government agencies is an item on the expenditure side of the central government budget. This means that if the Debt Office's 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 (treasury), at 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.

Interest payments on central government debt

Central government's interest payments fall sharply between 2020 and 2021, which is because the Debt Office is paying a relatively large amount of inflation compensation during 2020. When inflation-linked bonds mature or are repurchased, the central government pays compensation for the inflation that has accrued since the bonds were issued.

Payments of inflation compensation in 2020 are made for two reasons: as a result of the inflationlinked bond maturing in December⁴, and because the Debt Office is paying for inflation-linked bonds bought back in switch auctions in connection with the introduction of a new inflation-linked bond⁵. There is no such effect the following year, which is why interest payments decrease. In 2021, coupon payments will also be lower as bonds with a high coupons will expire at the end of 2020. In

⁴ SGB IL 3102

⁵ SGB IL 3114

addition to the inflation-linked bond above, the nominal bond is maturing⁶. Central government's interest payments are estimated at SEK 27 billion this year and SEK 6 billion in 2021 (see Table 5).



SEK billion	2020	2021
Interest on loans in SEK	23.4	2.7
Interest on loans in foreign currency	-0.3	0.3
Realised currency gains and losses	4.3	3.0
Interest payments	27.3	6.0

Figure 4. Interest payments, 2011–2021 SEK billion



Compared with the previous report, the forecast has been revised upwards by around SEK 2 billion for both 2020 and 2021. This is mainly due to lower premiums for government bond issues as a result of higher interest rates compared with the previous forecast. When the market interest rate is lower than the coupon rate at issue, the bond is purchased at a premium. Compared with the previous forecast, market interest rates are higher and the forecast issue premiums have decreased.

The Debt Office uses cut-off rates in calculating central government interest payments and in measuring the Riksbank's foreign currency loans. The cut-off date for this forecast is 31 January 2020.

Tax accounts continue to shape the risk scenario

Just as in the forecasts for macroeconomic development, the Debt Office's forecast for the budget balance for the previous year was close to the outcome. In October, the Debt Office's assessment was that the budget balance for 2019 would be a surplus of SEK 113 billion. The outcome was SEK 112 billion.

Compared to the last forecast the budget balance deficit is now expected to be smaller, especially next year. The revision of SEK 3 billion for 2020 and SEK 13 billion for 2021 is both due to higher income from taxes and lower spending. Also, the timing of withdrawals from tax accounts has been revised. This contributes to the revision the budget balance with SEK -10 billion this year and SEK

Uncertainty remains in regard to capital investments in tax accounts

There are several uncertainties that can affect the budget balance ahead and which are also difficult to fully take into account in the forecasts.

In the long term, the state of the economy is the most important factor affecting the budget balance. The interest rate trend and its significance for investments in tax accounts can be viewed as a macroeconomic effect – but one which affects the budget balance in the opposite direction than is

⁶ SGB 1047

usual according to macroeconomic theory. With a higher interest rate, companies and private individuals will withdraw their capital investments from their tax accounts faster, which leads to a lower budget balance. Correspondingly, the budget balance can be strengthened if for some reason the expected outflows do not materialise, for example as a result of improved cash flows for businesses. Capital investments in tax accounts are also greatly affected by the preferences of companies and individuals, which makes it difficult to assess the timing of the withdrawals.

On the expenditure side, the UK's withdrawal from the EU could increase Sweden's EU fee, which would weaken the budget balance. In the current forecast, the Debt Office has made no assessment of how the EU fee will be affected by Brexit.

Sweden is also facing a demographic challenge with an increasing proportion of elderly people in the population. This can lead to the central government having to transfer resources to the municipalities, which can weaken the central government's budget balance. It has already been announced by the Government that, in 2020, the municipalities will be allocated extra funds in the spring amending budget. At present, it is not known how the allocations will be financed. It is thus unclear how this affects the budget balance. The Debt Office's assessment is that the full effect on the budget balance from the demographic situation will not likely be seen until a point beyond the forecast horizon.





Note: The figure above shows the deviation between outcome and forecast in budget balance terms. A lower net lending to agencies implies a higher budget balance.

budget balance, 2010-2021

SEK billion

200



Figure 6. Central government net lending and

Sources: Statistics Sweden and The Debt Office.

Source: The Debt Office.

Central government net lending

The four budget policy objectives within the fiscal policy framework are divided into the following areas: surplus target, expenditure ceiling, debt anchor, and keeping local government finances in balance.

Central government net lending is followed up on within the parameters of the surplus target. Under the current surplus target, net lending for the general government sector as a percentage of GDP is to amount to one-third on average over a business cycle. The expenditure ceiling entails that the Government shall propose a ceiling for central government and retirement pension scheme expenditure with a three-year horizon. The Riksdag (the Swedish Parliament) then establishes the ceiling. The debt anchor is a target value, or benchmark, set for the size of the general government consolidated gross debt in the medium-term (see also the in-depth box *Different measures of central government debt in the statistics*, on page 36). The current debt anchor is 35 per cent of GDP. The fourth budget policy objective is for all local governments to have budgets in balance.

Central government net lending is the difference between income and expenditure distributed over a period of time. Accordingly, net lending distributes payments between the points in time that the financial activity occurred. The budget balance is instead a cash measure, which means it measures incoming and outgoing payments of liquid resources. Net lending is generally a better indicator of the underlying central government finances than the budget balance is.

Net lending can also be defined as the change in the central government's financial wealth excluding changes in value. This means that payments not affecting the state's financial wealth are excluded. The sale of financial assets, on-lending to the Riksbank, and capital investments in tax accounts thereby do not affect net lending. If the central government sells financial assets, assets are reallocated in the balance sheet, which does not affect net lending. However, the budget balance increases with the total sales. When the Debt Office raises loans on behalf of the Riksbank, the central government budget from financing that loan. Net lending for the central government is not affected, while the budget balance decreases by the corresponding amount. Within the framework for net lending, capital investments in tax accounts are measured as deposits instead of as income from taxes. Capital investments in tax accounts thus do not affect net lending, although they boost the budget balance.

According to the Debt Office's forecast, central government net lending is expected to reach 1.0 per cent of GDP for 2019, 0.7 per cent in 2020, and 0.3 per cent in 2021 (see Figure 6). This is 0.2 percentage points higher than in the previous forecast for both 2019 and 2020. The forecast for 2021 is 0.1 percentage points higher (See Table A1 in the appendix).

Bond borrowing remains unchanged

The new budget balance forecast does not prompt any change in the issuance plan, and the debt office is continuing to gradually increase the issuance volume of nominal government bonds. The only change is in regard to treasury bills, for which the auction volume is increased temporarily at the end of 2020 in connection with bond redemptions. As previously, the Debt Office expects to issue a green bond in 2020 without affecting the current borrowing plan. The Debt Office still sees no scope for an ultra-long bond.

The borrowing plan is largely the same as in October

As described in the previous chapter, the central government budget is expected to show a deficit this year and the next, compared with the October forecast. The total central government borrowing requirement decreases by altogether SEK 18 billion in the forecast period, which means that the Debt Office will need to borrow less within liquidity management than previously planned. Bond borrowing therefore remains unchanged, and the auction volume of nominal bonds continues to be gradually increased. At the end of 2020, there will be a redistribution within short-term borrowing. The auction volume of treasury bills will be temporarily increased then in connection with bonds maturing at the same time as funding within liquidity management decreases (see Table 1).

	2019	2	020	20	21
SEK billion	outcome	Feb	(Oct)	Feb	(Oct)
Money market funding	101	168	(170)	110	(124)
T-bills	20	55	(40)	68	(68)
Liquidity management	81	113	(130)	43	(57)
Bond funding	57	119	(120)	117	(118)
Nominal government bonds	30	51	(51)	60	(60)
Inflation-linked bonds	8	9	(9)	9	(9)
Foreign currency bonds	19	59	(60)	48	(49)
Total gross borrowing	158	287	(290)	227	(242)

Table 1. Borrowing according to new forecast

Note: Money market borrowing corresponds to the outstanding stock as of last December.

Source: the Debt Office

The volume of the planned green bond issue in 2020 has not yet been determined, but it will not affect borrowing in traditional government securities in accordance with the plan above. Instead, funding within liquidity management will decrease by the amount that the Debt Office borrows in the green bond (see the box on green bond issuance on page 33).

The Debt Office still sees no scope for issuing an ultra-long bond. Since the borrowing requirement is limited also in the periods ahead and liquidity in the government bond market is strained, the Debt Office prioritises borrowing in the existing terms to maturity (see the box on next page).

Poorer liquidity in the government securities market

Liquidity in the government securities market has gradually deteriorated in recent years and is considered to be increasingly strained. This is apparent in the annual questionnaire survey conducted for the Debt Office. Figure 1 shows the market participants' assessment of liquidity in the market for nominal government bonds. The problems described are that it has become more difficult to find government securities in the market and that wider spreads have increased transaction costs. Normal trading lots can still be purchased but larger volumes take longer to trade than before.

According to the survey, the deterioration is largely due to the Riksbank's purchase of central government securities in combination with the Debt Office's reduced supply having shrunken the volume of central government securities available in the market and the fact that turnover has decreased. Another important reason is that regulatory changes have made it more expensive for the Debt Office's primary dealers to maintain a trading book.









Note: Average daily turnover over the past 60 trading days in relation to the average outstanding stock during that period.

Sources: The Riksbank and the Debt Office.

The decrease in market activity is evident in the Riksbank's turnover statistics. Figure 2 shows the turnover ratio for nominal government bonds, i.e. the share of the outstanding stock that is traded on average per day. The turnover ratio has decreased for a long time, and at the end of January it was about a third of what it was in early 2012. The dashed line in the figure illustrates the turnover ratio when adjusting for the Riksbank's holdings in the outstanding stock. The Riksbank's purchases have meant that a significant portion of the bonds are no longer traded in the market – but, for the remainder of the stock, the turnover ratio is at approximately the same level as when the Riksbank began making its purchases in 2015.

Extra auction volume following the introduction of SGB 1062

After several years of surpluses, the central government budget is expected to show deficits this year and the next (see Figure 3). Issuance in government bonds is gradually raised in order to meet the higher borrowing requirement. As previously planned, the volume per auction increases from the current SEK 2 billion to SEK 2.5 billion after the summer and to SEK 3 billion in January next year, thus doubling the rate of borrowing compared with the historically low level in 2019 (see Figure 4).



Note: The net borrowing requirement is the budget balance with the opposite sign. "Other" includes an adjustment as net borrowing requirement is reported by settlement date while borrowing is reported by trade date.



Note: Borrowing excluding financing of on-lending to the Riksbank. The amount of T-bills refers to the outstanding stock as at year-end.

Source: The Debt Office.

Source: The Debt Office.

The majority of the auctions will be made in the ten-year maturity segment. Due to the limited borrowing requirement in recent years, the Debt Office has largely had to concentrate issuance to the ten-year segment in order to build up the volume of new bonds. Since borrowing is now gradually increasing, there is somewhat greater scope in the borrowing plan for issuing in other maturities, mainly two-year and five-year bonds.

The annual survey conducted for the debt office of investors and primary dealers shows that demand is greatest for terms to maturity of up to ten years. More than 90 percent of respondents expressed interest in bonds in that segment. The corresponding figure for the 10-year and 20-year terms to maturity was 65 and 36 percent, respectively. In the case of very long terms to maturity (50–100 years), 6 per cent of those surveyed responded that they were interested in such bonds.

Reference bonds in the electronic interbank market

The reference bond is the bond that is closest to two, five or ten years in term to maturity. Reference bonds are changed on the IMM dates (International Money Market): the third Wednesday in March, June, September, and December. New reference bonds are those closest to two, five or ten years to maturity on the subsequent IMM date.

Date of change	2-year	5-year	10-year
Current	1054	1058	1061
16/09/2020			1062
16/12/2020	1057	1059	

Note: The dates of change refer to settlement days.

On 25 March 2020, the Debt Office will introduce a new bond that matures on 12 May 2031: SGB 1062. Normally, the Debt Office offers switches on three occasions immediately after introducing new bonds in order to quickly increase the volume in the new issue. As described in the previous report, only one switch auction will be offered from the current benchmark bond SGB 1061 (see Table 2).

To replenish the volume in the new issue, the Debt Office will instead increase the auction volume to SEK 5 billion in the auctions on April 22 and 6 May. Due to the limited issuance in recent years, the outstanding volume of bonds in the ten-year segment is relatively small. Therefore, there is not as much outstanding volume to switch from as in previous introductions of new bonds (see Figure 5). Considering that the Riksbank owns a large share of the limited stock, there is a risk that it might be difficult for the Debt Office to buy back a sufficiently large volume in such switches in order to build up the outstanding volume of the new bond. Also, if the outstanding stock of the existing bonds decreases further, there is a risk of market liquidity worsening further.



Figure 5. Utestående statsobligationer och Riksbankens andel per den sista januari 2020

Switches from SGB IL 3104 on the introduction of a new inflation-linked bond

The issuance volume of inflation-linked bonds remains at SEK 0.5 billion per auction until the end of 2021. This corresponds to an annual volume of SEK 8.5 billion. With the current borrowing plan, the share is expected to reach the target value of 20 per cent of the debt at the end of next year when SGB IL 3102 matures (see Figure 6).



As previously planned, the Debt Office will offer further switches to the newly introduced bond SGB IL 3114 in March 2020. The majority of the switches will be made from SGB IL 3104 in order to reduce the risk that that bond becomes disproportionately large in relation to the other issues. If the share were to exceed 30 percent, problems could ensue for many managers who track inflation-linked bond indices and, in turn, create barriers to the already illiquid inflation-linked bond market.

Green issuance complements the regular borrowing

The Debt Office will issue a green bond in 2020. The green bond is a complement to the traditional government bonds – but for which the proceeds are connected to central government budget expenditure for achieving Sweden's environmental and climate goals.

The Government Offices are responsible for developing a framework for the central government's green bonds, stipulating how the green expenditure is defined, selected, accounted for, reported, and monitored. Investors should be able to easily and clearly monitor the expenditure to which the bond they buy is linked as well as the climate and environmental effects achieved.

The mandate is to carry out one issuance of a green bond, which will then be evaluated. The issuance volume is to be established based on the target for central government debt policy and with sufficient margin within the volume of selected green expenditure items.

Based on the above framework, the Debt Office expects that the green issuance will not affect the current borrowing plan in traditional government securities.

The auction volume of treasury bills is increased temporarily at the end of 2020

The issuance of treasury bills has been reduced to a minimum in recent years because of the historically low borrowing requirement. At the end of 2020, the surplus in the liquidity management shifts to a deficit as a large volume of bonds mature. In connection with this, and as previously announced, the stock of treasury bills will increase as the Debt Office returns to holding auctions every two weeks and, at the same time, increases the auction volume to SEK 7.5 billion per auction.

New for this forecast is that the issuance volume will be increased further to SEK 10 billion per auction in November and SEK 12.5 billion per auction in December. Thereafter, the Debt Office will return to an issuance volume of SEK 7.5 billion per auction. The outstanding stock thus increases to SEK 55 billion at the end of 2020, compared with SEK 40 billion in the October forecast. For 2021, the forecast is unchanged and the stock is expected to grow to SEK 68 billion during the year.

The purpose of the temporary increase is to mitigate the change from a surplus to a deficit in the central government's cash management. Figure 7 shows the amount that remains to invest or finance as part of liquidity management, taking into account the adjusted volumes of treasury bills.

Historically, treasury bill borrowing has varied to a greater extent in order to counteract fluctuations in central government payments between months. In recent years, the stock has been so small that the instrument has not been able to perform such a function. As the stock of bills now grows again, it is possible to adapt the volumes to the short-term borrowing requirement to some extent.



Figure 7. Balance in liquidity management

Note: Positive amounts correspond to cash surpluses. Repo volume is assumed to be SEK 10 billion on average until August 2020 and SEK 5 billion thereafter. The forecast does not include the green bond. The green bond issue will lead to a higher balance (all else equal).

Source: The Debt Office.

Volume of interest rate swaps remains the same

The volume of interest rate swaps remains unchanged at SEK 5 billion per year during the forecast period. The stock of outstanding interest rate swaps thereby continues to decrease (see Table 3). The Debt Office receives fixed interest, and pays variable interest, in kronor in the swaps, and the planned term to maturity is about three years.

The use of interest rate swaps has decreased in recent years as a result of the Government's decision to extend the interest rate refixing period in the guidelines for central government debt management. The change is due to the Debt Office's analysis that there is no longer the same expected savings to be had from borrowing in short terms to maturity compared with long terms to maturity as has been the case historically. Figure 8 shows how duration has developed.

Table 3. Change in outstanding swaps

	2019	2020	2021
SEK billion	Outcome	Feb (Oct)	Feb (Oct)
New swaps ¹	5	5 (5)	5 (5)
Maturing swaps	41	31 (31)	44 (44)
Net change	-36	-26 (-26)	-39 (-39)

¹ Interest rate swaps from fixed to floating rate in SEK





Source: The Debt Office.

Foreign currency bonds for the Riksbank

No bond borrowing in foreign currencies is planned apart from refinancing loans to the Riksbank. The Debt Office expects all maturing loans to be replaced with new foreign currency bonds in the forecast period. The euro bond that matured in February this year was temporarily replaced with short-term borrowing in commercial paper, which meant that the bond issue was delayed. Bond borrowing in foreign currency is estimated to comprise a total of SEK 59 billion this year and SEK 48 billion next year, in line with the previous forecast.

Central government debt decreases somewhat

Central government debt is estimated to amount to SEK 1,100 billion at the end of 2021, corresponding to 21 per cent of GDP. The level is somewhat lower than in the Debt Office's forecast from October. The Maastricht debt is expected to remain at around the current level and amount to 35 per cent of GDP at the end of the forecast period (see Figure 9 and table 4). The Maastricht measure refers to the general government consolidated gross debt and is commonly used in international comparisons (see the fact box on the next page).





SEK billion	2017	2018	2019	2020	2021
Net borrowing requirement (budget balance with opposite sign)	-62	-80	-112	14	14
Business day adjustment etc ¹	4	37	-15	-19	0
Net borrowing per business day	-58	-43	-127	-5	14
A. Nominal amount including money market assets	1 203	1 160	1 033	1 029	1 042
Inflation compensation	23	28	26	18	18
Exchange rate effects	11	26	26	24	14
B. Nominal amount to current exchange rate incl. inflation compensation	1 237	1 215	1 085	1 071	1 075
Assets under management	91	47	28	25	25
C. Central government debt	1 328	1 262	1 113	1 096	1 100
Assets under management	-91	-47	-28	-25	-25
On-lending	-238	-259	-193	-198	-198
D. Debt incl. on-lending and assets under management	999	956	893	872	876
Nominal GDP	4 621	4 834	4 992	5 1 1 2	5 284
C. Central government debt, % of GDP	29	26	22	21	21
D. Debt incl. on-lending and money market assets, $\%$ of GDP	22	20	18	17	17

Table 4. From net borrowing requirement to central government debt

¹A difference occurs as borrowing is reported by trade date and the net borrowing requirement by settlement date.

Different measures of government debt in statistics

There are different ways of measuring government 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 treasury 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 Budget Bill and in the annual report for the central government. The consolidated debt is calculated by the Swedish National Financial Management Authority (ESV).

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

Appendix of Tables

Key tables, forecasts

Table A1.Central government net lending

SEK billion	2017	2018	2019	2020	2021
Budget balance	62	80	112	-14	-14
Delimitations	13	5	-62	31	23
Sale of limited companies	0	2	0	0	0
Extraordinary dividends	0	0	0	0	0
Parts of Debt Office's net lending	-2	6	-68	20	22
Other delimitations etc.	15	-3	6	10	1
Accruals	0	-19	-2	21	4
Taxes	0	-20	-8	13	5
Interest payments etc.	1	1	7	7	0
Central government net lending	75	64	48	37	14
Per cent of GDP	1.6	1.3	1.0	0.7	0.3

SEK billion	Primary balance	Net lending	Interest on central government debt	Budget Balance
Feb-20	46.2	0.8	-1.5	45.5
Mar-20	-7.9	1.7	-5.8	-12.0
Apr-20	-9.3	2.1	0.3	-6.8
May-20	47.6	-0.8	-1.7	45.1
Jun-20	-23.0	4.9	-4.2	-22.3
Jul-20	3.0	4.3	0.3	7.6
Aug-20	22.8	3.5	0.4	26.7
Sep-20	1.1	2.2	0.4	3.7
Oct-20	-6.9	-1.2	0.9	-7.3
Nov-20	12.8	2.8	-2.0	13.6
Dec-20	-47.9	41.7	-15.6	-105.2

Table A2. Budget balance per month, SEK billion

Table A3. Sensitivity analysis for budget balance

The Debt Office does not usually produce an overall sensitivity analysis for the budget balance. Instead, a partial analysis of the effects from changes in certain key macroeconomic variables is presented. The table shows an estimate of the effects that different changes have for the budget balance on a one-year term. The effects can be combined in order to make an assessment of an alternative scenario in which several macroeconomic variables develop differently.

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

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

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

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

Table A4. Budget balance changes between 2017 and 2021

SEK billion	2017	2018	2019	2020	2021
Budget Balance	62	80	112	-14	-14
Change from previous year	-24	18	32	-126	1
Primary balance:	-31	29	-22	-33	-19
Of which					
Tax income	4	66	-8	7	26
Government grants to local governments	-12	-5	-9	-8	0
Labour market	0	-1	7	-2	-4
Social insurance	4	-14	-5	5	1
Migration & International aid	-5	14	11	-1	0
Sales of state-owned assets	0	2	-2	0	0
Share dividends	-4	6	0	5	-4
EU contribution	2	-9	0	-5	-10
Other	-20	-31	-29	-34	-28
Debt Office's net lending excl. on-lending	7	-1	-5	-13	-1
On-lending	10	-7	78	-74	0
Interest on government debt	-9	-3	-8	-6	21

Table	Δ5.	Forecast	comparison
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SEK billion	Budget balance	Sale of state assets	Adjusted budget balance
The Debt Office (18 Feb)			
2020	-14	0	-14
2021	-14	0	-14
Government (18 Sep)			
2020	47	5	42
2021	38	5	33
NIER (18 Dec)			
2020	24	0	24
2021	25	0	25
ESV (22 Nov)			
2020	10	0	10
2021	14	0	14

Table A6. Dividends on state owned shares

SEK Billion	2019	2020	2021
Akademiska hus AB	1.7	1.6	1.6
LKAB	3.2	3.2	2.7
Telia Company AB	3.8	4.0	3.9
Vattenfall AB	2.0	7.2	4.0
Sveaskog AB	1.1	1.1	1.1
Other corporations	3.1	2.8	1.7
Total	14.8	19.9	15.0

Market information

Table 6. Government bonds, auction dates

Announcement	Auction date	Settlement date
19-Feb-20	26-Feb-20	28-Feb-20
04-Mar-20	11-Mar-20	13-Mar-20
18-Mar-20	25-Mar-20	27-Mar-20
21-Feb-20	26-Mar-20*	30-Mar-20
15-Apr-20	22-Apr-20	24-Apr-20
29-Apr-20	06-May-20	08-May-20
27-May-20	03-Jun-20	05-Jun-20
10-Jun-20	17-Jun-20	22-Jun-20

Table 7. Nominal government bonds

Maturity date	Coupon %	Bond no.	SEK Million
01-Dec-20	5.00	1047	96 054
01-Jun-22	3.50	1054	103 631
13-Nov-23	1.50	1057	85 385
12-May-25	2.50	1058	65 126
12-Nov-26	1.00	1059	60 164
12-May-28	0.75	1060	45 513
12-Nov-29	0.75	1061	51 150
01-Jun-32	2.25	1056	21 000
30-Mar-39	3.50	1053	45 750
Total governm	573 773		

Note: Outstanding volume as of 31 January 2020.

Table 8. Inflation-linked bonds, auction dates

Announcement	Auction date	Settlement date
13-Feb-20	20-Feb-20	24-Feb-20
27-Feb-20	05-Mar-20	09-Mar-20
12-Mar-20	19-Mar-20	23-Mar-20
13-Feb-20	20-Mar-20*	24-Mar-20
13-Feb-20	23-Mar-20*	25-Mar-20
13-Feb-20	24-Mar-20*	26-Mar-20
26-Mar-20	02-Apr-20	06-Apr-20
07-May-20	14-May-20	18-May-20
20-May-20	28-May-20	01-Jun-20
04-Jun-20	11-Jun-20	15-Jun-20

Table 9. Inflation-linked bonds

Maturity date	Coupon %	Bond no.	SEK Million
01-Dec-20	4.00	3102	23 349
01-Jun-22	0.25	3108	29 625
01-Jun-25	1.00	3109	28 707
01-Jun-26	0.125	3112	22 296
01-Dec-27	0.125	3113	15 255
01-Dec-28	3.50	3104	28 901
01-Jun-32	0.125	3111	18 788
Total inflation-	166 922		

Note: Outstanding volume as of 31 January 2020.

*Exchange auction

Table 10. T-bills, auction dates

Announcement	Auction date	Settlement date
26-Feb-20	04-Mar-20	06-Mar-20
25-Mar-20	01-Apr-20	03-Apr-20
06-May-20	13-May-20	15-May-20
03-Jun-20	10-Jun-20	12-Jun-20

Table 11. Treasury bills

Maturity date	SEK Million		
19-Feb-20	9 500		
18-Mar-20	5 000		
15-Apr-20	5 000		
17-Jun-20	5 000		
Total treasury bills	24 500		

Note: Outstanding volume as of 31 January 2020.

Table 12. Rating

Rating company	Krona debt	Foreign currency debt
Moody's	Aaa	Aaa
Standard & Poor's	AAA	AAA
Fitch	AAA	AAA

Table 13. Primary dealers

Government bonds	Inflation-linked bonds	T-bills	Telephone no.
•			+44 207 773 8379
•	•	•	+46 8 568 808 44
•	•	•	+46 8 463 46 50
•			+44 207 805 0363
•	•	•	+45 3333 1609
			+46 8 614 91 07
•	•	•	+46 8 506 231 51
•	•	•	+46 8 700 99 00
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Next rapport

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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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