

Sweden's convergence programme 2019

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Introduction

In accordance with Council Regulation (EC) No 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies, Sweden submitted its first convergence programme to the European Commission in December 1998. The programme was evaluated and approved by the Council in spring 1999. Under the Regulation an update of the Convergence Programme has to be submitted annually; as was done from 1999 to 2009.

As of 2010 reporting within the Stability and Growth Pact has been adapted to the European Semester in order to strengthen the surveillance of economic policies. The convergence programme and the national reform programme are therefore submitted each spring. This enables budgetary and structural policy to be assessed consistently and recommendations to be made to Member States while their budget proposals are still in the preparatory phase.

Sweden's Convergence Programme for 2019 is based on the Spring Fiscal Policy Bill for 2019 (Bill 2019/18:100), which was presented by the Government to the Riksdag (Swedish Parliament) on 10 April 2019. The Parliamentary Committee on Finance was informed about the Convergence Programme on 23 April 2019. The Government adopted the Convergence Programme on 25 April 2019.

1. Economic policy framework and targets

1.1 Budgetary policy objectives

The budgetary policy objectives consist of a general government net lending target, an expenditure ceiling for central government, a local government balanced budget requirement and a debt anchor.

General government net lending target

The purpose of having a governing target for general government net lending is to contribute to strengthening control of the long-term development of general government finances. The net lending target also makes clear the need to set priorities among expenditure areas, or to raise taxes. In addition, fiscal policy has to be capable of contributing to economic stimulus in contractionary periods and of slowing the economy down in expansionary periods. Higher net lending in good times is therefore needed to provide scope for lower net lending when times are worse. This is made possible by formulating the net lending target as an average over an economic cycle (see also section 3.4).

Following a proposal in the Spring Fiscal Policy Bill for 1997, the Riksdag decided to introduce a surplus target for general government finances of 2 per cent of GDP on average over an economic cycle. The target was phased in over a three-year period and full application began from 2000. However, the Riksdag decided, following a proposal in the Spring Fiscal Policy Bill for 2007, to lower the net lending target from 2 per cent to 1 per cent of GDP on average over an economic cycle. The reason for the proposal was that Eurostat had decided that net lending in the premium pension system would no longer be included in the general government sector in the National Accounts; this reduced general government net lending by around 1 per cent of GDP.

A cross-party committee of inquiry, the Surplus Target Committee, was tasked in June 2015 with reviewing the target for general government net lending (terms of reference 2015:63). Its final report was submitted in October 2016 (SOU 2016: 67). In that report the Committee set out its views on lessons learnt from the fiscal policy framework thus far, its assessment of the future level of the general government net lending target and the impact of the target level on general government finances and the Swedish economy. The Government assessment, in the light of the Committee's proposal, was that the surplus target level should be changed to 0.33 per cent of GDP over an economic cycle and that the budgetary policy framework should be supplemented with a debt anchor for general

government consolidated gross debt. In the Budget Bill for 2018 the Government proposed, in accordance with the proposal of the Surplus Target Committee, changing the surplus target level to an average of 0.33 per cent of GDP over an economic cycle and augmenting the budgetary policy framework with a debt anchor for general government consolidated gross debt. The Riksdag adopted the Government's proposal (Committee Report 2017/18:FiU1, Riksdag Comm. 2017/18:54).

The Government has also made assessment that monitoring of the surplus target should be strengthened and that the Swedish Fiscal Policy Council should be assigned a clearer role in monitoring the fiscal policy framework (Govt Bill 2016/17:100).

The Government has given an account of the fiscal policy framework in the communication Fiscal policy framework (Govt comm. 2017/18:207).

Expenditure ceiling and a stringent budgetary process

The expenditure ceiling covers central government primary expenditure; i.e. excluding interest expenditure, and expenditure in the old-age pension system. The Swedish Budget Act (2011:203) requires the Government to propose an expenditure ceiling for the third budget year ahead in the budget bill. Then it is the Riksdag that sets the expenditure ceiling. A multi-year expenditure ceiling can be used as a tool to achieve the surplus target. Together with the general government net lending target, the expenditure ceiling governs the total take of taxes and contributes to preventing a situation in which taxes must be gradually raised as a result of a lack of control over expenditure, or in which temporary increases in income are used for permanent increases in expenditure.

The expenditure ceiling is the overarching restriction on the budgetary process in terms of total expenditure. The principle is that expenditure ceiling levels decided by the Riksdag are not changed except to make technical adjustments. The Budget Act also requires the Government to take measures if there is risk of exceeding an expenditure ceiling adopted. The established practice is to also have a 'budgeting margin' of a certain size under the expenditure ceiling. This is primarily intended to act as a buffer if the development of the economy leads to expenditure growth not expected when the level of the expenditure ceiling was adopted.

A well-organised, stringent budgetary process is of central importance in achieving the budgetary policy objectives. The budgetary process compares different expenditures with one another and expenditure increases are tested in the light of a predetermined total fiscal space defined by the expenditure ceiling and the net lending target. The main principle is that proposed

expenditure increases in one expenditure area must be covered by proposed expenditure reductions in the same area. It is also of central importance that the central government budget is transparent and comprehensive. The Government's proposed budget has to include all income and expenditure, as well as other payments that have an impact on the central government borrowing requirement (the "completeness principle"). Central government revenue and expenditure have also to be budgeted and reported gross under income headings and appropriations (the "gross principle"). This means that expenditure has to be reported on the expenditure side of the budget, while income has to be reported on the income side. A further main principle is that expenditure has to be booked in the year when it is intended to be used.

Local government balanced budget requirement

The general government net lending target includes net lending in the local government sector, which mainly consists of municipalities and county councils. However, it is net income, not net lending, that determines whether municipalities and county councils comply with the balanced budget requirement of the Local Government Act (2017:725). That requirement states the main rule that every municipality and county council must budget for net income in balance. Negative outcomes of net income have to be corrected within three years unless there are exceptional reasons.

The Local Government Act requires municipalities and county councils to have sound financial management in their operations. This means, for instance, that municipalities and county councils have to set their own financial targets and be accountable for long-term sustainable finances. It has long been a fundamental principle that each generation has to meet its own costs. The balanced budget requirement sets a minimum level, but net income generally needs to be higher to fulfil the sound financial management requirement of the Swedish Local Government Act.

Debt anchor

The fundamental reasons for the surplus target are sustainability and scope for action in stabilisation policy. So, essentially it is linked to debt and wealth levels rather than to net lending at a particular point in time. However, the level of general government gross debt is a key factor in assessing a country's creditworthiness and the scope for active fiscal policy for stabilisation over the economic cycle. Even though the surplus target is more suitable as an operational target in the budgetary process, the size of gross debt and net financial wealth play a central role in decisions about the size of the surplus target. As a member of the EU, Sweden is also bound by the EU debt

criterion, which states that general government consolidated gross debt must not exceed 60 per cent of GDP. The fiscal policy framework has therefore been supplemented with a debt anchor for consolidated gross general government debt. The level of the debt anchor, which is a guideline for the level of the debt, has been set at 35 per cent of GDP.

In the spring fiscal policy bill the Government has to give an account each year of the development of general government consolidated gross debt. If this debt deviates from the debt anchor by more than 5 per cent of GDP, the Government has to present a communication to the Riksdag at the same time as the spring fiscal policy bill. The debt is measured as the outcome in the national accounts for the preceding year and according to the forecast for the present year or the budget year. In its communication the Government has to give an account of the cause of the deviation and how the Government intends to handle it.

1.2 Sweden's medium-term budgetary objective

As a member of the EU, Sweden has to live up to the regulations concerning general government finances in the Stability and Growth Pact. It includes provisions that the general government deficit must not exceed 3 per cent of GDP and that general government debt must not exceed 60 per cent of GDP. Each Member State also has a medium-term budgetary objective (MTO) for its structural balance, i.e. cyclically adjusted general government net lending, excluding one-time effects. The level of MTO is decided by each Member State, but it must be compatible with a minimum level calculated by the EU Commission. Sweden's medium-term budgetary objective is -1 per cent of potential GDP (see section 3.4).

1.3 Monetary policy objective and monetary policy in Sweden

The Riksbank is responsible for monetary policy in Sweden. According to the Swedish constitution, no other authority is allowed to give instructions to the Riksbank how they should make decisions on monetary policy issues. Amendments to the Sveriges Riksbank Act (1988:1385) adopted in 1999 gave the Riksbank greater independence. In accordance to this act, the Executive Board of the Riksbank may neither seek nor receive instructions when fulfilling their monetary policy duties.

The objective for monetary policy is to maintain price stability. The Riksbank has defined this as a 2 per cent annual increase in the consumer price index with a fixed interest rate (CPIF).

At the same time as monetary policy is aimed at attaining the inflation target, it shall support the objectives of general economic policy for the purpose of attaining sustainable growth and a high level of employment. This is achieved through the Riksbank, in addition to stabilising inflation around the inflation target, endeavouring to stabilise production and employment around paths that are sustainable in the long term. The Riksbank therefore conducts what is generally referred to as flexible inflation targeting. However, the inflation target has priority over the other targets.

It takes time before monetary policy has a full impact on inflation and the real economy. Monetary policy is therefore guided by forecasts for economic developments. The Riksbank publishes its own assessment of the future path for the repo rate. This repo-rate path is a forecast, not a promise.

In connection with every monetary policy decision, the Executive Board makes an assessment of the repo-rate path needed, and any potential supplementary measures necessary, for monetary policy to be well-balanced. The trade-off is normally a question of finding an appropriate balance between stabilising inflation around the inflation target and stabilising the real economy. There is no general answer to the question of how quickly the Riksbank aims to bring the inflation rate back to 2 per cent if it deviates from the target. A rapid return may in some situations have undesirable effects on production and employment, while a slow return may weaken confidence in the inflation target. The Riksbank's general ambition has been to adjust monetary policy so that inflation is expected to be fairly close to the target in two years' time.

To illustrate the fact that inflation will not always be exactly 2 per cent each month, a variation band is used that spans 1 to 3 per cent, which captures around three quarters of the historical monthly outcomes of CPIF inflation. The Riksbank always strives for 2 per cent inflation, regardless of whether inflation is initially inside or outside the variation band.

According to the Sveriges Riksbank Act, the Riksbank's tasks also include promoting a safe and efficient payment system. Risks linked to developments in the financial markets are taken into account in the monetary policy decisions. With regard to preventing an unbalanced development of asset prices and indebtedness however, well-functioning regulation and effective supervision play a central role. Monetary policy only acts as a complement to these.

In some situations, as in the financial crisis 2008–2009, the repo rate and the repo-rate path may need to be supplemented with other measures to promote financial stability and ensure that monetary policy is effective.

The Riksbank endeavours to ensure that its communication is open, factual, comprehensible and up-to-date. This makes it easier for economic agents to make good economic decisions. It also makes it easier to evaluate monetary policy.

The Executive Board of the Riksbank usually holds six monetary policy meetings per year at which it decides on monetary policy. A Monetary Policy Report is published in connection with these meetings. Approximately ten days after each monetary policy meeting, the Riksbank publishes minutes from the meeting, in which it is possible to follow the discussion that led to the current decision and to see the arguments put forward by the different Executive Board members.

In September 2003, Sweden held a referendum on the introduction of the euro as its currency. The result of the referendum, which was “no”, did not lead to any changes in monetary or exchange rate policy. The Government is responsible for overall currency policy matters and decides on the exchange rate system, while the Riksbank is responsible for the enforcement of the exchange rate system. The current monetary and exchange rate policy regime stands firm. Sweden’s experience of an inflation target and a floating exchange rate system is very good. Pegging the Swedish krona to ERM2 is not under consideration.

On 22 December 2016, the Government decided to appoint a parliamentary committee with the task of reviewing the monetary policy framework and the Sveriges Riksbank Act (terms of reference 2016:114, terms of reference 2017:57 and terms of reference 2017:100). The Committee’s remit is based on the positions made in the deliberation (report 2015/16:FiU41) Evaluation of the Riksbank's monetary policy 2010–2015. The Committee’s remit includes analysing, and assessing and then proposing the legislative amendments it considers necessary in the following areas: the objectives and instruments of monetary policy; the Riksbank's responsibility for financial stability; the Riksbank’s institutional independence; the organisation of the Riksbank; the role of the Riksbank in international contexts; the democratic scrutiny of the Riksbank and monetary policy; and the Riksbank's responsibility for cash handling, cash provision and preparedness in the payment system. The starting point is that the price stability target should still be central and that the Riksbank should have a high degree of independence.

The Riksbank Committee has submitted a partial report on secured access to cash (SOU 2018: 42). The assignment shall otherwise be reported no later than November 30, 2019. The committee is to assess whether the proposals and legislative amendments proposed are compatible with what follows from Sweden's membership of the European Union, taking into account the fact that Sweden has not adopted the euro. The Riksbank Committee presented an interim report *Ensuring access to cash "Tryggad tillgång till kontanter"* (SOU 2018:42). The Committee is to report on the remainder of its remit by 29 November 2019.

1.4 The Government's economic policy

Measures adopted

The Budget Bill for 2019 was presented by a transitional government. The Riksdag then adopted the central government budget for 2019 on the basis of a reservation from the Moderate Party and the Christian Democrats. As a result, the budget effects of the Riksdag's decision on the central government budget (Committee Report 2018/19:FiU1, Riksdag Comm. 2018/19:62) resulted in a weakening of general government net lending by about SEK 17 billion for 2019 and by about SEK 35 and 47 billion for 2020 and 2021 respectively compared with the Budget Bill for 2019. In total, new fiscal policy measures were adopted that weakened net lending by SEK 12.7 billion in 2019, 1.5 billion in 2020 and 12.8 billion in 2021. The weakening in 2019 mainly follows from lower taxes while the further weakening in the subsequent years is mainly due to expenditure increases.

Table 1.1 New fiscal policy measures in the Budget Bill for 2019 and the Riksdag's decision on the central government budget, compared to the Spring Fiscal Policy Bill for 2018

Impact on general government net lending, SEK billions

	2019	2020	2021
Expenditure	-0.6	-9.1	-0.5
of which expenditure changes in the Budget Bill for 2019	-3.1	-28.2	-31.2
of which expenditure changes in the Riksdag's decision	2.5	19.1	30.7
Income	-13.5	-10.6	-13.3
of which income changes, net, in the Budget Bill for 2019	1.0	5.4	3.0
of which income changes, net, in the Riksdag's decision	-14.5	-16.0	-16.3
Change in general government net lending	-12.7	-1.5	-12.8
of which Budget Bill for 2019	4.2	33.6	34.2
of which Riksdag's decision on the central government budget	-16.9	-35.1	-47.0

Source: Own calculations.

Table 1.2 presents the budgetary impacts of all proposals for and announcements of measures and financing submitted by the Government to the Riksdag and that the Riksdag has either adopted or approved the estimates for. The budgetary effects are reported in relation to the preceding year and are part of the analysis of the change in structural balance and the direction of fiscal policy.

Table 1.2 Combined budgetary impacts of fiscal policy measures 2018-2022 in relation to the previous year

Budgetary impact in relation to the previous year of already decided and currently proposed and announced measures on general net lending. SEK billions

	2018	2019	2020	2021	2022
Expenditure changes ¹					
Change in ceiling-limited expenditure	26.3	9.3	2.5	5.3	-6.3
Adjustment for differences between the accounting principles in the central government budget and the National Accounts	2.1	3.5	2.9	0.8	-2.3
of which, infrastructure investments funded by borrowing ²	1.4	3.2	2.6	0.7	-2.4
Total expenditure changes	28.4	12.8	5.3	6.1	-8.7
Revenue changes ¹					
Taxes, gross	-3.9	-18.5	-1.5	-4.3	-0.4
Indirect impact of taxes	2.1	0.5	1,0	0,0	0,0
Other revenue reforms	-1.4	-0.1	0,0	0,0	0,0
Total revenue changes, net	-3.2	-18.1	-0.6	-4.3	-0,5
Changes in expenditure and revenue, impact on general government net lending^{1,3}	-31.6	-30.8	-5.9	-10.4	8,2
<i>Per cent of GDP</i>	<i>-0.7</i>	<i>-0.6</i>	<i>-0.1</i>	<i>-0.2</i>	<i>0.1</i>

Note: The amounts are rounded off and thus do not always agree with the total.

¹ For expenditure reforms, a minus sign reflects a decrease in an appropriation or the cessation or reduction in scope of temporary programmes. For revenue reforms, a minus sign reflects a decrease in tax revenues. For the combined budgetary effects of expenditure and revenue reforms, a minus sign indicates a weakening in general government finances compared with the preceding year.

² This item shows the change in net borrowing for road and rail needs. Net borrowing consists of the difference between new borrowing and amortisation.

³ Excluding the indirect impact of expenditure reforms on the revenue side.

Source: Own calculations.

The Government's further reform ambitions

Sweden's social problems must be solved. More jobs will be created, the challenge of climate change addressed, welfare secured and knowledge in schools enhanced. Sweden should be a society characterised by freedom, community, cohesion and respect for the life choices of the individual. The parliamentary situation following the 2018 elections to the Riksdag has meant the re-examination of old positions and emergence of new cooperation. Confidence in our democracy must be deepened.

At the same time, we are facing major challenges: climate change, inadequate integration, segregation and dependence on benefits, globalisation that continues to test our competitiveness, widening gaps,

increasing polarisation and racism, gang crime, demographics, a housing shortage and an increasingly uncertain neighbourhood.

With different political starting points, the parties behind the January Agreement are united in defence of a strong rule of law and unwavering protection of individual rights and freedoms, opposition to xenophobia, and support for free and independent media, gender equality, equity and equal opportunities, regardless of background.

Our welfare must be secured by high employment levels among both women and men, strong incentives to work and better conditions for innovation, exports and job creation. Having a job provides opportunities to earn a living and be self-determined. Opportunities to start and run a business and to succeed as an entrepreneur must improve, and taxes on labour must be reduced. More reforms are needed to enable employers to fill the more than 100 000 job vacancies for which there is often a lack of applicants with the right skills today. The business sector's overall competitiveness requires more innovative and growing companies. Wealth-creating forces create jobs throughout the country.

Global climate change is the critical issue of our time. Sweden will be the world's first fossil-free welfare nation. The target set by the Riksdag – that Sweden will have net zero greenhouse gas emissions to the atmosphere by 2045 at the latest – must be achieved. Economic policy instruments will be used to move society in an environment friendly direction and enable more people to make climate-smart choices in their everyday lives. Environmentally harmful subsidies need to be phased out, both in Sweden and globally. A robust green tax shift will be implemented. Society's climate investments will increase, contributing to jobs and entrepreneurship throughout the country. Companies have a key role in greening the economy. The ambition is for climate change adaptation to take place in a way that enables everyone to be part of the solution. Economic policy must continue to promote the achievement of the Swedish environmental objectives. The protection of endangered species and valuable natural environments for future generations goes hand in hand with strengthened legal certainty for landowners and companies.

Our universal and tax-financed welfare system supports a high level of labour force participation, contributes to equity and gender equality, and paves the way for improved life chances for everyone. Health care waiting lists must be shortened. Financial security for pensioners who have worked and paid taxes all their lives must be enhanced. The opportunities for people with disabilities to participate in working and social life must be improved. Everyone who is entitled to the assistance allowance must also receive it.

The integration of newly arrived immigrants into Swedish society must be characterised by clear expectations – and good opportunities – to learn Swedish and the vocational skills that are in demand in the labour market. Although the employment rate among people born abroad is higher in Sweden than the corresponding average in the EU, the difference compared with the employment rate among people born in Sweden is considerable and must be reduced. Both women and men must encounter the same expectations from society and be given the right opportunities to support themselves via entry into the labour market. Cohesion and gender equality require that women and men have the same right to education and work. Honour-related violence and oppression must always be combated. They must be pre-empted, prevented and punished. Sweden must have a humane, legally certain and sustainable migration policy that protects the right of asylum and is based on a broad agreement in the Riksdag.

Everyone must be given the same opportunities to gain the knowledge and skills required by the labour market of tomorrow at a time when requirements are being driven up by tougher international competition. Sweden's position as a knowledge nation must be strengthened. Schools must be characterised by order, peace and quiet for studies, a focus on knowledge, and equity. Teachers' work time must be spent teaching.

The whole of Sweden must thrive and grow. Opportunities to live, study and work throughout the country will be improved through broadband, roads, railways and housing construction. The development of rural areas is crucial for the whole of Sweden. This is where climate-smart energy, healthy and safe food, and values that contribute to jobs and welfare are created.

More housing is needed to make it easier for young people to get their first home, for people to move to where the jobs are, and to break the trend of increasing housing segregation. The housing market needs to be reformed so that more people's needs can be met, the rules are simplified and competition is increased. More mixed housing areas are needed, with greater opportunities for a housing career. Mobility in the housing market is improved when chains of moves provide better utilisation of the housing stock.

Efforts to combat crime and terrorism will continue to be strengthened. The police and the entire judicial system must have the resources necessary to tackle serious and organised crime, have a high level of preparedness to counter terrorism, and ensure security in people's daily lives. Security throughout the country must be enhanced, the judicial system strengthened, and the number of police employees increased by 10 000 by 2024. The

whole of society must do its part in combating crime and preventing criminality.

Our neighbourhood is becoming increasingly uncertain, while extreme forces are fomenting polarisation, distrust and xenophobia in our country. Sweden's democracy and right to self-determination must be protected from internal and external threats through robust efforts to combat all forms of violent extremism. A continued increase in defence capabilities enhances security in Sweden and stability in our neighbourhood. At a time when authoritarian movements are calling for strong leaders, the responsibility rests heavily on elected representatives to demonstrate democracy's superior ability to solve social problems.

The Swedish economy has performed strongly. Despite increasing economic uncertainty, Sweden's economic starting position is good. Our public finances are in good order, while the central government debt-to-GDP ratio in Sweden is the lowest since 1977 and the employment rate is the highest for more than 25 years. This high level of employment has led to the lowest proportion of the population supported by compensation and insurance systems since 1981. The fiscal policy framework agreement must be safeguarded to ensure long-term sustainable public finances. Sweden stands well prepared to solve the social problems we are facing.

The Spring Fiscal Policy Bill is based on a policy agreement between the Swedish Social Democratic Party, the Centre Party, the Liberal Party and the Green Party.

Using the January Agreement as the foundation, we are now building change that is sustainable over time. We want to create conditions for a society where cohesion and security go hand in hand with people's freedom and opportunities. This is how we will move Sweden forward.

The Government's view of the Council's recommendations from 2018

The Council adopted country-specific recommendations to the Member States on 13 July 2018. The formal Council Decision recommends that Sweden take the following action in 2018 and 2019:

Address risks related to high household debt by gradually reducing the tax deductibility of mortgage interest payments or increasing recurrent property taxes. Stimulate residential construction where shortages are most pressing, in particular by removing structural obstacles to construction, and improve the efficiency of the housing market, including by introducing more flexibility in setting rental prices and revising the design of the capital gains tax.

The Government welcomes the reviews conducted within the framework of the European Semester. The Government shares the assessment that household indebtedness poses a risk to macroeconomic stability. High household indebtedness and the functioning of the housing market are important challenges and the Government has taken action to meet them. The Council's recommendations are considered further in sections 3.1 and 3.2 of the National Reform Programme.

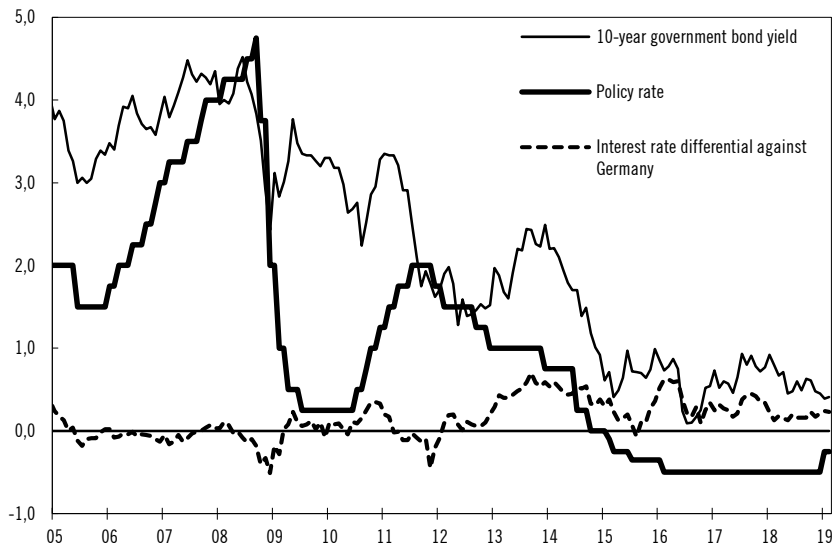
1.5 Monetary policy

The Riksbank has conducted a very expansionary monetary policy for several years and gradually reduced the repo rate between December 2011 and February 2016 from 2 per cent to the historically low level of - 0.5 per cent. However, in December 2018 the Riksbank raised the repo rate to - 0.25 per cent, the first increase for seven years (see chart 1.1). Despite this increase, monetary policy continues to be expansionary. The reasons for the reductions of the repo rate in recent years have been low inflation, concern about falling inflation expectations and the weak economic situation. In addition to holding the repo rate negative, the Riksbank has also carried out a comprehensive government bond purchase programme that was ended in December 2017. At that time the Riksbank also decided that reinvestments of maturing bonds in the first half of 2019 would be spread evenly over the period from January 2018 to June 2019. This means that the Riksbank's holding of government bonds has increased temporarily in 2018 and at the beginning of 2019.

In 2018 yields on government bond markets in Sweden and abroad have been marked by communication about monetary policy and strong signals of an economic slowdown in the world economy. In the US, government bond yields rose in the first three quarters at the same time as expectations of the future key interest rate rose. In Europe and Sweden government bond yields were, in contrast, relatively stable in the first three quarters. At the end of 2018 government bond yields fell in the US when the Federal Reserve changed its communication about coming interest rate increases at the same time as signs of a slowdown in the world economy could be observed in Europe and China. This led to falling inflation expectations and falling government bond yields, both in the US, in Europe and in Sweden at the end of 2018 and the start of 2019.

Chart 1.1 Interest rates in Sweden

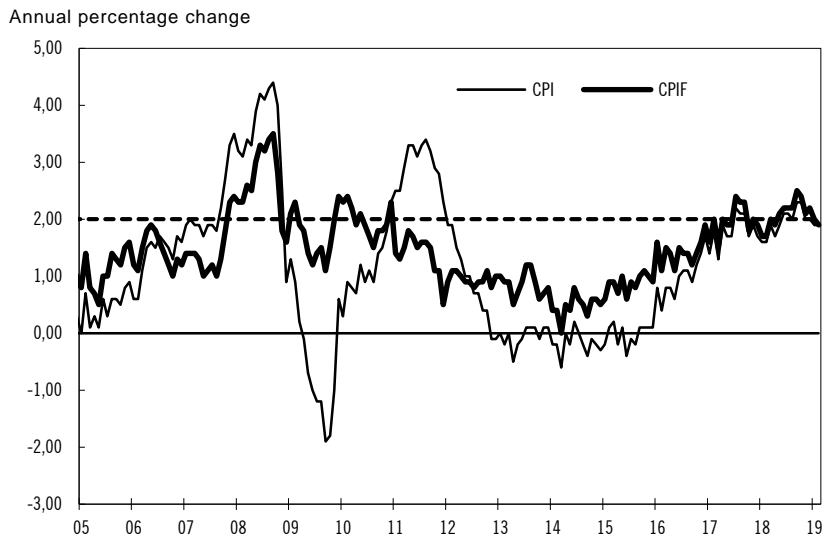
Per cent



Sources: Riksbank and Macrobond.

Inflation measured as the annual percentage change in CPI has shown a rising trend since the beginning of 2016 (see chart 1.2). The increase is largely attributable to rising energy prices. Price increases for some services have also had significant impact on the development of inflation. Underlying inflation measured as CPIF, which consists of CPI with a fixed home mortgage rate, has trended upwards since 2014. Since mortgage interest rates have remained virtually unchanged for the past year, the gap between CPIF inflation and CPI inflation has narrowed. CPI inflation is now close to the inflation target of 2 per cent.

Chart 1.2 Inflation measured as CPI and CPIF



Note: The dashed line shows the Riksbank's inflation target.

Source: Statistics Sweden.

Sweden has had a floating exchange rate since November 1992. Chart 1.3 shows the development of the Swedish krona against the euro and the US dollar since 2005, along with the trade-weighted KIX exchange rate index. The krona has weakened against many currencies since 2014, which is explained to some extent by the Riksbank's expansionary monetary policy.

Chart 1.3 KIX krona index and development of the Swedish krona against the euro and the US dollar

KIX index (right scale), SEK/EUR, SEK/USD (left scale)



Source: Riksbank.

2. Macroeconomic developments

2.1 International and financial economy

The international economic cycle has strengthened in recent years. However, in 2018 growth slowed in many countries, including China and in the euro area, and the growth of world trade declined. To some extent this slowdown is a result of the high position in the economic cycle, i.e. since resource utilisation is under increasing strain, the same rapid growth as before is not possible. But other factors, not directly related to the economic situation, have also probably played a role. Uncertainty linked to, for instance, the UK's exit from the European Union and trade relations between the US and China is judged to have contributed to less willingness to invest and to greater volatility in financial markets.

In many economies the start of 2019 has been characterised by a continuation of the cyclical slowdown for export-oriented sectors in manufacturing. At the same time, indicators of domestic demand, such as measures of consumer confidence, are not showing the same clear slowing tendency. The labour market is also continuing to perform well in many economies. Most indications suggest that many advanced economies are in an economic slowdown and the overall assessment is that weighted GDP growth in the countries that are important for Sweden's foreign trade (KIX-weighted GDP) is expected to be slightly lower in the coming years.

In the euro area growth slowed more quickly than expected in 2018, largely driven by a sharp slowing of large economies like Germany and Italy in the second half of the year. This weak performance can partly be explained by temporary factors, for example production bottlenecks in the German automotive industry and a decline in retailing on account of demonstrations in France. But it is also possible to observe a more general weakening of export demand and industrial production. The euro area seems to have been hit particularly hard by the declining growth of world trade in the second half of the year and confidence indicators suggest that export growth will also be subdued in early 2019. Indicators of domestic demand, such as the European Commission's confidence indicator for households in the euro area, have fallen compared with their high levels in 2017. Households are therefore expected to increase their consumption at a slower rate in the future, which also restrains GDP growth.

Growth in the UK slowed in 2018, and confidence indicators have fallen. The uncertainty concerning the forms for the UK's exit from the EU have contributed to poorer conditions for planning for business, and this has had a negative impact on investment. Export growth and household

consumption have also been subdued. The forms for the UK's exit from the EU were not clear when this forecast was completed. This forecast is based on an assumption of an orderly exit with trade between the EU and the UK developing on terms similar to those at present, i.e. without appreciable barriers to trade. Growth in the UK is expected to slow down in 2019 on account of elevated uncertainty about its exit but is expected to rise slightly in 2020 provided that the uncertainty about the future relations between the EU and the UK decreases.

The US economy remains strong despite trade policy concerns. Negotiations are under way between the US and China and decisions about further increases in US tariffs on Chinese goods have been postponed thus far. Important reasons for the continued upturn in the US economy have been the favourable performance of the labour market and an expansionary fiscal policy on account of the reductions made to taxes. Confidence indicators are still at high levels but have fallen slightly at the start of 2019. Growth is expected to slow slightly in 2019 and 2020 as both fiscal and monetary policy become less expansionary.

GDP growth in China weakened in 2018. This is partly because the authorities took restraining measures to limit high credit growth but is also due to the trade conflict with the US. These factors have then led to weaker growth in industry and retailing. The Chinese authorities have responded with more expansionary fiscal and monetary policy. This is expected to stimulate the economy in the short term, but may also contribute to a risky increase in indebtedness and financial imbalances. Growth is judged to fall to 6 per cent in 2019 and to then be slightly lower in 2020.

Global inflation is judged to increase slightly more slowly in 2019 and to rise again slightly in 2020. However, the underlying inflationary pressure in the international economy is still low.

2.2 The Swedish economy

In Sweden the economy has strengthened in recent years and growth has been high. Recently, however, several indicators have suggested that economic activity has fallen slightly, indicating that GDP growth will slow in 2019. A weakening of the global economy and a slow-down in public consumption are expected to contribute to slower growth continuing in 2020. A decrease in housing investment is also expected to make a negative contribution to GDP growth. Although house prices have risen weakly in the past year, prices at the start of 2019 were still below their peak in 2017. The high supply of newly produced housing and the lower price level

suggest that housing construction will continue to decrease in the next few years, but from high levels.

The labour supply has increased rapidly, and this has contributed, along with the strength of the economy, to a historically high employment rate. The employment rate has shown a clear increase among both women and men, at the same time as unemployment has decreased. Looking ahead, the increase in employment is expected to be slower as a result of the expected weakening of the economy.

At the same time as the labour market has performed favourably, there has been weak productivity growth in recent years. This has also been the case in many other comparable countries. Looking ahead, productivity growth is expected to rise slightly but the uncertainty here is great.

Resource utilisation is currently judged to be higher than normal, but has not made any clear impression on the rate of wage growth. Wage increases are expected to rise slightly in 2019–2022, partly on account of a gradual rise in productivity, rising wages internationally and a continuation of the stable performance of the labour market. However, the historically weak productivity growth is contributing to a relatively rapid rise in labour costs per unit of output. This is expected to press up cost growth in companies and to maintain the inflation rate in the coming years. At the same time, there are a number of factors that are expected to have a restraining effect on inflation in 2019 and 2020; one is that energy prices are expected to increase much more slowly. In an overall assessment, CPIF inflation is expected to be below 2 per cent in 2019 and 2020.

As the underlying rate of inflation rises, the Riksbank is expected to gradually raise its repo rate.

Table 2.1 Key indicators

Annual percentage change, unless otherwise stated

	2018	2019	2020	2021	2022
GDP	2.3	1.6	1.6	1.6	2.0
GDP gap ¹	1.2	1.0	0.4	0.0	0.0
Employment ²	1.8	1.3	0.2	0.6	0.7
Employment rate ³	82.6	83.0	82.7	82.8	82.9
Hours worked ⁴	2.4	1.0	0.3	0.4	0.6
Productivity, business sector ^{4,5}	0.5	0.9	1.3	1.4	1.6
Unemployment rate ⁶	6.3	6.3	6.4	6.4	6.5
Wages ⁷	2.6	2.8	2.9	3.1	3.2
CPI ⁸	2.0	2.0	1.9	2.2	2.7

¹ The difference between actual and potential GDP as a percentage of potential GDP.² Persons, 15–74 years.³ According to the EU2020 target, that is, those in employment as a percentage of the population in the age bracket 20–64 years.⁴ Calendar-adjusted.⁵ Labour productivity measured as GDP to base price per hour worked.⁶ Per cent of the labour force, 15–74 years.⁷ Measured according to the short-term wage statistics.⁸ Annual average.

Sources: Statistics Sweden and own calculations.

2.3 Potential macroeconomic imbalances

The emergence of macroeconomic imbalances in, for instance, the form of persistent differences in competitiveness has created severe problems for many countries in the wake of the financial crisis. To ensure a favourable economic development in the long term, it is important, in the first place, to implement measures that prevent macroeconomic imbalances from occurring and, in the second place, to identify and correct at an early stage any imbalances that nevertheless do occur. It is difficult to give an exact definition of a macroeconomic imbalance. But such an imbalance can be said to reflect an underlying problem that risks leading to a rapid and significant correction, which then has an adverse impact on the economy as a whole.

The macroeconomic imbalance procedure

The EU Macroeconomic Imbalance Procedure is part of the European Semester and economic policy coordination in the EU. The procedure began when the European Commission published the Alert Mechanism Report 2019 in November 2018. This report contained a preliminary economic analysis of the Member States, including a scoreboard with indicators in areas that might constitute macroeconomic imbalances. For Sweden, the Macroeconomic Imbalance Procedure for 2019 indicated that high private debt and high house prices were potential imbalances.

In February 2019, in connection with the publication of the annual country reports, the Commission published in-depth reviews of the 13 Member States that had been identified as countries with potential

imbalances in the Alert Mechanism Report. The Commission assessed that 10 of the 13 Member States examined had macroeconomic imbalances and that 3 Member States had excessive imbalances. All Member States assessed as having imbalances will be subject to specific monitoring, which is, however, adapted to how serious the imbalances are judged to be.

The Commission will submit a proposal on measures to address these imbalances within the framework of the European Semester. These proposals will be included in the package of country-specific recommendations that the Commission will present in June 2019. The information provided in the Member States' national reform programmes and convergence or stability programmes will be taken into account. If the European Commission considers that a Member State assessed as having excessive imbalances takes inadequate measures, the Commission may recommend that the Council initiate the Excessive Imbalance Procedure, which is the corrective arm of the Macroeconomic Imbalance Procedure.

Household indebtedness

High indebtedness, whether in the private or public sector, may lead to problems for both financial stability and macroeconomic performance.

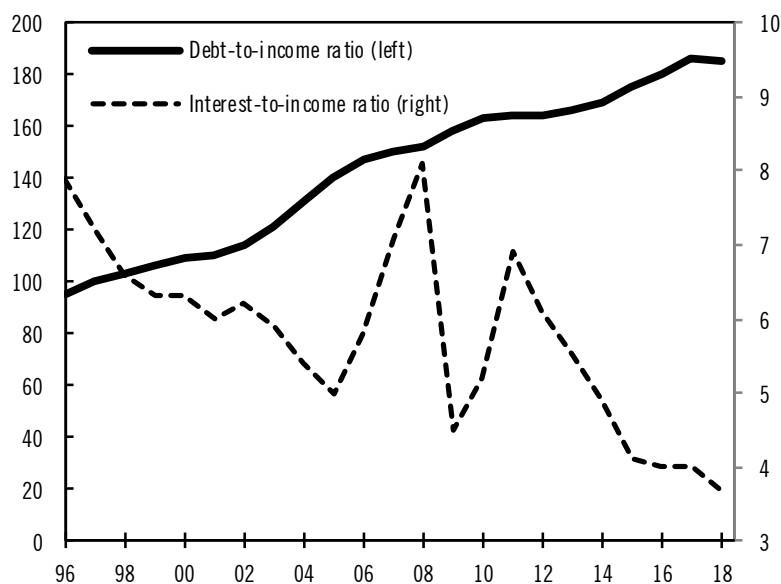
The indebtedness of Swedish households has increased considerably since the mid-1990s (see chart 2.1). At the aggregated level, this development can be described in terms of debt-to-income ratio and interest-to-income ratio, where the debt and the interest payments after tax, respectively, are compared to households' disposable incomes. Even though the debt-to-income ratio is at a historically high level, the interest-to-income ratio is the lowest in over 30 years. Lower interest rates have enabled households to take on more debt without higher interest expenditure crowding out the opportunities for consumption, investments or financial saving. Following several years of upturns, the debt-to-income ratio in 2018 was 186 per cent of households' disposable income, which is a marginal decrease compared with the previous year. Swedish household debt is high both from a historical perspective and compared with other countries.

A large part of the increase in house prices and household debt since the mid-1990s can be explained by structural and macroeconomic factors. More and more people own their homes. The supply of housing has increased more slowly than the population and housing-related taxes have been reduced, particularly in connection with the replacement of the central government real estate tax with a local real estate fee in 2008. The rise in the aggregate debt-to-income ratio since the mid-1990s is thus explained both by

more households having loans and by households having larger loans on average.

Chart 2.1 Household debt-to-income and interest-to-income ratios

Percentage of disposable income



Source: Statistics Sweden

Even though the risk of financial instability is judged to be low, there is reason to closely follow and monitor the high debt among households.

In autumn 2010 Finansinspektionen adopted general guidelines concerning a ceiling for loans collateralised by residential property. The so-called loan-to-value ceiling means that new loans should not exceed 85 per cent of the market value of the property. Increased amortisation means that household debt decreases in the long term, which improves households' resilience to disruptions. Following approval by the Government, Finansinspektionen adopted amortisation requirement regulations, which entered into force on 1 June 2016. This requirement means that households borrowing more than 50 per cent of the value of their home have to amortise at least 1 per cent of their mortgage per year, while households borrowing more than 70 per cent of the value of their home have to amortise at least 2 per cent of their mortgage per year. On 1 March 2018 the amortisation requirement was tightened for households taking large mortgages in relation to their income. The tighter requirement means that households borrowing more than 4.5 times their annual pre-tax income have to amortise an additional 1 per cent of their mortgage per year. Finansinspektionen has also been given an expanded mandate as of 1

February 2018 to enable the authority to propose further macroprudential measures. However, the measures must be approved by the Government before they can be introduced.

Finansinspektionen's analysis shows that the macroprudential measures have led to households buying cheaper homes, taking smaller mortgages and amortising more than they would otherwise have done. However, it is too early to evaluate the full impacts of the measures taken in recent years. In this context the Government therefore wishes to stress the importance of monitoring and following up the effects of measures taken. The Government has commissioned Finansinspektionen to present methods for evaluating macroprudential policy tools. The commission is to be reported to the Government by 14 June 2019.

The Swedish banking system is large and is dominated by a few, closely-linked banks. The major banks have considerable exposures to the housing market. Several measures have therefore been taken to strengthen the resilience of the financial system. To ensure that banks maintain own funds that cover the risks in their Swedish mortgage portfolio, Finansinspektionen introduced a risk-weight floor of 15 per cent for Swedish mortgages in May 2013, which subsequently was raised to 25 per cent in September 2014. This has been replaced by a requirement within the framework of Article 458 of the Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms (CRR). The overall capital need of credit institutions will not be affected to any appreciable extent by the measure. The measure entered into force on 31 December 2018 and applies for two years. Higher risk weights mean that banks, given existing lending, need to fund themselves with more capital. The measure is estimated to increase the cost of bank funding to some extent.

The Basel 3 Agreement was implemented in the EU in 2014 when the CRR entered into force and the Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms was implemented in Swedish law. The regulatory framework means that a larger proportion of capital requirements has to be met with capital of higher-quality, i.e. capital with better loss-absorbing capacity. Buffer capital requirements have also been introduced through the regulatory framework, and this has resulted in higher capital adequacy requirements for Swedish institutions, especially for systemically important institutions. In June 2015 Finansinspektionen decided to increase the counter-cyclical capital buffer from 1.0 per cent to 1.5 per cent. In March

2016 the authority decided to raise the countercyclical capital buffer to 2.0 per cent. These decisions entered into force in June 2016 and in March 2017 respectively. In September 2018 Finansinspektionen decided to further increase the counter-cyclical capital buffer to 2.5 per cent. The most recent increase of the counter-cyclical capital buffer enters into force in September 2019.

The Government shares the assessment of the European Commission that the design of the tax system can influence household indebtedness. The extensive tax reform to be implemented under the January Agreement aims, *inter alia*, to reduce household indebtedness and contribute to a better functioning of the housing market.

The Government shares the Commission's assessment that the tax system can affect mobility in the housing market. The changes made in housing taxation in recent years have moved towards lower current taxation and higher taxation when transactions are conducted. However, to increase mobility in the housing and labour market, the rules on deferral of taxation of capital gains on the sale of private homes were amended in 2017; this meant that the ceiling for the deferred capital gain was abolished for sales of private homes in the period 21 June 2016 to 30 June 2020. The method of calculating the size of the deferral on the purchase of a cheaper home has also been changed to make it more generous, apart from in exceptional cases. According to the January Agreement the payment of interest on the deferred capital gain will be abolished.

To sum up, a number of measures have been taken in recent years in order to strengthen the resilience of banks to financial crises and curb the rate of growth of household debt. Housing construction has increased strongly in the last five years, but slowed down in 2018. In 2017 house prices fell and the annual rate of growth turned negative, but they have stabilised since then.

3. General government finances

3.1 Accounting principles

This section presents the forecast for the general government finances given in the Spring Fiscal Policy Bill for 2019 (Govt Bill 2018/19:100). The reporting of general government income and expenditure is based on the European System of Accounts (ESA 2010). However, the Government's reporting, which is also used by the National Institute of Economic Research (NIER), differs in certain respects from ESA 2010 (see table 3.1). The main differences are that parts of sales revenue from public activities are

recorded on the expenditure side, as a deduction item in general government consumption expenditure in the national statistics, while these revenues are recorded on the revenue side according to ESA 2010. But there is no difference in the calculation of net lending. A detailed report of general government finances in accordance with ENS 2010 (and EDP) is given in table C.2a in Appendix C.

Table 3.1 General government finances in accordance with the accounting standards in the Spring Fiscal Policy Bill and ESA 2010

Per cent of GDP

	2018	2019	2020	2021	2022
SFPB16					
Revenue	49.5	49.1	49.0	49.0	48.9
Expenditure	48.8	48.5	48.3	47.9	47.1
Net lending	0.7	0.6	0.7	1.1	1.9
ESA 2010					
Revenue	50.5	49.9	49.7	49.6	49.4
Expenditure	49.8	49.3	49.0	48.5	47.6
Net lending	0.7	0.6	0.7	1.1	1.9

Note: SFPB16 = 2016 Spring Fiscal Policy Bill.

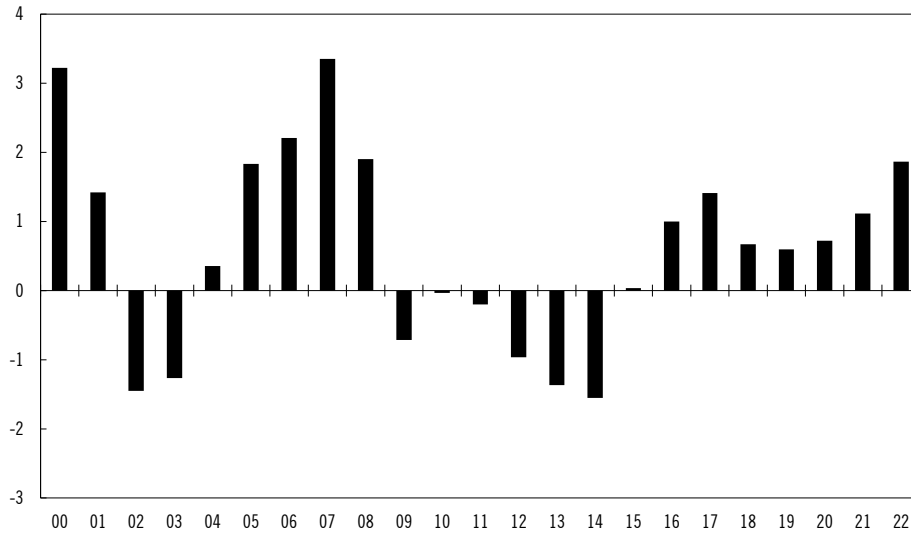
Sources: Statistics Sweden and own calculations.

3.2 Development of general government finances

General government finances were reinforced strongly between 2014 and 2017. Net lending turned round from a deficit of 1.6 per cent of GDP to a surplus of 1.4 per cent of GDP (see chart 3.1). Then, as lending was adapted to the new level of the surplus target, net lending fell and was 0.7 per cent of GDP in 2018.

Chart 3.1 General government net lending 2000-2022

Per cent of GDP



Sources: Statistics Sweden and own calculations.

A lower surplus is expected in both 2018 and 2019 compared with 2017. This applies both to central government and to the local government sector. As of 2020 general government net lending is expected to strengthen and approach 2 per cent of GDP in 2022 (table 3.2).

Table 3.2 General government finances

Per cent of GDP if not otherwise stated

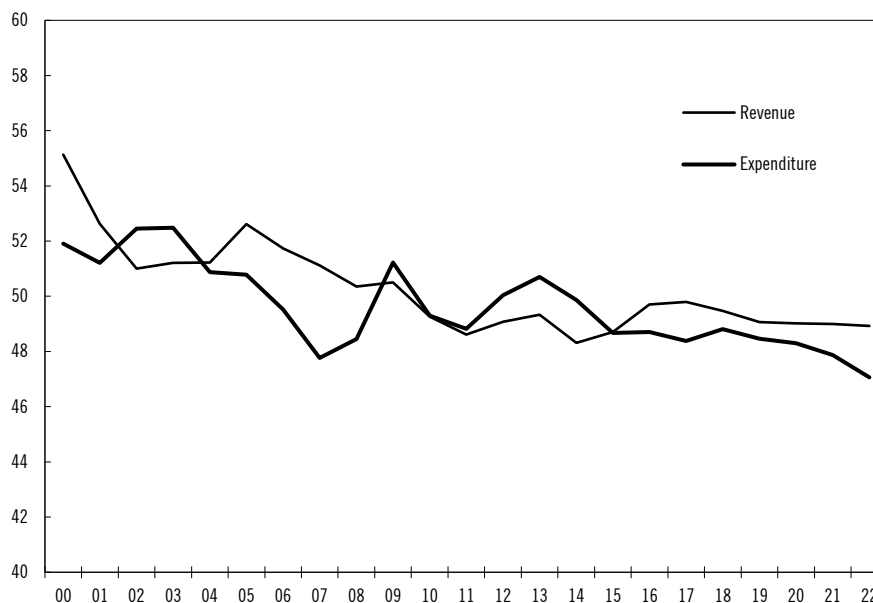
	SEK, billions					
	2018	2018	2019	2020	2021	2022
Revenue	2 370	49.5	49.1	49.0	49.0	48.9
Taxes and charges	2 093	43.7	43.3	43.1	43.1	43.0
Household direct taxes	614	12.8	12.6	12.5	12.5	12.5
Corporate direct taxes	147	3.1	3.2	3.3	3.3	3.3
Employers' contributions	256	5.4	5.3	5.3	5.3	5.3
Indirect taxes	1 076	22.5	22.1	22.0	21.9	21.8
Income from capital	75	1.6	1.6	1.7	1.7	1.8
Other revenue	202	4.2	4.2	4.2	4.2	4.2
Expenditure	2 338	48.8	48.5	48.3	47.9	47.1
Transfer payments	825	17.2	17.2	17.0	16.9	16.6
Final consumption expenditure	1 252	26.1	26.0	25.8	25.5	25.1
Gross fixed capital formation	227	4.7	4.8	4.9	5.0	4.8
Interest expenditure	24	0.5	0.4	0.4	0.3	0.3
Net lending	32	0.7	0.6	0.7	1.1	1.9
Primary net lending	56	1.2	1.0	1.1	1.4	2.2
Consolidated gross debt	1 859	38.8	34.5	32.8	30.9	28.2
Net debt	1 182	24.7	25.3	25.9	26.6	28.0

Sources: Statistics Sweden and own calculations.

The lower surplus in 2018 than in 2017 was mainly the result of a decrease in income from taxes as a share of GDP, but was also due to expenditure growing slightly faster than GDP. In 2019 income is estimated to continue to decrease as a share of GDP at same time as the share of expenditure also decreases. At the end of the forecast period, income is judged to increase in pace with GDP, while expenditure, in central government in particular, continues to decrease as a share of GDP.

Chart 3.2 General government income and expenditure 2000–2022

Per cent of GDP



Sources: Statistics Sweden and own calculations.

Income as a share of GDP

General government income decreases as a share of GDP in 2019 compared with 2018. This is mainly due to weaker tax growth that follows both from changes in tax legislation and from the estimate that households' capital taxes will grow more weakly than in 2018. As of 2020 income is expected to largely grow in pace with GDP (see chart 3.2).

Expenditure as a share of GDP

The expenditure ratio, i.e. expenditure as a share of GDP, was 48.8 per cent in 2018. This ratio is forecast to decrease gradually during the forecast period. This is largely a consequence of, first, an assumption of unchanged rules in accordance with the active fiscal policy announced up to now and, second, the assumption that the local government sector will conduct an expenditure policy that is consistent with the balanced budget requirement. It is primarily public consumption and transfers to households that are affected by these assumptions.

The strengthening of net lending is at central government level.

Net lending in central government in 2018 was 1.3 per cent of GDP. The surplus in the sector for 2019 is estimated to be largely unchanged compared

with 2018 (see table 3.3). Previously adopted measures mean that tax revenue to the sector will grow more slowly than GDP in 2019 compared with 2018, but that expenditure is also expected to grow more slowly. Expenditure for interest payments is the main source of the weaker increase in expenditure.

The surplus in central government is expected to increase slightly in 2020 and then to strengthen gradually up until 2022 because expenditure decreases as a share of GDP. Costs for activity and sickness compensation are among those that are expected to decrease. In addition, the assumption of unchanged regulations in accordance with the active fiscal policy announced up to now means that net lending will be further reinforced at the end of the period.

Table 3.3 Net lending and the central government budget balance

Per cent of GDP

	2018	2019	2020	2021	2022
General government net lending	0.7	0.6	0.7	1.1	1.9
Central government	1.3	1.2	1.3	1.6	2.3
Old-age pensions system	0.1	0.1	0.2	0.2	0.3
Local government sector	-0.7	-0.7	-0.8	-0.7	-0.7
Central government budget balance	1.7	2.6	0.0	1.7	2.3
Central government debt	25.0	19.9	19.0	16.5	13.6

Sources: Statistics Sweden, National Financial Management Authority and own calculations.

3.3 Net financial wealth and consolidated gross debt

Consolidated gross debt (Maastricht debt) is defined by EU regulations and is the debt concept used to assess Member States' general government finances within the framework of the Stability and Growth Pact. For Sweden, this definition means that the debt consists of the consolidated central government debt and local government sector debt in the capital markets, less the Swedish National Pension Funds' holdings of government bonds.

Prior to Sweden's accession to the EU on 1 January 1995, the consolidated gross debt amounted to over SEK 1 200 billion, corresponding to around 70 per cent of GDP. Since then this debt has increased by around SEK 650 billion as was around SEK 1 860 billion at the end of 2018.

Central government financing of loans to the Riksbank to reinforce currency reserves in 2009 and 2013 increased the debt by almost 3 per cent of GDP in each of these years. At the same time, central government claims on the Riksbank increased to a corresponding extent. The debt also increased by about 1.8 per cent of GDP in 2014 due to regulatory changes

that allowed central government agencies other than the National Debt Office to hold outstanding repurchase agreements regarding financial instruments, 'repos', over the turn of the year. According to the National Accounts, however, assets and liabilities are affected to the same extent by the repos, so the change does not affect net wealth. Since these repos are managed by the Legal, Financial and Administrative Services Agency, central government debt is not affected according to the accounting in the central government budget, which only reflects debt management by the National Debt Office. Otherwise, deficits in general government finances and currency effects also contributed to the debt increase between 2012 and 2014.

The contribution of the local government sector to the consolidated gross debt has increased in nominal terms. This is largely due to investments in the local government sector being partly financed by loans and to the sector's financing of on-lending to local authority companies.

However, the debt has decreased strongly as a share of GDP since 1994, and amounted to about 39 per cent of GDP at the end of 2018, which is substantially below the reference value in the Stability and Growth Pact of a maximum of 60 per cent of GDP. The development of the debt depends on net lending, which can be divided among the primary balance, interest expenditures and 'stock flow factors'. These factors are made up of financial transactions and accruals that do not affect net lending.

General government gross debt is estimated to decrease strongly in the present year on account of the Riksbank's decision not to refinance the remaining currency loans that mature in 2019. As of 2020 the gross debt is forecast to continue to decrease as a result of the estimated surpluses in general government finances. In 2022 the gross debt is judged to be less than 30 per cent of GDP.

General government's net financial wealth is strengthening.

The general government sector has positive net financial wealth that can mainly be attributed to the National Pension Funds in the old-age pension system. Central government's net financial wealth is negative and the financial assets and liabilities of the local government sector have essentially been in balance since 2000.

In addition to the Maastricht debt, the total debt also includes commitments by central government and the local government sector for defined-benefit occupational pensions earned since 1998.

Net financial wealth amounted to just under 25 per cent of GDP in 2018, which was an decrease of over 1 per cent of GDP compared with 2017. The main reasons for the decrease in financial wealth were value changes of assets in the old-age pension system and the contribution from GDP growth. For 2019–2022 it is primarily the surpluses in central government that reinforce general government’s net financial wealth.

3.4 Reconciliation against the general government net lending target

There is judged to be a deviation from the surplus target if the structural balance deviates clearly from the target level in the present year or the coming year, i.e. the budget year. There may be several reasons for the occurrence of a deviation from the target and this must not be equated with the policy being incorrectly framed or being incompatible with the fiscal policy framework. An eight-year retrospective average of actual net lending is used in order to be able to evaluate *ex post* whether the surplus target has been attained, and to detect systematic deviations. Accumulated deviations in net lending that lead to undesirable levels of debt can also justify an adjustment of the target level at the next review of the surplus target. However, the retrospective average is not intended to govern fiscal policy in the short term, but is, instead, mainly used at the next review to evaluate whether the target level, given target achievement and the development of the debt, needs to be adjusted to ensure the sustainability of and margins in general government finances.

As of 2019 the target will be reduced to 0.33 per cent of GDP. Formulating the net lending target as an average over an economic cycle, instead of an annual target, is justified for reasons of stabilisation policy. If the target was a fixed value of net lending as a share of GDP in each individual year, fiscal policy would also need to be contractionary in an economic downturn to ensure that the annual target was met. Fiscal policy would then amplify economic fluctuations instead of stabilising them. However, formulating the target as an average over an economic cycle makes it more difficult to monitor whether fiscal policy is in line with the target since it is difficult to determine when an economic cycle begins and ends, as well as the specific cyclical position of the economy.

Table 3.4 General government net lending and indicators for reconciliation against the net lending target

Per cent of GDP if not otherwise stated

	2018	2019	2020	2021	2022
Net lending	0.7	0.6	0.7	1.1	1.9
Retrospective eight-year average	-0.1				
Structural balance ¹	0.1	0.2	0.5	1.0	1.9

Sources: Statistics Sweden and own calculations.

Structural balance

Despite considerable uncertainty about the structural balance, this measure, calculated according to established methods, is judged to be the most suitable measure for assessing whether the present level of net lending and fiscal policy are consistent with the surplus target. The use of the structural balance as the main indicator in the prospective monitoring of the surplus target is also judged to be consistent with EU law. Table 3.4 presents outcomes and forecasts of general government net lending. The structural balance in years t and $t+1$, i.e. in the present year and the budget year, 2019 and 2020, is used to assess achievement of the surplus target looking forward.

The structural balance is 0.2 per cent of potential GDP in 2019. However, as a result of the uncertainty in the assessment of the structural balance, differences as small as this in relation to the target do not entail a clear deviation. Nor is there any clear deviation in 2020. The Government therefore makes the assessment that the direction of fiscal policy is in line with the new surplus target.

Retrospective eight-year average

The retrospective average of net lending for 2011–2018 is expected to be under the target level. However, the net lending has gradually been reinforced during the period.

The Government's assessment of achievement of the medium-term budgetary objective (MTO) according to the preventive arm of the Stability and Growth Pact

Sweden's medium-term budgetary objective (MTO) is that the structural balance should not fall below minus 1 per cent of potential GDP.

Table 3.5 Structural balance as calculated by the European Commission

Per cent of potential GDP

	2018	2019	2020
Structural balance	0.9	0.9	1.0
Medium term budgetary objective (MTO)	-1.0	-1.0	-1.0

Source: European Commission's winter forecast (February 2016).

The European Commission's latest forecast, published in November 2018, estimates the structural balance in Sweden at 0.9 per cent of potential GDP in 2018 and 2019 (see table 3.5). The structural balance in 2020 is judged to be 1.0 per cent of potential GDP, which is higher than the Government's assessment (see table 3.4). The difference is partly due to different assessments of economic developments and to different calculation methods. The Commission's November forecast indicates that Sweden is expected to meet the medium-term objective in all years.

Summing up, the Government finds that the margins to the limit values in the corrective arm of the Stability and Growth Pact are good and that Sweden is expected to meet the criteria of the preventive arm of the Stability and Growth Pact.

3.5 Monitoring of the debt anchor

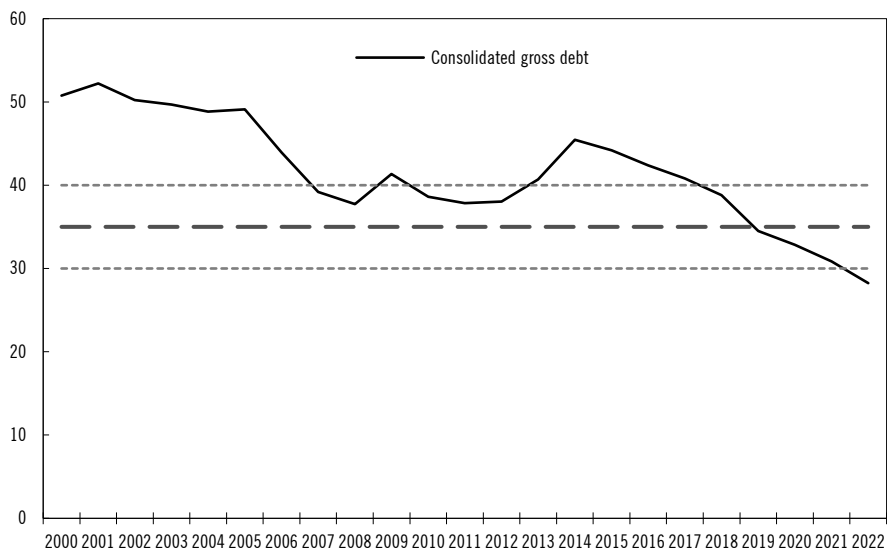
The fiscal policy framework is supplemented with a debt anchor for consolidated gross general government debt. The level of the debt anchor, which is a guideline for the level of the debt, was set at 35 per cent of GDP.

The rules for the debt anchor require the Government to give an account each year in the spring fiscal policy bill of the development of the consolidated gross general government debt. If this debt deviates from the debt anchor by more than 5 per cent of GDP, the Government has to present a communication to the Riksdag at the same time as the spring fiscal policy bill. Any deviations are measured according to the outcome in the national accounts for the preceding year or in the forecast for the present year or the budget year. In its communication the Government has to give an account of the cause of the deviation and how the Government intends to handle it.

Gross debt as a share of GDP is judged to be within the tolerance limits of the debt anchor in these years (see chart 3.3). In the present forecast, which is based on fiscal policy currently announced, the gross debt falls further on in the forecast horizon to just under 30 per cent of GDP in 2022.

Chart 3.3 Consolidated gross debt

Share of GDP



Source: Own calculations.

3.6 Monitoring of the expenditure ceiling

The multi-year expenditure ceiling is intended to foster the credibility of economic policy and is an important budgetary policy commitment for the Riksdag and the Government. In principle, all expenditure in the central government budget is subject to the expenditure ceiling, apart from expenditure for interest on the central government debt. Off-budget expenditure on the old-age pensions system is also covered by the expenditure ceiling. In the monitoring of the expenditure ceiling, ceiling-restricted expenditure consists of the actual use of appropriation funds, so that the use by agencies of appropriations savings and appropriations credit is included. The space between the expenditure ceiling and the ceiling-restricted expenditure is termed the budgeting margin. As a rule, use of the budgeting margin worsens general government finances. The expenditure ceiling is the upper limit for ceiling-restricted expenditures. The level of the expenditure ceiling should not, however, be regarded as a target for ceiling-restricted expenditures. One reason is that the surplus target may restrict the level of ceiling-restricted expenditures even when there is space below the expenditure ceiling.

In the Spring Fiscal Policy Bill for 2019 the Government proposes raising the level already adopted for the expenditure ceiling for 2021 for fiscal policy reasons. It is consistent both with practice and with the Swedish fiscal policy framework for a new government to propose amended levels of the expenditure ceiling as a part of a change in the direction of fiscal policy.

For 2022 the Government makes a first assessment of the level of the expenditure ceiling in the Spring Fiscal Policy Bill for 2019. The Budget Act requires the Government to propose a level of the expenditure ceiling for the third year ahead in the budget bill. In accordance with the Budget Act the Government will propose a level of the expenditure ceiling for 2022 in the Budget Bill for 2020.

Table 3.6 Expenditure ceiling 2019–2022

SEK billions, unless otherwise stated

	2019	2020	2021	2022
Expenditure ceiling	1 351	1 388	1 439	1 498
Per cent of GDP	27.1	27.0	27.0	27.0
Ceiling-limited expenditure	1 312	1 345	1 372	1 388
Per cent of GDP	26.4	26.1	25.7	25.0
Budgeting margin	39	43	67	110
Per cent of GDP	0.8	0.8	1.3	2.0

Note: The budgeting margin is the space between an expenditure ceiling and the ceiling-limited expenditure.
Sources: Swedish National Financial Management Authority and own calculations.

The budgeting margin under the expenditure ceiling for 2022 is estimated at SEK 110 billion, which the Government considers adequate to manage the uncertainty in expenditure growth. The estimated budgeting margins for 2020 and 2021 are SEK 43 billion and SEK 67 billion.

3.7 Monitoring the requirement of sound financial management in the local government sector and the local government balanced budget requirement

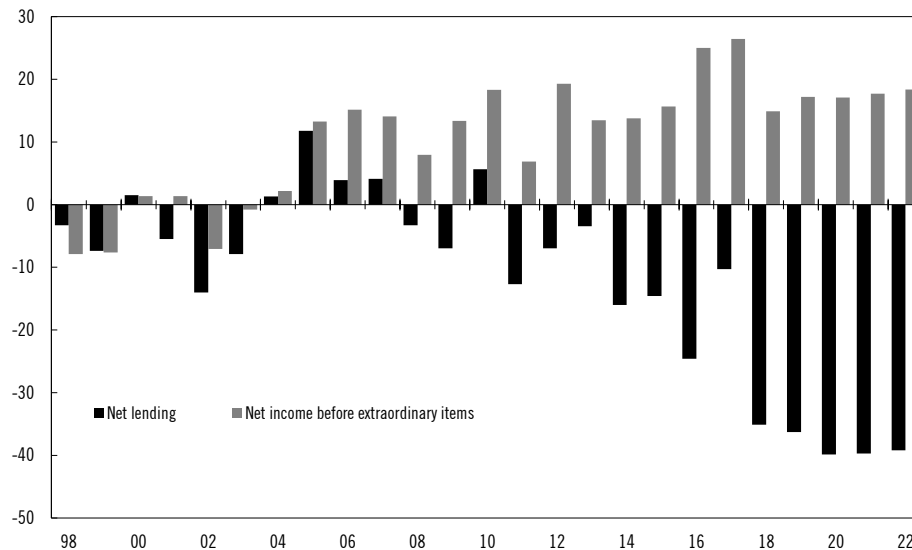
The general government net lending target (see section 1.1) also includes net lending in the local government sector, that is, municipalities and county councils and certain other local government organisations. The surplus target is expressed in terms of net lending as defined in the National Accounts. However, it is net income, and not net lending, that determines whether municipalities and county councils are in compliance with the balanced budget requirement of the Local Government Act. According to this requirement, municipalities and county councils have, as a main rule, to draw up budgets in which revenue exceeds costs. Deviations from the balanced budget requirement are only permitted in exceptional cases. Negative net income in the accounts for a particular year must be corrected within three years, unless there are exceptional grounds. This requirement represents the lowest acceptable level of net income in the short-term.

There are accounting differences between the local government accounts and the National Accounts that can amount to tens of billions kronor for a particular year (see chart 3.4). The reason for these differences is that local

government accounting is based on the same theoretical principles as those that apply to accounting in the business sector. If, for example, investment expenditure rises substantially between two years, this has an immediate impact on net lending, while net income would only be affected by depreciation.

Chart 3.4 Local government net income and net lending

SEK billions



Sources: Statistics Sweden and own calculations.

The Local Government Act requires municipalities and county councils to have sound financial management in their operations. This means, for instance, that municipalities and county councils have to set their own financial targets and be accountable for long-term sustainable finances. It has long been a fundamental principle that each generation has to meet its own costs. One commonly used target is that net income should correspond to a certain proportion of tax revenue and general central government grants. The annual reports of municipalities and county councils have to contain an assessment of whether the balanced budget requirement has been met and of whether targets for sound financial management have been achieved. As of 1 January 2013 municipalities and county councils are permitted to build up income equalisation reserves as part of their own funds. This means that surpluses can be set aside in good times for use if deficits arise as a result of an economic downturn.

Development of net income in local government

The local government sector as a whole reported net income before extraordinary items of SEK 15 billion in 2018 (see chart 3.4). The sector's costs increased more rapidly than revenue in 2018. As a result, net income in 2018 fell from its historically high level in the preceding year. The Government's forecast of the local government sector's finances estimates net income at SEK 17 billion in 2019. Thereafter net income is estimated at SEK 17–18 billion per year in 2020–2022, corresponding to 1.9 per cent of tax income and general central government grants.

3.8 Central government guarantees

A central government guarantee undertaking means that central government provides a guarantee for another party's payment undertaking, and this leads to a financial risk for central government.

The Budget Act enables the Government to decide on lending and to issue credit guarantees and make other similar undertakings for that purpose not exceeding the amount determined by the Riksdag. The regulatory framework provides that a fee corresponding to the expected cost of the undertaking is charged, unless the Riksdag decides otherwise. The expected cost of loans and guarantees consists of the expected losses and administrative costs associated with the undertaking. Expected loss is a statistical measure of the credit losses that estimates show may arise because of a certain probability that the guarantee holder or the borrower will not meet their undertaking. Previous fees for expected losses have been deposited in accounts with the National Debt Office or in banks or invested in securities. As of 1 January 2018 the fees are invested in an interest-bearing account with the National Debt Office. These guarantee activities are thus expected to be self-financing in the long term. These principles for the provision of loans and guarantees are called the central government guarantee model.

Examples of major guarantee commitments covered by this guarantee model are export credit guarantees and credit guarantees for infrastructure projects.

However, the Riksdag is able to decide to exempt specific guarantees from the guarantee model. So there are guarantees that are regulated in special acts or have terms that differ from those stipulated in the Budget Act on some other basis. Fees for such guarantees are usually stipulated directly in law and may be based on grounds other than the full recovery of expected costs. The deposit insurance scheme, which is central government's largest guarantee commitment, and the investor compensation scheme are examples of

guarantees regulated under special arrangements. Guarantee capital for international financial institutions is not covered by the guarantee model either.

Composition of the guarantee portfolio

Table 3.7 presents a summary of guarantees and commitments issued. At the end of 2018 the central government guarantee portfolio amounted to SEK 2 658 billion. The largest undertakings were the deposit insurance scheme (SEK 2 280 billion) followed by credit guarantees (SEK 224 billion) and guarantees for capital injections (SEK 146 billion).

Table 3.7 Central government guarantee commitments and pledges, 31 December 2018

SEK billions

	Guarantees	Pledges
Deposit insurance scheme¹	2 280,0	
Investor compensation²		
Credit guarantees	224,4	32,6
of which		
Bank guarantee programme		
Export credit guarantees ³	193,3	31,8
Credit guarantees in foreign aid	0,8	
Independent guarantees	4,4	0,8
Infrastructure	18,3	
Housing credits	3,1	0,0
International commitments	4,5	
Other	0,0	
Guarantees for capital injections	145,6	
of which		
Capital cover guarantees	4,4	
Subscription guarantees	0,4	
Guarantee capital	140,8	
Pension guarantees ⁴	8,0	
Total	2 658,0	32,6

¹ The commitment for the deposit insurance scheme is as on 31 December 2017.

² The size of the central government commitment for investor compensation cannot be stated.

³ Refers to restricted pledges.

⁴ The undertaking for pension guarantees is as on 31 December 2017.

Source: Swedish National Debt Office.

Expected losses in the central government's guarantee portfolio

In the guarantees covered by the guarantee model, the responsible authorities continuously assess the expected losses. The authorities make provisions for the expected losses on the liabilities side of their balance sheets.

To obtain a result for the part of guarantee activities that covers guarantees for which a provision has been made, an analysis is carried out of the relationship between provisions for expected losses and the assets held in guarantee activities. This comparison shows that for the part of the guarantee portfolio covered by the guarantee model, the provisions for expected losses are amply covered by the charges already paid in (reported as guarantee assets in table 3.8).

Table 3.8 Comparison between provisions for expected costs and assets in the guarantee operations as of 31 December 2018 (excluding the deposit insurance scheme, investor compensation scheme, bank guarantee programme and guarantee capital)

SEK billions

Authority	Guarantee commitment	Provisions for expected costs	Guarantee assets
Swedish National Debt Office	30.1	1.0	1.1
The Swedish Export Credits Guarantee Board	193.3	9.8	33.9
Swedish International Development Cooperation Agency	5.2	0.2	2.4
BOVERKET - The Swedish National Board of Housing, Building and Planning	3.1	0.1	2.3
Total	231.6	11.1	39.7

Source: Swedish National Debt Office.

Annual analysis of the risk of major losses

The National Debt Office has the task of performing a concerted analysis each year of the risk of large losses in the central government guarantee and lending portfolio along with the Swedish Export Credits Guarantee Board, the Swedish Board of Student Finance (CSN), Swedish International Development Cooperation Agency (Sida), Swedish National Board of Housing, Building and Planning (Boverket) and the other agencies concerned. The term large losses is defined by the National Debt Office as losses of at least around SEK 20 billion in the coming five years. The risk of large losses in the regular portfolio¹ is judged to remain low. The risk of large losses in the form of activation of the deposit guarantee scheme is assessed as low to moderate.²

¹See the National Debt Office's report for information about definitions and the analytical framework. *Statens garantier och utlåning – En riskanalys*, 15 mars 2019. <https://www.rikskalden.se/contentassets/47df9c56a9934b8eade5865da49eea25/2019-03-15-statens-garantier-och-utlaning-en-riskanalys-2019.pdf>

² The level of risk is assessed on the basis of a four-point scale; low, moderate, significant and high.

4. Alternative scenarios and comparison with Sweden's Convergence Programme 2018

4.1 Alternative scenarios

Forecasts of economic development are subject to uncertainty. To shed light on this uncertainty, this section presents some factors that could lead to a development that differs markedly from the forecast.

International uncertainty

Sweden is a small and open economy and is greatly affected by international developments. Continued trade policy tensions, especially between the US and China, have contributed to a slowdown in world trade. There is great uncertainty about how this situation will develop in the future. If the threats of increases in barriers to trade are realised, this can lead to significantly lower global growth than in the forecast.

Activity in the Chinese economy has also begun to decelerate. Apart from an escalated trade conflict that would hit its economy hard, China also has problems of overcapacity in state-owned enterprises, imbalances in the housing market and high private and public indebtedness. A severe slowdown of growth in China would have a major impact on the world economy since Chinese demand for raw materials and other input goods is an important driver of global growth.

Another uncertainty is the future shape of economic and political relations between the EU and the UK after the UK leaves the EU. The forms for the exit and the future relations will affect economic performance in both the UK and the Member States, including Sweden, that are closely linked to the UK economy.

Climate change and extreme weather events are also risks to the global economy, since they can result in major costs both for individuals and for society as a whole. This is taking place at the same time as several large countries, including the US and Brazil, are threatening to leave the Paris Agreement.

If the economy performs less well than expected, the ability of monetary policy to stabilise the economy is limited on account of the low level of interest rates. The ability of EU Member States to stabilise their economies with the aid of active fiscal policy is also limited. The European Commission estimates that general government net lending in Member States averaged -0.7 per cent of GDP in 2018 and that half of Member States have a general government debt (Maastricht debt) in excess of 60 per cent of GDP.

In the worst case, several of the above-mentioned risks could trigger a period of general financial unrest and higher risk premiums; for instance if the UK leaves the EU without a deal or in the event of a shift in market expectations concerning the pace of the normalisation of monetary policy in the US. Continued unrest surrounding Italy's fiscal policy and elevated yield levels on Italian government bonds can also contribute to more financial unrest.

The performance of the international economy may also be stronger than expected if, for instance, the ongoing trade conflict is de-escalated and global confidence therefore increases. Stronger economic growth internationally would benefit Swedish export industry.

Domestic uncertainties

In Sweden household indebtedness and the development of the housing market are judged to be the main uncertainties. Prices in the housing market stabilised in 2018, but if house prices fall in the future or if interest rates rise more than households expect, this can lead to negative effects on the Swedish economy on account of factors including lower housing investment and lower consumption.

A correct assessment of resource utilisation in the economy is central to the conduct of effective monetary and fiscal policy. However, resource utilisation cannot be observed directly, which means that there is great uncertainty in this assessment. If the assessment of resource utilisation deviates significantly from the actual utilisation, this would mean that the monetary and fiscal policy conducted has been less effective.

Another uncertainty is household consumption, which could grow more strongly than in the forecast. Consumption growth was subdued in 2018, but households have high savings at the same time. Along with the continuation of the favourable situation in the labour market, this indicates that household consumption can grow more quickly than assumed in the forecast.

Effects of different assumptions about the potential development of the economy

Potential GDP is the level of GDP that is consistent with an economy in balance and is, for instance, used to estimate the structural balance. Potential GDP cannot be observed and is therefore assessed on the basis of various indicators and statistical analyses (see the Ministry of Finance's report *Metod för beräkning av potentiella variabler* April 2019 on www.regeringen.se). This assessment is subject to a great deal of uncertainty. One important part of

the assessment of potential GDP is productivity growth in the longer term. For a period, productivity growth has been weaker than expected both in Sweden and internationally. The forecast assumes that potential productivity recovers and returns in the long term to a rate of growth corresponding to the historical average since 1980. In the following a sensitivity analysis is presented with scenarios in which potential productivity is higher and lower than in the forecast. The results show that the different assumptions of potential productivity growth do not have any substantial effects on the structural balance in 2020.

Sensitivity analysis assuming lower potential productivity

This scenario assumes that the level of potential productivity is around 0.5 percentage points lower at present than in the forecast, and resource utilisation in companies is therefore assumed to be more strained. It also assumes that potential productivity grows more slowly in the forecast period than in the forecast and that potential productivity in 2022 is just over 1 per cent lower. Potential GDP is therefore lower and, all else equal, resource utilisation higher.

Lower potential productivity leads to a lower level of the capital stock, reducing company profits. This reduces the level of investments in 2019–2022. In addition, Swedish exporters have lower production capacity than in the forecast, and export growth is therefore lower. Lower potential productivity leads to slightly slower growth of real wages, which then dampens household consumption. In aggregate, GDP growth is lower than in the forecast.

Weaker demand in the economy leads to slightly weaker performance of the labour market. Since wages adapt to the lower productivity growth with some lag, unit labour costs rise slightly initially. Inflation is therefore slightly higher than in the main scenario, and the Riksbank is expected to conduct a slightly less expansionary monetary policy.

The effect on general government net lending is judged to be relatively small. The weaker development of private consumption and the payroll in relation to the main scenario is offset by the expected decrease in public expenditure for consumption and investment. In total, general government net lending is estimated to be relatively unchanged by the alternative development. The structural balance decreases initially compared with the main scenario on account of a larger GDP gap. As the GDP gap decreases, the structural balance is expected to gradually develop in line with the estimate in the main scenario.

Sensitivity analysis assuming higher potential productivity

This scenario assumes that the level of potential productivity is around 0.5 percentage points higher at present than in the forecast, and resource utilisation in companies is therefore assumed to be less strained than in the forecast. It also assumes that potential productivity grows faster in the forecast period than in the forecast and is just over 1 per cent higher in 2022.

The effect in this scenario is the opposite from in the previous scenario, and GDP is thus slightly higher and resource utilisation slightly lower than in the forecast. Higher potential productivity leads to faster investment growth, and higher production capacity among exporters then results in stronger export growth. This leads on to faster growth of real wages than in the forecast, and the growth of household consumption is stronger. In aggregate, GDP growth is thus lower than in the forecast.

Higher demand is also reflected in the labour market, where employment rises and unemployment is slightly lower. In a similar way to in the previous scenario, wages adapt to the higher level of productivity with some lag and the cost pressure is slightly lower. Inflation rises slightly more slowly and monetary policy is slightly more expansionary to ensure that inflation reaches 2 per cent at the end of the forecast period.

The effect on general government net lending is also judged to be relatively small in this scenario since the effects on general government finances largely cancel one another out. The structural balance is judged to increase initially compared with the main scenario on account of a smaller GDP gap. As the GDP gap decreases, the structural balance is expected to gradually develop in line with the main scenario.

Table 4.1 Scenarios: 1 Higher potential productivity and 2 Lower potential productivity

Outcome and forecast according to the main scenario shown in bold for each variable. Percentage change unless otherwise stated.

	2018	2019	2020	2021	2022
Potential productivity¹	0.7	0.7	1.0	1.2	1.4
Scenario 1	0.9	0.9	1.2	1.5	1.5
Scenario 2	0.5	0.6	0.8	1.0	1.2
GDP¹	2.4	1.6	1.4	1.5	2.0
Scenario 1	2.4	1.9	1.9	2.0	2.0
Scenario 2	2.4	1.4	0.9	1.2	1.8
GDP gap²	1.2	1.0	0.4	0.0	0.0
Scenario 1	0.7	0.6	0.4	0.2	0.0
Scenario 2	1.6	1.3	0.5	0.0	0.0
Unemployment³	6.3	6.3	6.4	6.4	6.5
Scenario 1	6.3	6.3	6.3	6.3	6.5
Scenario 2	6.3	6.3	6.5	6.5	6.5
Hourly pay according to short-term pay statistics	2.6	2.8	2.9	3.1	3.2
Scenario 1	2.6	2.9	3.2	3.3	3.4
Scenario 2	2.6	2.7	2.7	2.9	3.0
CPI⁴	2.1	1.7	1.5	1.9	2.0
Scenario 1	2.1	1.7	1.4	1.8	2.0
Scenario 2	2.1	1.7	1.7	2.0	2.0
Repo rate⁴	-0.5	-0.3	0.0	0.3	0.7
Scenario 1	-0.5	-0.4	-0.1	0.2	0.7
Scenario 2	-0.5	-0.3	0.2	0.4	0.7
Net lending⁵	0.7	0.6	0.7	1.1	1.9
Scenario 1	0.7	0.6	0.8	1.2	1.8
Scenario 2	0.7	0.6	0.7	1.1	1.9
Structural balance⁶	0.1	0.2	0.5	1.0	1.9
Scenario 1	0.3	0.4	0.7	1.0	1.8
Scenario 2	-0.2	-0.1	0.4	1.0	1.9

¹ Data corrected for calendar effects.

² Difference between actual and potential GDP in percent of potential GDP.

³ 15–74 years, percentage of labour force.

⁴ Annual average.

⁵ Per cent of GDP.

⁶ Per cent of potential GDP.

Sources: Statistics Sweden, Riksbank, National Mediation Office and own calculations.

4.2 Comparison with the 2018 Convergence Programme

GDP growth in 2018 was slightly lower than the assessment made in the 2018 Convergence Programme. In both 2019 and 2020 growth is expected to be lower than the assessment made in the Programme. Consumption and investment make the main contributions to the downward revision of GDP.

Table 4.2 Comparison with the 2018 convergence programme

Annual percentage change in volume and per cent of GDP

	2018	2019	2020	2021	2022
GDP, percentage change in volume					
Convergence programme 2018	2.8	2.2	2.1	1.8	--
Convergence programme 2019	2.3	1.6	1.6	1.6	2.0
Difference, percentage points	-0.5	-0.6	-0.5	-0.2	--
General government net lending, per cent of GDP					
Convergence programme 2018	1.0	1.0	1.3	1.9	--
Convergence programme 2019	0.7	0.6	0.7	1.1	1.9
Difference, percentage points	-0.3	-0.4	-0.6	-0.8	--
Consolidated gross debt, per cent of GDP					
Convergence programme 2018	37.3	34.2	31.6	29.0	--
Convergence programme 2019	38.8	34.5	32.8	30.9	28.2
Difference, percentage points	1.5	0.3	1.2	1.8	--

Sources: Statistics Sweden and own calculations.

5. Long-term sustainability of fiscal policy

This section presents an assessment of whether fiscal policy is sustainable in the long-term. The assessment is made on the basis of scenarios for the development of general government income and expenditure with unchanged rules, given various assumptions about factors including population change, employment and growth. The purpose of the analysis is to pick up and identify, in ample time, signs that fiscal policy is unsustainable so that action can be taken at an early stage to restore its sustainability. The section also contains a comparison with assessments made by other actors and with the Government's previous assessments of the sustainability of fiscal policy.

A sustainable fiscal policy reduces the risks of imbalances in general government finances and of sudden shifts in the fiscal policy being pursued. If the necessary adjustments are identified and implemented at an early stage, this limits the negative impacts of the policy. Then the adjustments have a preventive effect so that more extensive measures do not need to be implemented at a later stage. If general government finances are strong, this also create the conditions for managing crises in an orderly way; when needed, stabilisation policy measures can then be taken without endangering confidence in fiscal policy. It is therefore important that there is great confidence in fiscal policy, both among households and companies and in international financial markets.

5.1 Long-term challenges

Sweden is facing demographic developments that may put strain on the macro economy. Rising life expectancy is leading to an ageing population, which can be expected to lead to greater public expenditure for social care and health care services. Moreover, a large number of, mostly young, people have immigrated to Sweden in recent years, which increases the need for labour market training and for places in education and training. At the same time, this immigration reduces the average age of the population, and can reduce the effect of an ageing population on public finances when the new arrivals enter the labour market.

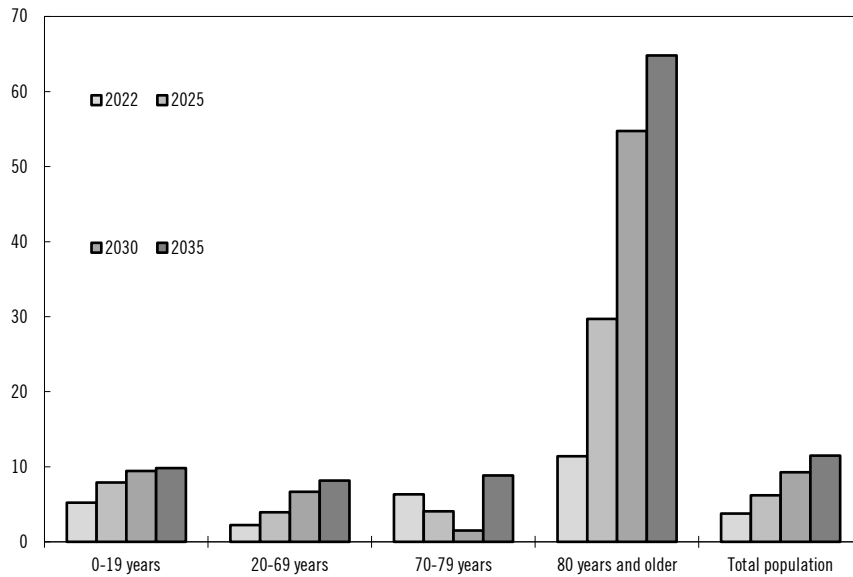
A change in population structure is not the only factor that can affect general government finances. Higher costs of and increased demand for tax-financed services may also result in strains. How to respond to this is essentially a political issue. A lower level of ambition (regarding the quality or scale of tax-financed welfare services) or higher taxes give different outcomes. However, these are not the only parameters that affect general government finances. By producing tax-financed services more effectively, extending working life in pace with increases in life expectancy, increasing employment in groups where the employment rate is lower, increasing average working hours and improving the population's health so that more people can work for longer, the pressure on the general government finances can be moderated.

The size and composition of the population will change rapidly in the coming 15 years

The Swedish population is expected to grow by about 1.2 million people between 2018 and 2035 according to the population forecast issued by Statistics Sweden in April 2018 (see chart 5.1). The population, which was around 10 million in January 2017, is expected to increase to around 11 million by the end of 2027 and just over 11.4 million in 2035. The population will then increase by more than 70 000 people per year in the period 2018–2035, or by around 0.7 per cent per year which is a relatively rapid growth rate in both a historical and a European comparison. Children and young people account for around 20 per cent of this increase and the number of people of working-age (20–69) for around 44 per cent. The remainder consists of people aged 70 or older.

Chart 5.1 Population changes compared with 2015

Thousands



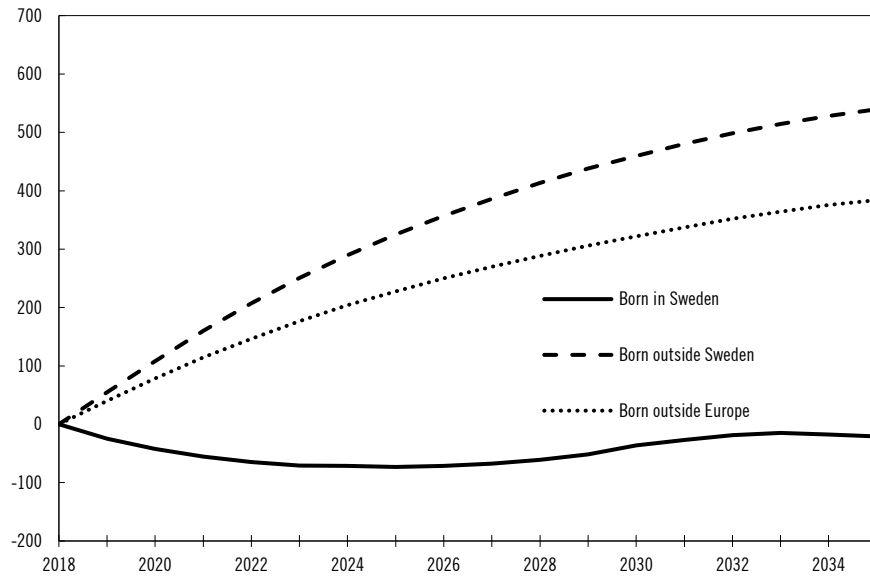
Source: Statistics Sweden

The number of young people and people of working age is expected to rise particularly quickly up until 2025, as immigration is expected to be large, while the very oldest segment of the population, people aged 80 or older, will gradually account for a constantly rising share of population growth after 2025.

The composition of the population is also likely to change in the next 15 years in terms of origin. The number of people aged 20–69 who were born in Sweden has decreased in recent years and will very likely continue to decrease by about 70 000 up to the mid-2020s, and will then only grow at a weak rate (see chart 5.2). This forecast is relatively certain since it does not depend on any assumptions about fertility and since the changes in mortality and the propensity to migrate in this population group are insignificant.

Chart 5.2 Population aged 20–69

Change compared to 2015, thousands of persons



Source: Statistics Sweden

The projection of the number of persons aged 20–69 years born abroad is much more uncertain since inward and outward migration among people born abroad varies strongly.

The average age of the population is rising

When life expectancy rises, the proportion of older people in the population increases. Chart 5.3 illustrates this development with an 'old-age dependency ratio', which is defined as the number of persons aged 70 or older per 100 persons in the 20–69 age group. After being more or less unchanged from the mid-1980s to 2010, the number of older people has shown a clearly faster increase than the number of people of working age in recent years. This is a trend that is expected to continue for the rest of the present century.

Chart 5.3 Old-age dependency ratio

Number of persons aged 70 or over per hundred persons aged 20–69

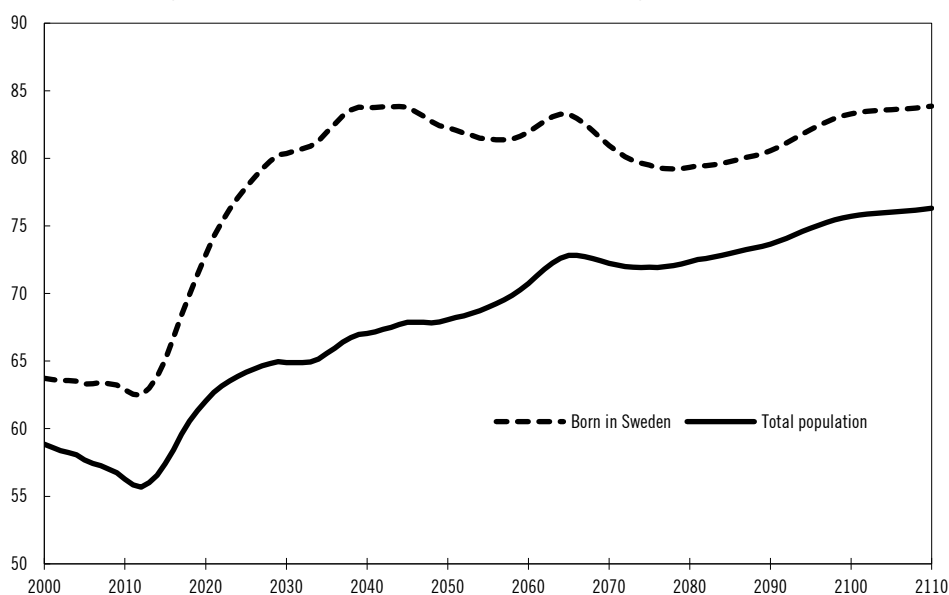


Sources: Statistics Sweden and own calculations.

Since people immigrating to Sweden are younger, on average, than people born in Sweden, an increase in immigration reduces the demographic dependency ratio defined as the number of persons aged 0–19 years and over 69 years per hundred persons in the 20–69 age group. Chart 5.4 shows a demographic dependency ratio in which the number of people who are younger or older than the 20–69 age group are related to that age group. When only people born in Sweden are counted, the number of younger and older people increases rapidly up to the mid-2030s. In the whole of the population the number of older and younger people increases more slowly in relation to the working age population and does not reach the same levels. People born abroad help to reduce the dependency ratio in every year. The difference is greatest at the end of the 2030s. Well-functioning integration is required if the lower demographic dependency ratio due to immigration is to lead to lower pressure on general government finances.

Chart 5.4 Demographic dependency ratio

Number of people aged 0–19 years and over 69 years per 100 people aged 20–69 years



Sources: Statistics Sweden and own calculations.

The effect of changes in the age structure of the population on general government finances arises because the average individual influences general government income and expenditure in different ways over their lifetime. To a great extent, the expected population increase takes place in the age groups – the youngest and oldest – where expenditure on welfare services and transfer payments is substantially higher than payments of tax. This means that the demographic developments we are now facing tend to worsen general government finances. However, the effect on general government finances also depends on how the financial exchange with the general government sector changes in different age groups. For example, a longer working life increases general government income, while better health leads to a decrease in the costs of health care and social care.

5.2 A scenario for long-term development

The section presents a scenario that illustrates the challenges described in previous sections. The scenario starts from the demographic changes in Statistics Sweden's population forecast. It should be underlined that the scenario does not present the most likely development (to mark the difference in relation to the assessments presented in sections 2 and 3, the estimates presented in section 5 are reported as projections, while references to the assessments in sections 2 and 3 are called forecasts throughout). Instead, its purpose is to illustrate the consequences of a development where there is no change to the rules for public income and expenditure and no

change in behaviour regarding labour force participation and use of tax-financed services. The ambition is to identify future challenges by studying what size of adjustments need to be made to current rules concerning general government revenues and expenditures so as to achieve long-term balance in general government finances. Alternative scenarios based on various assumptions make it possible to cast light on which factors strengthen the long-term sustainability of fiscal policy and which weaken it.

The calculations are based on assumptions

The long-term projections of public income and expenditure are based on the assessment of the development of the Swedish economy up until the end of 2022 presented in sections 2 and 3. In 2018 the primary balance in the general government sector, i.e. net lending adjusted for capital income and capital expenditure, was around -0.2 per cent of GDP. Between 2019 and 2022 general government net lending is strengthened in the estimate. In 2022 the primary balance in the public sector is estimated to correspond to 0.6 per cent of GDP, which is the starting point for the projection of developments in later years.

Productivity in the business sector is assumed to increase by 2.1 per cent per year in the long term. But productivity in the production of tax-financed services is assumed to be unchanged, irrespective of whether the services are produced by public or private providers. The difference in the productivity growth, along with an assumption of the same hourly wage growth across the entire economy, leads to the costs of producing welfare services increasing faster than the average cost increase for other production.

In this scenario, the population's labour market behaviour is assumed to remain largely unchanged as of 2022. This means that labour force participation, unemployment and average working hours for people of different ages, countries of origin and gender are assumed to remain constant. An average woman or man of a particular age with a particular country of origin is assumed to work just as much in the future as they do today. As an exception to this principle, the trend of a decreasing proportion of people who are sick and not in the labour force in the 55–64 age group is assumed to continue, which means that labour force participation in this group increases.

The scenario is also based on the assumption that the public commitment remains unchanged as of 2022. This is taken to mean that tax rates are kept at the same level as in 2022, i.e. their share of the tax bases is constant. For tax-financed activities it is assumed that the standard is unchanged, expressed as resource input per user; for example, it is assumed that a 90-

year-old will receive the same number of hours of elderly care in the future as a 90-year-old does today. Since no change is assumed in the productivity in the production of tax-financed services, general government consumption will develop at the same rate as the number of hours worked needed to provide an unchanged standard. The compensation rate in the transfer systems is also assumed to be unchanged, so that transfer payments per individual develop in parity with the hourly pay of people in employment. This means that transfer payments that, according to regulations, are set nominally or only track the development of prices are also assumed to increase in line with average pay as of 2023.

Fiscal policy is sustainable in the long term given the assumptions used.

The period up until 2035 is characterised by demographic changes that tend to increase general government primary expenditure (i.e. excluding interest expenditure) as a share of GDP (see chart 5.5). After 2035 this expenditure is expected to increase at a slower rate than GDP. Expenditure increases by around 0.6 per cent of GDP between 2022 and 2035 because the large cohort born in the 1940s reaches ages over 80 years— which, in relative terms, demands more social care and health care services – at the same time as people born in the 1960s start to exit the labour market. The primary balance is negative in these years (see chart 5.6).

Table 5.1 shows the development of primary general government expenditure by purpose. It can be noted that, with unchanged policies, the primary expenditure ratio falls rapidly until 2022, and then remains largely unchanged until 2035, after which it begins to fall again in the long term. One explanation of this trend is that expenditure on transfer payments decreases as a share of GDP between 2018 and 2022; this applies especially to transfers to households. After 2022 transfer payments decrease slightly more as a share of GDP up until 2035, while transfers to households show an unchanged GDP share. The main reason for the decline up until 2022 is that payments from the old-age pension system do not rise as quickly as GDP.

In the *no change in behaviour* scenario the consolidated gross debt decreases from about 39 per cent of GDP in 2018 to around 28 per cent of GDP in 2022, and then continues to decrease as a share of GDP so that it has been completely wound down around 2060 (see chart 5.7). In this scenario, the value of the ‘S1 indicator’ is 3.1 per cent of GDP (see table 5.3). The value of the S1 indicator is the size of the permanent budget weakening required in 2020 for the gross debt to correspond to 60 per cent of GDP in 2033. When the S1 indicator is calculated on the basis that the consolidated gross debt

will correspond to 60 per cent of GDP in 2033, the value of the indicator is comparable to the European Commission's indicator values (see Fiscal Sustainability Report 2018, European Economy, January 2019).

Developments after 2030

The demographic cost pressure declines after 2035 and primary expenditure decreases to less than 45 per cent of GDP in the long term. The main reason for the trend of falling expenditure is that general government investment and consumption expenditure decrease as a share of GDP (see table 5.1). One reason for the decrease in consumption expenditure is the assumption that there is no improvement of standards in tax-financed welfare services when GDP, and therefore income, increases. General government transfer payments show a weak declining trend as a share of GDP after 2060.

Table 5.1 Primary general government expenditure if there is no change in behaviour

Per cent of GDP

	2017	2020	2030	2050	2100
Primary expenditure	47.8	47.4	46.7	45.3	44.3
General government consumption	26.1	25.5	25.5	24.6	23.9
Childcare	1.7	1.6	1.6	1.4	1.3
Education	4.9	4.7	4.5	4.0	3.6
Healthcare	6.0	6.2	6.2	6.0	5.7
Elderly care i.a.	4.0	3.8	4.2	4.6	5.4
Other	9.4	9.2	9.0	8.5	7.9
Investments	4.5	5.0	4.7	4.1	2.9
Transfer payments	17.1	16.9	16.6	16.6	17.4

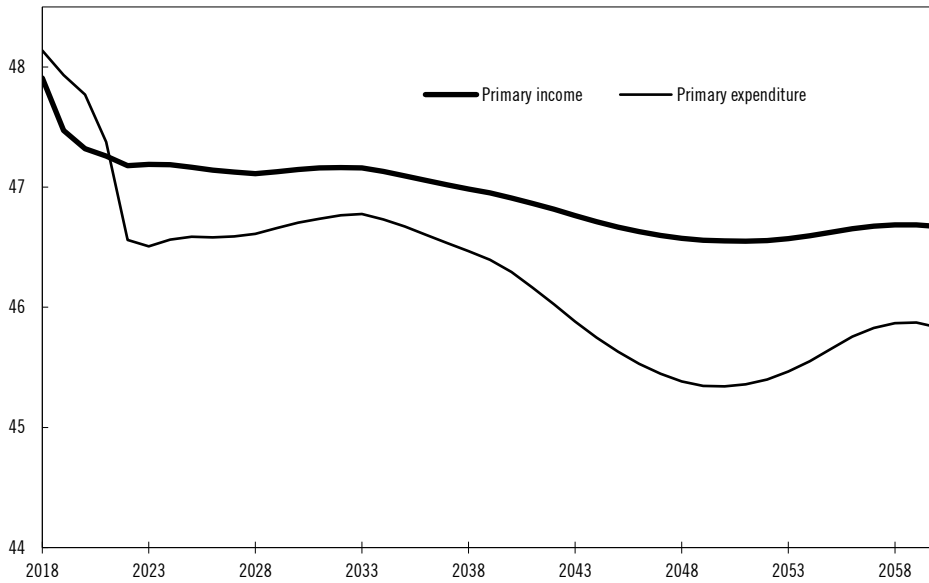
Sources: Statistics Sweden and own calculations.

After 2035 expenditure for general government consumption decreases as a share of GDP. Expenditure for elderly care, which includes care services for both older people and people with disabilities, is the only expenditure item to continue to show rising GDP shares after 2035, while expenditure for health care only decreases slightly as a share of GDP.

The most important tax bases (and therefore tax income) are largely steered by the performance of the labour market. Primary income amounts to around 47 per cent of GDP in the first part of the projection period (see chart 5.5), but declines slightly around 2035.

Chart 5.5 Primary general government revenue and expenditure if there is no change in behaviour

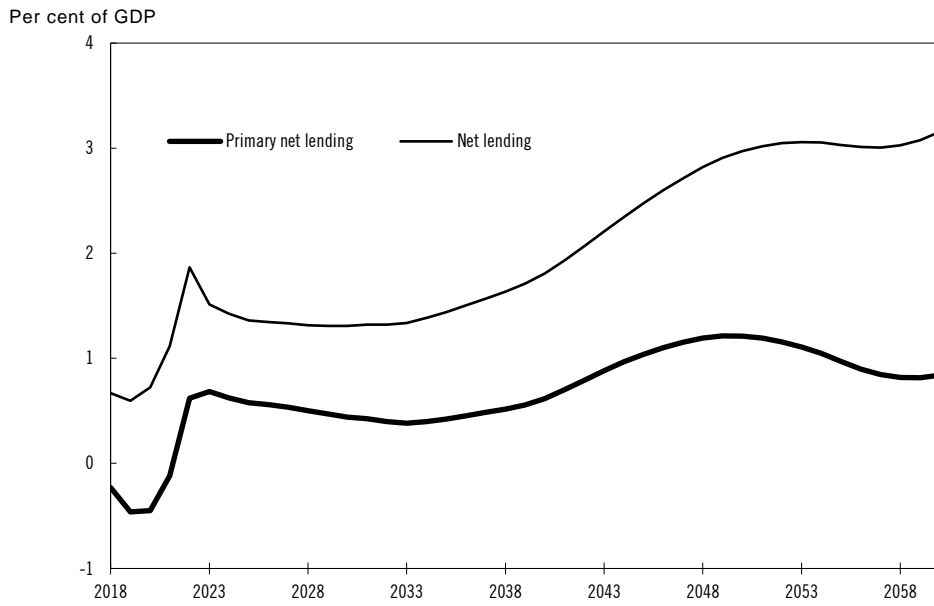
Per cent of GDP



Sources: Statistics Sweden and own calculations.

The primary balance reaches a minimum around 2035 and corresponds in the long term to around 0.5-1.5 per cent of GDP (see chart 5.6), while net lending tends to increase more quickly than GDP in the long term. The reason for this gradually widening difference between net lending and the primary balance is the increasingly large yield from net financial assets over time.

Chart 5.6 Net lending if there is no change in behaviour



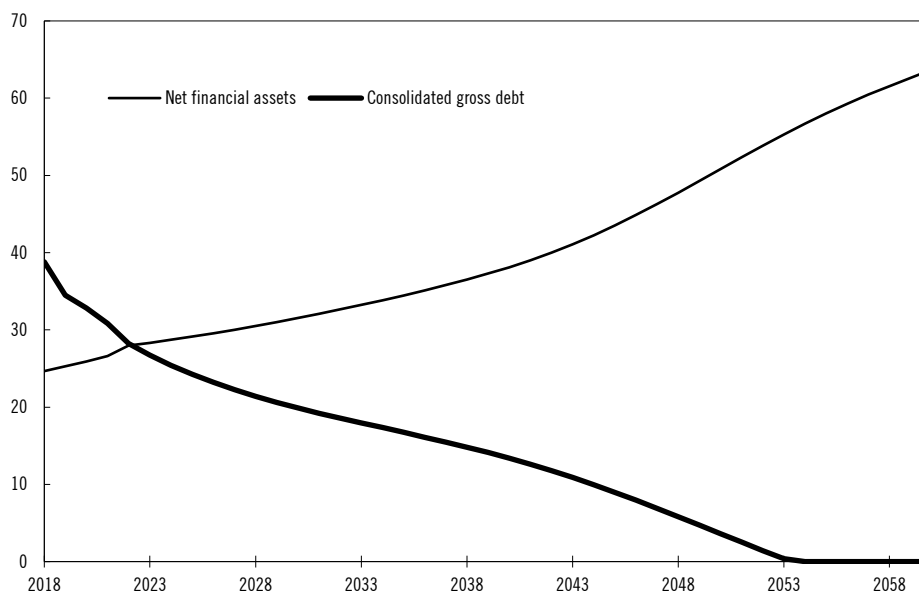
Sources: Statistics Sweden and own calculations.

In the long term the high level of the primary balance contributes to a sharp reduction in the consolidated gross debt and the steady growth of financial assets (see chart 5.7).

The trend described cannot be interpreted as a forecast of an expected actual development. It is, in actual fact, highly likely that current rules for general government income and expenditure would be changed if a surplus of the size indicated in chart 5.6 arose.

Chart 5.7 General government financial net assets and consolidated gross debt with no change in behaviour

Per cent of GDP



Sources: Statistics Sweden and own calculations

Two indicators, called the S1 and S2 indicators, are used to summarise the results of the calculations. They show the size of the permanent change in general government net lending that is needed in a given year for the general government debt to develop as wanted. In the calculations, 2020 is the year when the permanent change in general government net lending can be made, since it is the first year for which the Government can propose a new budget for central government.

The S1 sustainability indicator is -3.1 per cent of GDP, calculated from 2020. The relatively large negative S1 value shows that the present volume of public income and expenditure can very likely be maintained up until 2033 without the gross debt exceeding the limit value of the Stability and Growth Pact. So fiscal policy is sustainable by a good margin according to that criterion.

The S2 sustainability indicator is -1.5 per cent of GDP. Strictly interpreted, this means that net lending can be permanently weakened by 1.5 per cent of GDP in 2020, at the same time as net debt is stabilised over the very long term. So fiscal policy is also sustainable when assessed in this way. However, the fact that the indicator is based on assumptions about developments over a very long period of time means that the S2 indicator cannot be interpreted to mean that there actually is a fiscal space for reform. But the change in the indicator value when alternative assumptions are used

gives an indication of what factors strengthen the sustainability of fiscal policy and what factors impair it.

5.3 Conditions can change

The scenario presented above builds on a number of assumptions about the development of labour supply, productivity, etc. (this scenario is called the reference scenario below). Some alternative calculations varying different assumptions are carried out so as to shed light on the effect of alternative developments and illustrate which factors are of more or less importance for the development of general government net lending and to thereby enable a more exhaustive assessment to be made of the sustainability of the fiscal policy. The factors that strengthen net lending are discussed first, followed by those that impair it.

More people in employment and a longer working life strengthen sustainability.

Older people today can look forward to a considerably longer retirement than earlier generations. Both the age of exit from the labour market and average life expectancy have risen in recent decades, but the exit age has risen at a slower rate than life expectancy, especially for men (see table 5.2). In 2017, the exit age was 64 years on average, while the remaining life expectancy at age 65 was just over 20 years.

Table 5.2 Exit age and remaining life expectancy

Per cent of GDP

	Women		Men	
	1990	2016	1990	2016
Exit age	61.7	63.3	63.0	64.3
Remaining life expectancy at 65	19.0	21.5	15.3	19.0

Sources: Statistics Sweden and the Swedish Pensions Agency.

A number of factors suggest that the exit age may rise in the future. Better health, in combination with fewer people having physically demanding jobs, has improved conditions for continuing to work at higher ages. Moreover, the level of education is higher than in the past, and people with a higher education usually leave the labour market later than people with no higher education.

There are also financial drivers in the pension system that seek to influence people to postpone their exit from the labour market. If people do not postpone their exit from the labour market, the average old-age pension will increase more slowly than the incomes of employed people because the pension is lower when life expectancy increases and the pension rights

earned must be spread over additional years of retirement. Such a development could create sustainability problems if more pensioners qualify for other benefits, for instance guarantee pension and housing supplement for pensioners.

To contribute to the development of pensions in line with other income, the cross-party Working Group on Pensions agreed in December 2017 on a number of regulatory changes that raise the pension age. In brief, the proposal of the Working Group on Pensions is to gradually raise the minimum age for taking the national pension and guarantee pension from 61 and 65 years respectively at present to 64 and 66 years respectively in 2026; these ages would then be linked to a guide age that increases with remaining life expectancy at the age of 65.

In an alternative calculation the exit age is assumed to rise in line with remaining life expectancy at 65, which is expected to increase by around 1.7 years from 2018 to 2035, and by an additional approx. 1.3 years up to 2060. In this scenario, the labour supply increases by 1.6 percent in 2035 and 3.7 per cent in 2060 compared with the reference scenario. The exit age has been assumed to increase by two-thirds of a year for each year that remaining life expectancy at 65 increases. In the calculation this means that GDP and general government tax income rise at a faster rate, but also that the costs of unemployment insurance, sickness insurance and disability pensions increase in proportion to the higher labour supply.

Compared with the reference scenario, this reinforces the primary balance and thus appreciably strengthens the sustainability of fiscal policy (see table 5.3). The S1 indicator improves by around 0.2 per cent of GDP to -3.4 and the S2 indicator improves by 2.3 per cent of GDP to -3.9. The reason why the S2 indicator improves so much more than the S1 indicator is that in this scenario the supply of labour is reinforced each year compared with the reference scenario, and the main part of the increase in employment arises after 2033, the year that the S1 indicator starts from.

Quicker integration of people born abroad

Even though attachment to the labour market among people born abroad has strengthened in recent years, it is still significantly weaker than among people born in Sweden. In 2018 the employment rate was just under 62 per cent among people born abroad aged 15–74 years, compared with just over 70 per cent among people born in Sweden. In addition, unemployment among people born abroad was 15.5 per cent, compared with less than 4 per cent among people born in Sweden. Attachment to the labour market also differs between different groups of people born abroad; for instance, newly

arrived immigrants born outside Europe are in employment to a lesser extent than other people born abroad. Other important factors for attachment to the labour market are period of stay in Sweden and level of education. Additionally, women born abroad generally have lower labour market participation than men born abroad.

Faster introduction of newly arrived immigrants improves the sustainability of fiscal policy through greater tax revenue and lower expenditure on, for instance, municipal financial assistance, housing allowance and labour market support. To assess the effect of faster introduction of newly arrived immigrants, it is assumed that the difference in employment rate between people born abroad and people born in Sweden is halved between 2022 and 2035. Doing so increases the number of hours worked in the economy by 3 per cent up until 2035.

Compared with the reference scenario, this reinforces the primary balance and thus appreciably strengthens the sustainability of fiscal policy (see table 5.3). The S1 indicator improves by around 0.5 per cent of GDP to -3.7 and the S2 indicator improves by 0.7 per cent of GDP to -2.3.

Rising prosperity can put pressure on general government expenditure.

The above calculations show that the sustainability of fiscal policy improves if the supply of labour increases. But there are other possible developments that may put pressure on general government finances.

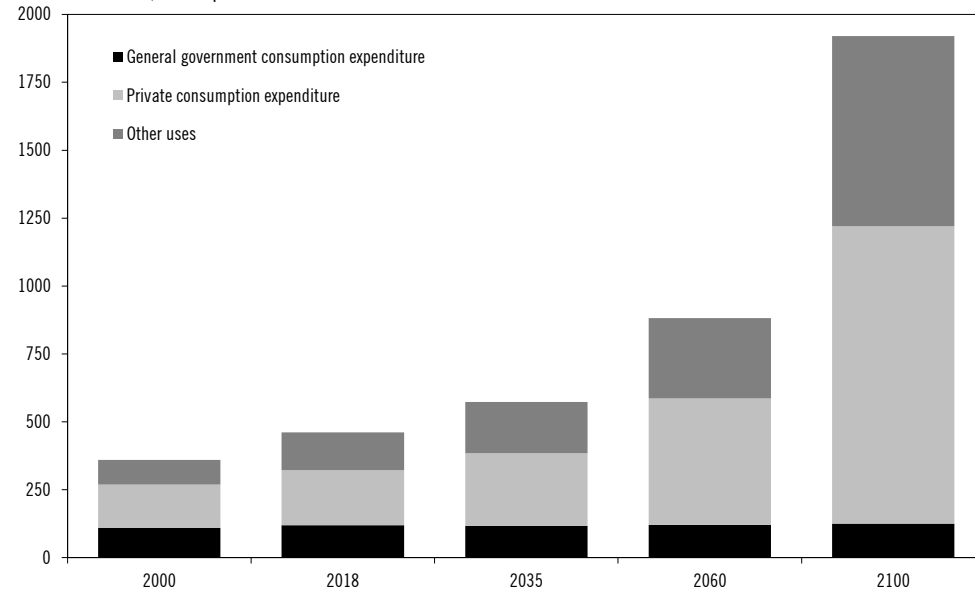
In Sweden welfare services such as health care, social care and education are largely provided via the public sector at low or no cost for the user. Higher demand for welfare services is a potential challenge for the fiscal policy of the future. At the same time, prosperity and resources are growing, which means that the possibility of meeting this challenge improves. Chart 5.8 shows that per capita GDP at constant prices in the reference scenario is expected to be almost twice as high in 2060 as in 2018, and more than four times as high in 2100. Household consumption expenditure increases slightly faster than GDP in the calculation, while public consumption in constant prices only increases to a limited extent. This means that, in the future, the population will have more resources to use for the consumption of goods and services, including welfare services.

To demonstrate the consequences of the changes in demand that may take place on account of greater prosperity, it is assumed that the annual working hours per employee decrease by 0.1 percent per year as of 2023 compared with the reference scenario. This roughly matches the decrease in average working hours in the period 1980–2009. The pension age is assumed to be the same as in the reference scenario. This decrease can be assumed to

increase the demand for leisure, a shorter working week, more days of annual holiday, etc. as GDP and material prosperity increase. At the same time, it is assumed that public consumption, in volume terms, grows 0.4 per cent faster per year than is motivated by demographic factors. This means that there is an increase in the standard of welfare services offered by the public sector (as an example, a corresponding increase in standards in compulsory schools corresponds to around 11 000 more teachers in 2035 than would be justified demographically).

Chart 5.8 GDP per person by use

SEK thousands, 2016 prices



Sources: Statistics Sweden and own calculations.

In this scenario, average working hours per person are assumed to be 15 hours shorter per person and year in 2035 and 60 hours shorter in 2060 than in the reference scenario (corresponding to about one and a half full-time weeks per year or about just over 15 minutes per working day). As a result, tax income and the possibilities of financing welfare provision also decrease. The financing problems are amplified further if the standard of public services increases gradually. In this scenario, staff ratios in health care, schools and social care are assumed to increase so that the number of hours worked in the public sector is, in aggregate, just over 5.5 per cent higher in 2035 and 17.5 per cent higher in 2060 than in the reference scenario. This means that there is a corresponding decrease in the number of working hours available for production in the business sector. As leisure increases, the number of hours worked in the whole of the economy decreases and the

standard of tax-financed services is raised, the public sector is exposed to greater pressure for change so as to make fiscal policy sustainable.

In this scenario, primary net lending is weakened considerably in the long term compared with the reference scenario, and this impairs sustainability (see table 5.3). The S1 indicator is -2.5, which is a weakening by 0.7 per cent of GDP compared with the reference scenario, and the S2 indicator is 11.7 per cent of GDP. According to the S2 indicator this development is therefore clearly unsustainable in the long term. About a third of the high S2 value is due to a decreasing supply of labour when leisure increases and two thirds of it is due to increasing tax-financed production of welfare services.

5.4 Sensitivity of the calculations and comparison with previous assessment

This section deals with the sensitivity of the calculations to different assumptions and makes a comparison with the sustainability assessment made in the 2018 Spring Fiscal Policy Bill for 2018 (Govt Bill 2017/18:100).

Fiscal policy is sustainable in most scenarios

The S1 and S2 sustainability indicators show that fiscal policy is long-term sustainable in a scenario based on no change in behaviour. However, this result should be interpreted with caution for several reasons. The fiscal policy challenges addressed in this section operate over the very long term, so the calculations often extend far into the future. The long calculation horizon involves a considerable degree of uncertainty. It should also be borne in mind that the calculations are strongly dependent on the assumptions made. As has already been noted, the calculations are not to be interpreted as forecasts of a probable development, but rather as impact analyses of the effect of various changes in the assumptions applied in the calculation.

Table 5.3 Sustainability indicators

Per cent of GDP

	S1	S2
No change in behaviour	-3,1	-1,5
No change in working life share	-3,3	-3,9
Better integration	-3,6	-2,3
Higher demand for leisure and welfare services	-2,5	11,7

Note: Positive values show that net lending must be strengthened permanently in order for fiscal policy to be sustainable in the long term, and negative values show that a permanent weakening is possible.

Source: Own calculations.

Table 5.3 summarises how the alternative assumptions on which the calculations are based affect S1 and S2. In general, it can be said that fiscal

policy is sustainable in most of the calculations. S1 is negative in all the scenarios presented, and S2 is only positive in the scenario with higher demand for leisure and welfare services. If decreasing average working hours are assumed, a higher standard of service production cannot be financed with unchanged tax rates in the long term.

5.5 An overall assessment of the long-term sustainability of fiscal policy

In an overall assessment, fiscal policy is judged to be long-term sustainable. In the reference scenario S1 amounts to minus -3.1 per cent of GDP and S2 to minus -1.5 per cent of GDP. Net lending and the consolidated debt are within the limits set by the Stability and Growth Pact in most of the scenarios presented.

The period of 2020-2035 is characterised by growing claims for expenditure arising from demography. Primary expenditure in central and local government is judged to increase by just under 1 per cent of GDP in these years on account of increased demand for tax-financed welfare services generated by demography. The pension system, as such, creates strong incentives to work to an older age when life expectancy increases, since pensioners' incomes decrease in relation to those of people in employment if their exit age from the labour market is not postponed. However, if working life is extended in line with the increase in remaining life expectancy at 65, the sustainability of the fiscal policy improves distinctly.

For pensioners and other citizens to enjoy a good economic standard and for it to be possible to provide high-quality publicly financed services, as many people as possible must have a long and productive working life. Increased life expectancy presents the opportunity to increase both leisure and time spent working. As average life expectancy increases, it is therefore important that labour force participation is high and working life long and sustainable for both women and men.

Other assessments of the sustainability of the fiscal policy.

Both the National Institute of Economic Research (NIER) and the European Commission have recently published assessments of the long-term sustainability of Swedish fiscal policy (see Special Study 61, NIER, February 2019 and Sustainability Report 2018, European Economy, January 2019). The NIER assessment is that the current strong general government finances provide scope to respond to coming demographic challenges even though the margins are small. The risk that general government finances will develop in an unsustainable way in the near future is assessed as small. The Commission considers that the risk of an unsustainable development is low

both in the short, medium – up until 2033 – and long term. Summary sustainability indicators are presented in table 5.4.

Table 5.4 Sustainability indicators for Sweden

Per cent of GDP

	S1	S2
Government	-3.1	-1.5
Swedish National Institute of Economic Research (Feb 2019)		0.0
European Commission (Jan 2019)	-4.6	1.1

Note: The values of the indicators are not directly comparable as they are calculated based on different assumptions.

Sources: Swedish National Institute of Economic Research, European Commission and own calculations.

Different starting points explain much of the difference between the Government's, the Commission's and the NIER's conclusions on the sustainability of fiscal policy. The Commission uses the S1 and S2 indicators to make its assessment of the sustainability of fiscal policy in the medium term, up until 2033, and in the very long term. Since there are only 14 years left to 2033, the initial debt level means a great deal for the value of S1. If general government debt is far below 60 per cent of GDP, as is the case in Sweden, major changes to fiscal policy are needed to reach this debt ratio.

The Commission also calculates the effects of fiscal policy over an infinite horizon. The present level of debt is of less importance for the result of these calculations. Instead, the initial level of net lending is of more importance. The Commission divides its S2 value up into an initial condition, i.e. the initial fiscal position, which contributes 0.4 percentage points of Sweden's S2 value of 0.5 per cent of GDP and a forward-looking part, which contributes the remaining 0.9 percentage points. In the latter component, rising costs of elderly care, in particular, contribute to the rise in S2 value. According to the Commission's assessment in its latest long-term calculation, the structural primary balance corresponds to 0.8 per cent of GDP in 2019, which is the year when the cost estimates begin. For 2022, the final year of the Government's medium-term forecast, the Commission assesses the structural primary balance as 1 per cent of GDP, which is slightly higher than the Government's assessment.

In addition to its picture of the starting point, the Commission also makes a different assessment from the Government regarding the calculation of future expenditure for general government consumption. The Commission calculates a cost per person using tax-financed services and then lets it rise in pace with per capita GDP up until 2060. Thereafter the Commission projects expenditure for general government consumption in line with population growth. The Government instead assumes that the staffing ratio in publicly financed production is unchanged.

Like the Government, the NIER considers that the need for the number of hours worked in the general government sector is constant per individual using the service. However, unlike the Government, the NIER assumes, at the same time, that the sum spent on input goods in this production (e.g. rent, computers, medical and other equipment, etc.) grows at the same rate as pay costs. The Government assumes instead that expenditure on input goods only rises in pace with the number of services produced and price growth of these input goods. This difference in the assumptions used means that expenditure on general government consumption as a share of GDP increases relatively quickly in the NIER assessment, reaching a higher GDP share than ever before in the longer term. This development differs significantly from the Government's calculation, where consumption decreases as a share of GDP up until 2022 and only increases by around 1 per cent of GDP in the subsequent thirteen-year period (see table 5.1).

It is also worth noting that the Commission uses a different population forecast from the Government. The Commission uses Eurostat's population forecast, which was published in March 2018. Since the calculations build to a great extent on the demographic input, their result is dependent on the population forecast used. The results also differ for other reasons: for instance on account of different assumptions about potential growth rates, rates of price increases, interest rates, the supply of labour and unemployment.

6. Quality in general government finances

6.1 Expenditure

In assessing the structure of general government finances it is not sufficient to only consider total expenditure and income. For this reason, income and expenditure are reported at a more detailed level below. Principles have been developed at the EU level for the production of uniform statistics on each Member State's distribution of general government finances (the COFOG classification). Uniform statistics facilitate comparisons between different Member States' general government expenditure, as well as of their development over time. Additional information and a higher level of detail are required to be to evaluate whether a change in the composition of general government expenditure has influenced long-term growth. However, the distribution of general government expenditure between different purposes, and the change in this distribution over time, show how different types of expenditure and purposes have been prioritised and provide an indication of the direction of policy.

Table 6.1 General government expenditure by purpose, per cent of GDP

Per cent of GDP

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change 2007- 2017
General public services	7.7	7.8	7.4	7.4	7.6	7.7	7.8	7.5	7.1	6.7	6.8	-0.8
Interest payments	1.8	1.7	1.3	1.2	1.3	1.1	1.0	0.8	0.7	0.7	0.6	-1.1
Other	5.9	6.1	6.1	6.2	6.4	6.6	6.8	6.7	6.4	6.1	6.2	0.3
Defence	1.5	1.5	1.5	1.5	1.4	1.4	1.5	1.3	1.1	1.2	1.2	-0.4
Public order and safety	1.3	1.3	1.4	1.4	1.3	1.4	1.4	1.3	1.3	1.3	1.3	0.0
Economic affairs	3.9	4.2	4.5	4.4	4.4	4.5	4.3	4.3	4.2	4.2	4.1	0.2
Environmental protection	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Housing and community amenities	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.8	0.1
Health	6.4	6.6	7.1	6.8	6.8	6.9	7.0	7.0	6.9	6.9	6.9	0.5
Recreation, culture and religion	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.1
Education	6.3	6.4	6.8	6.5	6.4	6.5	6.6	6.6	6.5	6.7	6.8	0.5
Social protection	20.2	20.1	21.8	20.7	20.0	20.7	21.3	20.8	20.4	20.7	20.2	0.0
Total expenditure	49.3	50.0	52.7	50.8	50.3	51.3	52.0	51.1	49.8	49.8	49.4	0.2
Excluding interest	47.5	48.3	51.4	49.6	49.0	50.2	51.0	50.2	49.0	49.1	48.8	1.3

Sources: Statistics Sweden and own calculations.

Expenditure as a share of GDP (the expenditure ratio) was relatively uneven in the wake of the financial crisis in 2009 but has, since 2015, been relatively stable at just under 50 per cent of GDP. As shown in table 6.1 and table 6.2, expenditure on social protection in Sweden in 2017 amounted to around 20 per cent of GDP and more than 40 per cent of total general government expenditure. After increasing at the start of the century, expenditure on social protection has oscillated around 40 per cent of total expenditure. Expenditure on health care also accounts for a large share of general government expenditure. After being just over 13 per cent of total expenditure in 2007, their share rose for several years and was around 14 per cent in 2017. There has been a large decrease in the proportion of expenditure consisting of interest payments; this is mainly because the general government consolidated gross debt has fallen strongly as a proportion of GDP at the same time as the level of interest rates has been relatively low.

Table 6.2 General government expenditure by purpose, per cent of total expenditure

Per cent of total expenditure

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change 2007– 2017
General public services	15.6	15.5	14.1	14.5	15.2	15.0	15.0	14.7	14.4	13.6	13.8	-1.7
Interest payments	3.6	3.4	2.5	2.3	2.5	2.1	1.8	1.6	1.5	1.4	1.3	-2.3
Other	12.0	12.1	11.6	12.2	12.7	12.9	13.2	13.1	12.9	12.2	12.6	0.6
Defence	3.1	2.9	2.8	3.0	2.9	2.7	2.8	2.5	2.3	2.4	2.4	-0.7
Public order and safety	2.6	2.6	2.6	2.7	2.7	2.7	2.6	2.6	2.6	2.6	2.6	0.1
Economic affairs	7.9	8.5	8.6	8.7	8.7	8.8	8.4	8.5	8.5	8.4	8.3	0.4
Environmental protection	0.7	0.7	0.7	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	-0.1
Housing and community amenities	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.4	1.5	0.1
Health	12.9	13.2	13.4	13.3	13.6	13.5	13.4	13.7	13.9	13.9	14.0	1.1
Recreation, culture and religion	2.0	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	0.1
Education	12.8	12.9	12.9	12.8	12.8	12.7	12.6	12.9	13.1	13.4	13.7	0.9
Social protection	41.0	40.2	41.3	40.8	39.9	40.4	40.9	40.8	41.1	41.6	40.9	-0.1
Total expenditure	100	100	100	100	100	100	100	100	100	100	100	
Excluding interest	96.4	96.6	97.5	97.7	97.5	97.9	98.2	98.4	98.5	98.6	98.7	2.3

Sources: Statistics Sweden and own calculations.

6.2 Income

For 2019, the tax ratio, i.e. total tax revenue as a share of GDP, is estimated at 43.4 per cent (see table 6.3). The tax ratio is generally affected mainly by regulatory changes in the tax system, since the composition of the tax bases normally co-varies with the business cycle. Between 2011 and 2022, the tax ratio is expected to increase by 0.7 percentage points, but the variations during this period are larger. Between 2011 and 2017 the tax ratio rose, peaking at 44.3 per cent in 2017. Thereafter the tax ratio is expected to decrease to 43.2 per cent at the end of the forecast period.

Revenue from tax on work is judged to vary a relatively great deal as a proportion of GDP in the period 2011-2022; a large part of this variation is explained by regulatory changes. The tax reduction for pensioners held tax revenue back at the start of the period. Then revenue from tax on work rose on account of the abolition of reduced social security contributions for young people along with changes in the ROT and RUT deductions and reductions of the earned income tax credit. It peaked in 2017, reaching 26.1

per cent of GDP. In the forecast years as of 2019 revenue from tax on work is expected to decrease slightly as a share of GDP; this is explained both by various changes in regulations, such as an expanded earned income tax credit and a higher threshold for state income tax as well as by the wage sum growing more slowly than GDP.

Revenue from tax on capital as a share of GDP is expected to rise by 0.5 percentage points in the period 2011–2022, but the variations during the period are greater. In 2015–2017 the proportion was unusually high, and this can be explained by temporarily higher revenue from both tax on corporate profits and tax on household capital. In 2018 and subsequent forecast years, the ratio for tax on capital is expected to remain stable at 5.5 per cent of GDP.

Revenues from taxes on consumption are estimated to decline by 0.5 percentage points as a proportion of GDP between 2011 and 2022. Revenue from value added tax is expected to remain largely unchanged throughout the period. In contrast, revenue from excise duties decreases continuously as a proportion of GDP. There are several reasons for this: for example, the use of certain products subject to selective taxation decreases over time, a third of selective taxes are not adjusted to inflation and the use of various kinds of energy in transport, heating and production is becoming more and more efficient.

Revenues from arrears and other taxes rose as a proportion of GDP by 0.2 percentage points between 2015 and 2016. This is explained both by a temporary respite granted and the introduction of the resolution fee. In the forecast years, revenues from arrears and other taxes is expected to remain stable at 0.4 per cent of GDP.

Table 6.3 Tax revenue, by tax types, per cent of GDP

Per cent of GDP

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Change 2011– 2022
Tax on labour	24.9	25.6	25.8	25.2	25.0	25.9	26.1	25.9	25.5	25.4	25.4	25.3	0.4
Direct taxes	13.3	13.7	13.9	13.5	13.3	13.8	13.9	13.7	13.4	13.3	13.3	13.3	-0.1
Indirect taxes	11.6	11.9	11.9	11.8	11.7	12.1	12.2	12.2	12.2	12.1	12.1	12.1	0.5
Tax on capital	5.0	4.5	4.6	5.1	5.8	5.6	5.7	5.6	5.5	5.5	5.5	5.5	0.5
Households	0.8	0.8	0.9	1.2	1.6	1.7	1.8	1.5	1.4	1.3	1.3	1.2	0.4
Corporate income	2.8	2.4	2.4	2.4	2.8	2.6	2.8	2.9	2.9	3.0	2.9	3.0	0.2
Tax on consumption	12.4	12.3	12.2	12.1	12.1	12.3	12.3	12.2	12.0	12.0	12.0	11.9	-0.5
VAT	9.1	9.0	9.0	9.0	9.1	9.3	9.3	9.3	9.1	9.1	9.2	9.2	0.1
Excise duties	3.3	3.3	3.2	3.1	3.0	3.0	2.9	2.9	2.9	2.9	2.8	2.8	-0.6
Arrears and other taxes	0.1	0.1	0.3	0.2	0.2	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.3
Total tax revenue	42.5	42.5	42.9	42.5	43.1	44.2	44.3	44.1	43.4	43.3	43.2	43.2	0.7

Sources: Statistics Sweden and own calculations.

Table 6.4 Tax revenue, by tax types, per cent of total tax revenue

Per cent of total revenue

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Change 2011– 2022
Tax on labour	58.7	60.2	60.1	59.3	58.0	58.7	58.8	58.9	58.8	58.7	58.8	58.7	0.0
Direct taxes	31.4	32.2	32.3	31.6	30.9	31.3	31.3	31.2	30.7	30.7	30.8	30.7	-0.6
Indirect taxes	27.4	28.1	27.8	27.6	27.2	27.3	27.5	27.7	28.0	28.0	28.0	28.0	0.6
Tax on capital	11.8	10.7	10.7	11.9	13.5	12.7	13.0	12.7	12.6	12.7	12.6	12.8	1.0
Households	1.9	1.8	2.0	2.9	3.8	3.8	4.0	3.4	3.1	3.0	2.9	2.8	1.0
Corporate income	6.6	5.7	5.5	5.8	6.6	5.9	6.3	6.5	6.7	7.0	6.8	6.9	0.3
Tax on consumption	29.3	28.9	28.5	28.4	28.1	27.8	27.6	27.6	27.7	27.7	27.7	27.6	-1.6
VAT	21.4	21.1	21.0	21.2	21.0	21.0	21.0	21.1	21.1	21.1	21.2	21.2	-0.2
Excise duties	7.9	7.8	7.5	7.2	7.0	6.9	6.6	6.5	6.6	6.6	6.5	6.4	-1.5
Arrears and other taxes	0.2	0.2	0.7	0.4	0.4	0.8	0.6	0.8	1.0	0.9	0.9	0.8	0.7
Total tax revenue	100	100	100	100	100	100	100	100	100	100	100	100	

Sources: Statistics Sweden and own calculations.

Appendix A – Technical assumptions

The methods applied in the calculation of general government finances in the period 2022–2100 are described in more detail below. The results reported in this appendix refer to the scenario that assumes no change in behaviour.

Demographic assumptions

The calculation is based on Statistics Sweden’s population forecast from April 2017, shown in table A.1.

Table A.1 Demographic assumptions

Number of children born per woman, number of years and number of individuals

	2015	2020	2030	2040	2050	2060
Birth rate	1.85	1.79	1.86	1.84	1.86	1.88
Average life expectancy, women	84.0	84.4	85.5	86.5	87.5	88.5
Average life expectancy, men	80.3	81.2	82.7	84.1	85.2	86.3
Net migration, thousands	78	71	32	23	21	22

Source: Statistics Sweden.

Labour market

The performance of the labour market depends on demographic developments. Projections of the employment rate and the number of hours worked are calculated disaggregated by age, gender and country of origin. The labour force participation rate, employment rate and average working hours are assumed to remain constant in each group in the long term. This can be interpreted as unchanged labour market behaviour because the absenteeism rate, rate of sickness and activity compensation, average hours worked, employment rate and unemployment rate are constant within each sub-group.

The number of hours worked in the general government sector is assumed to rise at the same rate as demographically dependent general government consumption. This implies an assumption that the staffing ratio is constant in the general government sector. The number of hours worked in the business sector represents the difference between total hours worked and hours worked in the general government sector.

Productivity

The assumption about productivity growth in the business sector is based on an analysis of the historical development. The underlying trend in productivity growth is assumed to be 2.2 per cent beginning in 2022. In an international comparison, productivity growth in Sweden has been strong

over the last two decades, with the exception of the period of 2007–2009. It is reasonable to assume that it will adjust in the long term to international growth rates. The weak growth in 2007–2009 has not affected the view taken of the long-term trend in productivity. Productivity growth in the general government sector is assumed to be zero from 2022.

GDP, expenditure and output approach

GDP growth is the sum of the productivity growth in the economy as a whole and the increase in the number of hours worked. The use side of GDP is determined so that the development of household consumption expenditure is generated by a macroeconomic model called MIMER. Household consumption expenditure as a proportion of GDP increases gradually over the period as people live longer and an increasing share of the population therefore does not work. In all, household consumption increases slightly to 2060. In total, gross fixed capital formation accounts for around 22–24 per cent of nominal GDP. General government consumption in terms of volume is determined by demographic developments, while its price growth is determined by assumptions about hourly pay growth and CPI. The remaining component of the expenditure approach of GDP is net exports, which are calculated in the estimates as the difference between GDP and domestic use. The production of general government consumption is obtained with an assumption of unchanged productivity and degree of privatisation. Production in the business sector is determined as the product of productivity and the number of hours worked in that sector.

Inflation and wages

It is assumed that the Riksbank will pursue a monetary policy that holds inflation at 2 per cent. The share of wage costs and gross profits in the business sector is assumed to be constant in the long term. This means that wages are determined by the price level and productivity. Higher productivity and a higher value added price in the business sector generate scope for higher wages. Pay in the general government sector is assumed to rise in line with private sector pay.

Assumptions regarding yield on capital

It is assumed that average interest rates on saving and borrowing are the same for all sectors in the economy in the long term. The assumed nominal interest rate is the nominal GDP growth rate plus 0.5 percentage points. In addition to interest-bearing assets, the general government sector also has non-interest-bearing assets. The yield on these assets consists of share

dividends and value adjustments. Dividends are assumed to be 3 per cent and value increases are then calculated so that the total return is the same as for interest-bearing assets. It is likely that there will also be differences in the long-term between the interest rates on borrowing and lending and that there will be differences between sectors. It is also likely that the return on non-interest-bearing assets is higher than for interest-bearing assets. However, the assumption regarding the return on financial capital is used for the purpose of simplification and to avoid the focus of the analysis shifting from central issues to those surrounding the dynamics of debt.

Table A.2 Macroeconomic assumptions

Annual percentage change and per cent

	2015	2020	2030	2040	2050	2060	2070
Percentage change							
Population, 15–74 years	0.7	0.5	0.5	0.2	0.2	0.3	0.3
Labour force, 15–74 years	0.8	0.4	0.3	0.3	0.2	0.2	0.4
Number employed, 15–74 years	1.4	0.2	0.3	0.3	0.2	0.2	0.4
Hours worked	1.5	0.9	0.3	0.3	0.2	0.3	0.4
Business sector productivity	4.1	1.3	2.2	2.2	2.2	2.2	2.2
GDP, fixed prices	4.5	1.6	2.0	2.1	2.1	2.2	2.4
GDP per capita	3.4	0.7	1.5	1.8	1.7	1.8	2.0
GDP productivity	2.9	0.7	1.8	1.9	1.9	1.9	2.0
GDP deflator	2.1	1.8	2.3	2.2	2.2	2.1	2.1
CPI, annual average	0.0	1.9	2.0	2.0	2.0	2.0	2.0
Hourly wages	2.5	2.3	4.2	4.2	4.2	4.2	4.2
Per cent							
Real interest	1.6	-0.6	2.6	2.9	2.9	2.7	3.0
Employment rate, 15–74 years	66.6	68.8	68.3	67.7	68.6	67.4	68.9
ILO unemployment rate, 15–74 years	7.4	6.4	7.0	7.1	7.0	6.8	6.5

Sources: Statistics Sweden and own calculations.

General government income

The calculations of general government income presented here are based on an assumption of constant tax rates relative to different tax bases. Consequently, the aggregate tax ratio will vary if the tax bases develop in a different way than GDP. This method reflects unchanged tax regulations. Table A.3 details general government taxes and charges as a proportion of GDP and as a proportion of the respective tax base (implicit tax rate), as well as the tax base's proportion of GDP.

Table A.3 Taxes and charges

Per cent of GDP

H	2015	2020	2030	2040	2050	2060	2070
Taxes and charges	42.9	43.1	43.1	43.2	43.3	43.7	43.6
Household direct taxes and charges							
Proportion of GDP	12.8	12.5	12.7	12.8	12.8	13.0	13.0
Implicit tax rate of direct taxes	24.1	24.0	24.3	24.2	24.2	24.1	24.2
Tax base for direct taxes as a proportion of GDP	53.3	52.3	52.3	52.7	52.9	53.9	54.0
Implicit tax rate of charges	6.8	6.7	6.7	6.7	6.7	6.7	6.7
Tax base for charges as a proportion of GDP	39.4	39.6	40.0	40.4	40.7	41.0	41.3
Corporate direct taxes							
Proportion of GDP	2.6	3.3	3.3	3.3	3.3	3.3	3.3
Implicit tax rate	8.8	11.2	11.3	11.3	11.3	11.3	11.3
Tax base as a proportion of GDP	30.0	29.3	29.4	29.3	29.3	29.1	29.2
Indirect taxes ¹							
Proportion of GDP	12.9	12.6	12.3	12.2	12.1	12.2	11.9
Implicit tax rate	28.6	28.7	27.8	27.2	26.7	26.2	25.9
Tax base as a proportion of GDP	45.0	43.9	44.2	44.7	45.2	46.4	46.0
Social security contributions from employers and the self-employed ²							
Proportion of GDP	14.3	14.7	14.8	15.0	15.1	15.2	15.3
Implicit tax rate	36.1	37.1	37.0	37.0	37.1	37.0	37.1
Tax base as a proportion of GDP	39.4	39.6	40.0	40.4	40.7	41.0	41.3

¹ Excluding wage-dependent indirect taxes.² Including wage-dependent indirect taxes.

Sources: Statistics Sweden and own calculations.

General government expenditure on consumption

The projection of general government consumption is made in two parts: a volume projection and a price projection. The calculation of general government consumption is based on costs for various purposes such as schools, health care and social care, disaggregated by age and gender. All expenditure areas are projected in line with the demographic trend. This means, for example, that a 70-year-old woman is allocated the same amount of public services, in real terms, in 2060 as in 2021. This can be viewed as an expression of unchanged standards in general government services. The price of general government consumption develops in line with a weighting of the price of the component parts of gross production, i.e. hourly pay, the price of consumables used and the price of consumption of fixed capital (the price of gross fixed capital formation).

Table A.4 General government consumption

Per cent of GDP

	2015	2020	2030	2040	2050	2060	2070
Total consumption	25.9	25.8	25.5	25.2	24.6	24.8	24.2
Childcare	1.6	1.6	1.6	1.5	1.4	1.4	1.4
Education	4.8	4.7	4.5	4.3	4.0	4.0	3.8
Healthcare	6.1	6.3	6.2	6.1	6.0	6.0	5.8
Elderly care	3.9	3.9	4.2	4.5	4.6	4.9	5.0
Other activities	9.5	9.3	9.0	8.8	8.5	8.5	8.2

Sources: Statistics Sweden and own calculations.

Transfer payments

The calculations assume a certain guarantee of standards in general government transfer payment systems. Some transfer payments have rules and regulations that automatically raise expenditure in line with wages. This applies to pensions that are adjusted upward in line with the income index and also partly to transfer payments compensating for income loss, such as health and parental insurance. In the calculations, pensions are projected in accordance with the current rules. Other transfer payments to households are assumed to rise in line with wages. This also means there is an assumption that the “ceilings” applied in the social insurance systems rise in line with wages. Such a guarantee of standards offsets the erosion of household transfer payments that would take place if the estimate was only based on a price projection.

Table A.5 General government transfer payments

Per cent of GDP

	2015	2020	2030	2040	2050	2060	2070
Total transfer payments	17.8	17.0	16.6	16.7	16.6	17.2	17.1
Transfer payments to households	14.4	13.2	12.9	13.0	12.9	13.5	13.3
Old age	7.8	7.4	7.3	7.4	7.3	7.8	7.6
Ill-health	2.7	2.1	2.0	2.0	2.0	2.0	2.0
Children/studies	1.9	1.9	1.9	1.9	1.9	2.0	2.0
Labour market	0.8	0.6	0.6	0.6	0.6	0.6	0.5
Other	1.2	1.1	1.1	1.1	1.1	1.1	1.1
Transfer payments to businesses and the rest of the world	3.5	3.8	3.7	3.7	3.7	3.7	3.7

Note: Old age = old-age pensions, survivor's pensions, central government and local government pensions and supplementary housing benefit to pensioners. Ill-health = health insurance, occupational injury insurance sickness compensation and assistance compensation. Children/studies = child benefit, parental insurance, maintenance support and student grants. Labour market = unemployment benefit, labour market training grants and wage guarantees.

Sources: Statistics Sweden and own calculations.

Old-age pensions system

Table A.6 shows the old-age pensions system's revenue and expenditure and its financial position. The calculation of pension expenditure is based on demographic trend, economic assumptions and the applicable regulations. The average age of retirement is assumed to be 65 years and to remain constant.

Table A.6 Old-age pensions system

Per cent of GDP

	2015	2020	2030	2040	2050	2060	2070
Revenue	6.6	6.5	6.8	6.9	7.0	7.1	7.2
Fees	5.9	5.8	5.8	5.9	5.9	6.0	6.0
Interest, dividends etc.	0.7	0.7	0.9	1.0	1.1	1.2	1.2
Expenditure	6.4	6.4	6.0	6.0	5.8	6.2	6.0
Pensions	6.2	6.2	5.9	5.8	5.6	6.0	5.8
Other	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Net lending	0.2	0.2	0.7	0.9	1.2	1.0	1.2
Net financial assets	29.7	29.2	26.2	26.8	30.0	32.2	33.8

Sources: Statistics Sweden and own calculations.

Table A.7 presents a number of key variables from the Swedish Convergence Programme in the format recommended by the European Commission.

Table A.7 Long-term sustainability of the general government finances

Per cent of GDP, unless otherwise stated

	2015	2020	2030	2040	2050	2060	2070
Total expenditure	48.7	48.3	47.9	47.2	45.8	45.7	44.0
Age-related ¹	34.4	33.8	33.3	33.1	32.5	33.2	32.4
Pensions ²	7.8	7.4	7.3	7.4	7.3	7.8	7.6
Guarantee pensions	0.4	0.3	0.3	0.5	0.6	0.7	0.7
Old-age pensions	6.2	6.2	5.9	5.8	5.6	6.0	5.8
Other pensions (disability and survivors')	0.5	0.4	0.4	0.4	0.3	0.4	0.3
General government occupational pensions	0.6	0.6	0.7	0.8	0.7	0.8	0.8
Healthcare	6.1	6.3	6.2	6.1	6.0	6.0	5.8
Elderly care and care services for disabled	3.9	3.9	4.2	4.5	4.6	4.9	5.0
Childcare	1.6	1.6	1.6	1.5	1.4	1.4	1.4
Education	4.8	4.7	4.5	4.3	4.0	4.0	3.8
Unemployment benefit	0.8	0.6	0.6	0.6	0.6	0.6	0.5
Other age-related expenditure	9.5	9.3	9.0	8.8	8.5	8.5	8.2
Interest expenditure	0.6	0.4	0.9	0.6	0.1	-0.3	-1.0
Total revenue	48.7	49.0	49.2	49.0	48.7	48.9	48.5
of which income from capital	1.5	1.7	2.1	2.1	2.2	2.2	2.3
of which is from the pensions system	0.7	0.7	0.9	1.0	1.1	1.2	1.2
Assumptions							
Labour productivity growth, GDP level	2.9	0.7	1.8	1.9	1.9	1.9	2.0
GDP growth	4.5	1.6	2.0	2.1	2.1	2.2	2.4
Unemployment rate	7.4	6.4	7.0	7.1	7.0	6.8	6.5
Population aged 65 + as a proportion of the total population	19.7	20.0	21.3	22.8	23.1	24.7	24.5

¹ Age-related expenditure includes childcare. This expenditure is not included in the age-dependent expenditure presented in Appendix B as calculated by an EU working group.

² In addition to old-age pensions, pensions also include sickness and activity compensation.

Sources: Statistics Sweden and own calculations.

Appendix B – Comparison with the European Commission's projections of demographically dependent expenditure

A working group (Working Group on Ageing Populations and Sustainability, AWG) under the Economic Policy Committee (EPC) has, together with the European Commission, calculated the development of demographically dependent expenditure up to and including 2060. These estimates were last reported in April 2015. However, the calculations in this Convergence Programme are based on the data presented to the Riksdag in the 2018 Spring Fiscal Policy Bill. This section compares the key demographic and macroeconomic indicators and also the demographically dependent expenditure from these two sources. The comparison is made for the period from 2013, the year in which the EPC estimates commenced.

Table B.1 Macroeconomic assumptions in the EPC estimates and in the Swedish convergence programme

Index, unless otherwise stated

	2018	2020	2030	2040	2050	2060	2070
Population, 15–74 years							
EPC	100.0	101.0	107.6	114.5	118.8	123.6	126.0
Convergence programme	100.0	101.1	106.5	110.1	112.1	115.5	117.4
Employed							
EPC, 15–74 years	100.0	101.3	108.2	114.5	119.5	121.8	126.0
Convergence programme, 15–74 years	100.0	101.5	106.2	108.8	112.2	113.6	117.9
Hours							
EPC	100.0	101.6	108.3	114.5	119.6	121.9	126.0
Convergence programme	100.0	101.8	106.5	109.0	112.3	113.6	118.1
Unemployment rate, percentage points							
EPC, 15–74 years	5.9	5.8	5.6	5.6	5.6	5.6	5.6
Convergence programme, 15–74 years	6.3	6.4	7.0	7.1	7.0	6.8	6.5
Labour productivity							
EPC	100.0	102.6	116.5	134.3	156.1	181.8	211.6
Convergence programme	100.0	101.4	118.1	141.4	170.4	205.3	249.3
Potential GDP							
EPC	100.0	104.3	126.1	153.8	186.7	221.6	266.7
Convergence programme	100.0	103.2	125.7	154.1	191.3	233.1	294.4
Potential GDP per capita							
EPC	100.0	102.1	113.1	129.3	148.6	168.4	194.6
Convergence programme	100.0	101.3	114.8	135.4	162.5	191.4	233.9

Sources: European Commission and own calculations.

The population forecast used in the EPC was prepared by Eurostat in 2015. Calculations in this Convergence Programme are based on a population forecast issued by Statistics Sweden in April 2017. That assessment takes account of actual developments in recent years, which means that the population increases more quickly than in the EPC calculation in the next few years. In the longer term, however, the population grows more slowly according to this Convergence Programme. The EPC thus also has a stronger increase both in hours worked and in the number of persons employed in the longer term. Productivity growth is stronger in this Convergence Programme than in the EPC calculations. This faster productivity growth means that both GDP and per capita GDP are higher in 2060 in this Convergence Programme than in the EPC calculations.

Table B.2 Change in age-dependent general government expenditure in the EPC calculations and in the Swedish convergence programme

Proportion of GDP

	Change 2018–2035			Change 2018–2070		
	CP	EPC	CP-EPC	CP	EPC	CP-EPC
Pensions	-0.2	-0.9	0.7	0.1	-0.9	0.9
Healthcare	0.1	0.3	-0.2	-0.3	0.7	-1.0
Elderly care and care services for disabled	0.4	0.8	-0.4	1.0	1.7	-0.8
Education/Unemployment benefit	-0.5	0.3	-0.8	-1.1	0.4	-1.6
Total	-0.2	0.6	-0.8	-0.4	2.0	-2.3

Note: CP is the abbreviation of convergence programme. Childcare is not included in this synthesis.
Sources: European Commission and own calculations.

Appendix C – Tables

Table C.1a Macroeconomic prospects

Annual percentage change

	SEK					
	billions	2018	2019	2020	2021	2022
Real GDP	4 686	2.3	1.6	1.6	1.6	2.0
Nominal GDP	4 791	4.6	3.9	3.5	3.6	4.1
Components of real GDP						
Private consumption expenditure	2 065	1.2	1.6	2.1	2.4	2.8
Government consumption expenditure	1 207	0.9	0.1	0.0	-0.3	-0.8
Gross fixed capital formation	1 180	3.3	0.8	1.3	0.9	1.1
Changes in inventories and net acquisition of valuables	47	1,0	1,0	1,0	1,0	0,9
Exports of goods and services	2 150	3.5	3.5	3.1	3.2	3.5
Imports of goods and services	1 963	2.9	2.3	2.5	2.6	2.4
Contributions to real GDP growth						
Final domestic demand		1.6	0.9	1.2	1.2	1.3
Changes in inventories and net acquisition of valuables		0.4	0.0	0.0	0.0	0.0
External balance of goods and services		0.4	0.6	0.4	0.4	0.7

Sources: Statistics Sweden and own calculations.

Table C.1b Price developments

Annual percentage change

	Level					
	2018	2018	2019	2020	2021	2022
GDP deflator	102.2	2.2	2.3	1.8	1.9	2.0
Private consumption deflator	102.3	2.3	1.7	1.6	1.8	1.9
HICP ¹	105.1	2.0	1.6	1.3	1.7	1.8
Public consumption deflator	103.8	3.8	3.1	2.7	2.8	3.3
Investment deflator	102.9	2.9	1.9	1.6	1.4	1.4
Export price deflator (goods and services)	104.6	4.6	0.6	0.4	0.6	0.6
Import price deflator (goods and services)	106.2	6.2	0.2	0.4	0.6	0.6

Note: All deflators are indices. 2014=100.

¹ Index, 2005=100.

Sources: Statistics Sweden and own calculations.

Table C.1c Labour market developments

Annual percentage change if not otherwise stated

	Level	2018	2019	2020	2021	2022
	2018					
Employment, persons ¹	5 101	1.8	1.3	0.2	0.4	0.7
Employment, hours worked ²	823 197	2.1	0.9	0.9	0.7	0.6
Unemployment rate (%) ³	344	6.3	6.3	6.4	6.4	6.5
Labour productivity, persons ⁴	813	0.5	0.2	1.4	1.2	1.3
Labour productivity, hours worked ⁵	559	0.5	0.9	1.3	1.4	1.6
Compensation of employees ⁶	2 277	5.5	3.9	3.2	3.5	3.9
Compensation per employee ⁷	446 277	3.6	2.5	3.0	3.0	3.1

¹ Occupied population, national accounts definition. Level in thousands.

² National accounts definition. Level in ten thousands.

³ Level in thousands. Per cent of labour force.

⁴ Real GDP per person employed, SEK.

⁵ Real GDP per hour worked, SEK.

⁶ SEK billion.

⁷ SEK.

Sources: Statistics Sweden and own calculations.

Table C.1d Sectoral balances

Per cent of GDP

	2018	2019	2020	2021	2022
Net lending/borrowing vis-à-vis the rest of the world	2.8	3.5	3.7	3.9	4.4
<i>of which</i>					
Balance on goods and services	2.9	3.6	3.8	4.1	4.5
Balance of primary incomes and transfers	0.1	0.0	0.0	0.0	0.0
Capital account	-0.1	-0.2	-0.1	-0.1	-0.1
Net lending/borrowing of the private sector	2.2	2.9	3.0	2.8	2.5
Net lending/borrowing of the general government	0.7	0.6	0.7	1.1	1.9
Statistical discrepancy	-1.6	--	--	--	--

Sources: Statistics Sweden and own calculations.

Table C.2a General government budgetary prospects

Per cent of GDP

	SEK bn					
	2018	2018	2019	2020	2021	2022
Net lending by sub-sector						
General government	32	0.7	0.6	0.7	1.1	1.9
Central government	61	1.3	1.2	1.3	1.6	2.3
Local government	-35	-0.7	-0.7	-0.8	-0.7	-0.7
Social security funds	6	0.1	0.1	0.2	0.2	0.3
General government						
Total revenue	2 420	50.5	49.9	49.7	49.6	49.4
Total expenditure	2 388	49.8	49.3	49.0	48.5	47.6
Net lending/borrowing	32	0.7	0.6	0.7	1.1	1.9
Interest expenditure	24	0.5	0.4	0.4	0.3	0.3
Primary balance	56	1.2	1.0	1.1	1.4	2.2
One-off and other temporary measures	0	0.0	0.0	0.0	0.0	0.0
Selected components of revenue						
Total taxes	1 960	40.9	40.5	40.4	40.3	40.3
Taxes on production and imports	1 076	22.5	22.1	22	21.9	21.8
Current taxes on income, wealth, etc.	884	18.5	18.4	18.4	18.4	18.4
Capital taxes	0	0.0	0.0	0.0	0.0	0.0
Social contributions	162	2.8	2.8	2.8	2.7	2.7
Property income	81	1.7	1.7	1.8	1.8	1.9
Other	217	5.1	4.9	4.7	4.7	4.6
Total revenue	2 420	50.5	49.9	49.7	49.6	49.4
Tax burden	2 100	43.8	43.4	43.3	43.2	43.2
Selected components of expenditure						
Compensation of employees + intermediate consumption	994	20.7	20.4	20.2	20.0	19.6
Compensation of employees	607	12.7	12.6	12.5	12.4	12.2
Intermediate consumption	387	8.1	7.8	7.7	7.6	7.4
Social payments	781	16.3	16.0	15.8	15.5	15.2
of which Unemployment benefits	31	0.6	0.6	0.6	0.5	0.5
Social transfers in kind supplied via market producers	174	3.6	3.6	3.5	3.5	3.4
Social transfers other than in kind	607	12.7	12.4	12.3	12.1	11.8
Interest expenditure	24	0.5	0.4	0.4	0.3	0.3
Subsidies	77	1.6	1.6	1.7	1.6	1.6
Gross fixed capital formation	227	4.7	4.8	4.9	5.0	4.8
Capital transfers	13	0.3	0.6	0.5	0.5	0.5
Other	272	5.7	5.5	5.6	5.5	5.5
Total expenditure	2 388	49.8	49.3	49.0	48.5	47.6
Government consumption (nominal)	1 252	26.1	26.0	25.8	25.5	25.1

Sources: Statistics Sweden and own calculations.

Table C.2b Revenue and expenditure forecasts

Per cent of GDP if not otherwise stated

	SEK bn	2018	2019	2020	2021	2022
	2018					
Total revenue	2 420	50.5	49.9	49.7	49.6	49.4
Total expenditure	2 388	49.8	49.3	49.0	48.5	47.6

Sources: Statistics Sweden and own calculations.

Table C.2c Amounts to be excluded from the expenditure benchmark

Per cent of GDP

	SEK bn	2018	2019	2020	2021	2022
	2018					
Expenditure on EU programmes fully matched by EU funds revenue	2	0.0	0.0	0.0	0.0	0.0
of which investment fully matched by EU funds revenue	0	0.0	0.0	0.0	0.0	0.0
Cyclical unemployment benefit expenditure	-1	0.0	0.0	0.0	0.0	0.0
Effect of discretionary revenue measures	-4	-0.1	-0.4	0.0	-0.1	0.0
Revenue increases mandated by law	-	-	-	-	-	-

Source: Statistics Sweden and own calculations.

Table C.3 General government expenditure by function

Per cent of GDP

	COFOG code	2017
General public services	1	6.8
Defence	2	1.2
Public order and safety	3	1.3
Economic affairs	4	4.1
Environmental protection	5	0.3
Housing and community amenities	6	0.8
Health	7	6.9
Recreation, culture and religion	8	1.1
Education	9	6.8
Social protection	10	20.2
Total expenditure		49.4

Source: Statistics Sweden and own calculations.

Table C.4 General government debt developments

Per cent of GDP

	2018	2019	2020	2021	2022
Gross debt	38.8	34.5	32.8	30.9	28.2
Change in gross debt ratio	-2.0	-4.3	-1.6	-2.0	-2.6
Contribution to changes in gross debt					
Primary balance	-1.2	-1.0	-1.1	-1.4	-2.2
Interest expenditure	0.5	0.4	0.4	0.3	0.3
Stock-flow adjustment	0.5	-2.3	0.2	0.3	0.5
<i>of which</i>					
Differences between cash and accruals	-0.2	-0.1	0.0	-0.1	0.0
Privatisation proceeds	0.0	-0.1	-0.1	-0.1	-0.1
Valuation effects and others	0.7	-2.0	0.4	0.5	0.5
Nominal GDP	-1.8	-1.5	-1.2	-1.1	-1.2
Implicit interest rate on debt	1.3	1.0	1.1	1.1	1.1

Sources: Statistics Sweden and own calculations.

Table C.5 Cyclical developments

Per cent of GDP if not otherwise stated

	2018	2019	2020	2021	2022
Real GDP growth (%)	2.3	1.6	1.6	1.6	2.0
Net lending of general government	0.7	0.6	0.7	1.1	1.9
Interest expenditure	0.5	0.4	0.4	0.3	0.3
One-off and other temporary measures	0.0	0.0	0.0	0.0	0.0
Potential GDP growth (%)	1.9	1.8	1.9	2.0	2.0
Output gap	1.2	1.0	0.4	0.0	0.0
Cyclical budgetary component	0.6	0.4	0.2	0.1	0.0
Cyclically-adjusted balance	0.1	0.2	0.5	1.0	1.9
Cyclically-adjusted primary balance	0.6	0.6	0.9	1.3	2.2
Structural balance	0.1	0.2	0.5	1.0	1.9

Sources: Statistics Sweden and own calculations.

Table C.6 Divergence from previous update

	2018	2019	2020	2021	2022
Real GDP growth (%)					
Previous update	2.8	2.2	2.1	1.8	--
Current update	2.3	1.6	1.6	1.6	2.0
Difference	-0.5	-0.6	-0.5	-0.2	--
General government net lending (% of GDP)					
Previous update	1.0	1.0	1.3	1.9	--
Current update	0.7	0.6	0.7	1.1	1.9
Difference	-0.3	-0.4	-0.6	-0.8	--
General government gross debt (% of GDP)					
Previous update	37.3	34.2	31.6	29.0	--
Current update	38.8	34.5	32.8	30.9	28.2
Difference	1.5	0.3	1.2	1.8	--

Sources: Statistics Sweden and own calculations.

Table C.7 Long-term sustainability of public finances

Per cent of GDP

	2015	2020	2030	2040	2050	2060	2070
Total expenditure	48.7	48.3	47.9	47.2	45.8	45.7	44.0
<i>of which</i>							
Age-related expenditure	34.4	33.8	33.3	33.1	32.5	33.2	32.4
<i>of which</i>							
Pension expenditure	7.8	7.4	7.3	7.4	7.3	7.8	7.6
<i>of which</i>							
Social security pension	0.4	0.3	0.3	0.5	0.6	0.7	0.7
Old-age and early pensions	6.2	6.2	5.9	5.8	5.6	6.0	5.8
Other pensions (disability- and survivors-)	0.5	0.4	0.4	0.4	0.3	0.4	0.3
Occupational pensions (if in general government)	0.6	0.6	0.7	0.8	0.7	0.8	0.8
Health care	6.1	6.3	6.2	6.1	6.0	6.0	5.8
Long-term care	3.9	3.9	4.2	4.5	4.6	4.9	5.0
Educational expenditure	4.8	4.7	4.5	4.3	4.0	4.0	3.8
Other age-related expenditures	9.5	9.3	9.0	8.8	8.5	8.5	8.2
Interest expenditure	0.6	0.4	0.9	0.6	0.1	-0.3	-1.0
Total revenue	48.7	49.0	49.2	49.0	48.7	48.9	48.5
<i>of which</i>							
Property income	1.5	1.7	2.1	2.1	2.2	2.2	2.3
<i>of which</i>							
From pensions contributions (or social contributions if appropriate)	0.7	0.7	0.9	1.0	1.1	1.2	1.2
Pension reserve fund assets	29.7	29.2	26.2	26.8	30.0	32.2	33.8
<i>of which</i>							
Consolidated public pension fund assets (assets other than government liabilities)	28.4	28.4	25.6	26.4	29.9	32.4	34.4
Assumptions							
Labour productivity	4.1	1.3	2.2	2.2	2.2	2.2	2.2
Real GDP growth	4.5	1.6	2.0	2.1	2.1	2.2	2.4
Unemployment rate	7.4	6.4	7.0	7.1	7.0	6.8	6.5
Population aged 65+ over total population	19.7	20.0	21.3	22.8	23.1	24.7	24.5

Sources: Statistics Sweden and own calculations.

Table C.7a Contingent liabilities

Per cent of GDP

	2018
Public guarantees	55.5

Sources: Statistics Sweden and own calculations.

Table C.8 Basic assumptions

Annual average if not otherwise stated

	2018	2019	2020	2021	2022
Short-term interest rate (annual average) ¹	-0.7	-0.2	0.2	0.6	1.0
Long-term interest rate (annual average) ²	0.7	0.5	1.0	1.6	2.0
USD/ € exchange rate (annual average)	1.2	1.2	1.2	1.2	1.2
Nominal effective exchange rate vis-à-vis the € ³	10.3	10.4	10.3	10.1	9.9
World. GDP growth ⁴	3.7	3.5	3.6	3.5	3.5
EU GDP growth ⁴	2.0	1.5	1.7	1.7	1.6
Growth of relevant foreign markets ⁴	3.1	3.7	3.7	3.7	3.6
World import volumes, excluding EU					
Oil prices (Brent USD/barrel. annual average)	71	63	62	61	61

¹ 6-months interest rate.

² 10-year government bond yield.

³ SEK/€. annual average.

⁴ Annual percentage change.

Sources: Statistics Sweden and own calculations