

Sweden's convergence programme **2016**



Sweden's Convergence
Programme
2016

Introduction	5
1 Economic policy framework and targets	7
1.1 Budgetary policy goals.....	7
1.2 Sweden’s medium-term budgetary objective	9
1.3 The objective of monetary policy	9
1.4 The Government’s economic policy.....	10
1.5 Monetary policy	19
2 The macroeconomic trend	21
2.1 International and financial economy	21
2.2 The Swedish economy	22
2.3 Potential macroeconomic imbalances.....	23
3 General government finances	26
3.1 Accounting principles.....	26
3.2 Development of general government finances.....	27
3.3 Net worth and consolidated gross debt	30
3.4 Reconciliation against the general government net lending target	32
3.5 Monitoring the expenditure ceiling	35
3.6 Monitoring sound financial management and the local government balanced budget requirement	36
3.7 Central government guarantees	38
4 Alternative scenarios and comparison with Sweden’s Convergence Programme 2015	40
4.1 Alternative scenarios	40
4.2 Comparison with the 2015 Convergence Programme	45
5 Long-term sustainability of the fiscal policy	46
5.1 Demographics and the general government finances	47
5.2 Calculations of fiscal sustainability.....	52
5.3 Overall assessment of the long-term sustainability of fiscal policy.....	61
6 Quality in the general government finances	64
6.1 Expenditure	64
6.2 Revenue	65
Appendix A – Technical assumptions	68
Appendix B – Comparison with the European Commission’s projections of demographically dependent expenditure	74
Appendix C – Tables	76

Introduction

In accordance with Council Regulation (EC) No 1466/97, Sweden submitted its Convergence Programme in December 1998.¹ The programme was evaluated and approved by the Council in spring 1999. The Council Regulation stipulates that an update of the Convergence Programme is to be submitted annually; accordingly, this took place from 1999 to 2009.

Effective from 2010, reporting within the Stability and Growth Pact has been adapted to the European Semester; the aim is to strengthen the surveillance of economic policies. Consequently, the Convergence Programme and the National Reform Programme are delivered each spring. This allows budgetary and structural policy to be assessed consistently and recommendations to be made to the Member States while their budget proposals are still in the preparatory phase.

Sweden's Convergence Programme for 2016 is based on the Spring Fiscal Policy Bill for 2016 (Govt. Bill 2015/16:100), which the Government delivered to the Riksdag on 13 April 2016. The Parliamentary Committee on Finance was informed about the Convergence Programme on 26 April 2016. The Government approved the Convergence Programme on 28 April 2016.

The Parliamentary Committee on European Union Affairs were informed of the European Commission's proposals for country-specific recommendations concerning the Convergence Programme for 2015 on 12 June 2015.

¹ 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.

1 Economic policy framework and targets

1.1 Budgetary policy goals

The budgetary policy goals encompass a general government net lending target, an expenditure ceiling and a local government balanced budget requirement.

General government net lending target

The argument in favour of having a governing target for general government net lending is that it strengthens control over the long-term development of general government finances. The net lending target also delineates the need to set priorities among expenditure areas, or for higher taxes. In addition, fiscal policy should facilitate economic stimulus during a downturn and help rein in the economy during an upturn. Accordingly, higher net lending in good economic times must provide space for lower net lending in worse times. This is made possible by formulating the net lending target as an average over an economic cycle (see also section 3.4).

According to the Swedish Budget Act (2011:203), the Government is required to propose a target for general government net lending. As proposed in the Spring Fiscal Policy Bill for 1997, a decision was taken to introduce a surplus target for general government net lending 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. Following a proposal in the Spring Fiscal Policy Bill for 2007, the Riksdag decided to lower the net lending target from 2 per cent of GDP to 1 per cent 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 posted to the general government sector in the National Accounts, which reduced general government net lending by around 1 per cent of GDP.

A parliamentary committee was tasked in June 2015 to review the general government net lending target (Dir. 2015:63). The committee will submit its final report in October 2016. In the final report, the committee must set out its views on the experiences from the fiscal policy framework thus far, its assessment of what level the general government net lending target should be set at going forward, and the impact of the target level on the general government finances and the Swedish economy.

Expenditure ceiling and a strict budgetary process

The expenditure ceiling covers central government primary expenditure; that is, excluding interest expenditure, and old age pensions system expenditures. According to the Swedish Budget Act, the Government is obliged to propose, in the Budget Bill, an expenditure ceiling for the last year of the three-year budget cycle on a rolling basis. The expenditure ceiling is then set by the Riksdag. A multi-year expenditure ceiling promotes a controlled development of central government expenditure and is an effective tool for attaining the net lending target and sustainable general government finances over the long term. Together with the general government net lending target, the expenditure ceiling governs the total levy 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 revenue are used for permanent increases in expenditure.

The expenditure ceiling is the overarching restriction for the budgetary process in terms of total expenditure. The fundamental principle is that expenditure ceiling levels decided by the Riksdag are not changed for any reason other than technical adjustments. According to the Budget Act, the Government is further obliged to take measures if there is risk that an established expenditure ceiling will be exceeded. According to standard practice, there should be a budgeting margin of a certain size under the expenditure ceiling. This is mainly intended to act as a buffer should expenditure, due to cyclical factors, develop in a way other than estimated when the level of the expenditure ceiling was set.

A well-organised, strict budgetary process has central significance to achieving the budgetary policy goals. The budgetary process compares different expenses to one another and expenditure increases are considered against a predetermined total fiscal space demarcated by the expenditure ceiling and the net lending target. The main principle is that the cost of proposed expenditure increases in any one expenditure area must be covered by proposed expenditure reductions in the same area. It is also vital that the central government budget is transparent and comprehensive. The Government's proposed budget must include all revenue and expenditure, as well as other payments that have an impact on the central government borrowing requirement (the "completeness principle"). Furthermore, central government revenue and expenditure are budgeted and reported gross on income headings and appropriations (the "gross principle"). This means that expenses will be reported on the expenditure side of the budget, while revenues will be reported on the revenue side. The main principle is that expenses must be accounted for in the year in which they are intended to be used.

Local government balanced budget requirement

To reinforce the budgetary process at the local and regional levels, a statutory requirement for balanced budgets in the local government sector has been in force since the year 2000. This stipulates that each individual municipality and county council must budget for a balanced outcome. Deficits must be corrected within three years, but the municipality or county council is permitted, if special circumstances exist, to decide not to correct the deficit. Municipalities and county councils are also required to maintain sound financial management in their operations.²

1.2 Sweden's medium-term budgetary objective

As a member of the EU, Sweden must adhere to the regulations concerning general government finances in the Stability and Growth Pact. The provisions include that the general government deficit must not exceed 3 per cent of GDP and general government debt must not exceed 60 per cent of GDP. All Member States also have a medium-term budgetary objective (MTO) for the structural balance; that is, cyclically adjusted general government net lending, excluding one-off effects. Each Member State decides the level of the MTO, but it must be compatible with a minimum level calculated by the European Commission. Sweden's MTO is minus 1 per cent of potential GDP (see section 3.4).

1.3 The objective of monetary policy

The Riksbank is responsible for monetary policy in Sweden. In accordance with the Sveriges Riksbank Act (1988:1385), the objective of monetary policy is to maintain a fixed monetary value. Amendments to the Sveriges Riksbank Act adopted in 1999 gave the Riksbank greater autonomy. The constitution states that no other governmental agency may determine how the Riksbank make decisions on monetary policy issues. The independence of the decision-making Executive Board is also underlined by the Sveriges Riksbank Act, which states that the members of the Board must not seek or receive instructions when performing their monetary policy tasks.

According to the Sveriges Riksbank Act, the objective of monetary policy is to maintain a fixed monetary value. The Riksbank has specified this as an inflation target of an annual change in the consumer price index (CPI) of 2 per cent.

² According to the sound financial management requirement set forth in the Local Government Act (1991:900), municipalities and county councils must, among else, set their own financial targets and be accountable for sustainable budgets in the long term. A commonly used target is that net income should correspond to 2 per cent of revenue from taxation and general central government grants.

At the same time as monetary policy is focused on achieving the inflation target, it must support the objectives of general economic policy with the aim of achieving sustainable growth and a high level of employment. This is achieved by the Riksbank, in addition to stabilising inflation around the inflation target, also striving to stabilise production and employment around long-term sustainable development paths. Consequently, the Riksbank conducts what is termed a flexible inflation target policy. This does not mean that the Riksbank renounces the primacy of the inflation target.

It takes time for monetary policy to achieve its full impact on inflation and the real economy. Monetary policy is therefore guided by economic trend forecasts. Among other things, the Riksbank publishes an assessment of how the repo rate will develop in future. The course of interest rates is a forecast, not a promise.

When each monetary policy decision is made, the Executive Board makes an assessment of which course the repo rate needs to take for the monetary policy to be well balanced. This normally entails finding a suitable equilibrium between stabilising inflation near the inflation target and stabilising the real economy.

There is no general answer as to how quickly the Riksbank aims to return inflation to 2 per cent if it deviates from this target. In certain situations, a rapid return may have undesired effects on production and employment, while a slow return can weaken the credibility of the inflation target. In general, the ambition has been to adjust interest and the course of interest rates such that inflation is expected to be relatively close to the target in two years' time.

In September 2003, Sweden held a referendum on the introduction of the euro. 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 exchange rate policy matters and decides on the exchange rate system, while the Riksbank is responsible for the application 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 is very favourable. Pegging the Swedish krona to ERM2 is not under consideration.

1.4 The Government's economic policy

Adopted measures

The Government's reforms have been and remain oriented towards increasing employment and pushing down unemployment, reversing the negative performance trend in Swedish schools, promoting climate adaptation and strengthening welfare. Sound general government finances are a prerequisite for creating more jobs and for sustainable financing of welfare.

Investments in jobs

Investments in Sweden are necessary to meet the challenges of the future. Investments in jobs are being made through the Government's jobs agenda. The jobs agenda consists of three parts: investments in housing, climate adaptation and infrastructure; an active enterprise and innovation policy; and investments in skills and matching. Greater gender equality and equity are part of the solution - efforts involved with all parts of the agenda must therefore proceed from a distinct gender equality perspective. When welfare is strengthened and covers more people, new jobs are created along with better conditions for working and working full-time.

Increased investments in infrastructure and housing create jobs here and now and the prerequisites for new jobs in the future. The housing shortage is not only an obstacle to an efficient labour market. It is also contributing to rapid price growth in the housing market that entails a risk to macroeconomic stability and is making it more difficult for people to enter the housing market. The shortage of rental housing is especially problematic, as it plays an important role in establishing an inclusive labour market and an efficient housing market.

The effectiveness of matching in the labour market is declining. Unemployment is high, even though there are many situations vacant. For more people to secure jobs, investments must increase and opportunities for training and matching initiatives improve so that people have the knowledge and skills that are in demand. In many cases today, upper secondary education is a prerequisite for labour market entry. Consequently, it is important on the one hand that people have the right to complete upper secondary education through municipal adult education (Komvux) and on the other hand that demands can be made on the individual, such as that they participate in the education contracts that the Government proposed in the Budget Bill. In addition, vocational higher education needs to be expanded and given better planning conditions. To increase the outflow from long-term unemployment to work and education, the Government proposed replacing occupational placements with initiatives based on individual needs and circumstances. Examples of such measures are extra jobs, subsidised employment, education and work experience, which will contribute to the gradual elimination of Phase 3.

The number of displaced people has not been as high as it is now since the Second World War. From a comparative European perspective, Sweden has assumed a very high share of responsibility in the refugee crisis. All municipalities need to take responsibility and must be put in a better position to do so. The best and most sustainable policy is to shorten the time required for people to become established in society and improve their opportunities to begin working. In response, the Government has proposed investments in measures to improve establishment, including a validation initiative and "fast tracks" into the labour market. The Government considers that all municipalities should contribute to the

reception of refugees. Accordingly, the 2016 Budget Bill proposed a rise in the standard compensation provided to municipalities for the reception of new arrivals.

Equitable knowledge-oriented schools with time for every student

Teachers are the most important resource for schools. By acting today to recruit, retain and develop more good teachers, we can improve future performance. This will require higher salaries for teachers and better conditions for teachers to give each pupil individual attention. The central government also needs to take more responsibility for supporting underperforming schools. Investments in early intervention, making the teaching profession more attractive and the national development programmes will boost knowledge outcomes and overcome segregation. More staff will be employed in Swedish compulsory education so that teachers have more time for their work and class size can be reduced in the early years.

Sustainable future

Climate change is the defining issue of our time. Sweden is to be one of the first fossil-free welfare nations in the world. Climate change is the Government's top environmental priority. Limiting global emissions of greenhouse gases so that the temperature increase stays as far below two degrees as possible will improve prospects for long-term prosperity. The Government considers that in the long term Sweden should have an energy system based on 100 per cent renewable energy. In the 2016 Budget Bill, the Government proposed increased investments in eco-friendly and resource-efficient technology, as well as additional climate financing in developing countries.

Increased welfare, equality and security

Collectively financed welfare services must benefit everyone, regardless of background and ability to pay. A comprehensive welfare system also contributes to increasing the number of hours worked, partly because it offers women and men alike the opportunity to work full-time. Better elderly care and higher quality out-of-school centres are not just a matter of security in old age and childhood, they are also a matter of people's opportunities to work and essential to improve women's conditions in life. With this in mind, the Government proposed continued investments in welfare in the Budget Bill for 2016.

In support of the local government sector, the Government presented the 2015 Extra Adjustment Budget Bill to the Riksdag in November 2015, which proposed a one-time allocation of SEK 9.8 billion to the local government sector. The Riksdag decided on the proposal of the government. The assessment was that there was a need for additional resources in many welfare services and that this need had risen due to the high number of asylum seekers. The funds can also be used in 2016 to meet the challenges in health, education and social care.

Public health in Sweden is good, but unevenly distributed. To close the health gaps that can be influenced, vigorous reforms are needed, not least with respect to women's health and young people's mental health. Accordingly, the Government proposed investments in free mammography screening, youth clinics and free dental care. Early interventions can help reduce sick leave. Investments were also proposed to strengthen the professions upon which Swedish health care depends.

Wages and pensions are taxed differently, which is both fundamentally wrong and poor distribution policy. The Government therefore proposed a first step towards closing the taxation gap. Under the proposal, the gap will be closed entirely for retired people with the lowest incomes. The Government proposed additional resources and several initiatives towards ensuring that municipalities and county councils can provide adequate staffing for services for older people.

Table 1.1 Reforms and financing

Effect on general government net lending, SEK billions

	2016	2017	2018	2019
Spring Fiscal Policy Bill for 2015 (SFPB15)				
More jobs and a more competitive Sweden	5.48	7.30	8.37	7.16
Knowledge-based education in equal schools with time for each pupil	2.55	2.65	2.65	2.30
Sustainable future	2.01	2.01	2.01	1.41
Increased welfare and security	6.49	6.45	6.38	4.48
Other reforms	3.44	4.00	3.67	3.49
Total reforms SFPB15	19.97	22.41	23.07	18.83
Total financing SFPB15	20.41	25.24	25.97	24.02
Effect on general government finances SFPB15	0.44	2.83	2.90	5.19
Budget Bill for 2016 (BB16)				
Investments in jobs	8.80	10.34	10.35	10.29
Investments in the schools	2.91	4.14	4.02	3.82
Investments in climate adaptation and energy	1.19	1.52	1.55	1.57
Reforms for increased welfare and security	6.52	6.71	6.94	6.96
Better reception and faster establishment	1.98	3.60	3.97	3.24
Sweden in the world	1.77	2.35	2.68	2.80
Other reforms	1.40	1.54	1.20	1.34
Total reforms BB16	24.57	30.21	30.70	30.01
Total financing BB16	24.66	30.42	32.04	35.96
Effect on general government finances BB16	0.09	0.21	1.34	5.95
Total reforms, SFPB15 and BB16	44.54	52.62	53.77	48.84
Total financing SFPB15 and BB16¹	44.63	52.82	55.11	54.79

¹ Does not equal the sum of the lines "Total financing SFPB15" and "Total financing BB16" because the technical transfer for SFPB15 is included in the sums of both of these lines.

New investments added to earlier initiatives

In the Budget Bill for 2016, which is based upon an agreement between the governing parties and the Left Party, the Government proposed total investments of approximately SEK 24 billion for 2016. This supplementary funding was added to the SEK 20 billion the Government

announced for 2016 in the Spring Fiscal Policy Bill for 2015 (2014/15:100), see table 1.1. As a result of the unique situation that arose when the Riksdag dealt with the Budget Bill for 2015, the Spring Fiscal Policy Bill contained more comprehensive proposals and announcements than under normal conditions.

Table 1.2 Combined budgetary impacts of Government policy 2015–2019 in relation to the previous year

Changes in expenditure and revenue in relation to measures and funding adopted and announced last year and those now proposed and announced. Budgetary impact on general government net lending.

SEK billions

	2015	2016	2017	2018	2019
Expenditure changes¹					
Change in ceiling-limited expenditure	14.8	19.4	5.6	0.2	-6.1
Adjustment for differences between the accounting principles in the central government budget and the National Accounts	-11.1	18.2	-8.9	2.8	0.4
of which, support to municipalities and county councils ²	-8.8	17.6	-8.8	0.0	0.0
of which, capital contributions to state-owned enterprises ³	0.0	-0.2	0.2	0.0	0.0
of which, infrastructure investments funded by borrowing ⁴	-1.7	0.0	0.5	2.7	-0.2
Total expenditure changes	3.7	37.6	-3.3	2.9	-5.7
Revenue changes¹					
Taxes, gross	13.9	32.2	4.7	1.2	1.0
Indirect impact of taxes	-1.7	-3.2	-0.8	-0.5	-0.2
Other revenue reforms	0.8	2.0	0.2	-1.2	-0.1
Total revenue changes, net	13.0	31.0	4.1	-0.5	0.7
Changes in expenditure and revenue, impact on general government net lending^{1,5}	9.3	-6.6	7.4	-3.4	6.5
<i>Per cent of GDP</i>	<i>0.2</i>	<i>-0.2</i>	<i>0.2</i>	<i>-0.1</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 Refers to temporary support to municipalities and county councils.

³ Capital injections do not affect net lending. The item refers to Sweden's involvement in the capital increase in the Asian Infrastructure Investment Bank of SEK 0.2 billion in 2016 proposed in the Spring Adjustment Budget Bill for 2016.

⁴ This item shows the change in net borrowing for road and rail needs. Net borrowing consists of the difference between new borrowing and amortisation.

⁵ Excluding the indirect impact of expenditure reforms on the revenue side.

Source: Own calculations.

The Government's further reform ambitions

Sustainable reception and effective establishment

The number of people who came to Sweden in the autumn of 2015 to escape war and oppression was higher than Sweden's reception capacity could cope with at one time. In response, the Government has proposed changes to the migration policy, including temporary legislation and border and ID controls. Sweden must have an effective reception system that makes it possible for new arrivals to become established in society. Sweden must take responsibility, as a matter of solidarity, for the difficult refugee situation, but Sweden and a few other countries cannot provide asylum reception for the entire EU. Efforts to ensure that the EU

Member States take their responsibility in the ongoing humanitarian disaster are continuing.

When the number of asylum seekers increases, so does the number of rejections in asylum cases. In order to meet the need for effective return procedures, the Government has proposed allocation of additional resources to the Migration Board in the Spring Adjustment Budget Bill for 2016. The Swedish Police Authority has also been allocated additional funds for this purpose in 2016. Work is the key to the introduction of newly arrived people in Sweden. Work provides opportunities to improve Swedish language skills, learn about Swedish society and establish wider social networks. However, the time required for establishment of new arrivals is far too long, and many are working in jobs below their skills level. The Government believes there is a great need for action to fully utilise the potential of new arrivals and hasten their establishment in the labour market. The language instruction programme Swedish for Immigrants (SFI) has been reformed and the Government is allocating resources to ensure that asylum seekers can begin learning Swedish as soon as possible.

Many new arrivals have both education and experience in areas where there are labour shortages. Other groups of new arrivals have no relevant vocational training. In addition to investments in adult education, the Government intends to broaden the trainee jobs and vocational introduction employment schemes to include newly arrived people. At a later date, the Government will present further measures to hasten the establishment of new arrivals in the labour market.

The Government must successfully cope with all dimensions of the refugee situation. The proposals in the Spring Adjustment Budget Bill for 2016 will make the reception system better and more efficient, improve introduction and pave the way for improved return activities.

Unemployment must fall

Fiscal policy is governed by the Government's objective to achieve the lowest unemployment rate in the EU by 2020. This objective is to be reached by increasing the number of men and women working and the number of hours worked in the economy. It is an ambitious objective and poses a great challenge for policy.

Even though the trend is positive, there are still far too many people who have a weak attachment to the labour market. This applies in particular to people with a short education and people who have recently arrived in Sweden. A great many people applied for asylum in Sweden in 2015. Consequently, over the next few years there will be a large number of new Swedes whose circumstances vary with regard to labour market entry. This entails a further challenge to attaining the Government's ambitious target. The need for policies to get more people into jobs has become even greater.

The Government has launched a new adult education initiative. The current steps, when fully deployed, will offer more than 50 000 places in

education and training in municipal adult education, vocational adult education, popular adult education, higher education and vocational higher education. The Government also intends to make municipal adult education courses that qualify participants for higher education a right for everyone from 2017 onwards.

There was a clear decline in youth unemployment in 2015, which is now essentially on par with the level before the financial crisis. As increasing numbers are now securing jobs in wide-ranging groups of young people, the Government's initiatives are aimed primarily at young people who have a weak attachment to the labour market. Long-term unemployment among adults also declined significantly in 2015 and is the lowest in the EU. Nonetheless, far too many people are suffering from long periods of unemployment. The Government is discontinuing phase 3 of the jobs and development guarantee. People who are currently in phase 3 will instead benefit from initiatives that improve their employability. The Government intends to present measures to further reduce long-term unemployment.

Investments in housing and infrastructure are improving people's opportunities to thrive all over the country, but also to commute and move to where jobs are available. The Government is raising its ambitions in the infrastructure area and has made substantial investments in rail maintenance, as well as public transport in sparsely populated and rural areas. The Government understands the considerable advantages of high-speed railways. However, the cost estimates for high-speed railways have increased sharply and unexpectedly. Investments in infrastructure require a long-term approach. The Government therefore intends to present a bill proposing financial frameworks for a national plan for the period of 2018-2029.

The Government is implementing the largest housing policy initiative in 20 years while engaging in dialogue with the Left Party, Moderaterna, the Christian Democrats, the Liberal Party and the Centre Party on reforms that can further improve housing supply in the future.

An active business and innovation policy across the country is improving the business climate so that more enterprises can be started up and existing enterprises afforded more expansive growth opportunities. The Government has appointed an innovation council, reporting directly to the Prime Minister, which continuously identifies measures that have the potential to strengthen Swedish innovation capacity. In addition, the Government has presented three important reforms. These involve a new structure that significantly improves access to venture capital to correct or complement private financing in the market. The Government has also adopted a new strategy for increased exports and a strategy for an industrial renaissance in Sweden. Ahead of autumn 2016, the Government is preparing a bill for higher education, research and innovation.

Knowledge-based education in equal schools with time for each pupil

The Government's objective for the education policy is knowledge-based education in equal schools where teachers have time for every pupil. International measurements show that knowledge outcomes in Swedish compulsory school have been declining for a long time and that the trend has accelerated in recent years. Segregation and performance gaps between schools have increased in the past ten years. In response, the Government has put priority on increased investments in education. The main direction is to improve knowledge outcomes through early intervention, greater equality and making the teaching profession more attractive. The Government has implemented a stimulus for higher salaries for teachers, which will make it possible for some 60 000 teachers to be given a substantial increase in salary from 1 July 2016. Measures are also being taken to make it possible for teachers to spend the majority of their working hours teaching. Special education teachers and early intervention are high priorities to create more equal conditions for all children. Earmarked resources have been allocated to schools with low performance scores. The Government's objective is that all young people should begin and complete upper secondary school. This also applies to young people who enter the Swedish school system during the later years of compulsory school or at upper secondary school age.

Climate change is the defining issue of our time

Sweden is to be one of the first fossil-free welfare nations in the world. Climate change is the Government's top environmental priority. The key to reducing global climate emissions is for wealthier countries to lead the way by reducing emissions and developing and spreading solutions while supporting developing countries in their efforts towards climate transition and climate adaptation. Sweden is making the national climate policy more rigorous and reducing emissions. The Government has taken new measures to reduce emissions of greenhouse gases in Sweden by 2020 and thereafter.

Under the Government's policy, central government climate investments in Sweden and abroad amount to SEK 4.5 billion in 2016. The investments are mainly concentrated in four areas: renewable energy, fossil-free travel and local and international climate investments. The Government is intensifying efforts to increase the instrumental impact of environmental taxes. The Government's objective is to establish rules as soon as possible during the current term in office that provide stable and sustainable long-term conditions for biofuels. The work to implement and further develop the City Environment Agreements for the future, with focus on sustainable transport in cities, remains a priority. The Climate Leap investment support scheme for local climate actions is contributing to increased climate investment and is an important contribution to attaining environmental objectives.

The Government considers that in the long term Sweden should to have an energy system based on 100 per cent renewable energy. The

Government wants to achieve a more circular economy based on reuse and recycling.

Environmental and climate issues still need to be integrated in policy areas where the driving forces and the solutions to environmental problems are found. The Government is carefully monitoring developments and will be presenting further measures to attain the environmental objectives.

Increased welfare and equality

The Government's objective is that economic growth and prosperity in Sweden must benefit everyone. Collectively financed welfare, such as childcare, elderly care, education and healthcare, are central components of the Swedish model. In a functioning welfare society, illness or unemployment should not lead to economic exclusion. There is still need for reforms to improve the incomes of the most vulnerable members of society.

Investments in welfare have been neglected for too long. The Government puts priority on strengthening welfare and creating the conditions for employing more people in welfare services. The Government is carefully monitoring developments in the local government sector and will be presenting further investments in welfare.

Increased equality between women and men

The present disparities between women and men as regards life circumstances and income are unacceptable. The Government believes that the gender equality perspective must be taken into account in all areas of policymaking, while special initiatives are taken to increase equality between women and men.

To improve gender equality in the labour market, the Government has introduced a third month reserved for each parent in the parental benefit system. The objective is a completely equal use of parental leave and the Government has appointed a commission of inquiry towards that end. The Government is also implementing continued welfare initiatives of particular significance to women's opportunities to work, such as increased staffing in elderly care and providing childcare during unsocial working hours. Improving women's life conditions is an important task.

The Government's view of the Council's recommendations from 2015

In the formal Council Decision of 14 July 2015, the Council recommends that Sweden take action in 2015 and 2016 to:

1. Address the rise in household debt by adjusting fiscal incentives, in particular by gradually limiting the tax deductibility of mortgage interest payments or by increasing recurrent property taxes, and by increasing the pace of mortgage amortisation. To alleviate the structural under-supply of housing, foster competition in the construction sector, streamline the planning and appeals procedures for construc-

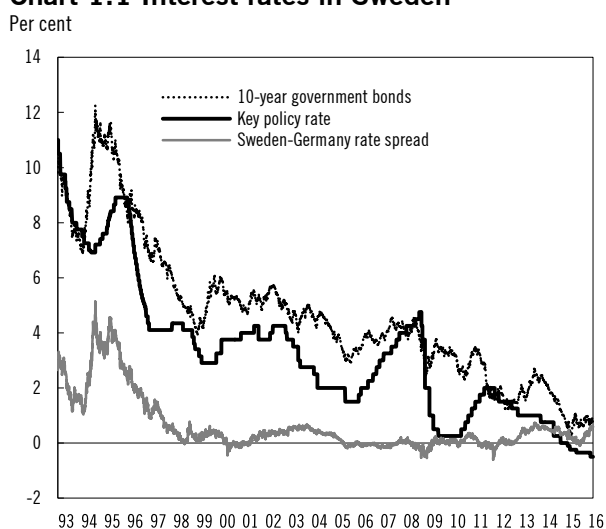
tion and revise the rent-setting system to allow more market-oriented rent levels.

The Government welcomes the reviews conducted within the framework of the European Semester. The Government shares the assessment that increasing household debt is one of the key challenges and has prepared actions to respond to this challenge. The recommendation is addressed in Section 2.3 and in the National Reform Programme.

1.5 Monetary policy

Chart 1.1 shows the trend in a selection of interest rates in Sweden from 1993. Starting in October 2008, the Riksbank cut the repo rate in several stages from 4.75 to 0.25 per cent to mitigate the effects of the financial crisis and to check the decline of the real economy. As the Swedish economy recovered and inflationary pressure began to rise, the Riksbank gradually raised the repo rate in the second half of 2010 and the first half of 2011. In December 2011 and February 2012, the Riksbank again lowered the repo rate to 1.75 and 1.50 per cent respectively. In response to the weak economic situation, the Riksbank made two further cuts of the repo rate, of 0.25 per cent each, in the autumn of 2012. The repo rate then remained at 1.0 per cent until December 2013, when, as a result of the continued weak economic situation, it was reduced by a further 25 points. Since the beginning of 2014, the Riksbank has further lowered the rate from 0.75 per cent to minus 0.5 per cent in February 2016. The measure was taken in response to low inflation and concern about falling inflation expectations, and that the Riksbank has been purchasing government bonds on the secondary market since 2015.

Chart 1.1 Interest rates in Sweden



Sources: Riksbank and Macrobond

The ten-year government bond rate also fell in autumn 2008, which was followed by a moderate rise in 2009 as the acute phase of the financial

crisis abated. Long-term bond rates in Sweden rose as financial anxiety further eased in 2010 and investors began to seek higher-yield assets. However, risk aversion intensified in 2011 when the financial crisis turned into a sovereign debt crisis and rates subsequently fell to record lows in the summer of 2012, as did German and US government bonds. After strong pledges from the ECB to do whatever was necessary to protect the euro area from collapse, risk aversion decreased once more, contributing to a decline in Swedish, German and US bonds premiums for riskier asset classes. Swedish and German government bond rates thereafter trended downwards in 2014, primarily due to investors having adjusted expectations to the understanding that the repo rate will remain low for a protracted period. This in turn pushed down rates on securities with longer maturity periods, such as government bonds. Five- and ten-year government bond rates in Sweden have fallen slightly since December 2015, partially due to the more expansive monetary policy.

Chart 1.2 Inflation measured as CPI and CPIF

Annual percentage change



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

Source: Statistics Sweden.

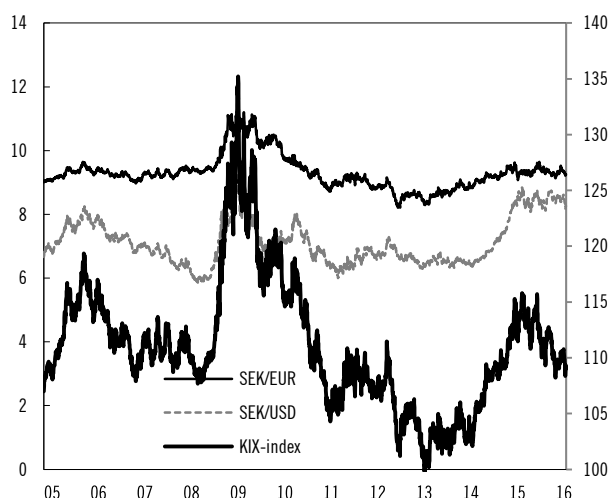
Inflation, measured as the annual percentage change in the consumer price index (CPI) fell rapidly in autumn 2008 (see chart 1.2). The dramatic decline was mainly attributable to lower mortgage interest costs, but also to lower energy costs. From the end of 2010, CPI inflation rose and amounted to 3.0 per cent in 2011. This was largely due to the sharp increase in interest rates in 2010 and 2011. Underlying inflation measured as CPIF (CPI at a fixed interest rate) was 1.4 per cent in 2011. In 2012, CPI inflation regressed as a result of lower interest rate costs and the subdued economic situation. CPI inflation hovered around the same level throughout 2013, while CPIF inflation decreased somewhat towards the end of the year. Inflation declined further during most of 2014, mainly due to weak growth in service prices in the domestic market. Underlying inflation measured as CPIF, excluding energy, has demonstrated a rising trend since the beginning of 2014. The upturn is

mainly attributable to higher prices on imported goods and services due to the depreciation of the Swedish krona since early 2014, while price growth for domestic services has been weak. Inflation measured as CPI was moderated in 2015 by further reductions in the repo rate and generally weak price growth elsewhere in the world due to falling energy prices.

Sweden has had a floating exchange rate since November 1992. Chart 1.3 shows the development of the Swedish krona against the KIX index³, the euro and the US dollar in the period 2005-2014. The uneasy situation in the financial markets caused the krona, like many other small currencies, to weaken in 2008. The krona depreciated against most currencies in 2014. Macroeconomic data and actions taken by central banks in Sweden and elsewhere contributed to relatively large movements in the exchange rate for the krona in 2015 and early 2016. Reductions to the repo rate and the government bond purchases are judged to have contributed to the depreciation of the krona against many currencies, while somewhat higher than expected inflation and GDP growth in Sweden have had a moderating effect.

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

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



Source: The Riksbank.

2 The macroeconomic trend

2.1 International and financial economy

Economic growth outside of Sweden was moderate in 2015. Growth in emerging economies decelerated markedly in 2015 and was the lowest since 2009, but was unchanged in the advanced economies compared

³ The KIX (effective exchange rate) index measures the value of the Swedish krona against a basket of other currencies.

with 2014. Early 2016 has been characterised by financial anxiety, with wide variations in world stock markets. Uncertainty about the stability of Chinese growth and clearly weaker economic development in countries dependent upon commodities has contributed to creating uncertainty in the financial markets. The anxiety was also exacerbated by signs of sagging economic development in many advanced economies.

Low interest rates and stronger investment growth, above all in the euro area, are expected, however, to contribute to maintaining the global economic recovery. This is an important prerequisite for sustained positive development in the Swedish economy.

Growth is expected to continue at a relatively moderate rate in the euro area, which is Sweden's most important export market, although the recovery is occurring in more countries and includes more sectors than before. However, high unemployment and low inflation are expected.

The US recovery continued in 2015. Strong growth in employment has led to solid growth in household consumption. However, there were signs of a deceleration of GDP growth in early 2016. Nevertheless, low interest rates are expected to maintain growth at a moderate level going forward.

Growth in China is expected to further weaken somewhat in the next few years, but is forecast thereafter to stabilise at a level that is still high compared with many other countries.

2.2 The Swedish economy

GDP growth was high in 2015 and is expected to remain high in 2016 (see table 2.1). Relatively high growth in household consumption, investments in the service sector, especially housing, and a positive contribution from foreign trade have been identified as drivers of GDP growth. Strong growth is expected in general government consumption expenditure, largely due to demographic developments, reception of asylum seekers and Government investments in healthcare, schools and social care. GDP growth is expected to slow somewhat in 2017, in tandem with rising resource utilisation.

The labour market situation improved in 2015. Employment increased considerably and unemployment decreased. Continued declines in unemployment are forecast for 2016 and 2017. The strong demand in the economy is expected to lead to faster growth in employment than in the labour force. The increase in employment is expected to be strong in the local government sector. Employment is also expected to increase at a good pace in service industries and in the construction industry.

The large number of people seeking asylum in Sweden is estimated to initially increase demand in the economy and contribute to a short term decline in unemployment. However, the dip in unemployment is expected to level off starting in 2018 as increasing numbers of new arri-

vals enter the labour force. The unemployment forecast is based on the reforms the Government has implemented thus far.

Table 2.1 Key indicators

Annual percentage change if not otherwise stated

	2015	2016	2017	2018	2019
GDP	4.1	3.8	2.2	1.8	2.1
GDP gap ¹	-0.9	0.2	0.5	0.3	0.0
Employment ²	1.4	1.7	1.6	0.8	0.7
Employment rate ³	80.5	81.2	81.7	81.4	81.0
Hours worked ⁴	1.0	1.9	1.7	0.7	0.7
Productivity, business sector ^{4,5}	3.3	2.1	1.1	1.8	1.9
Unemployment rate ⁶	7.4	6.8	6.3	6.4	6.5
Wages ⁷	2.4	3.1	3.3	3.4	3.4
CPI ⁸	0.0	0.9	1.6	2.3	3.2

¹ The difference between actual and potential GDP as a percentage of potential GDP.

² Persons, 15-74 years.

³ According to the EU 2020 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 short-term wage statistics.

⁸ Annual average.

Sources: Statistics Sweden and own calculations.

Resource utilisation rose in 2015 measured by the GDP gap. The GDP gap is expected to be somewhat positive in 2016. Indicators point to increased labour shortages in parallel with the decline in unemployment. This indicates rising resource utilisation in the labour market. However, the overall assessment is that the labour market situation as a whole is not yet strained. The shortage figures are high in the public sector in particular, while the share of private businesses experiencing a labour shortage is only slightly above the average level since 2005.

Inflation has been low for a long time, and has remained low in spite of the vigorously expansive monetary policy. This is due partly to low energy prices and low resource utilisation. Another contributing cause is that expectations of future inflation are at relatively low levels.

2.3 Potential macroeconomic imbalances

The emergence of macroeconomic imbalances, for example in the form of persistent differences in competitiveness, has created severe problems for many countries in the aftermath of the financial crisis. In order to ensure a favourable economic development in the long term, it is important to primarily implement measures that prevent macroeconomic imbalances from occurring and secondarily to identify and correct at an early stage any imbalances that do arise. It is difficult to precisely define a macroeconomic imbalance, but an imbalance reflects an underlying problem that has the potential to lead to a rapid and significant correction that in turn has impact on the entire economy.

The Macroeconomic Imbalance Procedure

The Macroeconomic Imbalance Procedure (MIP) is part of the European Semester and the overall economic policy coordination in the EU. The 2016 procedure commenced when the European Commission published the Alert Mechanism Report 2016 (AMR) in November 2015. The report contained a preliminary economic analysis of the Member States, including a scoreboard with fourteen indicators of areas that might constitute macroeconomic imbalances. For Sweden, the scoreboard indicated that the high current account surplus, losses of export market shares, high private sector debt and rising house prices were potential imbalances.

In February 2016, the Commission published in-depth reviews (IDR) of the 18 Member States that had been identified in the AMR as having potential imbalances. The Commission judged that macroeconomic imbalances existed in 12 of the Member States, including Sweden, and that excessive imbalances existed in five of these. All Member States assessed as having imbalances will be subject to specific monitoring, which is adapted to the degree and nature of the imbalances presented.

The Commission will submit proposals on policy action to address these imbalances within the scope of the European Semester. These proposals will form part of the package of country-specific recommendations that the Commission will present in May 2016. The country-specific recommendations will take into account the information provided in the Member States' National Reform Programmes and Convergence or Stability Programmes. If the Commission deems that a Member State assessed as having excessive imbalances has taken inadequate measures, the Commission may recommend that the Council initiate the Excessive Imbalance Procedure (EIP), which is the corrective arm of the MIP.

In the 2016 IDR for Sweden, the Commission assessed that there were macroeconomic imbalances, noting in particular the high and increasing level of household debt and rising house prices.

Household debt

A high level of debt, regardless of whether in the private or public sector, may lead to problems for both financial and macroeconomic stability. Developments in Europe and in large parts of the rest of the world in recent years provide a clear illustration of this.

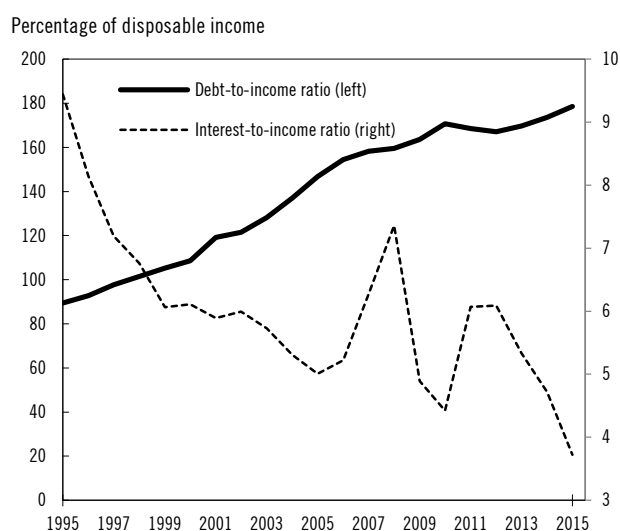
In the years from 1995 to 2015, Swedish household debt increased significantly (see chart 2.1). At the aggregated level, this development can be described in terms of debt-to-income ratio and interest-to-income ratio, where the debt and the interest payments after tax, respectively, are compared to households' disposable incomes. Despite the debt-to-income ratio being at a historically high level, the interest-to-income ratio is below the average for the past 30 years. Lower interest

rates have thus resulted in households being able to take on larger debt without higher interest payments suppressing the potential to consume, invest or save.

The debt-to-income ratio has been increasing for several years and currently amounts to around 180 per cent of households' disposable incomes. Swedish household indebtedness is high from both a historical and international perspective.

The increase in the household debt over the past two decades can be explained to some extent by a larger share of home ownership and a larger share of households with mortgage debt. In addition, the costs of mortgages and home ownership have decreased as a result of lower interest rates and reduced property tax. This means that households can, in general, deal with a higher individual debt-to-income ratio. The increase in the aggregate debt-to-income ratio is thus explained both by more households having mortgages and by households having larger mortgages on average.

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



Source: Statistics Sweden.

Sweden's earlier Convergence Programmes have demonstrated that very few households have high interest payments and that these payments will remain modest, even in a situation with normal interest rates. The Swedish Financial Supervisory Authority (*Finansinspektionen*) has conducted stress tests in its analyses of the Swedish mortgage market in order to evaluate household sensitivity to interest rate increases, loss of income and falling housing prices. Based on these tests, *Finansinspektionen* concluded that the majority of households that have taken out new mortgages have a good ability to repay them and are resilient to changed economic conditions.

Even though the risk of financial instability has been deemed low, vigilance concerning the macroeconomic consequences of high household indebtedness is justified. For example, higher interest payments for

households may lead to reduced consumption and suppressed domestic demand, which in turn can stifle economic growth and GDP growth.

A wide range of measures have been taken in recent years, aimed at strengthening the banks' resilience to financial crises and curbing the rate at which household debt has grown (see also Sweden's National Reform Programme 2016). The most recently proposed measures are found in the Amortisation Requirement Bill (Govt. Bill 2015/16:89), which requires credit institutions that extend mortgage loans to consumers to apply repayment terms that are compatible with a sound amortisation culture and that counteract excessive household indebtedness. The Government and responsible authorities are continuing to examine the risks associated with household debt. The Government Offices are reviewing whether Finansinspektionen should be given a wider mandate to institute measures for purposes including reducing the risks of household debt. The Government is prepared to take further action if so required.

3 General government finances

3.1 Accounting principles

This section details the forecast for the general government finances given in the 2016 Spring Fiscal Policy Bill (Govt. Bill 2015/16:100). Accounts of general government revenue and expenditure are, as in the Spring Fiscal Policy Bill, in accordance with European System of National and Regional Accounts (ESA 2010). The Government's accounts, which are also used by the National Institute of Economic Research (NIER), differ in certain respects from ESA 2010 (see table 3.1). The differences depend mainly upon that sales revenues are recorded on expenditure side in the national statistics, as a debit item among general government consumption expenditure, while these revenues are recorded on the income side according to ESA 2010 (although net lending does not differ). A detailed account of the general government finances in accordance with ESA 2010 (and EDP) is provided in Table C.2a in Appendix C.

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

Per cent of GDP

	2015	2016	2017	2018	2019
SFPB16					
Revenue	48.9	48.6	48.9	49.2	49.3
Expenditure	48.9	49.0	49.6	49.5	49.2
Net lending	0.0	-0.4	-0.7	-0.4	0.1
ESA 2010					
Revenue	50.4	50.1	50.3	50.6	50.7
Expenditure	50.4	50.5	51.0	51.0	50.6
Net lending	0.0	-0.4	-0.7	-0.4	0.1

Note: SFPB16 = Spring Fiscal Policy Bill for 2016.

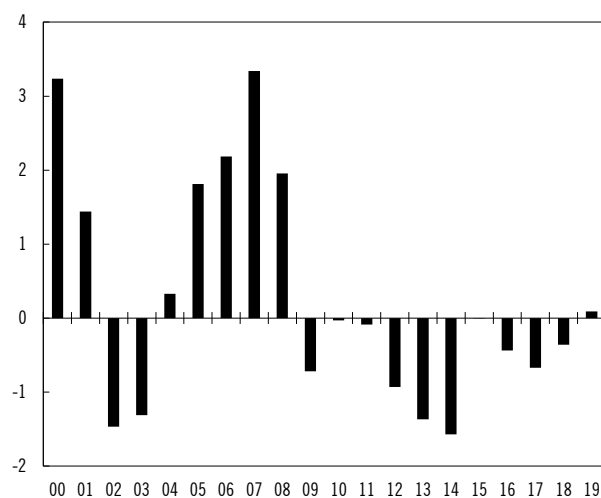
Sources: Statistics Sweden and own calculations.

3.2 Development of general government finances

General government net lending improved substantially between 2014 and 2015. General government net lending has been negative since 2009. After the deficit hit bottom in 2014 at 1.6 per cent of GDP, balance in general government finances was reported in 2015 (see chart 3.1).

Chart 3.1 General government net lending 2000-2019

Per cent of GDP



Sources: Statistics Sweden and own calculations.

The improvement in the general government finances is attributable to strong economic growth combined with the austere fiscal policy instituted by the Government since taking office, but also to events that temporarily improved finances in 2015. The finances were improved temporarily by payment of corporation taxes of SEK 15 billion (equal to 0.4 per cent of GDP), and by a refund of insurance premiums from AFA Försäkring of SEK 5 billion (equal to 0.1 per cent of GDP) to the local government sector (see table 3.2).

Table 3.2 General government finances

Per cent of GDP if not otherwise stated

	SEK billions					
	2015	2015	2016	2017	2018	2019
Revenue	2,033	48.9	48.6	48.9	49.2	49.3
Taxes and charges	1,792	43.1	43.2	43.5	43.7	43.7
Household direct taxes	529	12.7	12.9	13.1	13.3	13.3
Corporate direct taxes	125	3.0	2.7	2.7	2.8	2.9
Employers' contributions	224	5.4	5.3	5.4	5.4	5.4
Indirect taxes	915	22.0	22.2	22.2	22.2	22.1
Income from capital	60	1.4	1.4	1.4	1.4	1.6
Other revenue	181	4.4	4.0	4.0	4.0	4.0
Expenditure	2,033	48.9	49.0	49.6	49.5	49.2
Transfer payments ¹	746	17.9	17.7	17.8	17.6	17.5
Consumption	1,083	26.1	26.5	26.8	26.8	26.6
Investments	178	4.3	4.3	4.4	4.4	4.3
Interest expenditure	26	0.6	0.6	0.6	0.7	0.9
Interest on pension debt	6	0.1	0.1	0.1	0.1	0.1
Net lending	0	0.0	-0.4	-0.7	-0.4	0.1
Primary balance	20	0.5	0.0	-0.2	0.2	0.8
Consolidated gross debt	1,805	43.4	42.5	41.1	40.3	39.1
Net debt	811	19.5	17.8	16.3	15.2	14.5

Sources: Statistics Sweden and own calculations.

In spite of the economic upturn, the general government finances are estimated to be somewhat weaker in 2016. This is largely explained by the falling away of the temporary improvements in 2015, which results a reduction in revenues of 0.5 per cent of GDP between 2015 and 2016.

The exceptionally high number of asylum seekers entails higher expenditures in 2016 compared with 2015. At the same time, certain expenditures will decline in 2016 for reasons including the expenditure-limiting measures that have been implemented and the retroactive rebate on EU membership dues, which will be settled in 2016. Overall, expenditures will increase only marginally as a percentage of GDP in 2016, while revenue as a percentage of GDP will decline.

The deficit in the general government finances is still rising and is estimated to reach 0.7 per cent of GDP by 2017, depending primarily upon further increases in expenditures related to asylum seekers in 2017 compared with 2016.

Consequent upon the automatic budget increase, the deficit in the general government finances is expected to return to a surplus starting in 2019. Net lending will be reinforced through rising revenue and falling expenditure in relation to GDP (see chart 3.2).

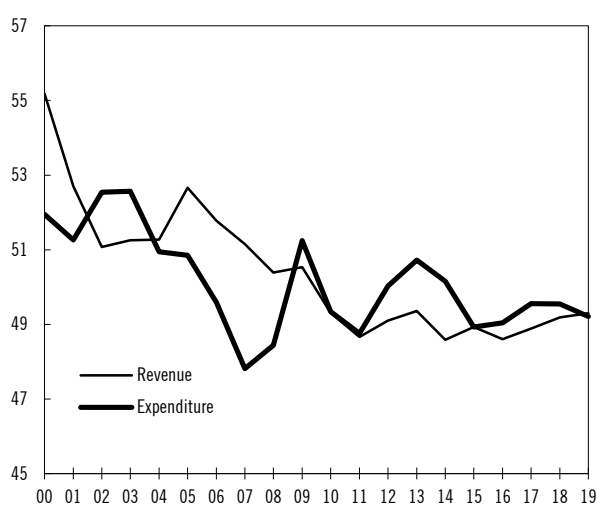
Revenues increasing as a proportion of GDP

The tax ratio is expected to increase by 0.6 percentage points in the period of 2015-2019. The majority of the increase over 2015-2017 depends upon the elimination of reduced social security contributions for young people in two steps in 2015 and 2016.

The increase in tax on capital as a proportion of GDP is explained by factors including temporarily higher revenues from tax on corporate income. Revenues from tax on household capital gains also contributed to the higher tax ratio in 2015. The revenue increases towards the end of the forecast period derived from tax on capital are largely attributable to the expectation that the tax on returns will grow at a faster rate than GDP, which is in turn based on expectations that the government borrowing rate will grow faster than GDP. Total revenue as a proportion of GDP is expected to develop in line with the tax ratio and increase from 48.6 per cent of GDP in 2014 to 49.3 per cent of GDP in 2019 (see chart 3.2).

Chart 3.2 General government revenue and expenditure 2000–2019

Per cent of GDP



Sources: Statistics Sweden and own calculations.

Expenditures as a proportion of GDP

A marginal increase in the expenditure ratio (expenditure relative to GDP) is expected in 2016 compared with 2015. In particular, general government consumption has been forecast to grow faster than GDP, while transfer payments to households decline.

In 2017, expenditures as a proportion of GDP increase by 0.5 per cent. Both general government consumption and transfer payments to the rest of the world, which are included in the item “Other transfer payments and subsidies” will increase. Among the transfers, the costs of sickness benefits will rise.

Local government consumption is estimated to remain unchanged as a proportion of GDP starting in 2018, while GDP growth is expected to outstrip growth in transfer payments to the rest of the world. In parallel, interest expenditures will increase due to a higher interest level. Overall, the expenditure ratio is expected to remain stable between 2017 and 2018.

Improvement in net lending occurring at the central government level

The improvement in the general government finances from 2015 takes place primarily at the central government level (see table 3.3), even though net lending at the central government level is only expected to become positive from 2018. The old-age pensions system is expected to show positive net lending in 2015 and balanced net lending in 2016. From 2017, the old-age pensions system is expected to demonstrate negative net lending. The local government sector reports negative net lending over the course of the forecast period, but a positive result according to the accounting principles that apply to the local government balanced budget requirement (see also section 3.7).

Table 3.3 Net lending and the central government budget balance

Per cent of GDP

	2015	2016	2017	2018	2019
General government net lending	0.0	-0.4	-0.7	-0.4	0.1
Central government	-0.1	-0.2	-0.2	0.2	0.7
Old-age pensions system	0.2	0.0	-0.1	-0.2	-0.1
Local government sector	-0.1	-0.3	-0.4	-0.4	-0.5
Central government budget balance	-0.8	-0.3	0.6	0.1	0.3
Central government debt	32.5	31.1	29.1	27.8	26.2

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

3.3 Net worth and consolidated gross debt

Consolidated gross debt in the general government sector is low

Consolidated gross debt, known as Maastricht debt, is defined by EU regulations and used to assess Member States' general government finances within the framework of the Stability and Growth Pact. In respect of conditions in Sweden, this definition means that the debt consists of the consolidated central government debt and local government sector debts in the capital markets, less the value of 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 SEK 1 216 billion, corresponding to around 70 per cent of GDP. Since then, the nominal value of the debt has increased by approximately SEK 590 billion, amounting to SEK 1 805 billion at the close of 2015 (see table 3.2).

The majority of the increase occurred between 2012 and 2014, when the debt rose by around SEK 380 billion, corresponding to around 7.6 per cent of GDP. Central government financing of loans to the Riksbank to reinforce currency reserves increased the debt in 2013 by 2.7 percentage points. The debt further increased by about 2.6 per cent in 2014 due to regulatory changes that allowed central government units other than the National Debt Office to hold outstanding repurchase agreements pertaining to financial instruments ("repos") over the turn of the year. The effect is recorded gross in the National Accounts, but as

the effect on assets and debt is of equal magnitude, the effect on net worth is neutral. Because these repos are managed by the Legal, Financial and Administrative Services Agency, central government debt is not affected according to the budget, which reflects only debt management by the National Debt Office. Otherwise, the deficit in general government finances and currency effects contributed to the debt increase.

However, the debt has decreased considerably as a proportion of GDP since 1994, amounting to 43.4 per cent of GDP (the debt ratio) at the end of 2015, which can be compared with the reference value stated in the Stability and Growth Pact of a maximum of 60 per cent of GDP.

Debt developments are dependent upon net lending, which can be divided among the primary balance, interest expenditures and the stock-flow. This flow is made up of financial transactions and accruals that do not affect net lending.

Consequent upon the deficit in net lending, gross debt is expected to increase through the end of 2018, but at a lower rate than GDP. In 2019, the debt ratio is estimated to be about 39 per cent of GDP.

The general government's net worth is weakening

General government net worth resides mainly in the national pension funds, while the central government has a negative net worth. The financial assets and liabilities of the local government sector have been essentially in balance since 2000.

The general government's income from capital in the form of interest and dividends, which refers mainly to the old-age pensions system, exceeds interest expenditure. The total debt includes central government commitments and local government sector commitments for defined-benefit occupational pensions earned since 1998. Like the premium pension system, total debts for funded defined-contribution occupational plans are not included in the general government sector, but are reported in the insurance sector.

Net worth declined from 20.5 per cent of GDP in 2014 to 19.5 per cent of GDP in 2015. Of this reduction, 1.2 percentage points are attributable to the strong GDP growth. Other changes, mainly referring to changes in value, instead provided an improvement of 0.2 percentage points.

In the absence of appreciation in value, the deficit in net lending and sustained strong economic growth will reduce net worth by 1.7 per cent as a proportion of GDP in 2016.

Net worth will continue to decline as a proportion of GDP in 2017-2019. The improvement in net lending towards the end of the period does not compensate for the decrease in the net worth ratio resulting from the increase in GDP. Net worth has been estimated at around SEK 717 billion in 2019, corresponding to 14.5 per cent of GDP.

From 2019, net worth is expected to have declined in absolute numbers by almost SEK 90 billion compared with 2014, primarily attributable to the change in cumulative net lending.

3.4 Reconciliation against the general government net lending target

According to the net lending target, general government net lending should equal 1 per cent of GDP on average over the course of an economic cycle. Formulating the target as an average over an economic cycle instead of an annual requirement is justified for stabilisation policy reasons. If the target was 1 per cent for each individual year, fiscal policy would need to be contractionary in an economic downturn to ensure that the annual target is met. Fiscal policy would thus amplify cyclical fluctuations instead of stabilising them. However, formulating the target as an average over an economic cycle makes it more difficult to monitor whether the fiscal policy is in line with the target because it is difficult to determine when an economic cycle begins and ends, as well as the cyclical position of the economy.

The Government's monitoring of the general government net lending target

As the general government net lending target mainly constitutes a prospective guideline for fiscal policy, it is primarily monitored in a forward-looking perspective. However, a backward-looking analysis is conducted in order to see whether there have been any systematic failures of fiscal policy that may reduce the probability of achieving the target in the future. The Government considers it important that there are clear principles for monitoring the target for general government net lending and that the monitoring is transparent. The Government therefore employs a number of indicators in the monitoring process. If the application of these indicators is excessively mechanical, however, there is a risk that fiscal policy will amplify rather than moderate cyclical fluctuations. The Government's starting point is thus that the assessment of the direction of fiscal policy should be based on a broad approach in which a number of different targets and restrictions are taken into account.

When the Government assesses that there is a deviation from the net lending target, the Swedish Budget Act (2011:203) requires the Government to report how a return to the target will be accomplished. The drafting history to the provision emphasised the following: an analysis should clearly indicate that a deviation exists for the Government to have a duty to provide such an account (Govt Bill 2013/14:173).⁴ Moreover, the plan presented by the Government for how a return to the target will be accomplished should cover a medium-term perspective, which normally refers to three or four years. If net lending deviates from the target, the Government should therefore present a plan for how a return to the target will be accomplished that incorporates the forecast years included in the Budget Bill.

⁴ The contents of the underlying bill, An Improved Budgetary Process (Govt. Bill 2013/14:173) were described in greater detail in Sweden's Convergence Programme 2014.

It is important that deviations from the target level are corrected, but this cannot be done mechanically. An overall assessment of how a deviation should be corrected must be conducted based on stabilisation policy, redistribution policy and structural policy considerations.

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

Per cent of GDP if not otherwise stated

	2015	2016	2017	2018	2019
Net lending	0.0	-0.4	-0.7	-0.4	0.1
Retrospective ten-year average	0.3				
The seven-year indicator	-0.9	-0.7			
Structural balance	0.2	-0.2	-0.7	-0.5	0.0

Sources: Statistics Sweden and own calculations.

Retrospective ten-year average

Average general government net lending was clearly below the target level of 1 per cent of GDP over the course of 2006-2015 (see table 3.4). This is explained partly by the effects of the long recession on the general government finances, but also by unfunded measures, including several tax reductions, implemented by the former government.

The seven-year indicator

The seven-year indicator is an average of net lending in the current year, three years prospectively and three years retrospectively, adjusted for one-off effects during the same period. The seven-year indicator shows that general government net lending was below the target by around 2 percentage points in 2015, but will improve by 0.2 per cent of GDP by 2016 (see table 3.4).

Structural balance

The structural balance is an assessment of how large general government net lending should be if the sector's revenues and expenditures are adjusted for the cyclical conditions and one-off effects. The structural balance is not included in official statistics and can be calculated in several different ways. Consequently, the level of the structural balance may vary according to different assessors and that there is no generally accepted outcome.

In 2015, the structural balance was assessed as falling short of the target level by around 0.8 per cent of potential GDP. Thereafter, the structural balance is expected to weaken by around 0.5 per cent of potential GDP in 2016 and 2017. The structural balance is expected to improve in 2018-2019 and be in balance in 2019. The deterioration in the structural balance in 2016 and 2017 is partly due to the development of various tax bases in a manner unfavourable to general government revenues, but primarily to increased expenditures for migration, old-age pensions, sickness benefits, personal assistance benefits, etc.

The Government's overall assessment of attainment of the general government net lending target

The Government's overall assessment is that net lending clearly deviates from the target level. The Government intends to pursue a responsible fiscal policy that leads to a return to the target level at a balanced pace. All reforms were fully funded in the first three fiscal policy bills decided during the current term in office. This contributed to a strong improvement in net lending between 2014 and 2015.

General government debt is relatively low, not least from an international perspective, while financial net worth is positive. Consequently, net lending can be strengthened at a rate that safeguards economic efficiency without jeopardising the sustainability of or confidence in the general government finances.

Development of the general government finances going forward will largely depend on migration trends. Financing the costs entailed in the sharp increase in the number of asylum seekers in 2015 in a responsible way presents a particular challenge. It is reasonable that the management of exceptional events such as natural disasters or very large migration flows should not require short-term budgetary reinforcements. The higher migration costs should therefore be taken into account when the fiscal policy direction is decided.

This should, however, only be the case if it is deemed likely that the sharp increase in the number of asylum seekers is temporary. If the number of asylum seekers is estimated to remain at a high level for an extended period, the fiscal policy must be adjusted to the new expenditure level, which would require reduced expenditures or increased revenues going forward. The Government's forecasts are based on the Swedish Migration Agency's mid-range scenario, which entails fewer asylum seekers per year in 2016-2019 than in 2015. Accordingly, a significant share of the expenditures linked to migration and establishment in the next few years are regarded as temporary in nature.

Against this background, it is not deemed appropriate to implement active decisions on budget reinforcements to attain the net lending target by 2019, despite the deviation from the current target level. The Government estimates that the net lending target of 1 per cent of GDP will not be attained until a few years after 2019.

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

According to Sweden's MTO, the structural balance should not fall below minus 1 per cent of potential GDP, as assessed by the European Commission. The Commission's latest forecast, published in February 2016, estimates the structural balance in Sweden at minus 0.7 per cent of potential GDP in 2015 and minus 1.0 per cent of potential GDP in 2016.

The structural balance in 2017 has been estimated at minus 1.2 per cent of potential GDP (see table 3.5).

Table 3.5 Structural balance as calculated by the European Commission

Per cent of potential GDP

	2015	2016	2017
Structural balance	-0.7	-1.0	-1.2
Medium term budgetary objective (MTO)	-1.0	-1.0	-1.0

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

The Government finds that Sweden, according to the Commission's February forecast, is expected to meet the requirements of the preventive arm of the Stability and Growth Pact in 2015 and 2016. The margins to the lower bound set by the MTO are small, however, and the structural balance is estimated to fall somewhat short of the target in 2017, although at present the deviation is considered too small for the Commission to deem it significant. If the deviation from the target is 0.5 per cent of GDP for one year, or on average 0.25 per cent of GDP over two years, the Commission will perform a detailed analysis to determine whether the deviation is significant.

The Government also notes that the Commission's assessments of the structural balance are slightly lower than the Government's (see table 3.4). The difference amounts to 0.8 and 0.5 per cent of GDP respectively and arises among else from diverging assessments of the economic development and different methods of calculating the structural balance. In the Government's assessment, the structural balance deteriorates in 2016 and 2017, primarily due to higher expenditures for migration, old age pensions, sickness benefits, personal assistance benefits, etc. However, the structural balance is expected to improve in 2018-2019 and to be in balance by the end of the forecast period (see table 3.4).

3.5 Monitoring of the expenditure ceiling

The multi-year expenditure ceiling serves to foster the credibility of economic policy and is an important budgetary policy commitment for the Riksdag and the Government. All expenditure in the central government budget is subject to the expenditure ceiling, with the exception of interest payments on central government debt. In addition, expenditure on the old-age pensions system is encompassed by the expenditure ceiling. Ceiling-restricted expenditure consists of actual rather than budgeted expenditure, meaning that the authorities' utilisation 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, if the budgeting margin is utilised, the general government finances deteriorate. The expenditure ceiling is the upper limit for ceiling-restricted expenditures. The level of the expenditure ceiling should not be regarded as a target for ceiling-restricted

expenditures. The reasons for this include that the net lending target may constrain the level of ceiling-restricted expenditures even if space below the expenditure ceiling exists.

According to the Swedish Budget Act, the Government is obliged to propose an expenditure ceiling for the third additional year. This proposed level forms the basis for the Riksdag's decision on the expenditure ceiling. In the Budget Bill for 2017, the Government will, in accordance with the Swedish Budget Act, propose a level for the expenditure ceiling for 2019. In the Spring Fiscal Policy Bill for 2016, the Government estimates the level of the expenditure ceiling for 2019 and 2020. An estimated level is not subject to decision by the Riksdag.

The budgeting margin under the expenditure ceiling for 2016 is estimated at SEK 21.4 billion, which the Government considers adequate to manage the uncertainty in expenditure development. The estimated budgeting margin for 2017 is SEK 9.5 billion, which is below the Governments' guideline for the minimum budgeting margin. The Government will accordingly carefully monitor expenditure development and take necessary measures as needed to prevent exceeding the expenditure ceiling in 2017. The estimated budgeting margin for 2018 is SEK 35.9 billion, which is consistent with the Government's guideline for the minimum budgeting margin.

Table 3.6 Expenditure ceiling 2014-2018

SEK billions if not otherwise stated

	2014	2015	2016	2017	2018
Expenditure ceiling	1 107	1 158	1 215	1 274	1 332
Per cent of GDP	28.3	27.9	27.7	27.9	28.0
Ceiling-restricted expenditure	1 096	1 135	1 194	1 264	1 296
Per cent of GDP	28.0	27.3	27.2	27.7	27.3
Budgeting margin	11	23	21	10	36
Per cent of GDP	0.3	0.6	0.5	0.2	0.8

Note: The budgeting margin is the difference between an expenditure ceiling and the ceiling-restricted expenditure.

Sources: Swedish National Financial Management Authority and own calculations.

3.6 Monitoring sound financial management and the local government balanced budget requirement

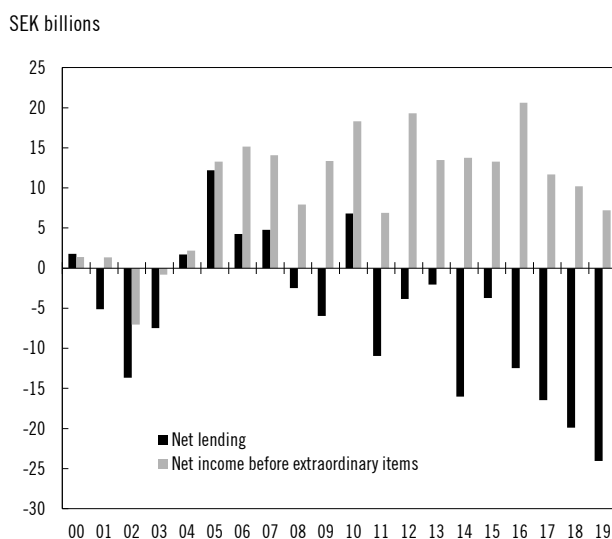
The general government net lending target (see section 1.1) also includes net lending in the local government sector; that is, municipalities and county councils. However, no explicit target has been stipulated for local government net lending.

The general government surplus target is expressed in terms of net lending as defined in the National Accounts. However, it is net income, not net lending, that determines whether municipalities and county councils comply with the balanced budget requirement of the Swedish Local Government Act (1991:900). According to this requirement, municipalities and county councils must draw up budgets in which

income exceeds expenditure. Only in exceptional cases are deviations from the balanced budget requirement permitted. A deficit result in the closing accounts must be corrected within three years, unless there are exceptional grounds. This requirement represents the lowest acceptable short-term net income.

There are differences in accounting methods between the local government accounts and the National Accounts that may amount to several billion kronor for a particular year (see chart 3.3). These discrepancies are due to the fact that local government accounting is based on the same theoretical principles as those which apply to accounting in the business sector. If, for example, investment expenditure were to rise substantially between two years, this would have an immediate impact on net lending, while net income would only be affected by depreciation.

Chart 3.3 Local government net income and net lending



Sources: Statistics Sweden and own calculations.

According to the Swedish Local Government Act, municipalities and county councils must also maintain sound financial management in their operations. Effective from 2005, municipalities and county councils set the financial targets that are significant to sound financial management. A commonly used measure is that net income corresponding to 2 per cent of revenue from taxation and general central government grants meets the requirement for sound financial management. The annual reports of municipalities and county councils reports must contain an assessment of whether the balanced budget requirement has been met. These reports must also include an evaluation of whether the requirement for sound financial management has been achieved.

As of 1 January 2013, municipalities and county councils are permitted to build up balancing funds within the scope of their equity. Surpluses can be set aside in good times to be utilised if deficits arise as a result of an economic downturn. The introduction of balancing funds can be seen as a clarification of the overall objective of sound financial management.

Development of net income in local government

The local government sector reported preliminary net income before extraordinary items of SEK 13 billion in 2015 (see chart 3.3). The strong result is mainly attributable to relatively favourable development of the tax base.

3.7 Central government guarantees

According to the Swedish Budget Act, the Government may issue credit guarantees and make other similar commitments for the purpose and not exceeding the amount determined by the Riksdag. A central government guarantee commitment entails the central government providing a surety for another party's payment obligation, which incurs a financial risk for the central government. General rules for management of central government guarantees are provided in the Budget Act (2011:203) and augmented in the Guarantee Ordinance (2011:211).

Among else, the rules require the central government to impose a guarantee charge corresponding to the expected costs of the commitment, unless the Riksdag decides otherwise. Expected costs for guarantees consist of anticipated losses and administrative costs associated with the commitment. Anticipated losses are a statistical measurement of potential credit losses based on the assessment, with some degree of probability, that the beneficiary of the guarantee or the borrower will not meet its obligations. Charges for anticipated losses are deposited in accounts with the National Debt Office or banks or invested in securities. The guarantee scheme is thus expected to be self-financed in the long term. These principles for extending guarantees are referred to as 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 empowered to exempt specific guarantees from the guarantee model. Accordingly, there are guarantees that are regulated separately and whose terms and conditions depart from those stipulated in the Budget Act. Charges for such guarantees are ordinarily stipulated directly in law and may be based upon grounds other than that they must cover expected costs. The deposit insurance scheme, which is the central government's largest guarantee commitment, and the investor compensation scheme are examples of guarantees regulated under special arrangements.

Composition of the guarantee portfolio

A summary of the guarantees and pledges issued by the Government and various public authorities is shown in table 3.7 . The central government's guarantee portfolio amounted to SEK 1 876 billion at the close of 2015. The largest commitments were the deposit insurance scheme

(SEK 1 501 billion), credit guarantees (SEK 244 billion) and guarantees for capital injections (SEK 122 billion). Pension guarantees and other guarantees amounted to a total of SEK 10 billion.

Table 3.7 Central government guarantee commitments and pledges, 31 December 2015

SEK billions

	Guarantees	Pledges	Expenditure area
Deposit insurance scheme¹	1 500.7		2 Economy and financial administration
Investor compensation²			2 Economy and financial administration
Credit guarantees	243.8	73.3	
of which			
Bank guarantees	0.0		2 Economy and financial administration
Export credit guarantees ³	214.1	73.0	24 Industry and trade
Credit guarantees in foreign aid	1.0	0.1	7 International development cooperation
Independent guarantees	2.5	0.2	7 International development cooperation
Infrastructure	18.5		22 Transport and communications
Housing credits	1.5		18 Planning, housing provision, construction and consumer policy
International commitments	6.2		2 Economy and financial administration 7 International development cooperation 22 Transport and communications
Other	0.0		1 Governance 6 Defence and contingency measures 23 Land-based industries, rural areas and food
Guarantees for capital injections	121.6		
of which			
Capital cover guarantees ⁴			22 Transport and communications
Subscription guarantees	0.4		22 Transport and communications
Guarantee capital	121.2		2 Economy and financial administration 7 International development cooperation
Pension guarantees⁵	8.6		2 Economy and financial administration 16 Education and university research 22 Transport and communications 24 Industry and trade
Other guarantees⁶	1.2		16 Education and university research 22 Transport and communications
of which			
Guarantees for public enterprises etc.	1.2		
Total	1 875.9	73.3	

¹ The commitment for the deposit insurance scheme is as of 31 December 2014.

² For the investor compensation scheme there is a lack of data regarding the scope of the protected assets.

³ Refers to both restricted and unrestricted pledges.

⁴ There are two capital cover guarantees for which no values have been estimated since the guarantees are not limited in terms of time and amount.

⁵ The commitment for pension guarantees is as of 31 December 2014.

⁶ As of 2015, the Transport Administration reports the guarantee capital for Eurofima as a contingent liability, but with no fixed amount.

Source: Swedish National Debt Office.

Expected costs in the central government's guarantee portfolio

To measure the risk of the guarantee commitments that are managed according to the guarantee model, the authorities issuing these guarantees continuously assess the anticipated losses. The authorities make provisions for the anticipated losses on the debt side of their balance sheets.

To assess how well the guarantee scheme is performing, an analysis is made of the relationship between the provisions for anticipated losses and assets (in the form of paid-in and future guarantee charges). The comparison shows that for the portion of the guarantee portfolio managed under the guarantee model, the provisions for anticipated losses are amply covered by the charges already paid in (reported as guarantee assets in table 3.8). The net present value of future charges are in addition to this. At present, the guarantee operations of the Export Credits Guarantee Board (EKN) account for a significant portion of the surplus.

Table 3.8 Comparison between provisions for expected costs and assets in the guarantee operations as of 31 December 2015 (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	Net present value of future charges
Swedish National Debt Office	33.7	0.8	1.0	0.0
The Swedish Export Credits Guarantee Board	205.5	10.1	29.3	4.6
Swedish International Development Cooperation Agency	3.5	0.4	2.1	0.0
BOVERKET - The Swedish National Board of Housing, Building and Planning	1.5	0.1	2.2	-
Total	207.0	7.0	35.5	1.7

Source: Swedish National Debt Office.

4 Alternative scenarios and comparison with Sweden's Convergence Programme 2015

4.1 Alternative scenarios

This section discusses risks in the forecast for economic development and the general government finances presented in sections 2 and 3. In addition, two alternative scenarios for the development of the Swedish economy are presented.

The forecast is associated with considerable uncertainty

The Migration Board's forecast for the number of asylum seekers in the next few years is highly uncertain. How many people seek asylum in Sweden depends upon developments in areas of conflict and upon decisions in Sweden and at the EU level. The number of asylum seekers is significant to the assessment of macroeconomic developments. The number of asylum seekers rose rapidly in 2015 and is expected, according to the Migration Board, to remain high over the next few years. This is leading to, for example, large recruiting needs in the local government sector, where there is already a labour shortage. Whether or not municipalities and county councils are able to recruit sufficient staff may affect the development of general government consumption and the labour market in the forecast.

The estimated unemployment at the end of the forecast period assumes that the economy is in equilibrium. This means that actual unemployment and structural unemployment are at the same level. Structural unemployment is difficult to assess, not least because it is a theoretical concept that cannot be observed with available statistics. As a whole, the reforms that the Government has implemented thus far are expected to lower structural unemployment. At the same time, as increasing numbers of new arrivals to Sweden join the labour force structural unemployment will increase, because the employment rate is lower among people who have resided in Sweden for a short time. Consequent upon the uncertainty surrounding the size of reform effects, along with the difficulty of estimating the number of people who will apply for asylum in Sweden over the next few years, the level of uncertainty is particularly high as regards the forecast development of unemployment until 2020. The Government is carefully monitoring developments and will be presenting further measures to reduce unemployment.

Household debt and house prices, which are at high levels from the historical perspective, are other risks affecting the economic development forecast. If house prices were to drop rapidly, it would entail the risk of negative consequences on growth and employment.

The development of the Swedish krona is a further risk in the forecast. In a situation of high financial turbulence, there is significant risk of wide movements in exchange rates against the krona. If, in such a situation, the market assesses Swedish financial assets as secure, the krona may appreciate considerably more than assumed in the forecast. This would have adverse impact on Swedish competitiveness and thus negative consequences for growth and employment.

Sweden is a small, open economy and developments in the rest of the world are always a key condition for Swedish growth. As in recent years, the risks associated with international economic developments are significant and have been assessed as having recently increased. Developments in emerging economies pose a material risk. Among else, growth in China may decelerate faster than expected. Weaker demand from

China constitutes a risk for advanced economies because Chinese demand is a key driver of global economic growth.

GDP growth increased in the first half of 2015 in the US, the euro area, the UK and elsewhere. But since the end of 2015, increasing signs of a slowdown in these economies have appeared. This is evident in particular in a widespread downturn in confidence indicators for both the manufacturing industry and domestic sectors, including consumption.

There is also risk that economic development in our neighbouring countries, which are highly significant to demand for Swedish exports, will be weaker than forecast. Finland may be hit harder by lower demand from the rest of the world and the slowdown in Norway may become more tangible if the downturn in the oil industry spreads to other parts of the economy.

The British referendum on EU membership, which will be held on the 23rd of June 2016, is also a risk. If the British people vote to leave the EU, this may lead to a protracted period of financial turbulence while negotiations between the EU and the UK are ongoing concerning the formal trade relationship that will replace the present one. To date, no country has left the EU and the consequences of such a decision are thus difficult to predict. In such a scenario, there is deep uncertainty about the real economic effects on trade relationships and financial markets, among else.

There has also been a rise in geopolitical uncertainty. This is linked to conflicts in the Middle East and Ukraine, with large refugee flows to Europe and threats of terrorism. If the geopolitical situation deteriorates, the recovery of the global economy may be checked, which would have impact on a small and open economy like Sweden's.

Climate changes and climate policy are also going to affect the global economy. There are risks linked to more unpredictable weather and the transition to a more fossil-free economy requires major changes. The large financial sector in Sweden is less exposed to heavily fossil-fuel dependent sectors than are the financial sectors in many other countries. However, as Sweden is an export-dependent country that is affected by the rest of the world, the Swedish economy and the financial sector will be impacted by climate-related risks in the future.

Stronger development possible

Development in the Swedish economy has been surprisingly strong since the adoption of the Budget Bill for 2016. It is possible that the pleasant surprises will continue. If the concerns about global growth prove to be exaggerated and growth in global trade accelerates faster, export growth may be stronger. Moreover, consumption growth in Sweden is relatively restrained compared with the strong development in household disposable income, paving the way to higher household consumption.

Alternative Scenario 1: More asylum seekers 2016–2019.

Taking into account the considerable uncertainty attached to estimating the number of people who will seek asylum in Sweden, two alternative scenarios are described below for macroeconomic development and the development of general government finances. These are based on different scenarios prepared by the Migration Board concerning the number of asylum seekers in Sweden, alongside the mid-range scenario upon which the forecasts in this year’s updated Convergence Programme are based (see table 4.1).

Table 4.1 Number of asylum seekers, registered applicants and new residence permits

Thousands

	2016	2017	2018	2019
Baseline scenario				
Number of new asylum seekers	100	75	75	75
Of whom unaccompanied minors	18	14	14	14
Registered with Migration Board, year-end	203	168	123	104
New residence permits ¹	48	78	85	57
More asylum seekers				
Number of new asylum seekers	140	105	105	105
Of whom unaccompanied minors	27	20	20	20
Registered with Migration Board, year-end	244	239	219	200
New residence permits ¹	48	76	91	84
Fewer asylum seekers				
Number of new asylum seekers	70	55	45	41
Of whom unaccompanied minors	12	9	6	6
Registered with Migration Board, year-end	171	121	75	61
New residence permits ¹	51	70	59	21

¹Refers to new residence permits from Migration Board asylum reception centres; that is, excluding resettlement and relatives of former asylum seekers who have entered the country.

Source: Migration Board

Alternative Scenario 1 describes the effects if the number of asylum seekers aligns with the Migration Board’s high-range scenario. This scenario assumes that the number of asylum seekers is 140 000 in 2016 and 105 000 persons per year 2017–2019. The number of unaccompanied minors is assumed to increase to 27 000 in 2016 and thereafter decline to 20 000 per year. As a result of the large influx of asylum seekers, the number of people registered in the Migration Board’s reception system increases to 244 000 in 2016 and remains at 200 000 or more until 2019. In this scenario, the number of people registered in the system is almost 100 000 higher than in the mid-range scenario for 2018–2019.

As the Migration Board’s capacity to determine cases is limited, the number of asylum decisions does not change to any appreciable extent in the short term. Starting in 2018, however, the number of granted residence permits is higher than in the Migration Board’s mid-range scenario.

A higher number of asylum seekers affects consumption expenditure in the general government and local government sectors. Above all, the Migration Board's expenditures for accommodation increase. In the municipalities, there are greater needs for schooling, social services and placement of unaccompanied minors. General government consumption grows at a higher rate throughout the period compared with the baseline projections in the convergence programme. This is particularly apparent in 2017, when growth in general government consumption is almost 1 percentage point higher. As a result of higher growth in general government consumption, GDP grows at a faster rate over the next few years.

Stronger GDP growth contributes to lower unemployment in 2016 and 2017. More asylum seekers and thus more people granted residence permits also increase the labour force. This means that employment and the number of hours worked increase over the longer term. Consequently, Swedish economic potential, that is, the production that can be attained when resource utilization is normal, increases somewhat.

When more people who have been in Sweden for a short time become part of the labour force, it contributes to higher unemployment, as it takes time for them to secure employment. In this scenario, the number of people granted residence permits does not increase until 2018–2019 compared with the Migration Board's mid-range scenario. As it takes some time for new arrivals to enter the labour force, the labour force and unemployment are not affected to any great extent during the forecast period.

A larger number of asylum seekers 2016–2019 increases expenditures for migration and integration. Central government expenditures for migration and integration are estimated to be SEK 2 billion higher compared with the baseline scenario. Expenditures increase as the number of people registered in the Migration Board's reception system rises.

General government net lending deteriorates gradually by 0.2–0.5 percentage points compared with the baseline forecast. The higher expenditures consequent upon more asylum seekers are offset to a certain extent, partly by larger offsets against the development cooperation budget and partly by higher tax revenues generated by the higher economic activity.

Alternative Scenario 2: Fewer asylum seekers 2016–2019.

This Alternative Scenario describes the effects if the number of asylum seekers aligns with the Migration Board's low-range scenario. This scenario assumes that the number of asylum seekers in 2016 totals 70 000 and thereafter gradually declines to 41 000 per year (see table 4.1). A decline in the number of unaccompanied minors, to around 6 000 per year, is also assumed. In spite of a significant decline in the number of asylum seekers, the number of people registered in the Migration Board's reception system will be high in 2016 due to the large number of asylum seekers who arrived in 2015. The number of people registered declines faster in this Alternative Scenario, however, to 61 000 people at

the end of 2019, which should be compared to the 104 000 assumed in the Migration Board's mid-range scenario.

The number of residence permits granted also declines sharply. In total, 201 000 new residence permits are granted in 2016–2019, compared with 268 000 according to the Migration Board's mid-range scenario.

Fewer asylum seekers reduces the Migration Board's expenditures for accommodation. Municipal expenditures are reduced, primarily in relation to reception of unaccompanied minors who are seeking asylum. As a result, growth in general government consumption, on average, is lower by around 0.3 percentage points per year for 2016–2019 compared with the macroeconomic baseline forecast in the convergence programme.

Fewer asylum seekers also results in slower population growth. As a result, the labour force and employment are lower over the longer term. Fewer people employed and thus fewer hours worked result in somewhat lower potential GDP.

Due to lower consumption growth, GDP grows at a lower rate over the next few years and unemployment is somewhat higher in 2017 and 2018. When fewer people are given residence permits, the number of new arrivals entering the labour market also declines. At the same time, the reduction in the number of residence permits granted in this scenario is larger than the corresponding increase in the Alternative Scenario with more asylum seekers. Overall, this means that the lower number of asylum seekers has a clear effect on unemployment at the end of the forecast horizon. Unemployment is estimated at 0.1 percentage point lower in 2019 compared with the baseline scenario.

Table 4.2 Macroeconomic development and net lending

Annual percentage change if not otherwise stated

	2016	2017	2018	2019
Baseline scenario				
GDP ¹	3.5	2.5	2.0	2.2
Unemployment rate ²	6.8	6.3	6.4	6.5
Net lending ³	-0.4	-0.7	-0.4	0.1
More asylum seekers				
GDP ¹	3.6	2.7	1.8	2.1
Unemployment rate ²	6.7	6.2	6.4	6.5
Net lending ³	-0.5	-0.9	-0.7	-0.4
Fewer asylum seekers				
GDP ¹	3.5	2.3	1.9	2.4
Unemployment rate ²	6.8	6.5	6.5	6.4
Net lending ³	-0.4	-0.6	-0.4	0.3

¹ Calendar-adjusted values.

² 15–74, percentage of labour force.

³ In the general government sector. Per cent of GDP

Source: Own calculations.

Consequent upon the assumption that fewer asylum seekers come to Sweden during the period of 2016–2019, expenditures for migration and

integration are lower. In 2016, expenditures are estimated to be SEK 2 billion lower than the forecast provided in section 3. As the number of people registered in the Migration Board's reception system declines, expenditures are further reduced.

The general government finances are improved by 0.2 percentage points, at most, in this Alternative Scenario compared with the baseline scenario. The lower expenditures consequent upon fewer asylum seekers are counteracted by lower tax revenues and a smaller offset against the development aid budget. As the offset against the development aid budget is expected to vary widely for different years, the difference in net lending is marginal in 2018 compared with the baseline scenario.

4.2 Comparison with the 2015 Convergence Programme

Actual GDP growth has been revised up for 2015–2016 in relation to last year's programme, but revised down for 2017–2018 (see table 4.3). In terms of level, however, GDP has been revised up for all years. The primary reason for the upwards adjustments is significantly higher growth in gross fixed capital formation and general government consumption. Investment growth has been stronger than expected in all sectors of the economy. The large number of asylum seekers is contributing, especially in the short term, to rapid increases in general government consumption.

Table 4.3 Comparison with the 2015 Convergence Programme

Annual percentage change in volume and per cent of GDP

	2015	2016	2017	2018	2019
GDP, percentage change in volume					
Convergence Programme 2015	2.6	2.7	2.5	2.4	--
Convergence Programme 2016	4.1	3.8	2.2	1.8	2.1
Difference, percentage points	1.5	1.1	-0.3	-0.6	--
General government net lending, per cent of GDP					
Convergence Programme 2015	-1.4	-0.7	-0.4	0.0	--
Convergence Programme 2016	0.0	-0.4	-0.7	-0.4	0.1
Difference, percentage points	1.4	0.3	-0.3	-0.4	--
Consolidated gross debt, % of GDP					
Convergence Programme 2015	44.2	42.8	41.5	40.0	--
Convergence Programme 2016	43.4	42.5	41.1	40.3	39.1
Difference, percentage points	-0.8	-0.3	-0.4	0.3	--

Sources: Statistics Sweden and own calculations.

General government net lending has been revised up for 2015 and 2015, but revised down for 2017 and 2018. The upwards adjustment in net lending in the near term is due primarily to upwards adjustment of tax revenues, especially revenue from tax on capital, but also revenues from taxes on consumption. The downwards adjustments in 2017 and 2018 are attributable largely to the expenditure side and to the significant upwards adjustment of migration-related expenditures. In turn, consolidated gross debt is expected to be lower as a proportion of GDP in 2016 and

2015, compared with the 2015 Convergence Programme due to the upwards adjustments of net lending.

5 Long-term sustainability of the fiscal policy

Developments in Europe in recent years illustrate how unsustainable fiscal policy can lead to substantial interference with government-funded activities, resulting in societal costs. As a result of large, growing government debts, several crisis-hit countries have been forced to adopt emergency crisis measures instead of implementing reforms that promote stable, long-term growth. Enforced crisis management thus also often increases the strains in redistribution policy. Strong general government finances create the prerequisites for constructive crisis management. As needed, stabilisation policy interventions can be implemented without jeopardising confidence in the fiscal policy. It is therefore important that fiscal policy is sustainable and enjoys a high level of confidence, not only among households and businesses, but also in the international financial markets.

Sweden is facing several changes that may subject the economy to stresses and which therefore require careful monitoring. An increasing average life expectancy is leading to an ageing population, which can be expected to lead to increased general government expenditure for health and social care services. In addition, large numbers of mainly younger people have migrated to Sweden in recent years; among else, this is increasing the need for labour market training and places in compulsory and upper secondary school as well as in higher education. A high level of inward migration can alleviate the pressure of an ageing population on the general government finances if sufficient numbers of new arrivals are able to enter the labour market.

The changing composition of the population is not the only factor that can affect the general government finances. Higher costs and increased demand for tax-funded services can also create strain, especially in connection with assumptions of unchanged tax rates. However, increased pressure on the general government finances does not necessarily have to be met with a reduction in the level of ambition. Pressure on the general government finances can be moderated by extending working life, increasing employment in groups with lower employment rates, improving public health and increasing productivity in the production of tax-funded services.

5.1 Demographics and the general government finances

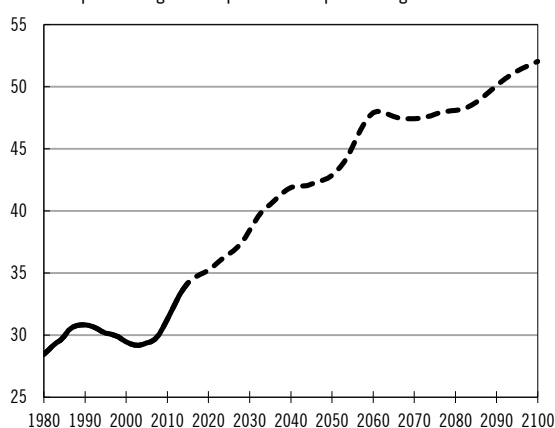
The average age of the Swedish population has increased in recent decades. This trend is expected to continue in the future. When average life expectancy increases, the proportion of older people in the population

rises. Chart 5.1 illustrates this development with a dependency ratio, which is defined as the number of persons aged 65 and older per hundred persons in the 20–64 age bracket.

After remaining essentially stagnant from the mid-1980s until around 2007, the number of older people has begun to increase more rapidly than the number of people of working age. This trend is expected to continue with brief interruptions for the rest of this century. In 2015, there were almost 34 persons age 65 and older per 100 persons of working age, 20–64. This number is expected to have increased to around 38 persons by 2030, almost 43 persons by 2050 and around 52 persons by 2100. The increased number of people born abroad reduces the ratio.

Chart 5.1 Dependency ratios

Number of persons aged 65+ per hundred persons aged 20-64



Sources: Statistics Sweden and own calculations.

The dependency ratio rises as a result of increases in the number of older people, both in absolute terms and in relation to the number of people of working age. Chart 5.2 shows how the number of people in different age groups changes from 2015 in the latest population forecast from Statistics Sweden. Calculated from 2015 as the base year, the number of people aged 65+ is expected to increase by around 1.0 million by 2050 and 2.1 million by 2100. The number of people of working age (20–64) will increase by around 1.1 million by 2050 and 2.0 million by 2100. Over the same periods, the number of people aged 80+ will increase by 610 000 and 1.2 million respectively. Besides increased average life expectancy, the large generations born in the 1940s, 1960s and 1990s will contribute to the sizeable changes over time.

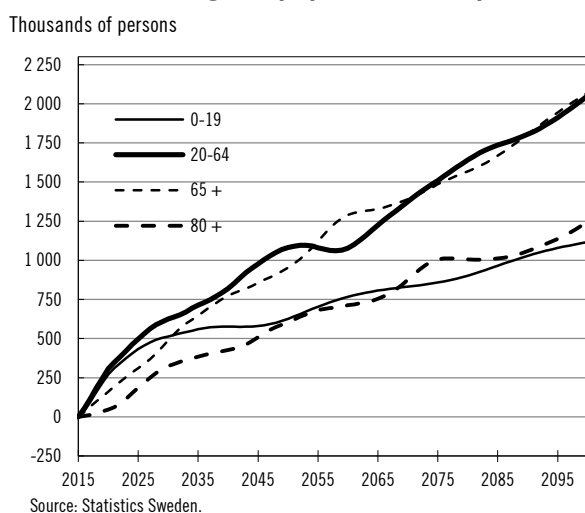
The impact of changes in the population age composition on the general government finances is illustrated by the impact of an average individual on general government revenue and expenditure at various ages, based on data from a specific year.⁵ Chart 5.3 shows that the net

⁵ The net contribution for a particular age consists of the difference between general government revenue (taxes and charges) and general government expenditure (general government transfer payments and general government consumption). The net contribution is calculated as an average for all individuals of a certain age and per year. The figures reported refer to 2012, but the change over time is probably minor.

contribution of younger people, up to around 25 years of age, was negative. General government expenditure on people in this age group primarily consists of childcare and education. The net contribution of people in the age group 26-63 years was positive because individuals' average payments of taxes and charges were higher than the cost of transfer payments and welfare services. At the age of 64, net contributions become negative once again when many choose to retire. Expenditure on social care and healthcare in particular also rises with age. Towards the end of life, expenditure increases rapidly. For a 97-year-old, for example, the negative net contribution was around SEK 400 000 per person and year. Total age-distributed expenditure is however considerably higher among the “younger elderly” since relatively few people live to be so old.

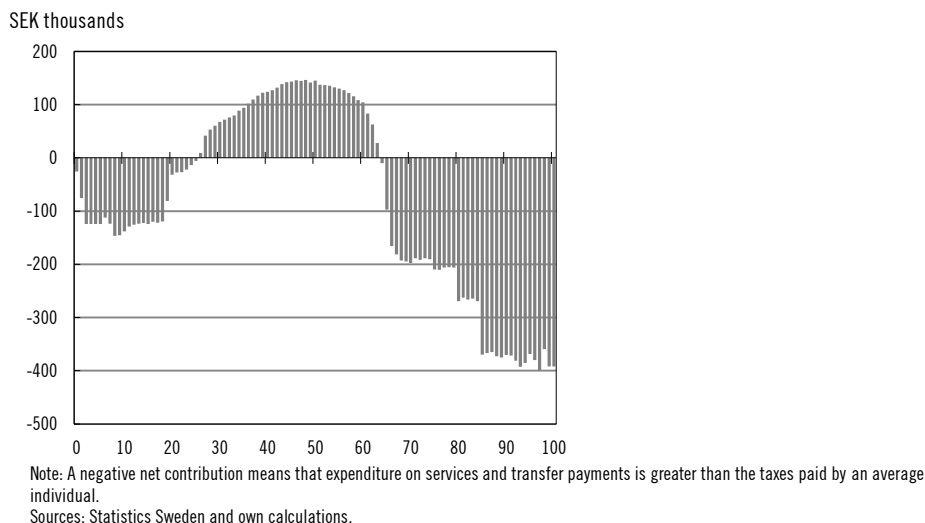
The general government funding challenges presented by demographic changes become clear if the population change in chart 5.2 is combined with the general government net contribution in chart 5.3.

Chart 5.2 Change in population compared with 2010



The expected population increase largely occurs in the age groups in which expenditure on services and transfer payments is substantially higher than tax payments. How the general government finances develop in future is, naturally, strongly dependent on how the financial exchange with the general government changes in various age groups. For example, improved health can reduce the health and social care costs of elderly people.

Chart 5.3 General government net contribution per person and age in 2012

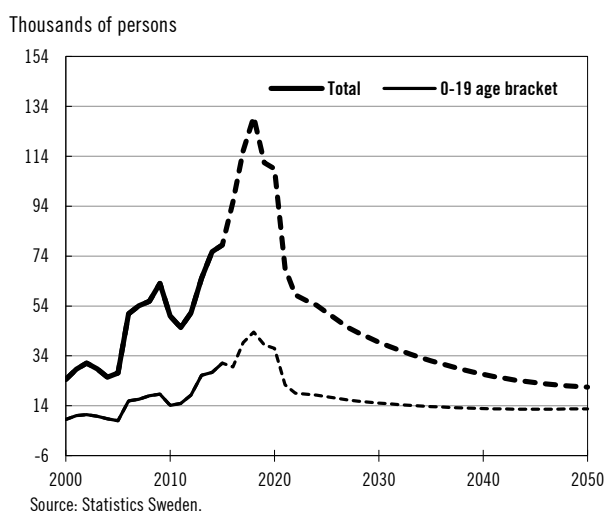


A large number of asylum seekers have come to Sweden in recent years

In 2014, around 80 000 people sought asylum in Sweden, followed by 160 000 in 2015, considerably higher than the average in earlier years. After a year or two, it can be expected that a large number of these people will be issued temporary or permanent residence permits. They will then be included in the total population register, which is the population upon which the calculations in this section are based. Over the long term, it is likely that a number of family members of these people will acquire residence permits in Sweden. As a result, the population is expected to grow considerably faster than before.

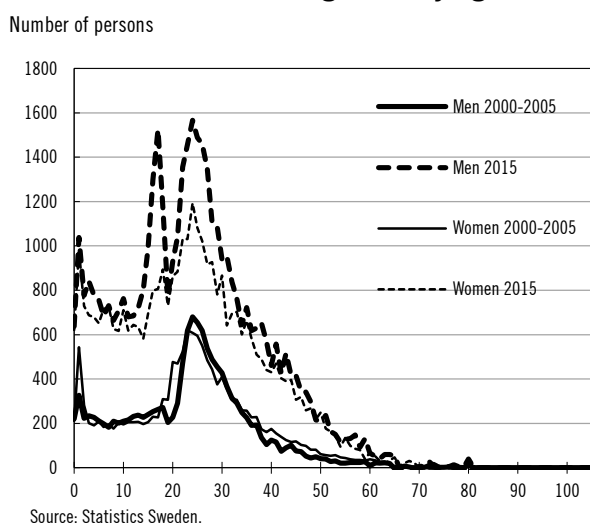
The latest forecast from Statistics Sweden assumes that net migration (the number of inward migrants minus the number of outward migrants) will be especially high in the next five years. Net migration will successively decline thereafter (see chart 5.4).

Chart 5.4 Net migration in Statistics Sweden’s population forecast



The large net migration will help reduce the average age of the population. Relatively few people over the age of 65 move into or out of Sweden. Most people who migrate into the country are in the 20–64 age bracket and a large proportion are aged 0–19. Costs for childcare and education are expected to rise due to the large number of younger people. Chart 5.5 shows how net migration to Sweden is distributed by age and sex in 2015 compared with the average distribution in 2000–2005. The chart shows that inward migration was considerably higher in 2015 than the annual average 2000–2005 and that the proportion of men is now higher, especially in the 15–20 age bracket.

Chart 5.5 Annual net migration by age and sex

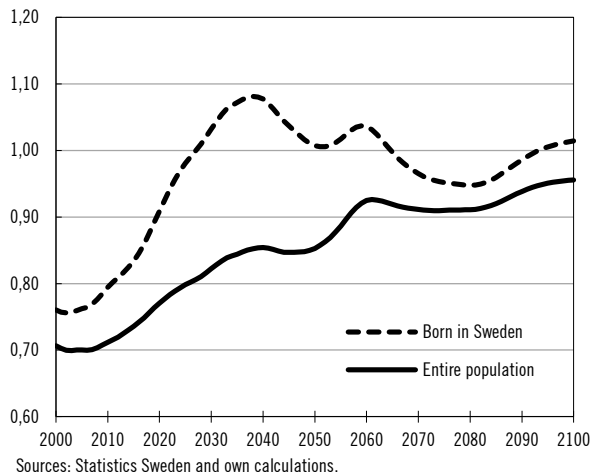


The increased inward migration can be expected to increase general government expenditure on migration and integration, but also education and labour market-related expenditures, since many of the people who come to Sweden are children and people of working age. However, higher inward migration also leads to increased general government revenues as people enter the labour market and secure a job. Inward migration also reduces the dependency ratio, as the country gains more people of working age in relation to the number of children and older persons who must be supported. This is illustrated in chart 5.6, which shows the dependency ratio for the entire population versus only the population of people born in Sweden.

People born abroad contribute to reducing the dependency ratio in all years. The reduction is largest in the 2030s. The wide difference in the dependency ratio between people born in Sweden and people born abroad illustrates the potential that people born abroad represent and underlines the importance of improving integration for people born abroad.

Chart 5.6 Dependency ratios

Number of persons 0–19 and 64+ per number of persons 20–64



Costs for tax-funded services tend to increase rapidly

One challenge for the fiscal policy is that wages in tax-funded sectors, such as education, childcare and social care services for older people, generally rise at the same rate as within other production but with no corresponding growth in productivity, which tends to lead to a gradual rise in the relative unit cost for these types of services. This is termed “Baumol’s law”. The consequence for the general government sector is that the costs of providing an unchanged scope of childcare and social care services for the elderly tend to increase faster over time in relation to general price trends in society.

There is some disagreement as to the extent to which Baumol's law applies to all tax-funded activities. Productivity growth has hovered around zero in the National Accounts ever since it began to be measured. However, many experts contend that productivity has in fact increased in certain segments of tax-funded service production, such as within the healthcare system. Still, it is difficult to prove productivity changes in the general government sector because the majority of its production is not sold in a market where price-setting is unrestricted. For any productivity increase to result in lower general government expenditure or increased quality or level of service, it must be accompanied by more efficient use of resources.

5.2 Calculations of fiscal sustainability

A scenario that illustrates the aforementioned challenges is provided in this section.

The scenario is based on the demographic changes described above. It should be emphasised that the scenario does not illustrate the most likely development. Instead, the ambition is to reflect a development involving no change to policy and no change in behaviour with regard to, for

example, labour force participation and use of tax-funded services. The ambition is to identify and analyse future challenges and the scope of adjustments to current rules concerning general government revenues and expenditures that are necessary to achieve long-term balance in the general government finances. Calculations based on various assumptions make it possible to analyse in alternative scenarios which factors strengthen the long-term sustainability of the fiscal policy and which weaken it.

The question of whether the current direction of fiscal policy needs to be changed so that it will be sustainable over the long term leads inevitably to issues of intergenerational equity. The tax-funded welfare systems may be likened to an implicit contract between the individual and society. We work and pay taxes during certain periods of our lives and expect in return a good education system for children and young people and good health and social care services for older people. However, there are no generally accepted answers to questions such as what the general government commitment really entails, what problems future generations will have to manage and what problems must be dealt with today via higher or lower general government net lending. However, the answers to these questions have consequences for the assumptions that are made. The calculations are based on the premise that it must be possible to maintain the current level of the general government commitment in the future as well. This means, for example, that if people in the future want a higher standard of tax-funded welfare services or want more leisure time, which is not at all unlikely if the GDP continues to grow, this is not something that should be cause for higher general government net lending today. Future generations will have to weigh the benefits of a higher standard of welfare services against the benefits of more leisure time, just as we do today, and strike a reasonable balance between work and taxes on the one hand and leisure and the level of general government services on the other.

The calculation is based on a number of assumptions about future developments

The calculations in this section are based on the assessment of Swedish economic development through the end of 2020 presented in sections 2 and 3.

In 2015, the primary balance in the general government sector - net lending adjusted for capital income and capital expenditure - was -0.8 per cent of GDP. A gradual move towards balanced resource utilisation in the economy occurs in 2016-2020, with higher employment and lower unemployment while no further unfunded reforms are assumed to be implemented after 2016, beyond those already adopted, proposed or announced, which improves general government net lending. In 2020, the primary balance in the general government sector is expected to be in

balance, which is the starting position for the projection of long-term development in subsequent years.

Productivity in the business sector is assumed to increase by 2.2 per cent in the long-term. However, productivity in tax-funded services, regardless of whether delivered by public or private sector providers, is assumed to be constant. This difference in the productivity trend, along with an assumption that wage growth is identical across the entire economy, leads to an increase in the costs of producing one unit of tax-funded production relative to one unit in the business sector. This is an effect of the previously mentioned Baumol's law.

In this scenario, the population's labour market behaviour is assumed to remain largely unchanged from 2020. This means that labour force participation, unemployment and average working hours for people of various ages and countries of origin of both genders remains constant, apart from a certain assumed downturn in the Non-Accelerating Inflation Rate of Unemployment (NAIRU), 2020–2025. An average woman or man of a certain age and of particular origin is assumed to work just as much in the future as they do today.

The scenario is also based on the assumption that the general government commitment remains unchanged from 2020. This means that tax rates are kept at the same level as in 2020; that is, their share of the tax bases is constant. It is assumed that the standard per user for tax-funded activities is the same, expressed as an unchanged resource input. For example, it is assumed that a 90-year-old in the future will receive the same number of hours of geriatric care as a 90-year-old does today. Because no change is assumed in productivity in the production of tax-funded services, general government consumption will develop at the same rate as the number of hours worked. The compensation rate in the transfer payments system is also unchanged, so that transfer payments per individual develop in parity with the hourly wages of those in employment. This means that transfer payments that are, in accordance with the regulations, nominally fixed or only track the development of prices are assumed to increase in line with average wages from 2021.

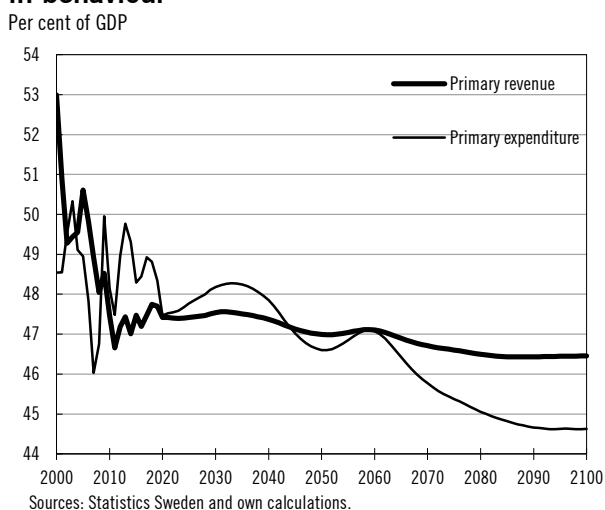
The demographic trend primarily has an impact on expenditure for welfare services that are the responsibility of municipalities and county councils. However, the projection focuses on the general government commitment in its entirety; in this context the general government is regarded as a combined whole. One key assumption is that the central government has the overall responsibility for financing tax-funded welfare. Consequently, central government grants are adapted in the calculations so that the requirement for sound financial management established in the Swedish Local Government Act (1991:900) is met.⁶

⁶ A more detailed description of the underlying assumptions is provided in the memorandum *Utvecklad bedomning av finanspolitikens långsiktiga hållbarhet* [In-depth assessment of long-term fiscal sustainability] (Ministry of Finance, 2016), which is available on the Government's website, www.regeringen.se.

Fiscal policy is sustainable in the long-term based on the stated assumptions

The period of 2020–2035 is characterised by demographic changes that increase general government primary expenditure; that is, expenditure excluding interest expenditure (see chart 5.7). An upturn in expenditure in relation to GDP will begin in 2020 and culminate around 2033. Thereafter, expenditure is estimated to rise at a lower rate than GDP. Expenditure increases by just over 0.8 per cent of GDP as a result of the large cohort born in the 1940s reaching 80+, when needs for health and social care services are relatively intensive, just as the generation born in the 1960 begins to retire. The primary balance is negative until 2044 (see chart 5.8).

Chart 5.7 General government revenue and expenditure if there is no change in behaviour



The demographic cost pressure abates with time and primary expenditure decreases to less than 45 per cent of GDP in 2100. The long-term trend of falling expenditure is mainly caused by general government consumption declining as a proportion of GDP. One cause of this reduction is the assumption that there is no improvement of standards in tax-funded welfare services when GDP and thus revenues increase. General government transfer payments as a proportion of GDP are essentially stable subsequent to 2030.

Table 5.1 shows the development of primary general government expenditure distributed by purpose. It should be noted that the primary expenditure ratio decreases rapidly up to 2020 if the policy is unchanged, followed by a slight increase up to 2030 and thereafter declines again. One explanation for this trend is that expenditure on transfer payments decreases by 0.7 per cent of GDP between 2015 and 2020. After 2020, transfer payments remain relatively stable as a proportion of GDP. The downturn up to 2020 is mainly attributable to that payments from the old-age pension system do not increase as quickly as GDP.

In the scenario with unchanged behaviour, the consolidated gross debt declines from around 43 per cent of GDP in 2015 to around 33 per cent of GDP in 2025, rising thereafter by about one per cent of GDP up to 2030 (see chart 5.9).

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

Per cent of GDP

	2015	2020	2030	2050	2100
Primary expenditure	48.3	47.5	48.2	46.6	44.6
General government consumption	26.1	26.0	26.9	26.2	25.3
Childcare	1.9	1.9	2.0	1.8	1.6
Education	5.0	5.0	5.1	4.7	4.2
Healthcare	6.2	6.1	6.4	6.4	6.3
Elderly care	4.1	4.1	4.6	5.1	5.9
Other	8.9	8.9	8.9	8.2	7.3
Investments	4.3	4.2	4.0	3.2	1.9
Transfer payments	17.9	17.2	17.3	17.2	17.3

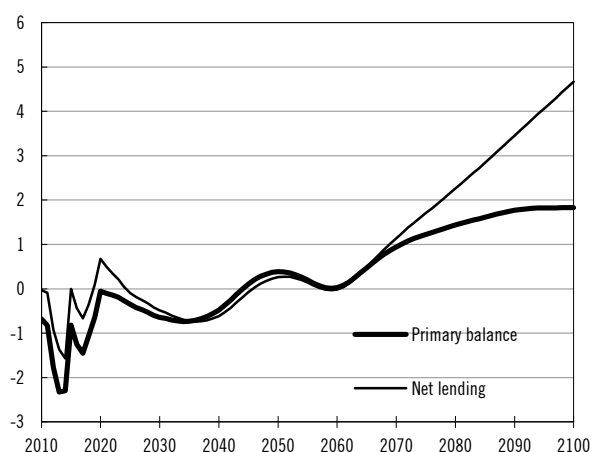
Sources: Statistics Sweden and own calculations.

The most important tax base, and thus tax revenue, is controlled largely by the development of the labour market. Primary revenue amounts to between 47 and 48 per cent of GDP for most of the projection period (see chart 5.7), but falls back slightly after 2060.

The primary balance improves gradually after 2030 until it amounts to around 1.8 per cent of GDP in 2100. The cause of the gradually increasing difference between net lending and the primary balance shown in chart 5.8 is the increasingly large yield from net financial assets illustrated in chart 5.9.

Chart 5.8 Net lending if there is no change in behaviour

Per cent of GDP

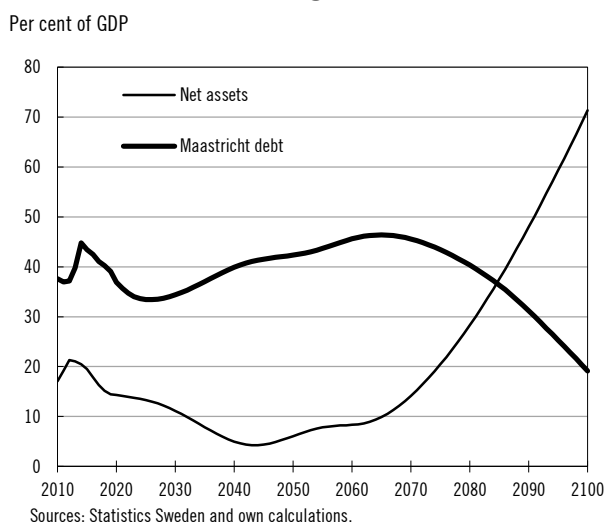


Sources: Statistics Sweden and own calculations.

Long term, the high level of the primary balance contributes to a sharp reduction in the consolidated gross debt (see chart 5.9). This debt is estimated to amount to around 37 per cent of GDP in 2020. The debt

increases as a proportion of GDP until around 2065, but subsequently declines gradually to around 20 per cent of GDP in 2100. Financial assets are built up gradually from around 2045 and capital income rises sharply as a result. Consequently, net lending, which includes income from capital, also increases sharply and amounts to nearly 5 per cent of GDP in 2100.

Chart 5.9 General government financial net assets and consolidated gross debt if there is no change in behaviour



It is important not to interpret the trend described as a forecast of an expected actual development. It is virtually impossible that the current rules for general government revenue and expenditure would not be altered if a surplus of the size indicated in chart 5.8 actually arose during an extended period of time.

The S1 sustainability indicator amounts to minus 1.8 per cent of GDP, calculated from 2017. The relatively large negative S1 indicator shows that the current scope of general government revenue and expenditure can in all likelihood be maintained until 2030 without causing unsustainable growth in gross debt. According to this criterion, the fiscal policy is thus sustainable by a good margin.

The S2 indicator is minus 1.1 per cent of GDP. Strictly interpreted, this means that net lending can be permanently weakened by 1.1 per cent of GDP in 2017 while stabilising net debt over the very long term. The fiscal policy is thus also sustainable when assessed in this manner. However, the fact that the indicator value is based on assumptions about development over several hundred years means that the S2 indicator cannot be interpreted to mean there is actually fiscal space for a one-off reform. The change in the indicator value in connection with alternative assumptions provides an indication of the factors that strengthen the sustainability of the fiscal policy and those that that impair it.

This scenario (called the main scenario below) is based on certain assumptions. Two alternative scenarios are described below in order to shed light on which factors are significant or less significant to the

development of general government net lending and thereby enable a more exhaustive assessment of the sustainability of the fiscal policy.

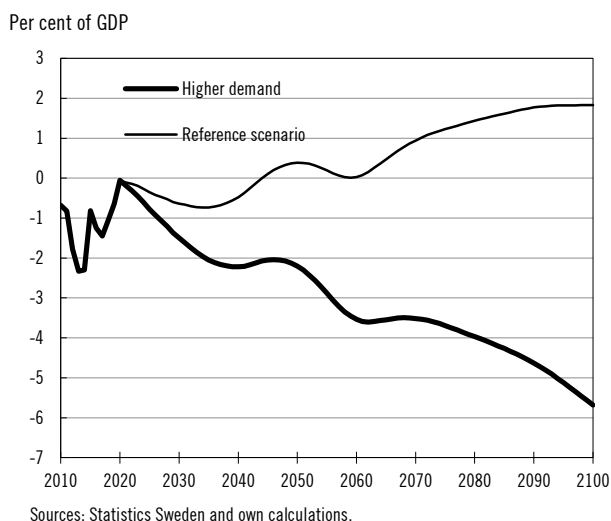
Alternative scenario: Higher demand for leisure and welfare services

The aim of this scenario is to illustrate the consequences of changes in demand that may occur as a result of increased prosperity, where the average number of hours worked per employee is assumed to decrease by 0.1 per cent per year starting in 2021, compared with the main scenario. This is roughly in line with the decline in the average number of hours worked between 1980 and 2009. The age of retirement is assumed to be the same as in the main scenario. The downturn is assumed to be due to increased demand for leisure, a shorter working week, additional days of annual leave, etc., in pace with rising GDP and material prosperity. At the same time, the volume of general government consumption is assumed to grow 0.2 per cent faster than demographically justified. This involves a certain increase in the standard of welfare services offered by general government. Consequently, there is also a gradual change in fiscal policy over time.

In the scenario, the average number of hours worked in 2030 is assumed to be around 15 fewer hours per person and year, and 120 fewer hours in 2100 compared with the main scenario (equivalent to around three working weeks per year or around a half hour per working day). As a result, tax revenues diminish along with the capacity to finance tax-funded welfare. The funding problems are further exacerbated if the standards of general government services gradually increase. The scenario assumes that staff density in healthcare, schools and social care increases so that the number of hours worked in the general government sector overall is around 2 per cent higher in 2030 and 17 per cent higher in 2100 than in the main scenario. This means that the number of working hours available for production in the business sector declines to a corresponding extent. As leisure time increases, the number of hours worked in the entire economy decreases and standards are raised through more working hours, the general government finances are subjected to increasing pressure to change to maintain a sustainable fiscal policy.

In this scenario, the primary balance is significantly undermined over the long term, compared with the main scenario, which weakens sustainability considerably (see chart 5.10). The S1 indicator amounts to minus 1.4, which is a weakening of 0.4 per cent of GDP compared with the main scenario and the S2 indicator is 3.8, which is a weakening of 5 per cent of GDP. According to the S2 indicator, the trend is therefore unsustainable over the long term. One third of the change is attributable to the decreased labour supply due to higher leisure hours, while two thirds can be attributed to increased demand for publicly funded welfare.

Chart 5.10 Primary balance with more leisure time and higher demand



Alternative scenario: Unchanged extent of working life

A number of factors indicate that the exit age may rise in the future. Better general health combined with declining numbers of people with physically demanding jobs have improved conditions for continuing to work later in life. Moreover, the general level of education is higher than in the past and highly educated people usually leave the labour market later than people with no higher education. There are also financial incentives in the pensions system that encourage delayed exit from the labour market. The size of the old age pension is based on average life expectancy upon retirement and calculations presented in the Fiscal Policy Council report of 2009 show that the exit age can therefore be expected to rise.

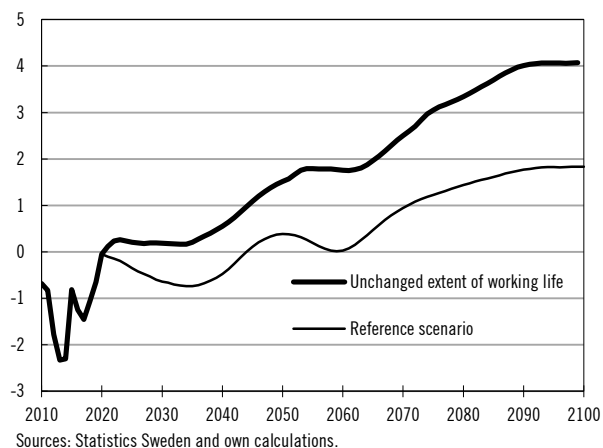
If exit from the labour market is not delayed, the average old age pension will increase more slowly than the incomes of working people because the pension becomes lower when the average life expectancy increases and earned pension rights must be distributed over additional years of retirement. A development of this nature can create financial sustainability problems if more retired people become entitled to other benefits, such as the guarantee pension or supplementary housing benefit for pensioners. In addition, low pensions may lead to demands for compensation in the form of more generous pension rules or tax reductions, for example. Creation of good conditions for a longer working life is thus a matter of urgency.

If the exit age increases in proportion to the expected remaining average life expectancy at age 65, which is expected to increase by around 1.5 years between 2015 and 2030 and by an additional 2 years or so by 2050, the labour supply will increase by 1.4 percent in 2030 and 3.6 per cent in 2050 compared with the main scenario. The exit age has been assumed to increase by two thirds of a year for each year that the average life expectancy at age 65 increases. In the calculation, this means that GDP and general government tax revenues rise at a faster rate, but also that the

costs of unemployment, sickness insurance and disability pensions will increase in proportion to the higher labour supply.

Chart 5.11 Primary balance with unchanged extent of working life

Per cent of GDP



Compared with the main scenario, this reinforces the primary balance and thus palpably improves fiscal policy sustainability (see chart 5.11). The S1 indicator improves by 0.1 per cent of GDP to minus 1.9 and the S2 indicator improves by 1.7 per cent of GDP to 2.9. This scenario shows that a longer working life is important to the long-term funding of welfare.

Sensitivity in the calculations

Table 5.3 summarises the impact on S1 and S2 of the alternative assumptions forming the basis of the calculations.

A number of sensitivity analyses are also reported.⁷ In general, it can be said that fiscal policy is sustainable in the majority of the different calculations. The S1 indicator is negative in all reported scenarios and S2 is positive only in the scenario with a poorer initial budgetary position, the scenario with higher demand for leisure and welfare services and the combination of the two.

In the scenario Higher Non-Accelerating Inflation Rate of Unemployment (NAIRU), it is assumed that NAIRU is 1 percentage point higher for all years subsequent to 2020, weakening S1 by around 0.2 per cent of GDP and S2 by around 0.4 per cent of GDP. If NAIRU were 1 percentage point lower subsequent to 2020, both S indicators would be improved to a corresponding extent.

To describe the significance of a poorer initial budgetary position, an alternative assessment assumes a deterioration in the primary balance of

⁷ A more detailed description of the sensitivity analyses is provided on the Government's website, www.regeringen.se, in the memorandum *Utvecklad bedömning av finanspolitikens långsiktiga hållbarhet* [In-depth assessment of the long-term sustainability of the fiscal policy].

about 1.5 per cent of GDP in 2020. This means that primary balance is equivalent to around 1.7 per cent of GDP that year, compared with a primary balance of plus/minus zero in the other scenarios. In the long-term calculations, the primary balance is thus brought down by around minus 1.7 per cent of GDP over the course of the entire projection period.

Table 5.2 S1 and S2 in the different scenarios

Per cent of GDP

	S1	S2
No change in behaviour	-1.8	-1.1
Worsens sustainability		
Higher demand for leisure and welfare services	-1.4	3.8
More leisure	-1.7	0.4
Higher standards	-1.5	2.0
Higher Non-Accelerating Inflation Rate of Unemployment	-1.6	-0.8
Poorer initial budgetary position	-0.3	0.5
Improves sustainability		
Unchanged extent of working life	-1.9	-2.9
Improved integration	-2.1	-1.9
Higher labour supply among women	-2.1	-2.5
Improved health	-1.9	-3.3
Higher productivity in the general government sector	-1.9	-2.3

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

Source: Own calculations.

In a trend such as this, S1 and S2 worsen to minus 0.3 and 0.5 per cent of GDP, respectively. The fiscal policy is thus still sustainable according to S1 if the initial budgetary position is impaired in this way, even though the margin to unsustainable development has narrowed.

5.3 Overall assessment of the long-term sustainability of fiscal policy

Fiscal policy is judged to be sustainable in the long term in a scenario involving no change in behaviour and in which no unfunded reforms are implemented, other than those already adopted or announced in this bill. In this case, S1 amounts to minus 1.8 per cent of GDP and S2 to minus 1.1 per cent of GDP. Net lending and the consolidated gross debt are also within the limits set by the Stability and Growth Pact in most of the reported scenarios. Accordingly, an important requirement that forms the basis of market evaluations of sustainability are met.

The period 2020-2035 is characterised by growing demographic pressure on expenditure. Primary general government expenditure is calculated to increase by just over 1 per cent of GDP in these years due to higher demand for tax-funded welfare services arising from demographic changes. This development illustrates the importance of a policy that

remain oriented towards reducing unemployment and increasing the number of hours worked. The pensions system is creating strong incentives to work longer when average life expectancy increases, because pensioners' incomes decrease in relation to those in work if the exit age from the labour market is not delayed. If working life is extended in pace with the increase in life expectancy at age 65, however, the sustainability of the fiscal policy will be substantially improved.

That as many people as possible have a long and productive working life is a prerequisite for pensioners and other citizens to enjoy good economic standards and for the delivery of high-quality publicly funded services. Increased average life expectancy provides the opportunity to increase both leisure time and time in work. As average life expectancy increases, it is therefore important to have high labour force participation and a long working life among both women and men.

Other assessments of fiscal sustainability

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. NIER assesses the fiscal policy as slightly unsustainable over the long term, while the Commission deems Sweden to be at low risk of unsustainable development in the medium-term, until 2030, but facing medium sustainability risk in the long term. S1 and S2 indicators are presented in summary in table 5.3.

The differences in the conclusions drawn by the Government, the Commission and NIER are largely explained by the differences in their points of departure.

The Commission assesses fiscal sustainability in the medium term, until 2030, and in the very long term using S1 and S2 indicators. As 2030 is only 14 years away, the initial debt level has strong impact on the value of the S1 indicator. If there is great distance between the general government debt and the debt target of 60 per cent of GDP, major changes to fiscal policy are required to reach this debt ratio.

Table 5.3 Sustainability indicators for Sweden

Per cent of GDP

	S1	S2
Government	-1.8	-1.1
NIER (March 2016)		0.7
EU Commission (Jan 2016)	-1.3	2.3

Note: The values of the indicators are not directly comparable as they are calculated based on different assumptions.
Sources: NIER, EU Commission and own calculations.

The Commission also calculates the effects of the fiscal policy over an infinite time horizon. In these calculations, the present level of debt becomes less important to the outcome, and net lending at the starting point becomes more important. The Commission splits the S2 value into two components: an initial budgetary position, which explains 1.2 per-

centage points of Sweden's S2 value of 2.3 per cent of GDP, and a component that refers to future developments, which explains the remaining 1.1 percentage points. According to the Commission's assessment in the latest long-term calculation, the structural balance will be minus 1.1 per cent of GDP in 2018, the year that cost calculations begin. For 2020, the last year in the Government's medium-term forecast, the Commission assesses the structural balance at minus 1.2 per cent of GDP, which is considerably lower than the Government's assessment.

Beyond the description of the initial budgetary position, the Commission's assessment also differs from the Government's assessment as regards the calculation of future expenditure for general government consumption. The Commission calculates a cost per person using tax-funded services and then allows this to increase in tandem with GDP per capita until 2060. Thereafter, the Commission uses population trends to project expenditure on general government consumption. The Government instead assumes that staff density within production funded by the general government is unchanged.

Like the Government, NIER assumes that the number of working hours in the general government sector remains constant per individual using the service. Unlike the Government, however, NIER also assumes that the money spent on production inputs (e.g., rent, computers, home health service alarms and medical devices) grows at the same rate as wage costs. The Government assumes instead that expenditure on inputs only increases in pace with the number of services produced and price growth for these inputs. As a result of this difference in assumptions, expenditure on general government consumption as a proportion of GDP rises quickly in the NIER assessment and over the long term reaches a higher proportion of GDP than ever before. This development departs significantly from the Government's calculation, where consumption as a proportion of GDP is relatively stable until 2020 and increases only by around 0.9 per cent of GDP during the subsequent ten-year period (see table 5.1).

It is also noteworthy that both NIER and the Commission use population forecasts different to that used by the Government. NIER uses the population forecast presented by Statistics Sweden in the autumn of 2015, in which inward migration to Sweden over the next few years was considerably higher than the forecast from February 2016, which the Government uses. The Commission uses Eurostat's Europop2013 population forecast, which was published in March 2014. Because the calculations are based to such a great extent on underlying demographic information, the results are highly dependent upon which population forecast is used. The results may also differ for other reasons, such as different assumptions concerning potential growth rate, price increases, interest rates, labour supply and unemployment.

6 Quality in the general government finances

6.1 Expenditure

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

Per cent of GDP

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Change 2004-2014
General public services	7.6	7.8	7.7	7.7	7.8	7.4	7.4	7.6	7.7	7.8	7.8	0.1
Interest payments	1.8	1.9	1.8	1.8	1.7	1.3	1.2	1.3	1.1	1.0	0.8	-1.0
Other	5.8	5.9	6.0	5.9	6.1	6.1	6.2	6.4	6.6	6.8	6.9	1.1
Defence	1.8	1.7	1.6	1.5	1.5	1.5	1.5	1.4	1.4	1.5	1.3	-0.5
Public order and safety	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.3	1.4	1.4	1.3	0.1
Economic affairs and business policy	4.0	4.2	4.0	3.9	4.2	4.5	4.4	4.3	4.5	4.3	4.3	0.3
Environmental protection	0.3	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.0
Housing and community amenities	0.8	0.8	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.0
Health	6.5	6.5	6.4	6.4	6.6	7.1	6.8	6.8	6.9	7.0	7.0	0.5
Recreation, culture and religion	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.1
Education	6.7	6.7	6.6	6.3	6.5	6.8	6.5	6.5	6.5	6.6	6.6	-0.2
Social protection	22.8	22.5	21.6	20.5	20.4	22.1	21.1	20.4	21.1	21.6	21.2	-1.6
Total expenditure	52.8	52.7	51.3	49.7	50.3	53.1	51.2	50.5	51.7	52.4	51.7	-1.0
Excluding interest	50.9	50.8	49.6	47.9	48.6	51.8	50.0	49.3	50.6	51.4	50.9	-0.1

Sources: Statistics Sweden and own calculations.

Principles have been developed at the EU level for the production of uniform statistics on the member states' distribution of general government finances. Uniform statistics facilitate comparison between different member states' general government expenditure, as well as of how this develops over time. The ability to evaluate whether a change in the composition of general government expenditure has affected long-term growth is dependent on additional information and a higher level of detail. However, the distribution of general government expenditure between different purposes and the change in distribution over time indicate how different types of expenditure and purposes have been prioritised and provide an indication of the policy's focus. Table 6.1 and table 6.2 contains expenditure distributed by purpose in accordance with the COFOG classification.⁸

Expenditure measured as a proportion of GDP (the expenditure ratio) declined overall from around 53 per cent of GDP to around 50 per cent over the period of 2004–2008. Following a temporary increase in

⁸ COFOG (Classification of the Functions of Government) is a tool for reporting and analysing the purposes of the goods and services provided by general government entities. The classification is in accordance with international standards.

2009 in the wake of the financial crisis, the expenditure ratio subsided again and amounted to around 50.5 per cent in 2011. Thereafter, the expenditure ratio has varied around 52 per cent of GDP. The general government sector reported an expenditure ratio of around 51.7 per cent of GDP in 2014.

Expenditure on social protection in Sweden accounts for more than 20 per cent of GDP and more than 40 per cent of total general government expenditure. These expenditures declined as a proportion of total expenditures until the middle of the 2000s, but rose again in 2009 in connection with the financial crisis. Thereafter, expenditure on social protection has varied around 41 per cent of total expenditure. Expenditure on healthcare also accounts for a major share of general government expenditure. Having amounted to 12 per cent of total expenditure in 2004, the proportion rose over a period of several years and in 2014 amounted to 13.6 per cent. There has been a large fall in the proportion of expenditure taken up by interest payments. This is mainly the result of general government consolidated gross debt falling sharply as a proportion of GDP at the same time as interest rates have been relatively low.

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

Per cent of total expenditure

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Change 2004-2014
General public services	14.5	14.7	15.1	15.5	15.4	14.0	14.4	15.1	14.9	14.9	15.0	0.5
Interest payments	3.5	3.6	3.4	3.6	3.4	2.4	2.3	2.5	2.1	1.8	1.6	-1.8
Other	11.0	11.1	11.6	11.9	12.1	11.5	12.1	12.6	12.8	13.0	13.4	2.4
Defence	3.3	3.1	3.2	3.1	2.9	2.8	3.0	2.9	2.7	2.8	2.5	-0.8
Public order and safety	2.4	2.4	2.5	2.6	2.6	2.6	2.7	2.7	2.7	2.6	2.6	0.2
Economic affairs and business policy	7.5	7.9	7.7	7.9	8.3	8.5	8.7	8.5	8.7	8.3	8.3	0.8
Environmental protection	0.6	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.7	0.6	0.6	0.0
Housing and community amenities	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	0.0
Health	12.3	12.3	12.5	12.8	13.1	13.3	13.2	13.5	13.4	13.3	13.6	1.3
Recreation, culture and religion	1.8	1.9	2.0	2.0	2.1	2.1	2.2	2.1	2.1	2.1	2.1	0.3
Education	12.7	12.7	12.8	12.7	12.8	12.9	12.7	12.8	12.7	12.6	12.7	0.0
Social protection	43.3	42.6	42.2	41.4	40.6	41.7	41.1	40.4	40.9	41.4	41.1	-2.2
Total expenditure	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Excluding interest	96.5	96.4	96.6	96.4	96.6	97.6	97.7	97.5	97.9	98.2	98.4	1.8

Sources: Statistics Sweden and own calculations.

6.2 Revenue

Between 2008 and 2019, the tax ratio, that is, total tax revenue as a percentage of GDP, is expected to decline by 0.1 percentage points. How-

ever, major changes have occurred over the course of this period. The tax ratio declined by 1.2 percentage points between 2008 and 2014 (see table 6.3). Subsequent to 2014, the tax ratio has risen and is expected to continue rising during the forecast years, reaching an estimated 43.9 per cent in 2019.

First and foremost, revenues from tax on labour declined between 2008 and 2014. The working tax credit accounts for the largest proportion of the tax reductions, but social security contributions have also been reduced and there are greater opportunities to receive tax deductions for work in and on the home. Revenues from tax on labour are also expected to increase the most as a proportion of GDP 2014–2019. The majority of this increase depends upon the elimination of reduced social security contributions for young people in two steps in 2015 and 2016.

Revenues from tax on capital are expected to increase by 0.3 percentage points between 2008 and 2019. During these years, revenues from tax on capital fluctuate as a proportion of GDP. Specifically in 2015, the ratio for tax on capital is unusually high, partly attributable to temporarily higher revenues from tax on corporate income.

Revenues from taxes on consumption are estimated to decline by 0.5 percentage points as a proportion of GDP between 2008 and 2019. Revenues from VAT are expected to remain essentially unchanged. However, revenues from excise duties decline, even though most of these duties have been increased at various points. Energy and environmental tax revenues have declined as a proportion of GDP since 2008. This decline is explained by more efficient residential heating, the switch from electricity and oil to geothermal heating and district heating, as well as newer vehicles with more energy-efficient engines.

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

Per cent of GDP

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Change 2008-2019
Tax on labour	26.9	26.5	25.0	25.0	25.6	25.8	25.4	25.3	26.0	26.5	26.6	26.6	-0.3
Direct taxes	14.7	14.5	13.5	13.3	13.7	13.9	13.5	13.5	14.0	14.2	14.4	14.4	-0.3
Indirect taxes	12.2	12.0	11.5	11.6	11.9	11.9	11.8	11.8	12.1	12.3	12.3	12.3	0.0
Tax on capital	4.8	4.9	5.4	5.0	4.6	4.6	5.1	5.5	5.0	4.9	5.1	5.1	0.3
Tax on capital House-													
holds	0.8	0.8	1.0	0.8	0.8	0.9	1.2	1.2	1.2	1.2	1.2	1.1	0.3
Corporate income	2.5	2.6	3.0	2.8	2.4	2.4	2.5	2.9	2.5	2.5	2.5	2.5	0.1
Tax on consumption	12.4	12.9	12.8	12.4	12.3	12.2	12.1	12.2	12.0	12.0	11.9	11.9	-0.5
VAT	8.9	9.2	9.2	9.1	9.0	9.0	9.1	9.2	9.0	9.0	9.0	9.0	0.1
Arrears and other taxes	-0.1	-0.1	0.0	0.1	0.1	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.4
Total tax revenue	44.0	44.1	43.2	42.5	42.6	42.9	42.8	43.2	43.3	43.6	43.9	43.9	-0.1

Sources: Statistics Sweden and own calculations.

Changes in the composition of tax revenue are relatively small during the period of 2008-2019 (see table 6.4). Tax on consumption accounts for the largest change, as its proportion of total tax revenue is expected to

decline by 1 percentage point during the period of 2008-2019. The share of total tax revenue derived from tax on labour is also expected to decline by 0.5 percentage points. However, the share of total tax revenue from tax on capital is expected to rise by 0.7 percentage points.

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

Per cent of total revenue

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Change 2008-2019
Tax on labour	61.2	60.1	57.8	58.7	60.3	60.1	59.2	58.6	60.1	60.7	60.7	60.7	-0.5
Direct taxes	33.4	32.8	31.2	31.4	32.2	32.3	31.6	31.3	32.3	32.6	32.7	32.7	-0.7
Indirect taxes	27.8	27.3	26.6	27.4	28.1	27.8	27.6	27.3	27.9	28.1	28.0	27.9	0.1
Tax on capital	11.0	11.1	12.6	11.8	10.7	10.7	11.9	12.6	11.5	11.3	11.5	11.7	0.7
Tax on capital													
Households	1.8	1.7	2.3	1.9	1.8	2.0	2.9	2.8	2.8	2.6	2.6	2.5	0.7
Corporate income	5.6	6.0	7.0	6.6	5.7	5.5	5.8	6.6	5.9	5.8	5.8	5.8	0.2
Tax on consumption	28.1	29.2	29.5	29.3	28.9	28.5	28.3	28.3	27.8	27.4	27.2	27.1	-1.0
VAT	20.1	20.8	21.3	21.4	21.1	21.0	21.2	21.2	20.7	20.6	20.5	20.5	0.4
Arrears and other taxes	-0.2	-0.3	0.1	0.2	0.2	0.7	0.5	0.4	0.6	0.6	0.6	0.6	0.8
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 used in calculations concerning the general government finances in the period 2021-2100 are discussed in more detail below. The results reported in this appendix are for the scenario involving no change in behaviour.

Demographic assumptions

The calculation is based on Statistics Sweden's population forecast from February 2016 shown in Table A.1.

Table A.1 Demographic assumptions

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

	2010	2020	2030	2040	2050	2060
Birth rate	1.98	1.95	1.91	1.91	1.91	1.91
Average life expectancy, women	83.5	84.6	85.8	87.0	88.1	89.1
Average life expectancy, men	79.5	81.4	83.0	84.3	85.6	86.7
Net migration, thousands	50	109	39.5	26.5	21.5	20.8

Source: Statistics Sweden.

The labour market

The development of the labour market is strongly linked to the demographic trend. Projections concerning the employment rate and the number of hours worked are distributed by age, gender and country of origin. The extent of participation in the labour market, employment rate and average working hours are assumed to remain constant in each group. This can be interpreted as unchanged labour market behaviour as the rate of absenteeism, rate of sickness and activity compensation, average hours worked, employment rate and unemployment rate are constant within each 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 staffing density is constant in the general government sector. The number of hours worked in the business sector represents the difference between the total number of hours worked and the number of hours worked in the general government sector.

Productivity

The assumption regarding productivity growth in the business sector is based on an analysis of the historical trend. The underlying trend in productivity growth is assumed to be 2.2 per cent from 2021. Based on an international comparison, productivity growth in Sweden has been strong over the last two decades, with the exception of the period 2007–2009. It is however reasonable to assume that, in the long term, it will adjust to international growth rates. The weak growth in 2007-2009 has

not affected the view of the long-term trend in productivity. Productivity growth in the general government sector is assumed to be zero from 2021.

Components of GDP: Expenditure approach and production

GDP growth is the sum of the productivity growth in the economy as a whole and the increase in the number of hours worked. GDP from the usage side is determined so that the development of household consumption expenditure is generated by a macroeconomic model called MIMER⁹. Household consumption expenditure as a proportion of GDP increases gradually over the period as people live longer and the population ages. Overall, household consumption increases from 45.2 per cent of GDP in 2021 to 48.1 per cent of GDP in 2100. In total, investments account for around 22–24 per cent of nominal GDP. General government consumption in terms of volume is projected in line with demographic changes, while price growth in general government consumption is determined by assumptions about hourly wage growth and CPI. The remaining components of GDP using the expenditure approach are net exports, which are calculated residually in the estimates as the difference between GDP and its domestic usage. Production of general government consumption is derived with an assumption of unchanged productivity and degree of privatisation. Production in the business sector is determined as the sum of productivity and 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 proportion of wage costs and gross profits in the business sector is assumed to be constant in the long term. Wages are thus determined by the price level and productivity. Higher productivity and a higher value added price generate scope for increased wages. Wages in the general government sector rise in line with those in the private sector.

Assumptions regarding yields 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. A nominal interest rate of 5 per cent is assumed. Given an inflation rate of 2 per cent, the real interest rate becomes 3 per cent. 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 2 per cent in the long-term. The total return thus amounts to 5 per cent, which is the same as for interest-bearing assets. It is also likely, in the

⁹ MIMER is a model for intergenerational macroeconomic accounts; that is, a macroeconomic simulation model of the Swedish economy. See *Promemoria, Teknisk beskrivning av modellen MIMER [Memorandum, Technical description of the MIMER model]* on the Government's website for a more detailed account of the model.

long-term, that differences arise between the interest rates on borrowing and lending and that there will be differences between sectors. It is also probable that the long-term return on non-interest-bearing assets will be 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

	2010	2015	2020	2030	2040	2050	2060
Percentage change							
Population, 15-74 years	1.0	0.7	0.9	0.5	0.3	0.2	0.3
Labour force, 15-74 years	0.8	0.8	1.0	0.3	0.4	0.3	0.2
Number employed, 15-74 years	0.6	1.4	0.9	0.2	0.4	0.3	0.3
Hours worked	2.6	1.6	1.6	0.3	0.4	0.3	0.2
Productivity	4.7	3.3	2.0	2.2	2.2	2.2	2.2
GDP, constant prices	6.0	4.1	2.9	2.1	2.3	2.2	2.2
GDP per capita	5.1	3.0	1.5	1.5	1.8	1.8	1.8
GDP productivity	3.3	2.5	1.3	1.8	1.9	1.9	1.9
GDP deflator	1.0	1.9	2.0	2.3	2.2	2.2	2.1
CPI, annual average	1.2	0.0	3.2	2.0	2.0	2.0	2.0
Hourly wages	0.4	2.7	2.8	4.3	4.2	4.2	4.1
Per cent							
Real interest	1.7	1.4	-1.1	3.5	3.5	3.5	3.2
Employment rate, 15-74 years	64.4	66.6	67.0	66.2	64.9	66.2	65.5
ILO unemployment rate, 15-74 years	8.6	7.4	6.6	7.4	7.6	7.2	6.8

Sources: Statistics Sweden and own calculations.

General government revenue

The calculations reported 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. Stable tax rates over time are advantageous both in terms of their efficiency and for redistribution policy. Table A.3 shows, in detail, 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

	2010	2015	2020	2030	2040	2050	2060
Taxes and charges	43.1	43.1	43.5	43.5	43.6	43.6	43.8
Household direct taxes and charges							
Proportion of GDP	12.5	12.7	13.2	13.3	13.4	13.3	13.5
Implicit tax rate of direct taxes	23.7	23.7	24.7	24.7	24.6	24.7	24.6
Tax base for direct taxes as a proportion of GDP	52.6	53.8	53.5	53.9	54.2	54.0	54.8
Implicit tax rate of charges	6.6	6.7	6.6	6.6	6.6	6.6	6.6
Tax base for charges as a proportion of GDP	38.8	40.0	39.9	40.5	40.8	41.1	41.4
Corporate direct taxes							
Proportion of GDP	3.0	2.7	2.9	2.9	2.9	2.9	2.8
Implicit tax rate	9.8	9.3	10.1	10.1	10.1	10.1	10.1
Tax base as a proportion of GDP	30.9	29.0	29.0	28.6	28.4	28.5	28.2
Indirect taxes ¹							
Proportion of GDP	13.4	13.0	12.6	12.4	12.3	12.2	12.2
Implicit tax rate	28.9	28.8	27.8	27.4	26.9	26.4	26.0
Tax base as a proportion of GDP	46.4	45.2	45.2	45.2	45.7	46.1	46.8
Social security contributions from employers and the self-employed ²							
Proportion of GDP	14.0	14.4	14.8	15.0	15.1	15.2	15.3
Implicit tax rate	36.1	36.0	37.0	37.0	37.0	37.0	37.0
Tax base as a proportion of GDP	38.8	40.0	39.9	40.5	40.8	41.1	41.4

¹Excluding wage-dependent indirect taxes.²Including 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, healthcare and social care, distributed according to 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 2100 as in 2021. This may be regarded as an expression of unchanged standards in general government services. The price of general government consumption develops in line with a total appraisal of the price of the component parts of gross production, that is, hourly wages, the price of consumption and the price of consumption of fixed capital (the investment price).

Table A.4 General government consumption

Per cent of GDP

	2010	2015	2020	2030	2040	2050	2060
Total consumption	25.2	26.1	26.0	26.9	26.8	26.2	26.5
Childcare	1.8	1.9	1.9	2.0	1.8	1.8	1.8
Education	4.9	5.0	5.0	5.1	5.0	4.7	4.7
Healthcare	5.8	6.2	6.1	6.4	6.4	6.4	6.5
Elderly care	3.9	4.1	4.1	4.6	5.0	5.1	5.4
Other activities	8.8	8.9	8.9	8.9	8.6	8.2	8.1

Sources: Statistics Sweden and own calculations.

Transfer payments

The calculations assume a certain guarantee of standards in the general government transfer payments systems. For some transfer payments, there are rules and regulations that automatically raise expenditure in line with wages. This applies to pensions, which are adjusted upward in line with the earnings index, and also partly to transfer payments compensating for loss of earnings, 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 were only based on a price projection.

Table A.5 General government transfer payments

Per cent of GDP

	2010	2015	2020	2030	2040	2050	2060
Total transfer payments	18.6	17.9	17.2	17.3	17.4	17.2	17.6
Transfer payments to households	15.3	14.5	13.7	13.9	14.0	13.7	14.1
Old age	8.0	7.8	7.7	7.6	7.5	7.3	7.7
Ill-health	2.9	2.7	2.5	2.7	2.8	2.8	2.7
Children/studies	2.1	2.0	1.8	1.9	1.9	1.9	1.9
Labour market	1.0	0.8	0.7	0.8	0.8	0.7	0.7
Other	1.4	1.1	1.0	1.0	1.0	1.0	1.0
Transfer payments to businesses and the rest of the world	3.3	3.5	3.4	3.5	3.4	3.4	3.4

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 the demographic trend, economic conditions and 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

	2010	2015	2020	2030	2040	2050	2060
Revenue	6.6	6.7	6.6	6.9	7.0	7.3	7.6
Fees	5.9	6.0	5.9	6.0	6.1	6.1	6.1
Interest, dividends etc.	0.7	0.7	0.7	0.9	1.0	1.2	1.4
Expenditure	6.4	6.5	6.7	6.3	6.1	5.7	5.9
Pensions	6.2	6.3	6.5	6.1	5.9	5.5	5.7
Other	0.2	0.2	0.3	0.2	0.2	0.2	0.2
Net lending	0.2	0.2	-0.1	0.6	0.9	1.6	1.6
Net financial assets	25.5	30.0	23.5	20.6	21.5	26.9	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 if not otherwise stated

	2010	2015	2020	2030	2040	2050	2060
Total expenditure	49.3	48.9	48.4	50.3	50.2	49.1	49.6
Age-related ¹	32.3	32.7	32.5	33.3	33.3	32.4	33.2
Pensions ²	8.0	7.8	7.7	7.6	7.5	7.3	7.7
Guarantee pensions	0.5	0.4	0.3	0.4	0.6	0.7	0.9
Old-age pensions	6.2	6.3	6.5	6.1	5.9	5.5	5.7
Other pensions (disability and survivors ¹)	0.7	0.5	0.4	0.4	0.4	0.4	0.4
General government occupational pensions	0.6	0.6	0.6	0.7	0.7	0.7	0.7
Healthcare	5.9	6.1	6.1	6.3	6.3	6.3	6.3
Elderly care and services for disabled people	2.2	2.3	2.3	2.8	3.2	3.4	3.7
Childcare	1.7	1.8	1.8	1.8	1.6	1.6	1.6
Education	5.0	5.0	5.0	5.1	5.0	4.7	4.7
Unemployment benefit	1.0	0.8	0.7	0.8	0.8	0.7	0.7
Other age-related expenditure	8.6	9.0	8.9	8.9	8.7	8.5	8.4
Interest expenditure	1.1	0.5	0.8	1.7	1.9	2.1	2.1
Total revenue	49.3	48.9	49.1	49.8	49.6	49.4	49.6
of which income from capital	1.9	1.4	1.7	2.2	2.2	2.4	2.5
of which from the pensions system	0.7	0.7	0.7	0.9	1.0	1.2	1.4
Assumptions							
Labour productivity growth, GDP level	3.3	2.5	1.3	1.8	1.9	1.9	1.9
GDP growth	6.0	4.1	2.9	2.1	2.3	2.2	2.2
Unemployment	8.6	7.4	6.6	7.4	7.6	7.2	6.8
Population aged 65+ as a proportion of the total population	18.3	19.7	19.9	21.1	22.6	23.1	24.9

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 (Ageing Working Group, 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 2015.¹⁰ The calculations in the Convergence Programme are, however, based on the data presented to the Riksdag in the 2016 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

Annual percentage change if not otherwise stated

	2013	2020	2030	2040	2050	2060
Population, 15-64 years (index)						
EPC	100.0	102.5	108.9	115.7	122.1	124.8
Convergence Programme	100.0	106.8	113.5	117.9	121.7	122.2
Employed (index)						
EPC, 15-64 years	100.0	105.7	112.5	119.9	126.8	129.5
Convergence Programme, 15-74 years	100.0	108.7	113.7	116.8	121.9	124.3
Hours						
EPC	1.2	0.6	0.6	0.7	0.4	0.3
Convergence Programme	0.4	1.6	0.3	0.4	0.3	0.2
Unemployment, per cent of labour force						
EPC, 15-74 years	8.1	6.2	5.8	5.8	5.8	5.8
Convergence Programme, 15-74 years	8.0	6.6	7.4	7.6	7.2	6.8
Labour productivity						
EPC	0.9	1.3	1.5	1.5	1.5	1.5
Convergence Programme	0.9	1.1	1.8	1.9	1.9	1.9
Potential GDP						
EPC	2.2	1.9	2.1	2.2	1.9	1.8
Convergence Programme	1.3	2.7	2.1	2.3	2.2	2.2
Potential GDP per capita						
EPC	1.3	1.0	1.4	1.6	1.4	1.4
Convergence Programme	0.4	1.2	1.5	1.8	1.8	1.8

Sources: European Commission and own calculations.

¹⁰ The 2015 Ageing Report: Economic and budgetary projections for the 28 EU Member States (2013-2060).

The population forecast used in the EPC was prepared by Eurostat in 2013. Calculations in the Convergence Programme are based on a population forecast issued by Statistics Sweden in February 2016. Over the long term, the population grows considerably faster than in the EPC calculation. The EPC thus also has a stronger increase both in hours worked and in the number of employed persons. In 2060, the level of employment is and the number of hours worked are approximately 5 percentage point stronger in the EPC calculations. In the Convergence Programme, unemployment is assumed to increase by around 0.5 percentage points from the 2020 level to a structural level around 7.6 per cent when the proportion of people in the labour force born outside Europe increases. After 2040, unemployment again subsides when the demographical composition of the labour force becomes more favourable, reaching 6.8 per cent in 2060. In the EPC, the structural level of unemployment is 5.8 per cent. Productivity growth is stronger in the Convergence Programme than in the EPC calculations. The higher level of productivity is one reason for the GDP level for 2060 being higher in the Convergence Programme. GDP per capita also reaches a higher level in the Convergence Programme. However, the calculations are not comparable with regard to GDP and productivity because the EPC uses a one-sector model and the Convergence Programme a two-sector model without a chain index.

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

Proportion of GDP

	Change 2013-2020			Change 2013-2060		
	CP	EPC	CP-EPC	CP	EPC	CP-EPC
Pensions	-0.7	-0.7	0.0	-0.7	-1.4	0.7
Healthcare	-0.1	0.2	-0.3	0.1	0.4	-0.3
Elderly care and services for disabled people	0.0	0.3	-0.3	1.4	1.5	-0.1
Education	0.0	0.0	0.0	-0.4	0.2	-0.6
Unemployment benefit	-0.3	-0.1	-0.2	-0.2	-0.1	-0.1
Total	-1.0	-0.4	-0.6	0.4	0.6	-0.2

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

There are differences in age-dependent general government expenditure in all areas. This is largely due to the EPC assuming a minor improvement in the standards of general government services, but also because the EPC bases the age-distribution of general government consumption on different a data set. General government pension expenditures are the item where the difference is greatest.

Appendix C – Tables

Table C.1a Macroeconomic prospects

Annual percentage change

	SEK					
	billions	2015	2016	2017	2018	2019
Real GDP	4,079	4.1	3.8	2.2	1.8	2.1
Nominal GDP	4,155	6.0	5.5	4.2	3.9	4.4
Components of real GDP						
Private consumption expenditure	1,859	2.6	3.0	2.7	2.5	2.6
General government consumption expenditure	1,057	2.5	4.6	2.1	0.7	-0.2
Gross fixed capital formation	989	7.3	3.9	2.3	2.5	3.4
Changes in inventories and net acquisition of valuables ¹	12	0.1	0.0	0.0	0.0	0.0
Exports of goods and services	1,847	5.9	5.9	3.7	3.6	4.0
Imports of goods and services	1,686	5.4	5.9	4.2	4.2	4.0
Contribution to real GDP growth						
Final domestic demand		3.6	3.5	2.3	2.0	2.0
Changes in inventories and net acquisition of valuables		0.1	0.0	0.0	0.0	0.0
External balance of goods and services		0.4	0.2	-0.1	-0.1	0.2

¹ Contribution to GDP growth.

Sources: Statistics Sweden and own calculations.

Table C.1b Price developments

Annual percentage change

	Level					
	2015	2015	2016	2017	2018	2019
GDP deflator	101.9	1.9	1.7	1.9	2.0	2.2
Private consumption deflator	101.0	1.0	1.3	1.7	1.8	2.0
HICP ¹	114.9	0.7	1.0	1.5	1.7	1.9
Public consumption deflator	102.4	2.4	2.4	3.2	3.3	3.6
Investment deflator	101.8	1.8	1.4	1.5	1.5	1.5
Export price deflator (goods and services)	101.7	1.7	-0.1	0.9	0.9	0.9
Import price deflator (goods and services)	100.9	0.9	-0.4	1.1	1.0	1.0

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					
	2015	2015	2016	2017	2018	2019
Employment, persons ¹	4 806	1.5	1.7	1.6	0.8	0.7
Employment, hours worked ²	775 080	1.6	2.5	1.2	0.4	0.7
Unemployment rate ³	386	7.4	6.8	6.3	6.4	6.5
Labour productivity, persons ⁴	750	2.4	2.1	0.6	1.0	1.4
Labour productivity, hours worked ⁵	465	2.3	1.4	1.0	1.4	1.5
Compensation of employees ⁶	1 982	5.3	4.4	5.1	4.1	4.2
Compensation per employee ⁷	432 780	3.6	2.6	3.5	3.3	3.4

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 billions.

⁷ SEK.

Sources: Statistics Sweden and own calculations.

Table C.1d Sectoral balances

Per cent of GDP

	2015	2016	2017	2018	2019
Net lending/borrowing vis-à-vis the rest of the world	5.7	6.4	6.0	5.8	5.7
<i>of which</i>					
Balance on goods and services	5.5	5.6	5.4	5.1	5.1
Balance of primary incomes and transfers	0.4	1.0	0.8	0.9	0.8
Capital account	-0.2	-0.2	-0.2	-0.2	-0.2
Net lending/borrowing, private sector	5.7	6.8	6.7	6.2	5.6
Net lending/borrowing, general government	0.0	-0.4	-0.7	-0.4	0.1
Statistical discrepancy	2.5	--	--	--	--

Sources: Statistics Sweden and own calculations.

Table C.2a General government budgetary prospects

Per cent of GDP

	SEK billions	2015	2016	2017	2018	2019
	2015					
Net lending by sub-sector						
General government	0	0.0	-0.4	-0.7	-0.4	0.1
Central government	-4	-0.1	-0.2	-0.2	0.2	0.7
Local government	-4	-0.1	-0.3	-0.4	-0.4	-0.5
Social security funds	8	0.2	0.0	-0.1	-0.2	-0.1
General government						
Total revenue	2,096	50.4	50.1	50.3	50.6	50.7
Total expenditure	2,096	50.4	50.5	51.0	51.0	50.6
Net lending/borrowing	0	0.0	-0.4	-0.7	-0.4	0.1
Interest expenditure	20	0.5	0.5	0.5	0.6	0.7
Primary balance	20	0.5	0.0	-0.2	0.2	0.8
One-off and other temporary measures	2	0.0	0.1	0.0	0.0	0.0
Selected components of revenue						
Total taxes	1 676	40.3	40.4	40.7	41.0	40.9
Taxes on production and imports	915	22.0	22.2	22.2	22.2	22.1
Current taxes on income, wealth, etc.	761	18.3	18.3	18.5	18.8	18.8
Capital taxes	0	0.0	0.0	0.0	0.0	0.0
Social contributions	116	2.8	2.7	2.8	2.8	2.8
Income from capital	65	1.6	1.5	1.5	1.5	1.7
Other	239	5.8	5.4	5.4	5.3	5.3
Total revenue	2,096	50.4	50.1	50.3	50.6	50.7
Taxes burden	1,799	43.3	43.3	43.6	43.9	43.7
Selected components of expenditure						
Compensation of employees + intermediate consumption	860	20.7	20.8	20.9	20.9	20.7
Compensation of employees	517	12.4	12.5	12.7	12.7	12.6
Intermediate consumption	343	8.3	8.3	8.3	8.2	8.1
Social payments	711	17.1	17.0	17.1	17.1	17.1
of which Unemployment benefits	32	0.8	0.8	0.7	0.7	0.7
Social transfers in kind supplied via market producers	150	3.6	3.8	3.9	3.9	3.9
Social transfers other than in kind	561	13.5	13.3	13.2	13.2	13.2
Interest expenditure	20	0.5	0.5	0.5	0.6	0.7
Subsidies	69	1.7	1.6	1.5	1.5	1.5
Gross fixed capital formation	180	4.3	4.4	4.4	4.4	4.3
Capital transfers	11	0.3	0.3	0.3	0.2	0.2
Other	245	5.9	6.0	6.2	6.1	6.0
Total expenditure	2,096	50.4	50.5	51.0	51.0	50.6
Government consumption (nominal)	1,083	26.1	26.5	26.8	26.8	26.6

Sources: Statistics Sweden and own calculations.

Table C.2b Revenue and expenditure forecasts

Per cent of GDP if not otherwise stated

	SEK billions	2015	2016	2017	2018	2019
	2015					
Total revenue	2,096	50.4	50.1	50.3	50.6	50.7
Total expenditure	2,096	50.4	50.5	51.0	51.0	50.6

Sources: Statistics Sweden and own calculations.

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

Per cent of GDP

	SEK billions	2015	2016	2017	2018	2019
	2015					
Expenditure on EU programmes fully matched by EU funds revenue	2	0.0	0.1	0.1	0.1	0.1
Of which investments	0	0.0	0.0	0.0	0.0	0.0
Cyclical expenditure changes due to higher unemployment ¹	0	0.0	0.0	0.0	0.0	0.0
Effects of discretionary revenue measures	17	0.4	0.8	0.1	0.0	0.0
Revenue increases mandated by law	–	–	–	–	–	–

¹ Change in comparison with preceding year.

Sources: Statistics Sweden and own calculations.

Table C.3 General government expenditure by function

Per cent of GDP

	COFOG code	2014
General public services	1	7.8
Defence	2	1.3
Public order and safety	3	1.3
Economic affairs	4	4.3
Environmental protection	5	0.3
Housing and community amenities	6	0.8
Health	7	7.0
Recreation, culture and religion	8	1.1
Education	9	6.6
Social protection	10	21.2
Total expenditure		51.7

Sources: Statistics Sweden and own calculations.

Table C.4 General government debt developments

Per cent of GDP

	2015	2016	2017	2018	2019
Gross debt	43.4	42.5	41.1	40.3	39.1
Change in gross debt ratio	-1.3	-0.9	-1.4	-0.8	-1.2
Contribution to changes in gross debt					
Primary balance	-0.5	0.0	0.2	-0.2	-0.8
Interest expenditure	0.5	0.5	0.5	0.6	0.7
Stock-flow adjustment	1.2	0.9	-0.4	0.4	0.6
<i>of which</i>					
Differences between cash and accruals	0.5	0.2	-0.8	0.1	0.5
Privatisation proceeds	0.0	-0.1	-0.1	-0.1	-0.1
Valuation effects and others	0.7	0.8	0.6	0.4	0.1
Implicit interest rate on debt	1.2	1.1	1.2	1.5	1.9

Sources: Statistics Sweden and own calculations.

Table C.5 Cyclical developments

Per cent of GDP if not otherwise stated

	2015	2016	2017	2018	2019
Real GDP growth (%)	4.1	3.8	2.2	1.8	2.1
Net lending of general government	0.0	-0.4	-0.7	-0.4	0.1
Interest expenditure	0.6	0.6	0.6	0.7	0.9
One-off and other temporary measures	0.0	0.1	0.0	0.0	0.0
Potential GDP growth (%)	2.7	2.4	2.2	2.2	2.4
Output gap	-0.9	0.2	0.5	0.3	0.0
Cyclical budgetary component	-0.3	-0.4	0.0	0.1	0.1
Cyclically adjusted balance	0.3	-0.1	-0.7	-0.5	0.0
Cyclically adjusted primary balance	0.9	0.5	0.0	0.3	0.9
Structural balance	0.2	-0.2	-0.7	-0.5	0.0

Sources: Statistics Sweden and own calculations.

Table C.6 Divergence from previous update

	2015	2016	2017	2018	2019
Real GDP growth (%)					
Previous update	2.6	2.7	2.5	2.4	--
Current update	4.1	3.8	2.2	1.8	2.1
Difference	1.5	1.1	-0.3	-0.6	--
General government net lending (% of GDP)					
Previous update	-1.4	-0.7	-0.4	0.0	--
Current update	0.0	-0.4	-0.7	-0.4	0.1
Difference	1.4	0.3	-0.3	-0.4	--
General government gross debt (% of GDP)					
Previous update	44.2	42.8	41.5	40.0	--
Current update	43.4	42.5	41.1	40.3	39.1
Difference	-0.8	-0.3	-0.4	0.3	--

Sources: Statistics Sweden and own calculations.

Table C.7 Long-term sustainability of public finances

Per cent of GDP

	2010	2015	2020	2030	2040	2050	2060
Total expenditure	49.3	48.9	48.4	50.3	50.2	49.1	49.6
<i>of which</i>							
Age-related expenditure	32.3	32.7	32.5	33.3	33.3	32.4	33.2
<i>of which</i>							
Pension expenditure	8.0	7.8	7.7	7.6	7.5	7.3	7.7
<i>of which</i>							
Social security pension	0.5	0.4	0.3	0.4	0.6	0.7	0.9
Old-age and early pensions	6.2	6.3	6.5	6.1	5.9	5.5	5.7
Other pensions (disability and survivors')	0.7	0.5	0.4	0.4	0.4	0.4	0.4
Occupational pensions (if in general government)	0.6	0.6	0.6	0.7	0.7	0.7	0.7
Health care	5.9	6.1	6.1	6.3	6.3	6.3	6.3
Long-term care	2.2	2.3	2.3	2.8	3.2	3.4	3.7
Educational expenditure	5.0	5.0	5.0	5.1	5.0	4.7	4.7
Other age-related expenditures	8.6	9.0	8.9	8.9	8.7	8.5	8.4
Interest expenditure	1.1	0.5	0.8	1.7	1.9	2.1	2.1
Total revenue	49.3	48.9	49.1	49.8	49.6	49.4	49.6
<i>of which</i>							
Property income	1.9	1.4	1.7	2.2	2.2	2.4	2.5
<i>of which</i>							
From pension contributions (or social contributions if appropriate)	0.7	0.7	0.7	0.9	1.0	1.2	1.4
Pension reserve fund assets	25.5	30.0	23.5	20.6	21.5	26.9	33.8
<i>of which</i>							
Consolidated public pension fund assets (other than government liabilities)	24.8	30.1	23.7	20.7	21.6	27.1	34.0
Assumptions							
Labour productivity	4.7	3.3	2.0	2.2	2.2	2.2	2.2
Real GDP growth	6.0	4.1	2.9	2.1	2.3	2.2	2.2
Unemployment rate	8.6	7.4	6.6	7.4	7.6	7.2	6.8
Population aged 65+ over total population	18.3	19.7	19.9	21.1	22.6	23.1	24.9

Sources: Statistics Sweden and own calculations.

Table C.7a Contingent liabilities

Per cent of GDP

	2015
Public guarantees	45.1

Sources: Statistics Sweden and own calculations.

Table C.8 Basic assumptions

Annual average if not otherwise stated

	2015	2016	2017	2018	2019
6-month interest rate	-0.3	-0.5	0.0	0.7	2.0
10-year government bond yield	0.7	1.1	2.1	3.0	3.7
USD/€ exchange rate	1.1	1.1	1.1	1.1	1.1
Nominal effective exchange rate vis-à-vis the €e	9.4	9.3	9.3	9.2	9.1
World. GDP growth ¹	3.1	3.0	3.2	3.9	4.0
EU GDP growth ¹	1.9	1.5	1.6	1.6	1.6
Growth of relevant foreign markets	1.3	3.0	4.8	5.1	4.7
World import volumes, excluding EU					
Oil price (Brent USD/barrel)	52	38	44	46	48

¹ Annual percentage change

Sources: Statistics Sweden and own calculations.

Government Offices of Sweden

Ministry of Finance

103 33 Stockholm