Swedish Fiscal Policy

Fiscal Policy Council Report 2019

The Swedish Fiscal Policy Council is a Government agency, whose remit is to conduct an independent evaluation of the Government's fiscal policy. The Council fulfils its tasks primarily through the publication of the report Swedish Fiscal Policy, which is presented to the Government once a year. The report is used by the Riksdag as a basis for its evaluation of the Government's policy. The Council also arranges conferences. In the series 'Studier i finanspolitik' (Studies in fiscal policy), it publishes in-depth studies of different aspects of fiscal policy.

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Foreword to the English translation

The 2019 report of the Swedish Fiscal Policy Council was published in Swedish on May 7, 2019. The translation into English was conducted by Semantix AB in collaboration with the council secretariat under the supervision of Joakim Sonnegård, Head of Agency.

Stockholm, 28 September, 2019

Harry Flam
Chairman of the Council

Foreword

The Fiscal Policy Council is tasked with monitoring and analysing fiscal policy. The Council also aims to promote more public debate in society about economic policy.

The Council consists of six members. Since the previous report in May 2018 the appointment of Cecilia Hermanssons has come to an end. Åsa Hansson is a new member of the Council.

The Council is assisted by a secretariat consisting of Joakim Sonnegård (Head of Agency), Niklas Frank (Deputy Head of Agency and Senior Economist), Christina Håkanson (Senior economist), Axel Malmcrona (Economist), Hannes Jägerstedt (Economist – on leave) and Charlotte Sandberg Gavatin (Head of Administration).

This is the Council's twelfth report. The analytical work was completed on April 26th.

We have received many valuable comments. We would particularly like to thank all those who have presented reports at Council meetings: Fredrik Kopsch, Tora Bäckman and Eric Spector.

Our dialogue with colleagues at the National Institute of Economic Research is valuable in our work. Discussions with Johan Almenberg, Urban Hansson Brusewitz, Ylva Hedén Westerdahl and Elin Ryner throughout the year were especially helpful.

Finally, we would like to join with the whole of the secretariat in thanking Thomas Bergman, Karl Bergstrand, Johanna Frodell, Katinka Hort, Philip Löf, Johanna Modigsson, Marcus Mossfeldt, Jonas Norlin, Kristina Padrón, Karine Raoufina, Cecilia Renmyr, Per

Olof Robling, Jesper Roine, Joakim Skalin, Gia Wickbom, Thomas Wilhelmsson and Hwan Willén for their interesting views and constructive comments.

Stockholm, 3 May, 2019

Harry Flam
Chairman

Kari Lotsberg
Deputy Chair

Peter Englund

Åsa Hansson

Bertil Holmlund

Ragnar Torvik

Abbreviations

LFS	Labour Force Surveys (conducted by Statistics Sweden)
BP	Budget Bill
GDP	Gross Domestic Product
ECB	European Central Bank
ESV	Ekonomistyrningsverket (Swedish National Financial Management Authority)
IMF	International Monetary Fund
NIER	National Institute of Economic Research
CPIF	Consumer price index with fixed interest rate
NAIRU	Non-accelerating inflation rate of unemployment
NAWRU	Non-accelerating wage rate of unemployment
OECD	Organisation for Economic Co-operation and Development
RB	Sveriges riksbank (Sweden's central bank)
SCB	Statistiska centralbyrån (Statistics Sweden)
VP	Spring Fiscal Policy Bill
WTO	World Trade Organization

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The Fiscal Policy Council's remit

The Fiscal Policy Council has been instructed[1] to review and evaluate the extent to which the fiscal and economic policy objectives proposed by the Government and decided by the Riksdag are being achieved, and thus to contribute to more transparency and clarity about the aims and effectiveness of economic policy.

In particular, the Council, with the Spring Fiscal Policy Bill and the Budget Bill as a basis, is required to assess whether fiscal policy is consistent with:

1. Long-term sustainable public finances,
2. Budgetary targets, particularly the surplus target and the expenditure ceiling, but also the debt anchor and, if needed, the balanced budget requirement for local authorities.

The Council, with the Spring Fiscal Policy Bill and the Budget Bill as its basis, is also required to:

1. Assess whether the fiscal stance is consistent with the cyclical position of the economy,
2. Evaluate the Government's forecasts of economic development and reports to the Riksdag on the public finances and the costs of reform proposals. This evaluation should comply with Article 4(6) of European Council Directive 2011/85/EU of 8 November 2011, in its original wording.

The Council is also tasked with reviewing and assessing whether fiscal policy is in line with healthy long-term sustainable growth and leads to long-term sustainable high employment, examining the clarity of the Spring Fiscal Policy Bill and the Budget Bill, particularly with respect to the stated basis for economic policy and the reasons for proposed measures, and analysing the effects of fiscal policy on the distribution of welfare in the short and long term.

The Council also works to stimulate more public debate on economic policy.

[1] SFS 2011:446, SFS 2016:1088 and SFS 2017:1316.

The fiscal policy framework

The fiscal framework consists of the fundamental principles that fiscal policy is to follow to be sustainable in the long term.[1] Some of these principles are governed by law, while others follow practice. The targets of budgetary policy, i.e., the surplus target, the debt anchor, an expenditure ceiling and a balanced budget requirement for local authorities – constitute, together with a strict state budget process, external review and transparency, the core components of the fiscal policy framework.

Under the Budget Act, the Government is required to present a proposed target for general government net lending, a surplus target. The Riksdag has set the surplus target from and including 2019 such that it should equal 1/3 percent of GDP on average over an economic cycle. Previously, the target was 1 percent of GDP. If the surplus target is not met, the Government must present a plan regarding how to return to the target. The plan must include a timetable and normally begin the following year, and the pace at which the return to the target will be achieved must take into account the state of the economy.

Under the Budget Act, the Government has to propose an expenditure ceiling for the third year ahead in the Budget Bill. The Riksdag sets the expenditure ceiling. Under the expenditure ceiling, there is customarily a budget margin of a specified size. This is mainly there to act as a buffer if expenditure develops in an unexpected way.

The expenditure ceiling is the overarching restriction in the budget process. In the budget process, priorities are set for different expenditure types and expenditure increases are considered in the light of a predetermined total fiscal space provided by the expenditure ceiling and the surplus target. The main thrust is that proposals for expenditure increases in an expenditure area have to be covered by proposals for expenditure reductions in the same area.

As a complement to the surplus target, from 2019 a debt anchor was introduced for the consolidated gross debt of the public sector. The debt anchor is not an operative target, but a benchmark for the desired debt level in the medium term, and the level is set at 35 percent of GDP.

[1] This summary is based on the so-called Framework Communication, Skr. 2017/18:207.

Since 2000 there has been a balanced budget requirement in effect in the local government sector. The balanced budget requirement states that each municipality and county council must plan for a balanced budget, if there are no exceptional reasons.

The surplus target and the debt anchor must be stable over longer periods, while it must also be possible to revise them in case, for example, of changes in demographics or debt development assessments. To avoid changing the targets such that their credibility is reduced, changes should be implemented in a predictable manner and with as wide political support as possible. The target levels should therefore be reviewed every eight years, at the end of every second mandate period.

Summary

The main task of the Fiscal Policy Council is to review and evaluate the extent to which fiscal and economic policy objectives proposed by the Government and adopted by the Riksdag are being achieved. Our principal conclusions in this year's report are as follows:

Economic conditions and stabilisation policy

1. Global economic growth has peaked and is expected to slow down in 2019. The risk for negative shocks has increased in the last six months, and the risk for positive shocks has decreased.
2. Although the Swedish economy has been strong for several years, it has peaked and has now entered a slowdown.
3. There is currently little need for economic stabilisation measures, however the scope for monetary policy measures to stabilise the economy is currently very limited. Should Sweden experience a serious economic downturn, the automatic stabilisers of fiscal policy may be insufficient to stabilise resource utilisation. Accordingly, the Government should be ready to employ active stabilisation policy measures.

Employment and unemployment

4. The Swedish labour market has been very strong in the last couple of years. There is a major labour shortage both in the business sector and, in particular, in the public sector, where shortages are at historically high levels. The employment rate is high, both from a historical and an international perspective. Sweden and Estonia have the highest employment rates in the EU.
5. The main problems in the Swedish labour market are shortages of labour force with the skills the labour market demands and large differences in employment and unemployment rates between individuals born in Sweden and those born outside of Europe. The Council welcomes the Government's measures to reduce these problems, but believes, like previously stated, that

they are insufficient. There is still a need for regular low-skilled jobs.

GDP per capita

6. In recent years, Sweden has seen a low GDP per capita growth in an international comparison. If this turns out to be a persistent development, it is a serious problem.
7. Seen in a longer perspective, Sweden's GDP per capita growth has been on par with other comparable countries. Relative to the OECD countries, Sweden's GDP per capita is currently at approximately the same level as in the 1980s.
8. Even though Sweden has done fairly well in an international comparison, one should not be complacent about the poor productivity growth in recent years. It is important to track the development and to take measures that may contribute to improved productivity growth.

Guidelines for a transitional Government and the fiscal policy framework

9. According to the guidelines for a transitional Government, a budget bill should not contain proposals with a clear party-political orientation. There is a potential conflict between these guidelines and the fiscal policy framework. It may be very difficult to achieve the surplus target and to respect the expenditure ceiling without taking measures that have a party-political orientation.

The surplus target and the expenditure ceiling

10. The fiscal policy of 2019 is in line with the surplus target. There is no clear aberration from the surplus target. Retrospectively, however, neither the old nor the new targets have been attained.
11. The expenditure ceiling was reduced by the Riksdag in December 2018, and the Government's Spring Bill does not propose any significant changes to the new levels. The budget

margins are therefore normalised, and the scope allowed by the expenditure ceiling is more in line with the expenditure allowed within the surplus target. We welcome this, but, as the Council has stated previously, the principles and considerations governing the choice of expenditure ceiling should be clarified.

The debt anchor and long-term sustainable public finances

12. In 2019, the gross public debt is nearly 35 percent of GDP, and in 2022 it is expected to fall below 30 percent according to the Government. However, this calculation does not comprise any future fiscal policy measures. Accordingly, it is unlikely that the gross public debt will fall below 30 percent before the next fiscal policy framework review.
13. In the longer term, the demographic development will entail strains on public finances. Overall, long-term sustainability is assessed to remain fairly good. However, assessments of the long-term sustainability of public finances are very uncertain and sensitive to the underlying assumptions.

Income distribution and income mobility

14. Differences in labour income, measured as total earned income, have increased drastically since the early 1980s, but remain relatively small in an international perspective.
15. Our analysis indicates that the inter-generational income mobility for individuals born between 1968 and 1982 has not changed significantly. The statistical relationship between income mobility and income inequality in a comparison between different countries is not apparent in Sweden.

1 The economic situation

The purpose of this chapter is to provide a general picture of the economic situation and the conditions for growth in Sweden and the world. In subsequent chapters, the Council discusses and evaluates the economic policy adopted by the Riksdag in December 2018 and proposed by the Government in the Spring Bill of 2019 in the light of this, among others. The Council produces no economic forecasts of its own; rather, our analysis is based on forecasts published by other analysts and forecasters.

1.1 The international economic situation[1]

1.1.1 The global economy is slowing down

During the beginning of 2018, the global economy continued to grow at the same pace as in recent years, though not as synchronized as in 2017. Growth in the US increased, while it slowed down in other parts of the world. In the second half of 2018, however, global economy growth slowed down, especially in the euro area, but also in China. The global economic expansion has probably peaked (Figure 1.1). In 2019, a slowdown in global growth is expected. The slowdown in the investment activities of recent years is a contributing factor to this. The risk of a weaker development has increased over the past six months, while the prospects for a stronger development have deteriorated. The escalated trade conflict between the US and China means, for example, that the uncertainty surrounding the development of the global economy has increased. Signs of weakness and vulnerabilities in several emerging economies also contribute to the increased uncertainty.

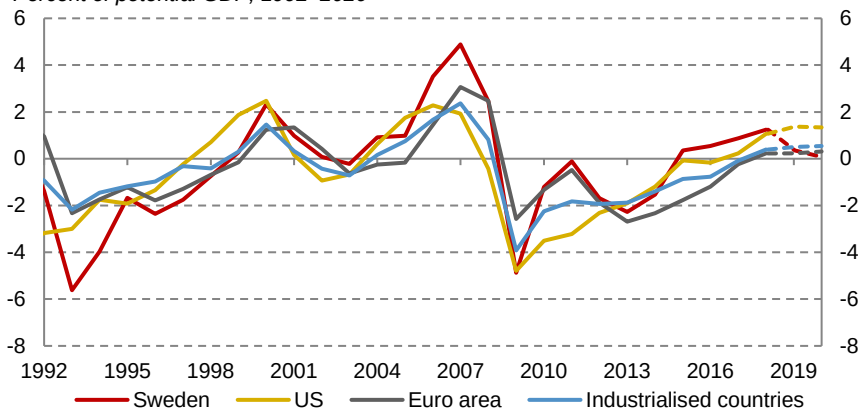
In the US, the economy is relatively strong, and households and companies perceive the future to be bright, even though confidence was reduced somewhat in the second half of 2018. The expansionary fiscal policy will help to stimulate growth in the US in 2019 as well, which counteracts the trade barriers that China has introduced in response to the US measures. Unemployment in the US is at its lowest level since the late 1960s. GDP in the US is expected to grow by about

[1] This section is based on information from the IMF (2018a, 2019a, 2019b), NIER (2018a, 2018b, 2019a), Sveriges riksbank (2018a, 2019a, 2019b), OECD (2019a) and ECB (2019).

2.5 per cent in 2019, which is moderate in a historical perspective (Figure 1.2).[2] After the financial crisis 2008-2009, the annual GDP growth in the US reached 3 per cent in one year only (2018); during the period 2010–2018, the average annual growth was 2.3 per cent, which can be compared, for example, with the average during the period 1987–2007, which amounted to 3.2 per cent per year.[3]

Figure 1.1 Output-gap in Sweden, United States, the Euro area and industrialised countries

Percent of potential GDP, 1992–2020



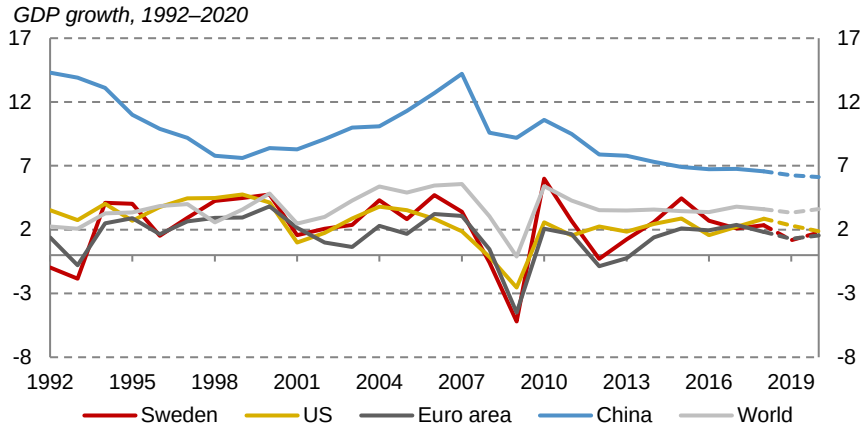
Note: The output gap shows how actual GDP differs from its long-term level (potential GDP), and is expressed as a percentage. A positive gap indicates that the economy is in a period of growth, while a negative indicates a period of contraction (see in-depth analysis 1.1). The diagram includes the IMF's forecast for 2019–2020. The term industrialised countries is used as defined by the IMF definition.
Source: IMF (2019a).

Growth in China and a few other Asian growth economies is expected to be negatively impacted by the US trade barriers. However, these are small effects, at least currently. China's government has, during 2018 and the beginning of 2019, fended off the decline in the export industry with expansionary fiscal and monetary policy. Annual growth in China is expected to be around 6 percent in 2019 and 2020. There has been a pattern of falling growth in the Chinese economy over the past decade. The lower rate of growth in China is largely explained by the Chinese government's reorganisation of economic policies with the aim of steering away the economy from export and investment-

[2] In the period 1961–2007 annual growth in the US was greater than 3 per cent during 27 individual years, i.e.. 59 percent of the time. Annual average growth during this period was 3.5 per cent; US Bureau of Economic Analysis (2019).
[3] US Bureau of Economic Analysis (2019).

based growth towards an economy that is growing largely through increased consumption. In the years to come, the Chinese economy is not expected to support the global economy in the way it has done previously.

Figure 1.2 GDP-growth in Sweden, United States, the Euro area and the world



Note: GDP constant-price growth. The diagram includes the IMF's forecast for 2019–2020.
Source: IMF (2019a).

In the euro area, the recovery after the financial crisis began later than in the United States. It appears that the mild boom that several analysts expected in 2018–2019 will not take place (Figure 1.1). This is mainly due to weaker growth in Germany and Italy. Growth in the euro area amounted to 1.8 per cent in 2018. From 2019 to 2020, the euro area GDP is expected to grow somewhat slower than the historical average of 1.6 per cent per year.[4] Growth is maintained by expansionary monetary and fiscal policy. At the same time, the structural problems in the euro area remain, for example in the banking sector and in public finances in several countries. There are also financial risks linked with the global political development.

1.1.2 Uncertainty has increased

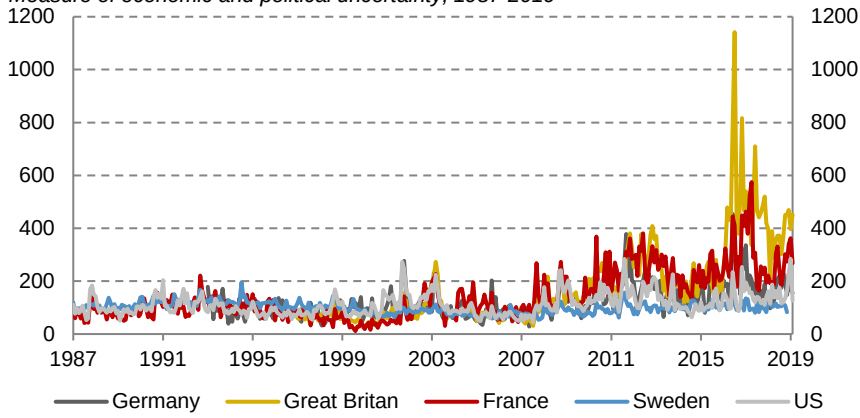
The economic and political uncertainty in the world has, according to available measures, increased during 2018 (Figure 1.3), but remains at

[4] The average growth for the euro area in the period 1996–2018 amounts to 1.58 per cent growth. Source: IMF (2019a).

a lower level than in 2016 and early 2017, when the European refugee crisis, the Brexit vote and the US presidential election contributed to increased uncertainty in relation to political and economic decisions and forecasts. US foreign trade policy has continued to create great uncertainty and is expected to dampen global growth, primarily by influencing international trade. Uncertainty about global growth conditions have resulted, in the autumn of 2018, in turbulence in several of the world's stock exchanges.

Figure 1.3 Political uncertainty

Measure of economic and political uncertainty, 1987-2019



Note: The measure of political uncertainty is based on the mention in news articles of uncertainty or concern together with words such as economics, financial or regulation, government and ministry etc. to indicate political decisions.[5]
Source: Economic Policy Uncertainty (2019).

The uncertainty surrounding the economic and financial impact of the UK's exit from the EU remains high. This is especially true if the UK were to leave the EU without a withdrawal agreement, which cannot be completely ruled out. Although the long-term growth effects of an exit are deemed to be relatively limited for the EU as a whole, the effects vary between different countries, and, in the short term, significant disturbances cannot be ruled out, especially as regards developments in the financial markets.[6]

[5] Armelius et al. (2016) and Baker et al. (2016).
[6] For a discussion concerning possible effects of Brexit, see IMF (2018).

Analysis 1.1 Terminology

Figure 1.4 provides a general picture of the economic cycles. The image shows how the GDP level according to the national accounts develops relative to potential GDP levels. Potential GDP is defined as the level of production achieved at full resource utilization of labour and capital factors at a given time. Full resource utilization in the labour market means that employment and the number of hours worked are at a level that is consistent with a stable wage growth rate and thus a stable inflation in the long run. The concept *potential* does not therefore mean the highest possible level of resource utilization, but the highest level consistent with stable inflation and trend growth. Potential GDP cannot be observed in the statistics reported by the national accounts, but is a result of a model calculation associated with uncertainty.

Figure 1.4 Potential GDP and the Output gap

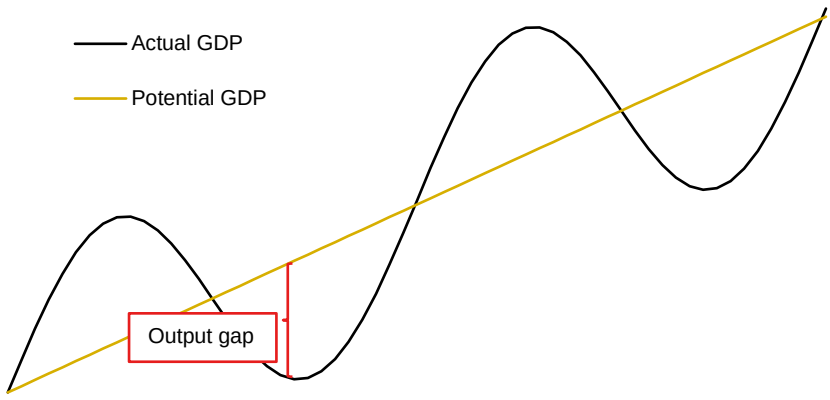


Table 1.1 contains definitions of the terminology we use to describe the phase of the current economic cycle in the economy.

Table 1.1 Terminology

Recession	Actual GDP is lower than potential GDP
Balanced economic performance	Actual GDP is near potential GDP
Growth period	Actual GDP is higher than potential GDP
Economic recovery	Actual GDP is lower but grows faster than potential GDP
Economic upswing	Actual GDP is higher and also grows faster than potential GDP
Economic slowdown	Actual GDP is higher but grows slower than potential GDP
Economic downturn	Actual GDP is lower and also grows slower than potential GDP

Source: NIER (2018a).

1.2 Developments in Sweden

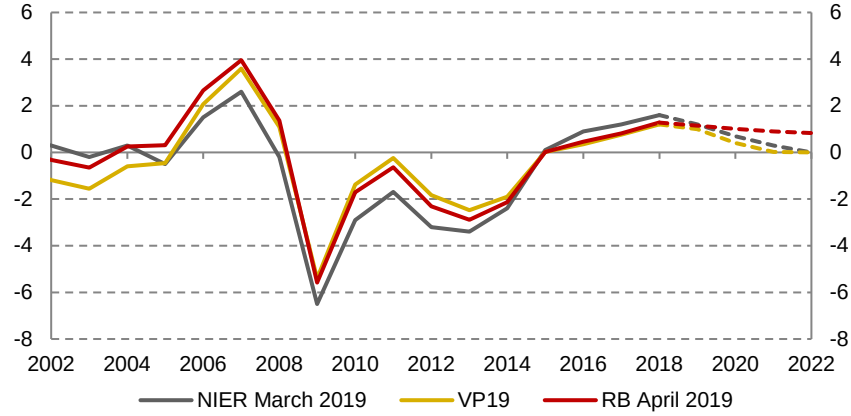
1.2.1 The economy is slowing down[7]

The economy in Sweden continued to improve during the beginning of 2018 but slowed down during the latter part of the year. The economy is in a period of expansion, but the economy has peaked. The Swedish economy has been in a slowdown phase for some time. During the second half of 2018, resource utilization declined, but nevertheless remains at a historically high level (Figure 1.6). In 2019, however, resource utilization is expected to slow down gradually. A slowdown in the international economy and reduced housing investments are expected to contribute to continued subdued growth in 2020 as well.

[7] NIER (2019a), Sveriges riksbank (2018a, 2019b), BP19, Ekonomistyrningsverket (2019), OECD (2019a), and VP19.

Figure 1.5 Swedish growth slows down

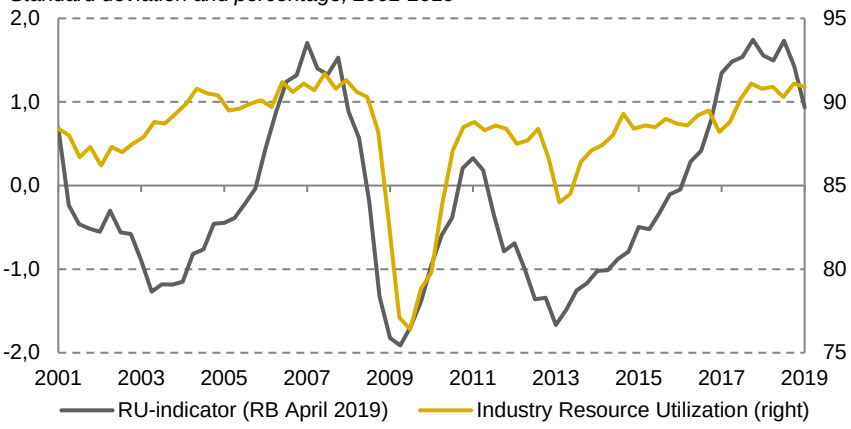
Output gap, percentage of potential GDP, 2002-2022



Note: The output gap describes how GDP relates to its long-term trend. It thus acts as an indicator of the economic situation. A positive gap means that the economy is booming, while a negative gap indicates that the economy is in a recession (see in-depth analysis 1.1).
Sources: NIER (2019), Sveriges riksbank (2019b) and VP19.

Figure 1.6 Resource utilization remains high

Standard deviation and percentage, 2001-2019

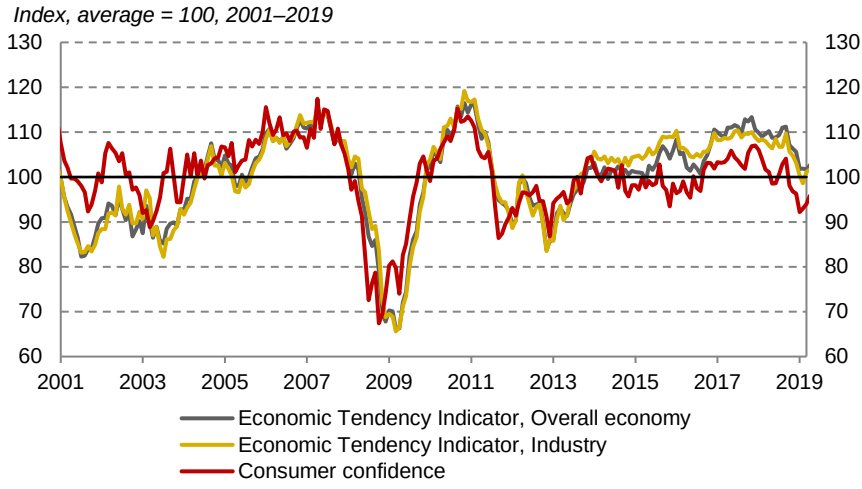


Note: The Riksbank's RU indicator is a weighting of information in survey data and labour market data. The indicator is the ratio between actual production and total production capacity among the companies.
Sources: Riksbank (2019b) and SCB.

Household and corporate confidence in the economy was initially good in 2018, but both households and companies became increasingly pessimistic during the latter part of 2018 and the beginning of 2019 (Figure 1.7). For a couple of years now, households have been more pessimistic than companies. In recent years, household consumption

has made a large contribution to GDP growth (Figure 1.8). However, household consumption developed slower than expected for the full year 2018. During the beginning of 2018, consumption rose sharply, but most of the increase in consumption was due to temporary effects, including a marked increase in purchases of passenger cars prior to the vehicle tax increase on 1 July of newly registered petrol- and diesel-powered cars. According to the National Institute of Economic Research's (NIER) confidence indicator, households have become less optimistic in their view of the economy: since the beginning of the year, household confidence indicators have been below the historical average (Figure 1.7). Household contribution to growth in 2019 appears to be higher than in 2018, although it is historically moderate (Figure 1.8).

Figure 1.7 Reduced confidence among households and companies

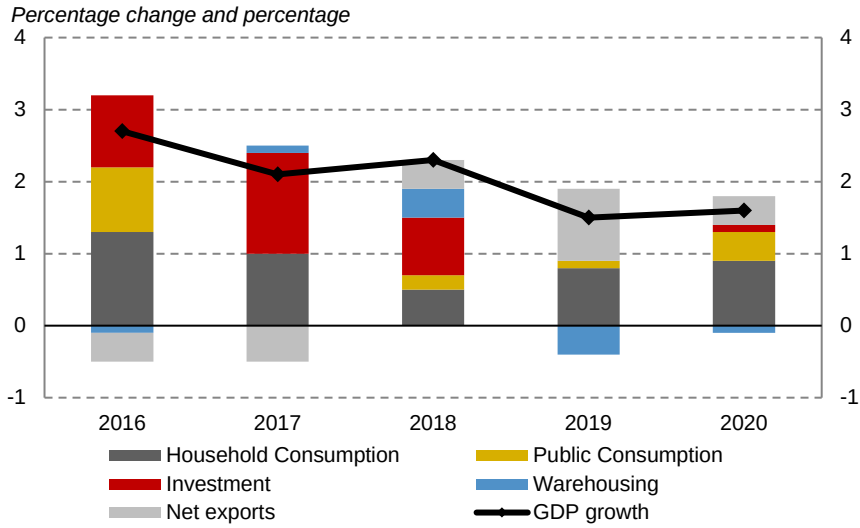


Source: NIER (2019b).

The strong GDP growth in recent years has largely been driven by investments and public and private consumption (Figure 1.8). Above all, an increase in residential construction together with increased municipal expenses for refugee reception have contributed to the development. In the past three years, residential investment has accounted for almost half of the contribution of total investments to GDP growth. Investment growth is now declining considerably, especially for housing, and investments are not expected to contribute to growth in 2019. Public consumption is also expected to grow less in 2019. This is

explained, among others, by the fact that the migration-related expenditure associated with the first year of new arrivals in Sweden is gradually decreasing.

Figure 1.8 Contribution to change in GDP, as a percentage



Note: The bar chart shows the contribution to percentage change in GDP in percentage points for GDP components. For the period 2019-2020, the diagram shows NIER's assessment. The assessment of public consumption in 2020 is based on the assumption that public consumption will increase in line with the demographic need. The government makes a different, more cautious, assessment of public consumption in VP19 (VP19, p. 37).
Source: NIER (2019a).

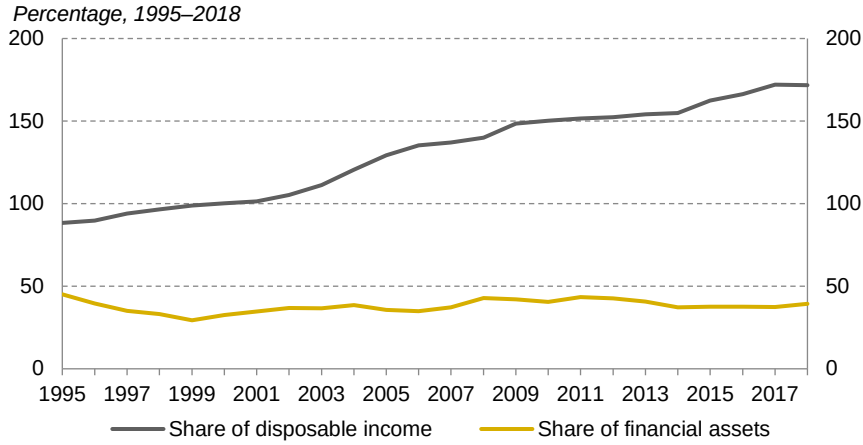
For several years now, several analysts have argued that household debt is a macroeconomic risk in Sweden.[8] The Swedish households' debt liabilities have increased for a long time and amounted to approximately 172 per cent of disposable income (Figure 1.9) in 2018. This is a historically very high level. Household debt in relation to financial assets, on the other hand, has remained at a stable level throughout the 21st century; households have had high savings and the stock market has risen sharply during this period. The link between indebtedness and the sharply rising housing prices has been the focus of the debate. Following a downturn that began in the autumn of 2017, housing prices stabilised during the autumn of 2018 (Figure 1.10).
However, Swedish household debt has continued to rise faster than household income, albeit at a slower pace. This development is

[8] See Sveriges riksbank (2018a), European Commission (2018) and OECD (2019b).

expected to continue in the coming years as housing is traded at today's high price level. The effect on household consumption of the housing price decline in 2017–2018 has probably been limited.

Some analysts argue that a larger housing price fall may lead to noticeable negative effects on household consumption, housing investments and for the financial sector. However, it is debatable whether housing prices are really unreasonably high and whether household indebtedness is greater than its debt repayment capacity.[9] According to available studies, the decline in household consumption that has been observed in other countries following a fall in housing prices has been due to the fact that households have increased mortgage lending on their homes and used the loans for consumption. Therefore, this loan-financed "over-consumption" has led to reduced demand, rather than high indebtedness as such. Households that did not increase their lending did not reduce their consumption.[10] By comparison, Sweden has a very high level of household savings. The Council considers that concerns about household indebtedness and macroeconomic risks seem excessive. The financial risks for households and banks are, according to Finansinspektionen, small.[11]

Figure 1.9 Household mortgage debt

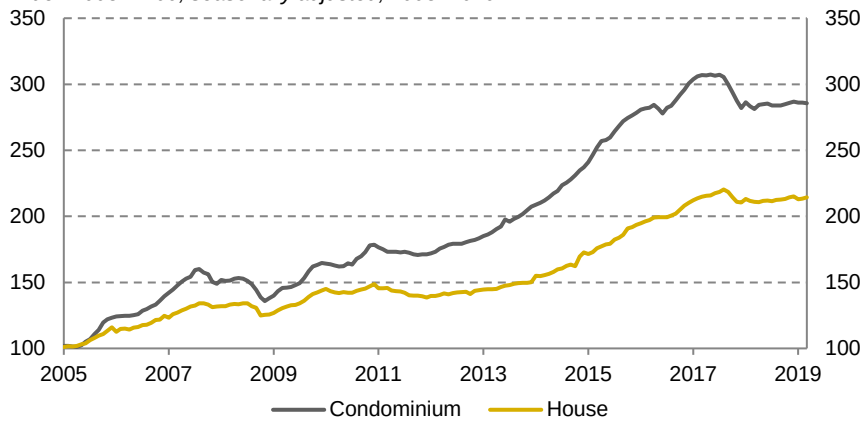


Note: Only mortgage liabilities are reported in the diagram, as they are most relevant in the current discussion.
Source: SCB and our own calculations.

[9] Sørensen (2013) and Flam (2016).
[10] Svensson (2019).
[11] Finansinspektionen (2017, 2018).

Figure 1.10 Prices of flats and houses

Index 2005 = 100, seasonally adjusted, 2005–2019



Source: Valueguard (April 2019) and our own calculations.

1.2.2 Differences in forecasts

In autumn 2018, there were only minor differences in the outlooks of the Government, NIER and the Riksbank for GDP growth, employment development, unemployment and inflation in 2018–2019 (Table 1.2). However, the Government differed somewhat from both NIER and the Riksbank in its assessment of GDP growth and financial savings for 2020. The reason for this is that the Government's calculation for 2020 does not include any (extensive) policy measures for 2019–2020 (see Chapter 3). In March-April 2019 as well, the differences between the forecasts and assessments of the Government, the Riksbank and NIER are small. We note, for example, that the Government and NIER have similar views on how unemployment will develop. There is a difference in the assessment of the size of the output gap. The Government believes that resource utilization is not as strained as the Riksbank and NIER assert. Accordingly, the Government forecasts a higher structural net lending than NIER. The biggest difference is in the assessment of net lending during 2019. The Government's forecast entails a net lending that is approximately SEK 18 billion higher than NIER's. This difference appears to be a result of the Government forecasting weaker public consumption and slightly higher tax revenues in 2019 than NIER does.

Tabell 1.2 Key macroeconomic indicators

Percentage change, unless otherwise specified	BP19 November 2018			VP19 April 2019		
	2018	**2019**	**2020**	**2018**	**2019**	**2020**
GDP[1]	2.6	2.1	1.4	2.4	1.6	1.4
Output-gap[2]	1.4	1.3	0.5	1.2	1.0	0.4
Employment	1.7	0.9	0.5	1.8	1.3	0.2
Unemployment[3]	6.4	6.4	6.4	6.3	6.3	6.4
CPI	2.1	2.0	1.9	2.1	1.7	1.5
Gov. Net lending[4]	1.0	1.2	2.0	0.7	0.6	0.7
Structural net lending[2]	0.4	0.8	1.8	0.1	0.2	0.5
Gross debt[4]	38.2	34.6	31.6	38.8	34.5	32.8
	NIER October 2018			**NIER** March 2019		
	2018	**2019**	**2020**	**2018**	**2019**	**2020**
GDP[1]	2.5	1.9	1.7	2.4	1.5	1.4
Output-gap[2]	1.5	1.3	0.9	1.6	1.2	0.7
Employment	1.7	0.9	0.5	1.8	1.1	0.5
Unemployment[3]	6.3	6.2	6.2	6.3	6.3	6.4
CPI	2.1	2.0	2.0	2.1	1.7	1.6
Gov. Net lending[4]	0.7	0.7	0.8	0.7	0.2	0.3
Structural net lending[2]	0.2	0.1	0.5	-0.1	-0.1	0.0
Gross debt[4]	37.2	35.1	34.4	38.9	34.6	34.4
	Riksbank October 2018			**Riksbank** April 2019		
	2018	**2019**	**2020**	**2018**	**2019**	**2020**
GDP[1]	2.4	1.9	1.8	2.4	1.7	1.7
Output-gap[2]	1.5	1.3	1.1	1.3	1.1	1.0
Employment	1.7	0.8	0.5	1.8	1.0	0.5
Unemployment[3]	6.3	6.4	6.5	6.3	6.4	6.5
CPI	2.2	2.1	1.9	2.1	1.8	1.8
Gov. Net lending[4]	0.9	0.9	0.7	0.9	0.6	0.5

Note: [1] Fixed prices, calendar adjusted values. [2] Percentage of potential GDP. [3] Percentage of labour force, 15–74 years. [4] Percentage of GDP. The Riksbank does not report structural net lending or gross debt in their forecasts. The Riksbank reports a financial saving in 2018 which is higher than what VP19 and NIER do. This is because the Riksbank includes EDP statistics published by SCB at the end of March 2019.
Sources: Riksbank (2018b, 2019b), NIER (2018a, 2019a), BP19 and VP19.

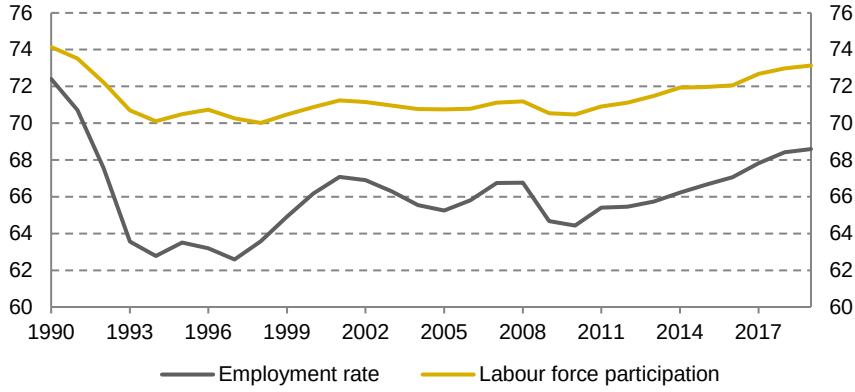
1.2.3 The labour market

The Swedish labour market has been very strong for a couple of years. The employment rate is high, both in a historical and international perspective (Figure 1.11, panel a). Together with Estonia, Sweden has the highest employment rate in the EU.

Figure 1.11 A strong labour market

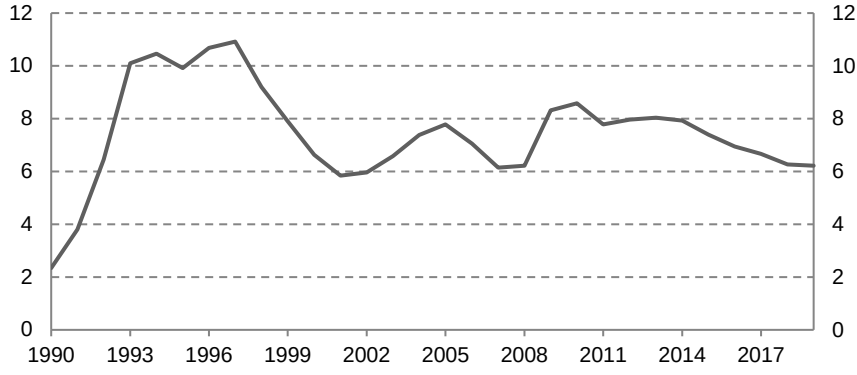
a. Employment rate and labour force participation

Percentage of the population, 15–74 years, 1990-2019



b. Unemployment

Percentage of labour force, 15–74 years, 1990-2019



Source: SCB (AKU).

The employment rate has increased continuously since the financial crisis 2008–2009 and continued to rise in 2018, albeit at a slightly slower pace. The high level of employment growth is mainly due to the favourable economic situation in recent years. Demand for labour has been high both in the public sector and in the business sector.

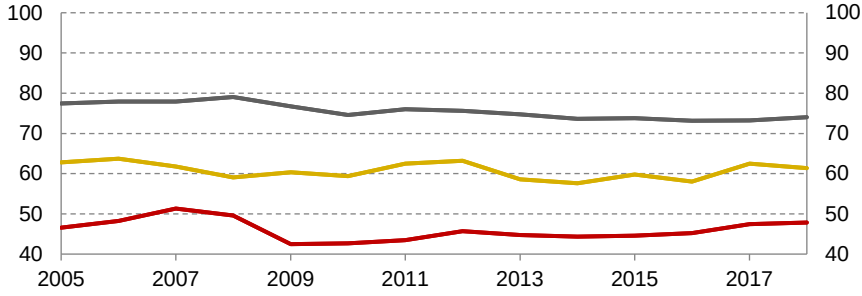
Labour force participation usually rises in periods of economic growth as more people enter the labour market. But the upswing in recent years is also because foreign-born and older people participated in the labour force to a greater extent than before, as a result of political reforms. As labour force participation has steadily increased, the increase in employment in recent years has not resulted in a corresponding reduction in unemployment. The fact that labour force participation is increasing is positive, as it means that more people are available for the labour market. This improves the prospects for the long-term level of employment to rise. In 2018, employment and labour force participation grew at approximately the same rate, mainly due to the influx of foreign-born persons into the labour market. Overall, this meant that unemployment remained at just over 6 per cent in 2018 (Figure 1.11 panel b). Unemployment has fallen to levels that prevailed before the financial crisis and is now below what is considered to be its equilibrium level.[12] During the fourth quarter of 2018, the unemployment rate was 6.2 per cent: among foreign-born persons, unemployment was 15.3 per cent and among persons born in Sweden, unemployment was 3.6 per cent, which is the lowest level measured since 2005 when LFS began to produce labour market statistics divided into those born in Sweden and those born abroad.

While Sweden has the highest employment rate in the EU, there are major differences between different groups in the Swedish labour market. It is hardest for individuals without upper secondary education and individuals born outside of Europe to enter the labour market. (Figure 1.12, panel a). The employment rate among persons born in Sweden in the age group 25–54 with upper secondary education is over 90 per cent. The corresponding figure for persons born outside Europe is approximately 20 percentage points lower (Figure 1.12, panel c).

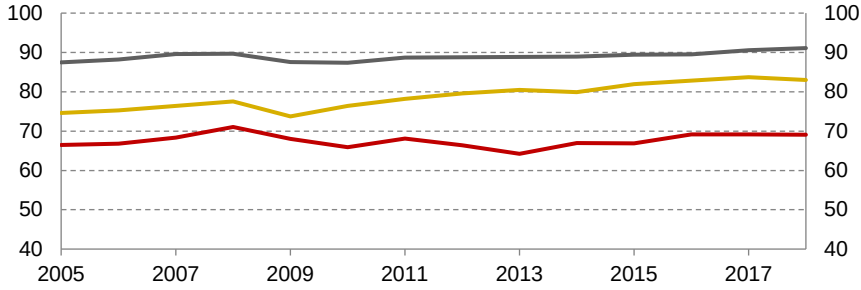
[12] NIER, the Government and OECD all come to this conclusion, although the size of the unemployment gap, i.e. the deviation of unemployment from its equilibrium level, varies in their assessments. The Government believes, according to VP19, that the equilibrium unemployment is 6.4 per cent and the forecast for 2019 is 0.1 percentage points lower. In The Swedish Economy, March 2019, NIER (NIER, 2019a) estimates that the equilibrium unemployment is 6.8 per cent and that actual unemployment is 6.3 per cent, i.e., 0.5 per cent below equilibrium The OECD (2018a), estimates that the actual unemployment is 0.78 percentage points lower than NAIRU. The EU Commission concludes the opposite, i.e. that unemployment is above its equilibrium level (NAWRU) this year (estimated at 6.2 per cent and 5.6 per cent, respectively). See NIER ´(2019), VP19 and OECD (2018a) and the European Commission (2018b). For a discussion about various terms and methods to estimate equilibrium unemployment, see Swedish Fiscal Policy 2017 Chapter 2.

Figure 1.12 Employment rate according to origin and education in the core labour force aged 25–54, 2005–2018

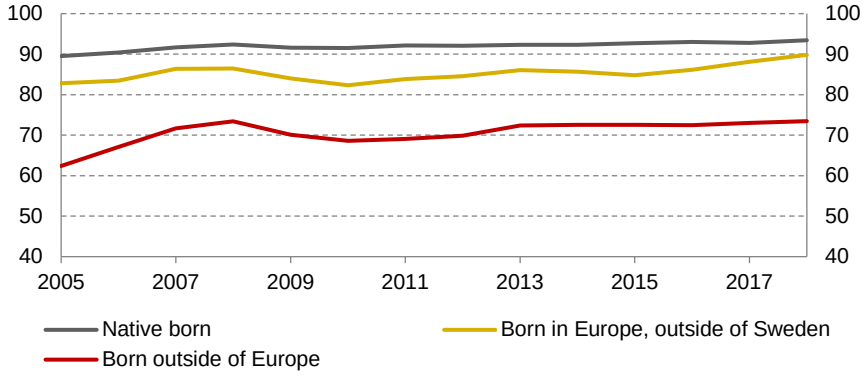
a. Primary and lower secondary education



b. Upper secondary education



c. Post-secondary education



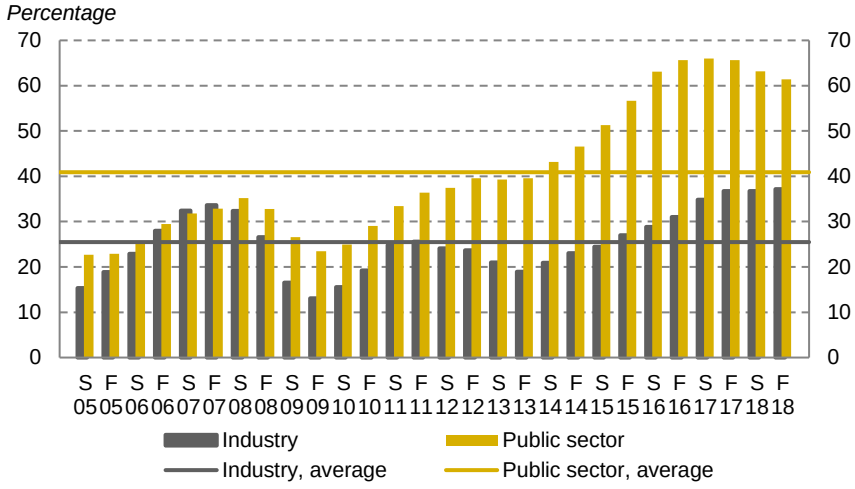
Note: Percentage of labour force aged 25–54.
Source: SCB (AKU).

It is also problematic that the employment rate in the latter group has remained virtually unchanged over the past ten years and does not

show any tendency to rise. The difference between persons born in Sweden and persons born overseas is even greater for those with the lowest qualifications. Almost half of those born abroad with no more than pre-upper secondary education were employed in 2017, while almost three-quarters of the persons born in Sweden with the same educational level were employed.

The favourable economic development and high demand for labour force have contributed to a major shortage of labour. The situation is made more difficult by the fact that an increasing proportion of unemployed lack skills in demand. The lack of labour has contributed to the fact that it takes longer to recruit or that employers reduce their requirements in relation to those who are hired. An increasing proportion of recruitments have in recent years also been made from other workplaces, i.e., among people who already have a job.

Figure 1.13 Shortage of labour



Note: Percentage of employers in the respective sector stating that they have experienced a shortage of labour in connection with recruitments during the last six months in Public Employment Service's interview survey. Seasonally adjusted data, trend values. S in the chart stands for spring and F for fall.
Source: Public Employment Service (2018).

The shortages measured in the Swedish Public Employment Service's interview surveys are historically very high both in the public sector and in the business sector (Figure 1.13).[13] In the public sector, the shortage figures have increased since 2010, and just over 60 per cent

[13] Swedish Public Employment Service (2018).

of public employers state that they have a labour shortage. The county councils have had a major labour shortage for a long time, and since 2010, the shortage in the municipal sector has increased at a very rapid pace. The shortage figures in the public sector have fallen slightly since the middle of 2017, but are still well above previous cyclical peaks. The shortage of labour in the public sector is not only of a cyclical nature, but above all structural. The labour shortage in the public sector is expected to become even more difficult in the future as a result of demographic developments. The unchanged welfare commitment places great demands on municipalities, county councils and regional authorities, and means that demand for labour in the public sector will increase sharply in coming years. This will entail increased pressure on public finances.

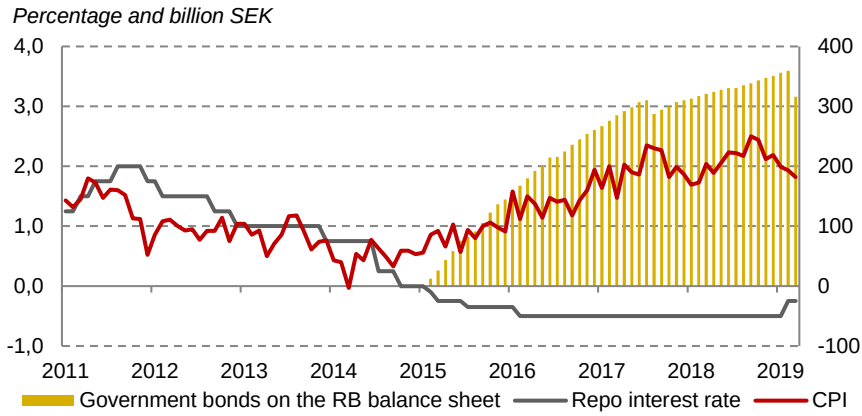
Shortage of labour with the required skills has also been widespread in large parts of the business sector in recent years, hampering employment growth. Shortage figures remain considerably higher than normal, even though they have decreased somewhat recently. The economy is now entering a more quiet phase and the demand for labour will increase more slowly in the future and, as a result, a gradual mitigation of cyclically-based labour shortages is expected.

1.3 Inflation and monetary policy

The Riksbank's task is to keep inflation close to the target of 2 per cent while striving to stabilise production and employment around long-term sustainable development paths. Against the background of weak global growth, for a considerable time the Riksbank has conducted a very expansionary monetary policy to stimulate demand and raise inflation to the target level. The base rate has been negative since February 2015 and the Riksbank has also bought government bonds largely with the aim of raising inflation in the economy. Inflation has been around the Riksbank's inflation target of 2 per cent since the beginning of 2017. This is explained mainly by rapidly rising energy prices, especially during last year when inflation was above 2 per cent for some time (Figure 1.14). However, the inflation outcomes of recent months indicate that inflationary pressure is a bit weaker than what several analysts expected. Together with lower inflation globally, this indicates that inflation will be somewhat lower in the next few years. One- and two-year ahead inflation expectations have, like

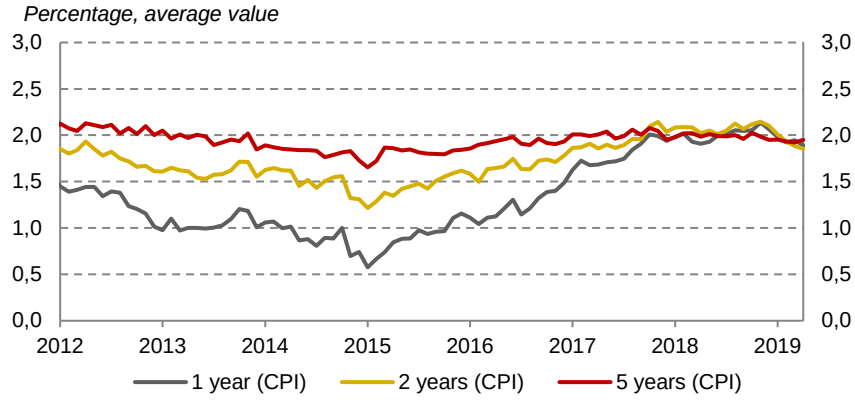
inflation, fallen slightly (Figure 1.15). However, long-term inflation expectations have not been significantly affected. Five years ahead, the expected inflation measured with CPI is 2.0 per cent.

Figure 1.14 Inflation, repo interest rate and government bonds on the Riksbank's balance sheet



Note: CPI, monthly values.
Source: Riksbank (2019b).

Figure 1.15 Inflation expectations in the money market



Source: Riksbank (2019b).

The Riksbank's expansive monetary policy has contributed to the economic recovery and initial rise in inflation. For some time, inflation, as noted above, has been close to the target and the Riksbank assesses – like the Government and NIER – that resource utilization is above normal (see Table 1.2 and Figure 1.6). The Riksbank raised the repo

rate to -0.25 per cent in December 2018, which has raised interest rates on government bonds with short maturities. Interest rates on government bonds with longer maturities, on the other hand, have fallen in line with developments in many parts of the world.

In April, the Riksbank decided to maintain the repo rate unchanged at -0.25 per cent. At the same time, the Riksbank indicated that the next increase in the repo rate will be made towards the end of the year or at the beginning of next year. In this case, an interest rate increase would be made during a cyclical slowdown, i.e., it would be procyclical. The Riksbank also decided to continue buying government bonds.

1.4 Assessment and recommendations

The global economic expansion has passed its peak. In 2019, a slowdown in the global growth rate is expected. The risk of a weaker development has increased in the past six months, while the prospects for positive surprises have deteriorated. Sweden is in a growth phase, but the cycle has peaked, and the economy is now in a slowdown phase. The need for stabilisation policy measures is currently limited, but the scope for stabilisation policy-driven monetary policy measures is very limited. Should Sweden suffer from a serious economic downturn, the fiscal policy's automatic stabilisers may not suffice to stabilise resource utilization. The Government should therefore be prepared to take stabilisation policy measures.

The Swedish labour market has been very strong for a couple of years. There is a major shortage of labour in the business sector and, above all, in the public sector, where shortage figures are at a historically high level. The employment rate is high, both in a historical and international context. Together with Estonia, Sweden has the highest employment rate in the EU. While Sweden has the highest employment rate in the EU, the Swedish labour market is characterised by large differences between different groups. Major problems in the Swedish labour market are the lack of labour with the right skills and the large differences in employment and unemployment rates between people born in Sweden and people born outside of Europe. The Council welcomes the Government's measures to reduce these problems, but, as before, considers them to be insufficient. There is still a need for regular simple jobs.

2 GDP per capita

It is sometimes alleged that Sweden is losing its ranking in international prosperity comparisons. In this chapter we want to describe our view of how economic prosperity in Sweden has developed over time and compared with other countries. Sweden's economic prosperity remains higher than the average in OECD countries and considerably higher than the average in EU countries. In recent years, however, Sweden's level has fallen somewhat in relation to the OECD average, but not in relation to comparable EU countries. If it is indeed the case that Sweden has lagged behind other comparable countries, the causes should be analysed, and measures should be considered.

2.1 GDP per capita as a measure of prosperity

Gross domestic product (GDP) is used to measure the overall financial result - and the total income generated within a country for one year.[1] The total production can increase either by using existing production resources more efficiently, i.e. improving productivity, or by increasing the amount of resources used. The single most important production resource is labour, which means, among others, that GDP tends to rise with population growth. However, a larger population also means that income must be shared by more people. In order to achieve a meaningful measure of economic prosperity, GDP is therefore usually related to the size of the population. GDP per capita is the standard measure of economic prosperity in a country.

The measure has been criticised for a long time.[2] GDP does not capture the social or environmental aspects of a society. In a broader discussion of prosperity, it therefore needs to be supplemented with, for example, measures of physical and mental health, climate impact, income distribution, the state of the labour market, etc..[3] Although criticism is largely justified, this does not mean that GDP per capita is

[1] GDP measures the measures the value of everything that is produced in Sweden and includes income accruing to residents outside the country. Gross domestic income is used to measure income accruing to persons resident in the country. (GDI).
[2] See, e.g., SOU 2015:56 Får vi det bättre? Om mått på livskvalitet, or Stiglitz (2010).
[3] An example of a broader measure is the Human Development index (HDI) used by the UN, which shows a summary measure of the dimensions life expectancy, education and material standard of living. Even when using this type of measure, Sweden does well compared with other countries.

irrelevant. GDP measures the material standard, which is probably positively correlated with other aspects of prosperity.

2.2 Developments in 1970–2017

Sweden's GDP per capita grew on average by 2.1 per cent per year during the period 1950–2017. However, the differences between individual years and periods are significant. During the 1960s, the annual growth rate was 3.6 per cent while during the 2000s it was 1.4 per cent (Table 2.1). The table shows that it is the high growth of the 1950s and 1960s, when Europe recovered from the World War II and there was a strong demand for Swedish export goods, which deviates in a longer perspective.

Table 2.1 GDP per capita-growth in various decades

Period	Average	Accumulated
1950s	2.6	23.1
1960s	3.6	35.6
1970s	2.1	20.8
1980s	2.0	19.9
1990s	1.4	13.6
2000s	1.4	14.8
2010s[1]	1.6	14.8

Note: Average annual growth rate and accumulated during the respective decade. GDP is calculated based on fixed prices, reference year 2017. [1] The final year for the period is 2017.
Source: SCB and our own calculations.

However, comparisons are very sensitive to the choice of time periods. Both the 1990s and the 2000s showed weak growth rates on average, but parts of these decades nevertheless had high growth rates. During the years 1994–2007 for example, i.e., between the Swedish 1990s crisis and the global financial crisis 2007–2008, average GDP per capita growth was just over 3 per cent per year. This period was characterized by both recovery after the crisis and by comprehensive structural reforms.[4] During the recovery and expansion phase after the latest financial crisis, 2010–2017, GDP per capita grew by just over 1.5 per cent a year on average. However, there were large differences between the two periods. The 1990s crisis was a domestic crisis and the recovery took place in a relatively strong global economy with the help of strong export demand, while the recovery after the financial

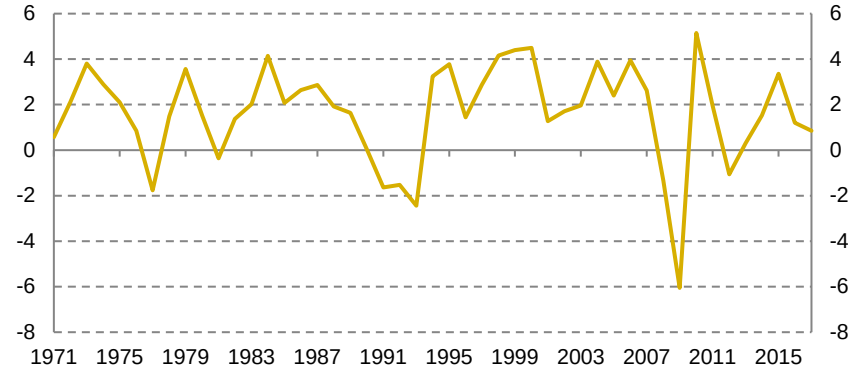
[4] See, for example, Calmfors (2013) and the opinion of the Committee on Surplus Target (SOU2016:67).

crisis in 2008–2009 took place in a considerably weaker international economy.

Figures 2.1 and 2.2 show that the crisis of the 1990s and the financial crisis affected development of GDP per capita. Growth in some of the years after both crises reached around the same levels as in the 1970s and 1980s (Figure 2.1). The development of GDP per capita with logarithmic values yields a picture of a roughly constant growth rate from 1970 up to the financial crisis in 2008 – with a break in the early 1990s (Figure 2.2). Since then, growth has been weaker.

Figure 2.1 GDP per capita-growth

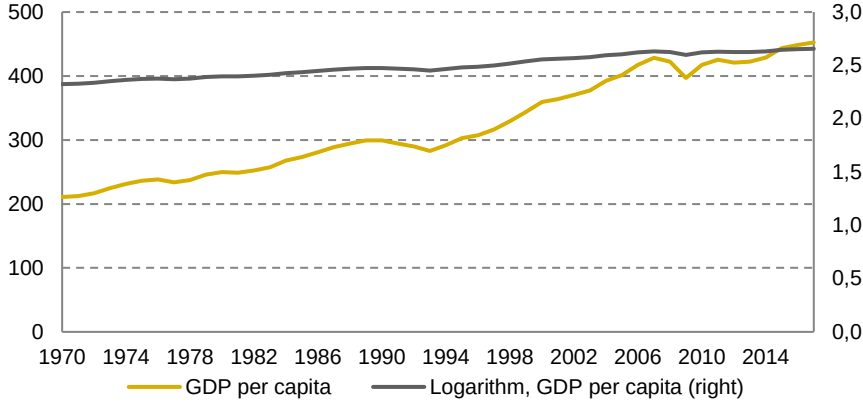
Rate of change GDP per capita, fixed prices, percent, 1971–2017



Source: SCB and our own calculations. GDP per capita is calculated based on total population and fixed prices with reference year 2017.

Figure 2.2 GDP per capita

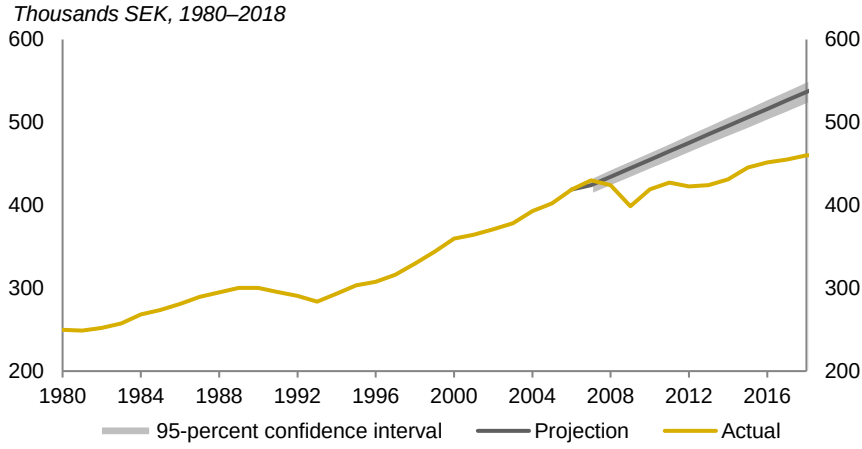
GDP per capita, fixed prices, thousands SEK, 1970–2017



Source: SCB and our own calculations. GDP per capita is calculated based on total population and fixed prices with reference year 2017.

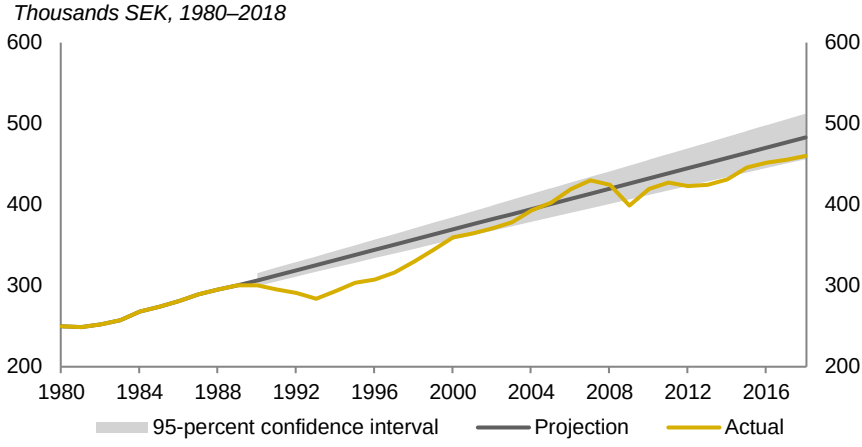
To illustrate how the choice of the comparative period can affect the assessments, we here make two hypothetical projections. The first is based on the growth of 1993–2006 (Figure 2.3), and the second is based on the more restrained growth of the 1980s (Figure 2.4). The yellow lines show the actual development and the dark grey lines show the projections.

Figure 2.3 GDP per capita based on growth 1993–2006



Source: SCB and our own calculations. GDP per capita is calculated based on total population and fixed prices with reference year 2017.

Figure 2.4 GDP per capita based on growth in the 1980s



Source: SCB and our own calculations. GDP per capita is calculated based on total population and fixed prices with reference year 2017.

The first example shows that if growth had continued at the same pace as in the crisis year of 1993 until the boom year of 2006, GDP per

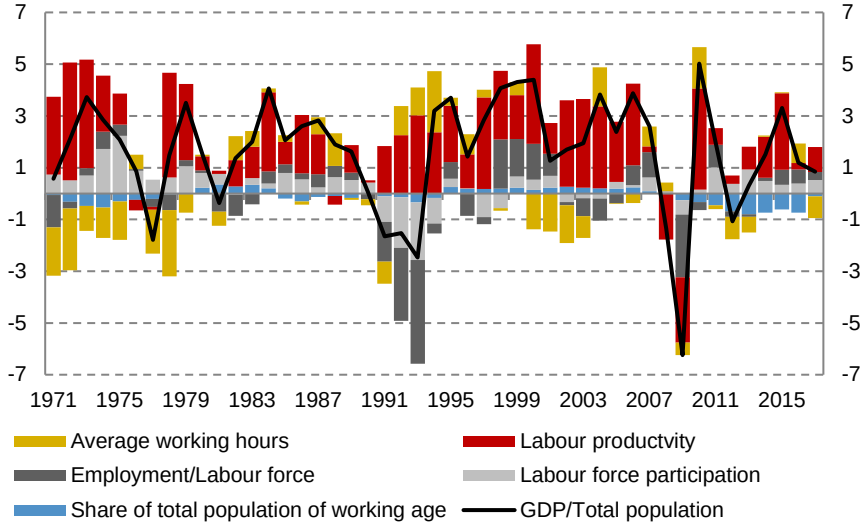
capita today would have been significantly higher, namely 16 per cent higher, or SEK 80,000 per person. The second example shows that today's GDP level is within the interval that could be expected based on growth in the 1980s. The two cases illustrated here lead to opposite conclusions: the Swedish economy appears to have underperformed after the financial crisis if the favourable growth in the 1990s is used as a reference point, but based on the development in the 1980s, growth appears to be comparatively good.

2.3 Decomposition 1970–2017

In order to better understand what has influenced the development of GDP per capita, we have decomposed the growth figures into a number of variables: employed persons as a proportion of the labour force, average working hours, labour force participation, proportion of the population who are of working-age and labour productivity.

Figure 2.5 Decomposition of GDP-development per capita

Contribution to GDP per capita-growth, 1970–2017



Sources: SCB, OECD and our own calculations.

The contribution from each variable to the development in GDP per capita is shown in Figure 2.5. The black line shows the growth in GDP per capita, and the bars show the contribution from each variable. The average contributions for each decade are shown in Table 2.2.

During the 1970s, rising labour force participation and strong productivity growth contributed positively to growth. Growth was, however, held back by falling average working hours and a reduced proportion of people of working age. In the 1980s, conditions were different: productivity growth declined and growth in per capita GDP was to a greater extent borne by rising average working hours and an increased proportion of the population who were of working age.

Table 2.2 Average contributions per decade

Period	GDP/ capita	Working age/ population	Labour force participation.	Employment/ labour force	Labour productivity	Average working hours
1970s[1]	1.7	-0.2	1.0	-0.1	2.4	-1.4
1980s	2.0	0.1	0.4	0.0	1.1	0.3
1990s	1.4	0.0	-0.6	-0.6	2.1	0.5
2000s	1.4	0.1	0.1	0.0	1.6	-0.3
2010s[2]	1.6	-0.6	0.5	0.2	1.4	0.0
1970–2017	1.6	-0.1	0.2	-0.1	1.7	-0.2

Note: Annual percentage growth in GDP per capita. Contributions in percentage points in other variables.
[1] The averages reported for the 1970s relate to the period 1971–1979, since the change is calculated based on data from 1970 as a result of limitation of underlying variables for the decomposition. Since 1970 was a strong growth year, the average is lower than reported in Table 2.1.
[2] Averages reported for the 2010s refer to 2010–2017.
Sources: SCB, OECD and our own calculations.

During the 1990s crisis, both the employment rate and labour force participation fell sharply. Meanwhile, average working hours increased and counteracted the decline in GDP per capita. The relatively high increase in labour productivity is probably an effect of the reduced labour force participation and the employment rate; companies rationalised through redundancies. When the labour market subsequently recovered in the late 1990s and the beginning of the 2000s, the average working hours decreased. During the most recent financial crisis, employment and labour force participation fell again, but not as much as in the 1990s. However, since average working hours and labour productivity also decreased, the decline in GDP per capita was significant. The differences can probably be explained by the very different origins of the two crises.[5]

During the recovery period after the 1990s crisis, the proportion of the population of working age increased and contributed positively to growth. However, the proportion of the population of working age

[5] Fiscal Policy Council (2010) and opinion of the Committee on Surplus Target (SOU 2016:67).

has fallen since around 2011 and is expected to continue to fall according to SCB's population forecast. During the 2010s, this demographic effect reduced growth by an average of 0.6 percentage points per year.

During the financial crisis, the Swedish export sector was hit hard by the economic downturn in the world economy – exports fell by 15 per cent between 2008 and 2009. As the export sector is relatively capital-intensive, the effect on employment and labour force participation was limited, while productivity instead decreased. As world trade recovered, Sweden's GDP grew rapidly, and the effects of the crisis were limited. As can be seen, variations in GDP per capita growth do not depend solely on the development of labour productivity, but on several other factors that, on the whole, can play a major role at times. In addition, there is a mutual dependence between labour productivity and, for example, changes in employment.

2.4 Multifactor productivity

However, labour productivity is the factor that produces the greatest contribution to GDP per capita, and which is most relevant to investigate from a welfare point of view. Labour productivity has increased by an average of 1.7 percentage points per year since 1970 (Table 2.2). Labour productivity appears to be the single most important variable to explain the development of GDP per capita.

The productivity growth of the labour force has decreased both in Sweden and internationally since the mid-2000s. [6] The development of labour productivity depends, among others, on the quality of the workforce, the amount and quality of available capital and how efficiently the capital is used in production. Another productivity measure, multifactor productivity (MFP) is often used to try to capture all of these aspects. The measure is produced by treating value added as a result of capital input, labour input and a residual item, MFP. [7] According to calculations from SCB, MFP contributed about half of the growth in business value added per hour worked between 1994 and 2005 (Figure 2.6). Most of this productivity improvement took place in the goods-producing industries, especially high-tech industries

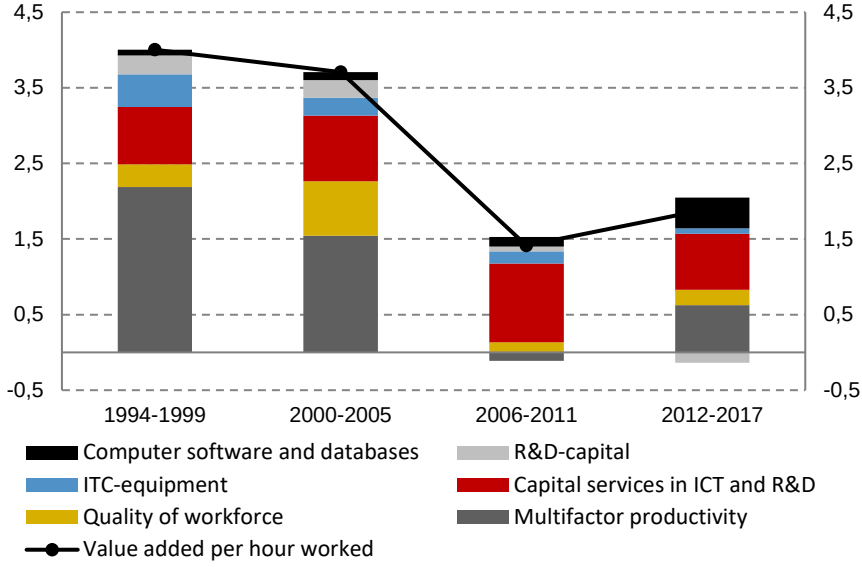
[6] Fiscal Policy Council (2018) for a discussion.
[7] SCB has produced such calculations as a part of the national accounts since 2012. See SCB (2017) for a review of the method and results.

such as the automotive and electronics industries. Another factor that contributed to the favourable growth in labour productivity during the 1990s was that the crisis led to a large increase in unemployment, which in itself leads to increased labour productivity.

In the period 2006–2011 however, the contribution from MFP was slightly negative, mainly due to the impact of the financial crisis. Subsequently, the MFP's contribution to the increase in value added has been moderate compared to before the financial crisis; during the period 2012–2017, MFP accounted for about one third of the business sector's total value-added growth. Most of the contribution during the period came, in contrast to earlier, from service industries.

Figure 2.6 Increase in value added per hour worked - contribution of different factors

Percentage change and contribution in percentage points



Note: Data is only available from 1994.
Source: SCB and our own calculations.

Changes in the quality of the labour force, which primarily reflects its age composition and level of education, contributed mainly to the growth in value added during the first half of the 2000s. The contribution has subsequently decreased by more than two-thirds. The rapid technological development in the 1990s led to large contributions to the growth from information and communication technology (ICT) and R&D-capital. The contribution from ICT slowed

down after the turn of the millennium and since then has continued to be weak.[8] The contribution of R&D capital has been negative during the period 2012–2017. The use of computer programs and databases has also increased sharply and accounted for one third of capital's contribution to growth during the same period.

2.5 International comparison

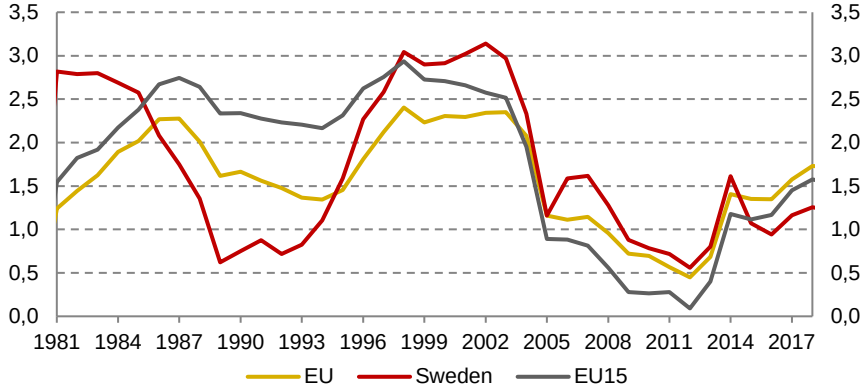
The relatively weak development of Sweden's GDP per capita since the financial crisis is not unique. Sweden suffered less from the financial crisis and had stronger per capita growth than the EU average from the mid-1990s to 2014 (Figure 2.7). Since then, Sweden's GDP per capita growth has been below the EU average, probably partly as a consequence of the recovery in the euro countries after the crisis years. The IMF forecasts that growth in Sweden will remain weaker than in comparable countries over the next few years. A similar picture is also given in Figure 2.8, which shows Sweden's growth in GDP per capita in relation to the OECD countries according to the OECD's forecast. There are two distinctive periods when Sweden deviated from the OECD average: the period before the 1990s crisis when GDP per capita growth was lower than the OECD average, and the years after the 1990s crisis when the situation was the reverse.

The OECD group includes several countries that are considered emerging economies. If, instead, a comparison is made with the EU-15 (member states before the 2004 enlargement), the difference is smaller, although it does to some extent remain. Figure 2.9 shows the relationship between the respective countries' GDP per capita level in 1995 and the average growth rate thereafter. The relationship is negative, indicating that the countries with comparatively low GDP levels in 1995 have grown faster. The difference in material prosperity between the countries of the EU has thus decreased. Sweden's material prosperity has increased neither faster nor slower than can be expected in this context. The relatively weak Swedish growth in GDP per capita in recent years compared to the EU average may thus be a natural part of this process.

[8] So-called ICT equipment. This includes computer equipment (excl. computer programmes), equipment for sending and receiving audio, data and images; equipment for communication in fixed and wireless networks; television and professional video cameras and alarms.

Figure 2.7 Growth in GDP per capita in Sweden and as EU-average

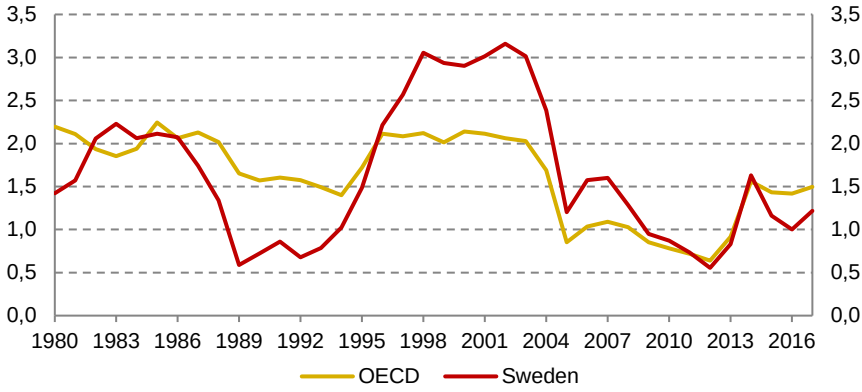
PPP-adjusted, fixed prices, percentage change, moving 9-year average, 1981–2018



Note: GDP is adjusted for purchasing power and stated in fixed prices.
Source: IMF (2019c) and our own calculations.

Figure 2.8 GDP per capita growth in Sweden and OECD-countries

PPP-adjusted, fixed prices, percentage change, moving 9-year average, 1980–2017

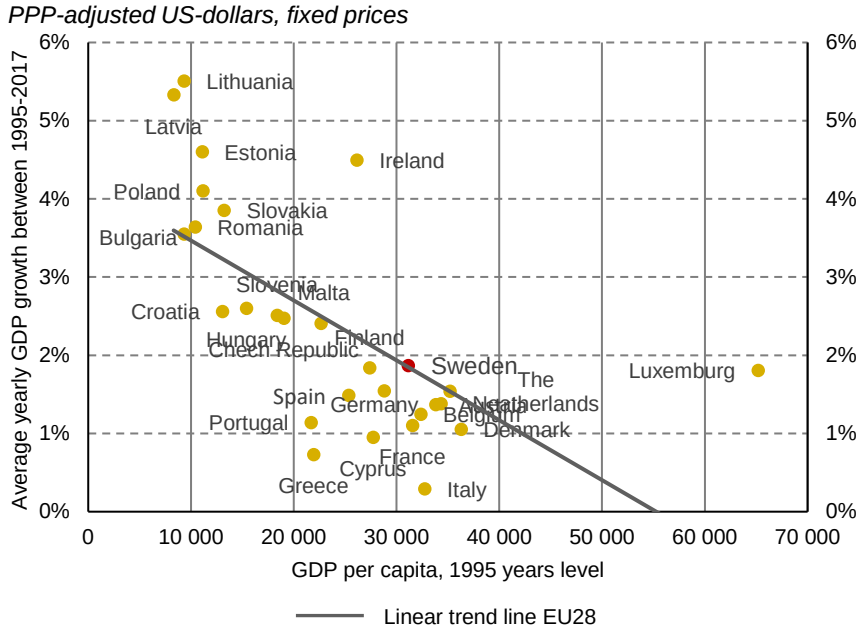


Note: GDP is adjusted for purchasing power and stated in fixed prices.
Source: OECD (2019c) and our own calculations.

In a comparison with a narrower selection of countries (France, Germany, Italy and the UK), the development does not seem very worrying either (Figure 2.10). Sweden's GDP per capita growth is roughly in line with developments in the largest EU countries. The exception is Germany, which has performed better ever since the financial crisis and will continue to do so according to the IMF's forecast. Germany's GDP per capita has grown on average 0.6 per-

centage points faster per year than Sweden during the period 2008–2017 (Figure 2.10).

Figure 2.9 GDP per capita-level 1995 and growth 1995–2017 in the EU-28



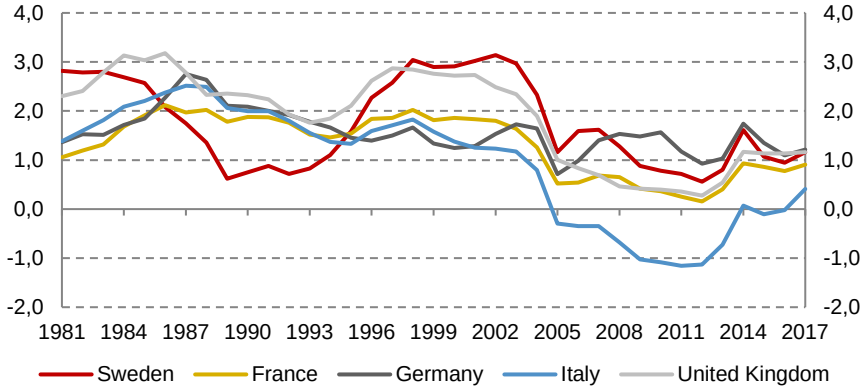
Note: GDP is adjusted for purchasing power and stated in fixed prices.
Source: IMF (2018b) and our own calculations.

In order to compare Sweden's development with Germany's in more detail, we have decomposed the German growth per capita in the same way as in section 2.3 with respect to the Swedish development (Table 2.3). Labour productivity, which was higher in Germany since 2008, has contributed 0.2 percentage points to the difference in growth rate. The variable that accounts for the biggest difference is the employment rate, which grew 0.6 percentage points faster per year in Germany compared to Sweden. However, we note that Sweden has a higher employment rate than Germany. The employment rate in 2018 was 68.5 per cent in Sweden and 59.1 per cent in Germany.[9]

[9] Source: OECD (2019a). Proportion of the population, aged 15–74.

Figure 2.10 Growth in GDP per capita in Sweden and selected EU-countries

PPP-adjusted, fixed prices, percentage change, moving 9-year average, 1981-2017



Note: GDP is adjusted for purchasing power and stated in fixed prices.
Source: IMF (2019c) and our own calculations.

Table 2.3 Decomposition of Germany's and Sweden's growth in GDP per capita

	GDP/ capita	Labour produc-tivity	Mean working hours	Employed/ Labour force	Labour force participation	Of working age
Level 2008						
Germany	39,660	56.3	1,584.1	92.5	80.0	60.2
Sweden	42,357	52.7	1,699.7	94.9	84.7	58.8
Growth pace 2008–2017						
Germany	1.2	0.7	-0.4	0.5	0.3	0.0
Sweden	0.6	0.5	0.1	-0.1	0.3	-0.2
Difference	**0.6**	**0.2**	**-0.5**	**0.6**	**0.0**	**0.3**

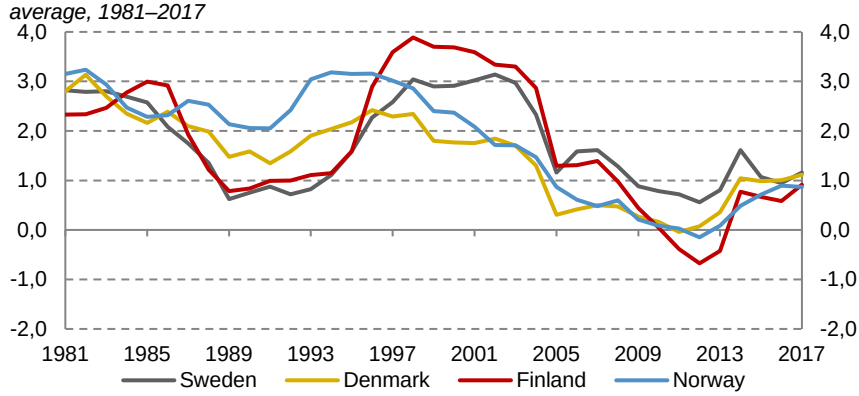
Note: GDP is calendar-adjusted and expressed in purchasing power-adjusted US dollars, fixed prices. Labour market variables relate to the age of 20–64, except for hours worked which relate to the entire economy. Due to rounding, the summation does not necessarily match the individual components.
Sources: Eurostat, OECD, Conference Board and our own calculations.

The proportion of the population who are of working age has remained unchanged in Germany but decreased in Sweden, which contributed 0.3 percentage points per year to the differences in growth. Thus, productivity differences are not the only explanation of why German GDP per capita has grown faster during the period – differences in the labour market and in demographics have also played a role. Sweden still has a higher GDP level per capita than Germany, although the difference has decreased since 2008.

Another relevant comparison group is the Nordic neighbouring countries, whose growth per capita is shown in Figure 2.11. Sweden has experienced higher growth than the other Nordic countries since 2005.

Figure 2.11 Growth in GDP per capita in Sweden and neighbouring countries

PPP-adjusted, fixed prices, percentage change, moving 9-year average, 1981–2017



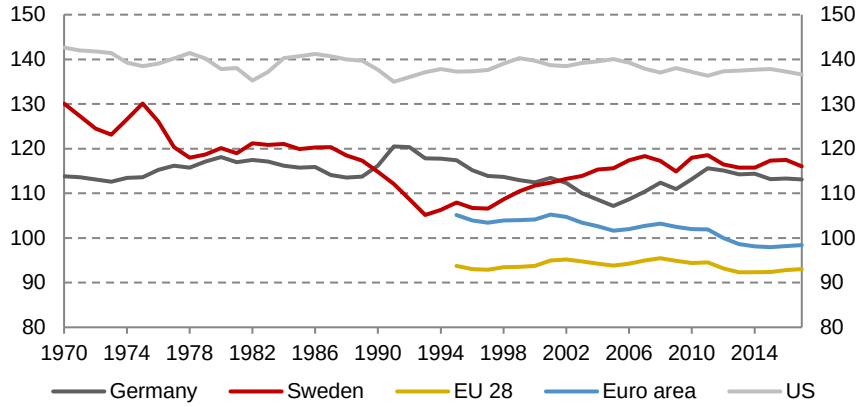
Note: GDP is adjusted for purchasing power and stated in fixed prices.
Source: IMF (2019c) and our own calculations.

The development of prosperity compared to other countries can also be illustrated with levels (Figure 2.12). The diagram shows how the purchasing power-adjusted GDP per capita relates to the OECD average each year.[10] For example, the US had a GDP per capita level which is about 40 percent higher than that in the OECD – the highest among the countries studied. Although Sweden has reduced its distance to the OECD countries, it continues to maintain a level around 15 per cent higher than the average in the group and higher than in Germany. The diagram also illustrates that Sweden has a significantly higher GDP per capita than the average among EU countries.

[10] Purchasing power adjustment means that price differences between countries are taken into account. This is done by calculating a fictitious exchange rate between two currencies based on the purchasing power of the two currencies in each home market.

Figure 2.12 GDP per capita, level in relation to OECD-countries

Index (OECD = 100), 1970-2017



Note: GDP is adjusted for purchasing power and stated in fixed prices. Each country's level is stated in relation to the OECD-average of the respective year.
Source: OECD.

2.6 Assessments and recommendations

In recent years, Sweden has seen a low GDP per capita growth in an international comparison. If this turns out to be a lasting trend, it is a serious problem.

Viewed in a longer time perspective, GDP per capita growth has been approximately constant since 1970, with deviations in the development around the crisis in the early 1990s and the financial crisis in 2008–2009.

Sweden's growth in GDP per capita has been on a par with other comparable countries in a longer perspective. In relation to the OECD countries, Sweden's GDP per capita is currently at about the same level as in the 1980s. In a longer-term perspective, Sweden's per capita growth has not deviated significantly from the growth in the largest economies in the EU or the Nordic neighbours. Germany has had a higher GDP per capita growth since 2008, but the difference in productivity growth is small.

Even though Sweden has done fairly well in an international comparison, one should not be complacent about the poor productivity growth in recent years. It is important to track the development and to take measures that may contribute to improved productivity growth.

3 The budget and the fiscal policy framework

3.1 The Budget Bill for 2019, a transitional budget

During autumn 2018, Sweden was in a unique political position. At the end of September, the Prime Minister lost the mandatory no confidence vote and the Government was dismissed. However, until a new government had taken office, the Prime Minister and ministers retained their positions in the form of a transitional government. The Riksdag Act provides that the budget bill must, in the event of a change of government, be submitted no later than three weeks after the new government has taken office, however, no later than 15 November.[1] As no government was formed in the autumn, it became the task of the transitional government to present a budget bill. It was the first time that the 15 November deadline had to be enforced and the first time that a transitional government submitted a budget bill.

Formally, a transitional government has the same powers as an ordinary government, except the power to announce extra elections, but according to guidelines prepared by the Prime Minister's Office, a transitional government should only decide on ongoing or urgent matters.[2] The guidelines of the Prime Minister's Office can be found in a memorandum (hereinafter referred to as SB-PM) initially drafted in 1990 and updated on a couple of occasions, most recently in 2014. SB-PM provides that "the provisions of the Constitution Act on government formation and on the powers of a transitional government have been designed to be applied in a variety of situations, the majority of which are difficult to predict." It also provides that in practice, without the support of a majority in the Riksdag, a transitional government has limited possibilities to take action and should only decide on ongoing or urgent matters. The memorandum also indicates that the term "ongoing matters" in this context should be interpreted broadly and that the restriction to ongoing matters becomes less rigorous if a transitional government is long-standing. The memo-

[1] The Riksdag Act, Chapter 9 (5).
[2] SB-PM 1990:1 (latest revision July 2014), The powers of a transitional government.

randum is scanty regarding the powers and obligations of a transitional government in the budget process. The memorandum states that:

> In the case of a very lengthy change of government, a transitional government may need to submit a budget bill, and probably also a bill with proposals for amendments to the current year's budget to the Riksdag. Such a bill should ... not contain proposals with a clearly party-political orientation.

According to the memorandum, the powers of the transitional government should be determined primarily in the light of the parliamentary situation. There is therefore no regulation regarding a transitional government's powers and obligations in relation to the budget process, nor is there much informal guidance. No established practice is available, since a similar situation has never occurred previously. However, it follows from the Constitution Act that the most recently adopted budget will continue to apply unless the Riksdag decides on a new budget.

Against this background, the Government decided, upon confirmation by M, C, L, KD and V, to design the budget bill based on the 2018 budget with adjustments according to a number of general principles. The financial plan, which normally describes the Government's proposed economic policy orientation, is largely limited in BP19 to a brief review of the budget policy goals. The following principles were applied in BP19:[3]

1. *Appropriations used for management and investment purposes have been price- and wage-adjusted in the customary manner. Appropriations relating to regulated transfer systems have been adjusted based on changed macroeconomic developments as well as changed volumes (such as number of persons covered).*
2. *Appropriations have been adjusted according to adopted laws and regulations, international agreements, civil-law agreements or EU laws.*
3. *Appropriations have been adjusted on the grounds of the Riksdag's decisions to move purposes and activities between areas of expenditure.*
4. *Appropriations have been adjusted if required to maintain necessary social functions.*

[3] Budget Bill for 2019 (prop. 2018/19:1) volume 1, p. 23–24.

5. *Appropriation levels for all years have been adjusted having regard to the level of estimated fulfilments of the economic commitments in 2019 in order that operations based on an authorisation to place orders for the following year can continue to the same extent in 2019–2021.*
6. *Bills that are politically uncontroversial, and which cannot be implemented during the current financial year, have been included in cases where there is political consensus on the proposals.*

There were also many measures that had been announced in previous bills and that were included in the budget estimates in the Spring Bill of 2018.[4] The announcements consisted largely of planned increases in expenditure, but these measures were removed in BP19 as a result of the budgetary principles applied. The estimated expenditure was thus considerably lower, especially for 2020 and 2021.[5] There were also time-limited expenditures ending in 2018, and the Government extended these to 2019 as well.

As mentioned above, SB-PM states that if a transitional government is long-standing, the significance of the restriction to ongoing or urgent matters is reduced. Therefore, the longer a transitional government is in power, the more freedom it has to make all kinds of decisions. What constitutes a long time in this context is an open question, but the transitional government after the 2018 election considered itself bound by the restriction set out in SB-PM.[6] If government formation had been unsuccessful, an extra general election would have been held in Sweden. The transitional government would then have had an obligation to also submit a Spring Budget Bill to the Riksdag, with guidelines regarding economic policy and budgetary policy.[7] According to the Riksdag Act, such a bill must be submitted no later than 15 April. In our opinion, it would not be reasonable for such a bill to be unaffected by party politics as well.

The only thing that a transitional government is explicitly prohibited from doing is to announce an extra general election.[8] The budget

[4] The announcements were unusually extensive in BP18, see Fiscal Policy Council 2018, Section 2.3.
[5] Changes of previous announcements reduced the appropriations by around SEK 8 billion in 2019 and just over SEK 30 billion in 2020 and 2021, respectively.
[6] SB-PM describes a situation where a transitional government must submit a budget bill as " a very protracted change of government".
[7] An extra general election must take place no later than three months after it was announced, and according to the Swedish Election Authority (Valmyndigheten) it could be held at the beginning of April at the earliest.
[8] Constitution Act, Chapter 3 (11).

process itself, however, includes several clear obligations for the government. If the government considers that there is a deviation from the surplus target, the government must explain how a return to the target will be achieved.[9] Similarly, the government must take measures to avoid exceeding the expenditure ceiling if such a risk is deemed to exist.[10] These rules apply equally to a transitional government as to an ordinary government. A transitional government must also comply with the fiscal policy framework.

Public finances are currently strong, and the Council is of the opinion that they are in line with the budget policy goals. The transition budget also includes a review of the budget policy goals, which the government has a duty to conduct. This year, therefore, no conflict arose between the principles that formed the basis for BP19 and the requirements that follow from the fiscal policy framework. However, if the situation with regard to state finances were different, this may not have been the case. If there had been a risk that the expenditure ceiling may be exceeded or if there had been a clear deviation from the surplus target, the government would have had an obligation to take action. For example, it might have been necessary to reduce expenditure to prevent the expenditure ceiling from being exceeded or to reach the surplus target. Such measures would likely be controversial and probably also have a clear party-political orientation. Nevertheless, they may have been necessary to comply with the fiscal policy framework.

Thus, there is a potential conflict between the budget principles in BP19 and the fiscal policy framework. The guidelines in SB-PM in combination with the six principles presented in the bill simply mean that the government will only adjust the previous year's budget if it is absolutely necessary, and that no proposals with a clear party-political orientation are submitted. However, the requirements of the Budget Act do not take into account whether the country is governed by an ordinary government or by a transitional government. If a contradiction were to arise between the fiscal policy framework and the principles upon which BP19 is based, the statutory rules of the framework apply. Even though there was a broad consensus on the budgetary principles in connection with BP19, there is therefore no

[9] Budget Act (2011:203) Chapter 2 (1a).
[10] Budget Act (2011:203) Chapter 2 (4).

certainty that the principles can form the basis of established practices for how a transitional government should design a budget.

The budget bill for 2019 is therefore not an expression of the government's political will, but a result of the budgetary principles, which were drafted with a broad political consensus. The budget bill (Table 9.1) shows how public finances are affected by proposed and estimated measures since VP18. It shows that public finances in 2019–2021 are expected to be SEK 4, 34 and 34 billion stronger, respectively, than in VP18. The main reason for this is that many expenditure increases announced earlier are not included in the budget. In addition, there are no new proposals in the bill (with some exceptions, mainly the proposal regarding reduced taxes for pensioners). The calculations in BP19 therefore do not give a realistic picture of how the public finances will develop in the future, as is also stated in the bill.

On December 12, the Riksdag voted on the first step in the framework decision-making process, which includes the economic policy orientation, expenditure ceilings, framework for expenditure areas, changes in tax legislation and approval of the income calculation. In the main vote, the transitional government's draft budget was pitched against a joint reservation by Moderaterna and Kristdemokraterna, and the reservation won the vote. This created the peculiar situation where a government that was unable to resign or to announce an extra general election was tasked with implementing a different economic policy than the one advocated by it.

As a result of the Riksdag's framework decision on the budget, the Riksdag adopted three proposals for changes in income taxes that came into force on 1 January 2019: a sixth working tax credit, an increase of the lower threshold for state income tax and reduced income tax for pensioners. The budget decision also entailed changed frameworks for expenditure areas and reduced expenditure ceilings. In addition, the joint reservation also contained announcements regarding ten items, including abolished special payroll tax for the elderly, tax changes to facilitate generational shifts for entrepreneurs, increased ceilings and wider scope of the tax credit for domestic service work (RUT) and abolished aviation tax.[11] The Government was tasked with reverting to the Riksdag with proposals accommodating these ten

[11] Opinion 2018/19:FiU1, reservation 5. The announcement covers a total of ten points.

items in the reservation. According to the announcement, the proposals will come into force on 1 July 2019.[12]

On 18 January 2019, the drawn-out government formation ended and Stefan Löfven was elected prime minister of a coalition government consisting of S and MP. One week earlier, the government parties concluded the so-called the January agreement with C and L, which in turn agreed to support the S-MP government. The agreement includes 73 clauses and the parties "... agree to cooperate on budget matters and on the political issues stated in the agreement."

Accordingly, there is no express hindrance stopping the government, or any of the cooperating parties, from making deals with other parties in areas outside the January agreement. However, since the agreement provides for budgetary cooperation, it seems reasonable that all issues affecting the budget should be covered, even if the issues are within subject areas that are not mentioned in the January agreement. The assumption is that the cooperation will continue throughout the term of office, however the agreement provides that it applies on a year-by-year basis, as long as the parties agree it should continue.[13]

The form of cooperation is similar to the agreement made between S, V and MP after the 2002 election, the so-called 121-point programme. Like the January agreement, this agreement was concluded between the government and two other parties, its content was specified in a number of more or less specific clauses, the intention was that the agreement would be in force throughout the term of office, and not all policy areas were covered.

In relation to the forms of cooperation, there are both similarities and differences between the January agreement and the 121-point programme. The January agreement provides that C and L will participate fully in relation to issues covered by the agreement. Under the 121-point programme, the forms of cooperation were more specific. For example, it provided that each of the cooperating parties would have a coordination office, services in the Government Offices, that the party leaders would have monthly consultations and that the forms of cooperation would be evaluated after two years.

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[12] A measure, abolished tax reduction for trade union fees, which came into force on 1 April 2019.

[13] It is somewhat unclear what this means, but according to one interpretation the cooperation can cease without necessarily technically breaching the agreement.

The preamble of the January agreement provides that "The fiscal framework agreement should be safeguarded", which is probably a reference to the parliamentary Committee on Surplus Target's opinion of autumn 2016. In this respect as well, the 121-point programme was more specific, stating, for example, that the approved expenditure ceiling would remain in place. The January agreement is silent on how the expenditure ceiling will be managed.

The January agreement covers major and central policy areas such as economic policy and tax policy, the labour market, environmental policy, school, healthcare and migration and integration. The level of detail varies. In some cases, there are solid proposals with timetables, for example that the austerity tax should be abolished on 1 January 2020. In other cases, the agreement provides that issues need to be investigated, specifying when such investigations should be initiated or completed. In yet other cases, it specifies when a measure is intended to come into force.

The agreement does not contain any cost estimates of various measures, and many of the items must be specified in more detail before the cost can calculated. It is therefore difficult to assess at present whether the January agreement's measures will fit within the boundaries of the framework.[14] However, since the first clause of the agreement states that the fiscal policy framework must be safeguarded, the Council assumes that measures will only be implemented to the extent that there is no risk of a conflict with the framework.

The Riksdag's decision to adopt M's and KD's joint reservation meant that public finances weakened by SEK 17 billion in 2019 and SEK 35 billion in 2020 in relation to BP19.[15] Structural net lending for 2019, which in the Budget Bill was estimated at 0.8 per cent of GDP, thus dropped to 0.5 per cent of GDP. On 10 April the Government presented VP19 and the Spring Amending Budget for 2019. The bills included measures for 2019 in the order of SEK 4.5 billion, which were fully funded, and some necessary changes in relation to the adopted budget. The overall effect on the public finances of the Government's proposals and announcements amounted to SEK -0.6 billion 2019 and

[14] In its forecast of March 2019, NIER express the view that the reforms of the January agreement can be implemented without exceeding the available budgetary margins expected during the rest of the term of office. However, any additional measures, may need to be fully funded (NIER, 2019a, p. 55).
[15] VP19, table 7.3, p. 115.

SEK 0.7 billion in 2020, i.e., the effect was negligible in the context of the state budget.

According to its instructions, the Council "shall review and assess the goal fulfilment in fiscal policy and in the economic policy proposed by the Government and adopted by the Riksdag…".[16] As a result of the political developments in the autumn, the policy proposed by the Government is not the same as the policy adopted by the Riksdag. It is the Council's task to assess whether economic policy in the budget bill meets the budgetary policy goals, even if the bill was drafted by a transitional government and even if it was voted down in the Riksdag. However, an assessment of the extent to which fiscal policy in BP19 is well balanced in relation to the state of the economy is not called for, since the transitional budget is not designed to be cyclically adjusted. Unlike the budgetary policy goals, cyclical adjustment cannot be linked to legal obligations.

It is also the task of the Council to assess whether the policy adopted by the Riksdag complies with the fiscal policy framework and is cyclically balanced, whether or not the Riksdag's decision is based on a bill. Obviously, it is also the Council's task to assess the Government's economic Spring Bill.

3.2 The Council's role in monitoring the surplus target

The surplus target is formulated so that the public sector's net lending will amount to an average of 1/3 per cent of GDP over an economic cycle, as determined by the Riksdag in autumn 2017.[17] This decision meant reduced the target from 1 to 1/3 per cent of GDP , but did not introduce any change in the definition or design of the target. The surplus target relates to an average over an economic cycle ever since it was introduced at the beginning of the 2000s. The target is defined over an economic cycle because net lending is affected by the economic situation and must be allowed to vary over the economic cycle. A target that is not allowed to vary over the economic cycle would be pro-cyclical and thus be destabilizing for the economy.

[16] Council's instructions, Regulation 2011:446, §5.
[17] Opinion of the Finance Committee 2017/18:FiU1.

However, it is difficult to measure whether a target relating to an average over an economic cycle is met. There is no unambiguous or safe way to determine the economic situation and there is no clear delimitation of the duration of an economic cycle. All ways of determining whether the public finances meet the surplus target therefore contain uncertainties and estimates.

Previously, the government used several indicators to assess the achievement of targets. One indicator was structural net lending, while other indicators included the average of actual savings for different time periods and cyclically adjusted versions of these.[18] The use of many indicators was intended to provide a multifaceted illustration of the target achievement and thus a good basis for an overall assessment. But the diversity of indicators also created problems. The indicators could provide conflicting information and there were no clear principles for how such situations should be handled, or for how the various indicators should be balanced against each other. Instead, it became possible for the government to focus on the indicator that provided the most favourable assessment at any given time. It was also unclear over what time horizon the target should be reviewed, which made it possible to refer to favourable indicator values several years ahead in time. This system was repeatedly criticized by the Council, as well as by NIER and the National Audit Office.

The question of how the surplus target should be reviewed and which indicators should be used was discussed in detail by the parliamentary Surplus Target Committee.[19] Although aware of the flaws associated with structural net lending, the Committee concluded that the surplus target should be assessed on the basis of structural net lending in the current and next year. The Council had previously argued that structural net lending should be used as an indicator and gave its support to the proposal. The new way of assessing target achievement contributed to creating a more direct link between the surplus target and the current economic policy. The Fiscal Policy Council was also given a clearer role in the review of the fiscal policy framework. In its report, (SOU 2016: 67 pp. 264–265) the Committee writes:

[18] The review contained a retrospective ten-year average and the so-called the seven-year indicator, which was presented in both a cyclically-adjusted and a non-cyclically-adjusted variant, see e.g. BP14 (prop. 2013/14:1, Section 5.3).
[19] SOU 2016:67, Sections 9.4–9.5, p. 252–268.

> The Fiscal Policy Council shall, in its instructions, be expressly tasked with assessing whether there is a deviation from the surplus target. The Council shall also assess whether any deviation is justified, and at what rate a return to a level in line with the surplus target should be implemented. The Council's task shall be to make a well-founded assessment of relevant circumstances based on the principles for the review that the Government and the Riksdag have supported. The assessment must be well-founded and based on economic analysis. It cannot be simplified to only establish an indicator value or a valid rate of return in all situations. This requires assessments of several relevant circumstances, in particular the current economic situation.

The fiscal framework communication also includes similar formulations regarding the Council's task.[20]

The Budget Act provides that the government must present a plan regarding the return to a level in line with the surplus target if there is a deviation. The obligation applies if the deviation is clear. In order to clarify what is meant by a target deviation, the following definition was created: "A deviation from the surplus target exists if the structural net lending during the current or the subsequent year, i.e., the budget year, clearly deviates from the target level."[21]

Calculations of the structural, i.e., cyclically adjusted, net lending are, however, uncertain and based on several assumptions and estimates. This applies to both the assessments of the economic situation and the effects on the public finances of cyclical variations. In order to calculate the structural net lending, the actual savings must be corrected. The correction depends on the current stage of the economic cycle and is based on the differences between the actual resource utilization and a theoretical state of full resource utilization. There are no official statistics for structural net lending; it is a hypothetical calculation that cannot be gauged or determined, even in retrospect. Structural net lending is revised as a rule rather than an exception, not only because forecasts of the future change, but also

[20] Government communication 2017/18:207 p. 23.
[21] Finance Committee's opinion 2017/18:207 p. 23.

because assessments of resource utilization can be changed retrospectively.[22]

Assessments of structural net lending can thus vary considerably, both between different analysts at one and the same time and with regard to the assessment of previous years. The assessments are often revised retrospectively. They must therefore always be interpreted with great caution. We have previously made the assessment that structural net lending should deviate by more than 0.5 per cent of GDP from the target level in order for the deviation to be considered clear.[23]

However, a deviation from the surplus target need not be a serious problem for the long-term sustainability of public finances, as long as the deviation is temporary. A target deviation therefore does not necessarily mean that the fiscal policy is incorrectly conceived or that there is a violation of the fiscal policy framework.

Although the Council believes that a deviation in structural net lending should be greater than 0.5 per cent of GDP in order to be regarded as clear, a numerical limit must be seen in its context. If the structural net lending consistently deviates by, for example, 0.4 per cent of GDP from the target level, the target will not be reached over time – even though the deviation is too small in each single year to be considered clear. A deviation of less than 0.5 percent of GDP can, if it is enduring, be serious and indicate that the target will not be reached.

In addition to the forward-looking assessment of target fulfilment based on structural net lending, the Government also evaluates target achievement retrospectively using an eight-year average of actual net savings.[24] This indicator is less uncertain than structural net lending since actual savings can be measured and observed. However, it is not certain that an eight-year period coincides with an economic cycle and it is also not possible to determine with certainty the state of the economy over a given eight-year period. Instead, the eight-year time horizon is adapted to extend over two mandate periods and forms part of the basis for review of the surplus target at the end of every other term of office.

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[22] For example, we note that structural net lending for 2013 and 2014 reported in VP19 is stronger by around 0.5 per cent of GDP than the one reported for the same years in BP19.
[23] Fiscal Policy Council (2017) p. 113, and Fiscal Policy Council (2018) p. 51.
[24] In accordance with the Committee on the Surplus Target proposal and with the Framework Communication (Skr. 2017/18:207).

The Government reports the eight-year average exclusively for years with known outcomes and thus does not include forecasts for the current or future years. In VP19, an eight-year average for 2018 was reported at -0.1 per cent of GDP, and this figure therefore refers to the average for the years 2011–2018. However, we believe, as we indicated in the 2018 report (pp. 41–42), that an eight-year average of actual financial savings, which also includes current and future years, is relevant for the overall assessment of the target fulfilment. When the budget is prepared, preliminary results are available for half the current year, and a calculation based on the proposed policy is available for the subsequent year. For the second and third additional years, the budget bill shows developments with so-called unchanged policy, which usually means an automatic strengthening of public finances by about 0.5 per cent of GDP per year. The uncertainty of the eight-year average thus increases as more future years are included, and averages that include the second and third additional years tend to systematically show too positive a picture of savings. This must be considered when the indicator is interpreted. The target cannot be seen as fulfilled because an average that includes years of unchanged policy reaches a certain level. Nevertheless, the rolling average provides information on whether financial savings are approaching or moving away from the target. For example, a situation could arise where the structural net lending for the financial year indicates that the surplus target will be met, but that the years ahead will entail a sharp deterioration and that the eight-year average will move away from the target level. This should then be weighed into an overall assessment of the surplus target.

The surplus target refers to an average of the public sector's net lending over an economic cycle, so that savings should be allowed to vary over the cycle and thus leave room for the effect of the automatic stabilisers and for a discretionary cyclical stabilisation policy. However, the definition of the surplus target also entails difficulties in measuring and reviewing the target. Structural net lending is the main indicator of the surplus target, but is not a target in itself. The fact that the structural net lending for a certain year amounts to 1/3 per cent of GDP does not mean that the surplus target has been met. The fact that the structural net lending for a given year is less than 1/3 per cent of GDP also does not mean that the surplus target will not be met. Furthermore, a deviation from the target must be clear in order to

trigger the requirements of the Budget Act that the Government must present a plan for returning to a level in line with the target. Given the uncertainties associated with calculating the structural net lending, the Council estimates that it should deviate by at least 0.5 per cent of GDP from the target level in order for the deviation to be considered clear.

3.3 The surplus target 2019

As of 2019, the new lower surplus target of 1/3 per cent of GDP on average over an economic cycle applies. The transitional government reports in BP19 a structural net lending of 0.8 per cent of GDP in 2019, i.e., barely 0.5 percentage points above 1/3. The Government writes that it does not consider the deviation to be clear, in other words it does not need to be addressed. In the years after 2019, structural net lending is further strengthened. This is a normal pattern. Tax revenue is roughly in line with GDP growth, while expenditure is developing more slowly provided no active decisions on expenditure increases are made. In BP19, this effect is stronger than usual, since the bill does not contain any measures for 2019 or any notifications for the years thereafter. The retrospective eight-year average for the period 2010–2017 is -0.2 per cent of GDP. This is explained, according to the Government, in part by the long-term recessionary effects on public finances, but also by non-funded fiscal measures. The Government's overall assessment is that public net lending is in line with the surplus target.

The fiscal policy adopted by the Riksdag on 12 December was more expansive than the policy proposed by the Government in the transitional budget. The reservation estimates that the policy will entail an expansion of SEK 17 billion in relation to the transitional budget.

The Government also made an assessment of the scope for measures in connection with its meeting at Harpsund in August 2018. The Government presented its plans for the forthcoming budget bill and reported structural net lending of 0.6 per cent of GDP in 2019. In the reservation that won the Riksdag's budget vote, structural net lending in 2019 amounts to 0.5 per cent of GDP. As regards the assessment of the scope for measures and the tightness of fiscal policy, there was thus no major difference between the policy announced by the then government before the September elections and the budget adopted by the Riksdag in December. In both cases, a well-balanced structural

net lending of approximately 0.5 per cent of GDP was estimated, i.e., slightly higher than for 2018. Thus, the differences between the political alternatives are not reflected in different views on fiscal policy tightness but in differences of policy content.

Net lending in the public sector is estimated in BP19 at 1.2 per cent of GDP for 2019, and structural net lending is estimated at 0.8 per cent of GDP. This is higher than would be required to meet the surplus target and is a result of the fact that BP19 is a transitional budget and therefore lacks any proposals for measures. Like the Government, the Council considers that the deviation is not such that it had to be remedied with reference to the requirements of the Budget Act. In the Riksdag's budget decision of December, structural net lending in 2019 is estimated at 0.5 per cent of GDP. The following years, structural net lending is expected to rise and by 2021, to amount to 1.7 per cent of GDP. However, the structural net lending for 2020 and 2021 should not be used to assess whether the surplus target will be met, but shows expected net lending if no new fiscal policy measures are taken after 2019.

Table 3.1 Review of surplus target

		2017	2018	2019	2020	2021	2022
BP19	Net lending	1.6	1.0	1.2	2.0	2.6	--
	Retrospective eight-year average	-0.2	--	--	--	--	--
	Structural net lending	0.9	0.4	0.8	1.8	2.6	--
RD decision	Net lending	1.6	1.0	0.9	1.3	1.7	--
	Structural net lending	0.9	0.4	0.5	1.2	1.9	--
VP19	Net lending		0.7	0.6	0.7	1.1	1.9
	Retrospective eight-year average		-0.1	--	--	--	--
	Structural net lending		0.1	0.2	0.5	1.0	1.9
	Eight-year average	-0.2	-0.1	0.0	0.2	0.5	1.0

Note: RD decision refers to the opinion 2018/19:FiU1, reservations 1 and 5. The eight-year average is our calculation based on the actual financial saving according to VP19. In the Bill, this average is only reported for outcome years.

In VP19 both net lending and structural net lending are estimated to be lower than the adopted budget. The structural net lending in 2019 is estimated at 0.2 per cent of potential GDP which is 0.3 per cent lower than in the Riksdag decision. In 2020 and 2021 the structural net lending is expected to be 0.7 per cent below the Riksdag decision. The downward revision is mainly due to changes in the underlying

economic development and is not explained by the fact that the Government proposes non-funded measures. The impact on public finances of the proposals in the Spring Amending Budget for 2019 is very limited.[25] The structural net lending for the current and next year are indicators of the surplus target. The Government's assessment is that there is no clear deviation from the surplus target for 2019 or 2020 and that the policy is in line with the surplus target.

NIER's October forecast included a structural net lending of 0.2 per cent of potential GDP in 2018. For 2019, NIER's calculation contained an assumption that the budget would contain SEK 20 billion in non-funded measures. As a result, structural net lending was 0.1 per cent of potential GDP, which according to NIER was slightly lower than needed to be in line with the surplus target. In the slightly longer term, until 2022, NIER's calculations indicated that the budgetary margins broadly accommodate the expenditure increases needed to maintain the staff density in the public welfare services and to allow a standard increase in line with the historical development. In other words: In October, NIER assessed that the structural net lending in 2019 was not in line with the surplus target, and that all measures other than maintaining the public welfare services would need to be fully funded in order for the surplus target to be met later.

Table 3.2 Pubic saving according to NIER, ESV and OECD

	2017	2018	2019	2020	2021	2022
Net lending						
NIER October 2018	1.6	0.7	0.7	0.8	0.6	0.5
ESV January 2019	1.5	0.7	0.3	0.8	1.4	1.7
OECD March 2019	1.5	0.7	0.4	0.5	--	--
NIER March 2019	1.4	0.7	0.2	0.3	0.4	0.2
ESV March 2019	1.4	0.7	0.2	0.6	1.1	1.6
Structural net lending						
NIER October 2018	0.7	0.2	0.1	0.5	0.5	0.5
ESV January 2019	0.7	0.3	0.2	0.7	1.4	1.8
OECD November 2018	1.1	0.6	0.7	1.0	--	--
NIER March 2019	0.5	-0.1	-0.1	0.0	0.3	0.3
ESV March 2019	0.7	0.2	0.0	0.5	1.1	1.7

In its March forecast, NIER made a similar assessment that the structural net lending was at a low level in relation to the surplus target. The

[25] The effect on public finances of the Government's proposal and announcements after the Budget Bill amount to SEK -0.6 billion in 2019, SEK 0,7 billion in 2020 and -SEK 2,6 billion in 2021 (VP19, table 7.3).

space for unfunded measures for 2019 was considered non-existent. NIER's scenario until 2023 is based on the assumption that the staff density in the publicly funded welfare services will remain unchanged at the 2019 level and that there will also be a standard improvement in accordance with the historical pattern. The tax rules are assumed to be unchanged. The calculations indicate that a budget margin of approximately SEK 120 billion will arise during the period, but that the expenditure needs are approximately SEK 150 billion. Therefore, according to NIER, some form of budget reinforcement of approximately SEK 30 billion is required to cope with this development while also meeting the surplus target.[26]

The ESV submitted a forecast in January 2019. The calculations are based on an assumption of unchanged policy, and on the Riksdag's budget decision in December. The forecast therefore includes a weakening of the budget amounting to approximately SEK 17 billion for 2019 compared to BP19. The ESV considered that all budgetary policy goals will be met. On March 13, the ESV submitted a brief updated forecast, where the GDP level is expected to be slightly lower and public finances somewhat weaker than in January. In the March forecast, the ESV does not make any statement on the surplus target.

In a comparison of the calculations made by the Government, NIER and ESV, we should bear in mind that the calculations are not only based on different macroeconomic scenarios but are carried out with different methods and at different times. The Government's calculation in BP19 is based on the agreed budget principles, i.e., with the least possible changes to the 2018 budget (see section 3.1). In its scenarios, NIER makes the assumption that the staff density will be maintained in publicly financed operations and that the standard will improve in accordance with a historical pattern. NIER furthermore assumes that the structural net lending is in line with the surplus target after 2020. The calculations show whether such a development fits within the available public resources, or whether budget-strengthening measures will be needed. The ESV calculates how public finances develop in the absence of new measures after 2019. Therefore, as in the Government's calculations, a gradually increasing budget space

[26] It should be noted that since December 2018, NIER has changed its standard for what is required to meet the surplus target from a structural net lending of 0.5 per cent of GDP to 1/3 per cent of GDP (NIER, 2018b). The budget margin is calculated as the part of structural net lending exceeding, assuming unchanged rules, 1/3 per cent of potential GDP. (NIER, 2019a, p. 55).

arises in the ESV's calculations. However, the calculations say nothing about whether this space will suffice to maintain a certain level of public services.

In last year's report, we concluded that the Government appeared optimistic in its assessment of structural net lending, mainly in relation to NIER's assessments. However, the Government believes that their assessment is within the middle-ground if the comparison also includes, for example, forecasts by the IMF and the EU Commission. Given that NIER is the forecaster who is likely to have the greatest knowledge and insight into the Swedish economy, we consider it reasonable to primarily compare the Government's forecasts to NIER's forecast.

The uncertainty in calculations of structural net lending is significant and we therefore believe that structural net lending should deviate more than 0.5 per cent of GDP from the target level in order for a deviation to be considered clear (see section 3.2). No such deviation exists according to any forecaster.

The eight-year average of actual savings is lower than the current target level of 1/3 percent of GDP. The average for the period 2011–2018, when the target amounted to 1 per cent of GDP, is estimated at -0.1 per cent of GDP. We believe that it is obvious that the surplus target has not been met in retrospect.[27] As of 2019, however, a new target level and partly changed routines are in place for review and assessment of target fulfilment. Unless the public balance deteriorates significantly, the eight-year average will also rise as an effect of years with lower savings falling out of the calculation.

3.4 The expenditure ceiling

According to the Budget Act, the proposal for the expenditure ceiling for the third year shall be submitted in the budget bill. It is also common practice for the Government to present an assessment, in the preceding spring, of the expenditure ceiling for the third year. In VP18, the Government therefore presented its assessment that the expenditure ceiling for 2021 should amount to SEK 1,492 billion, corresponding to 27.5 per cent of potential GDP. In BP19, the Government proposed that the expenditure ceiling of 2021 should be set at SEK

[27] Fiscal Policy Council, 2018 (Section 2.2.6.).

1,496 billion, which, after a technical correction, was consistent with the assessment in the Spring Bill. [28] The proposed level of the expenditure ceiling thus did not imply any real change in relation to the assessment in VP18.

In last year's report, the Council discussed the expenditure ceiling and its relationship to the surplus target. We concluded that there was considerable space below the expenditure ceiling, clearly more than what would fit within the surplus target. This means that if the Government intends to utilize all or a large part of the space below the expenditure ceiling, it has implications for tax policy: significant income increases would be needed to finance an expenditure development in line with the ceilings. The Council therefore considered it highly reasonable for the Government to discuss its views on the desirable expenditure and income developments over a three-year period as part of the economic policy and budgetary policy guidelines. In VP19, the Government commented on the Council's views and emphasized that space under the expenditure ceiling does not as such mean that there is room for expenditure-increasing measures, since such measures must be reconciled with the surplus target.

As formulated in the framework communication, the level of the expenditure ceiling is an expression of the Government's view of how the public welfare commitment should develop. It also states that the level of the expenditure ceiling in the long term is crucial for the total fiscal levy and therefore must be in line with the view on the size of a reasonable fiscal levy.[29] However, we believe that if the ceiling is set so high that it cannot reasonably become binding, the surplus target becomes the only real budget constraint. The expenditure ceiling is then no longer an expression of the Government's view on how the public welfare commitment should develop, and is unrelated to what is a reasonable fiscal levy.

[28] The technical adjustment is largely caused due to the proposal regarding lower tax for pensioners. This reduces the tax income of local authorities which the state compensates through increased government grants.

[29] Government's Communication 2017/18:207 Section 7.1.

Table 3.3 The expenditure ceiling

	2018	2019	2020	2021	2022
Budget Bill for 2019					
Expenditure ceiling	1,337	1,401	1,475	1,496	--
Percentage of potential GDP	28.3	28.4	28.6	27.9	--
Capped expenditure	1,285	1,308	1,322	1,334	--
Budgeting margin	52	93	153	162	--
Percentage of capped expenditure	4.0	7.1	11.6	12.1	--
The Riksdag's budget decision					
Expenditure ceiling		1,351	1,388	1,430	--
Percentage of GDP		27.0	26.8	26.6	--
Capped expenditure		1,311	1,342	1,366	--
Budgeting margin		40	46	64	--
Percentage of capped expenditure		3.1	3.4	4.7	--
Spring Bill 2019					
Expenditure ceiling		1,351	1,388	1,439	1,498
Percentage of potential GDP		27.4	27.1	27.0	27.0
Capped expenditure		1,312	1,345	1,372	1,388
Budgeting margin		39	43	67	110
Percentage of capped expenditure		3.0	3.2	4.9	8.0

As part of the Riksdag's budget decision in December, where a joint reservation from M and KD won the vote, the expenditure ceiling for 2019-2021 was also established. The decision entailed considerable reductions in the expenditure ceilings for 2019–2021. For 2019 and 2020, the decision entailed reductions of ceilings that have already been set, and for 2021 there was a reduction compared to the proposal in BP19. In the reservation, no detailed explanation is provided in relation to the level of the expenditure ceilings, but it is pointed out that the scope for reforms on the expenditure side depends, inter alia, on amounts needed for unforeseen expenditure increases. The reservation also notes that the expenditure ceilings are falling as a percentage of GDP.

In VP19, as is customary, an assessment is made of the expenditure ceiling for the third additional year, i.e., 2022, while the final proposal will be submitted in the autumn's Budget Bill. The Government's assessment of an appropriate ceiling for expenditure for 2022 is SEK 1,498 billion, which means that it represents the same proportion of potential GDP as the year before. For 2021, the Government proposes raising the ceiling by SEK 9 billion, but for 2019 and 2020 no changes are proposed to the expenditure ceilings set by the Riksdag.

However, the motives behind the proposals for a certain level of the expenditure ceilings remain unclear. The Government has not provided any clear explanations of the high ceilings, something we

criticised in last year's report. The Riksdag lowered the ceilings considerably through its budget decision in December, without providing any clear explanations. The Government also does not explain its decision, in VP19, to retain the lower ceilings.[30]

The lower expenditure ceilings have restored the large budgeting margins to more reasonable levels and improved the interconnection of the two budgetary policy goals. With the lower expenditure ceilings, the difference between the space below the expenditure ceiling and the scope of the surplus target decreases.

3.5 The debt anchor

As of 2019, a debt anchor is used to ensure that the public sector's gross debt, the so-called Maastricht debt, will, in the medium term, amount to 35 per cent of GDP. However, the debt anchor should not be treated as an operational goal, but rather as a benchmark. If the gross debt deviates from 35 per cent of GDP by more than 5 percentage points, upwards or downwards, the Government shall submit a special letter to the Riksdag and explain the reasons for the deviation. The debt anchor will also be reviewed every eight years, both in terms of level and construction.

Table 3.4 Public gross debt according to VP19

		2016	2017	2018	2019	2020	2021	2022
VP19	SEK billion	1,858	1,869	1,859	1,716	1,692	1,646	1,567
	Percent of GDP	42.4	40.8	38.8	34.5	32.8	30.9	28.2
NIER	SEK billion	1,858	1,870	1,864	1,718	1,758	1,785	1,820
March	Percent of GDP	42.4	40.8	38.9	34.6	34.4	33.7	33.2

The gross public debt is expected to decrease until 2022, both nominally and in relation to GDP. However, the calculations for the years after 2019 are based on the strong improvement in public finances resulting from the automatic budgetary strengthening in case of unchanged policy.

With less surplus, debt does not fall as quickly. However, gross debt development is not only affected by the public balance, but also by the change in GDP, as well as by several more technical factors. The large debt reduction between 2018 and 2019 is explained by the fact that the

[30] Except a correction of SEK 9 billion for 2021.

Riksbank will repay part of its debt to the National Debt Office.[31] In 2019, the debt is estimated to be largely at the level of the debt anchor. The Government's reported debt ratio for 2022 is outside the debt anchor's tolerance range of 30–40 per cent of GDP. However, this rapid debt reduction is based on high surpluses at the end of the period, since the Bill does not contain any measures for those years. According to NIER's calculations, which are based on the assumption that structural net lending amounts to 1/3 per cent of GDP from 2021, public debt will decrease more slowly and is expected to be within the tolerance range.

3.6 Fiscal policy and the state of the economy

The annual change in structural net lending is normally used as an indicator of how expansive or contractive fiscal policy is in the short term. This is a rough measure of the fiscal stance of fiscal policy. Structural net lending is largely unchanged between 2018 and 2019, and fiscal policy can thus be described as neutral. The active fiscal policy is expected to be slightly expansionary for 2019 and the measures are expected to weaken net lending by 0.6 per cent of GDP in relation to 2018. Most of the measures were included in the Riksdag's budget decision, which was expected to weaken public finances in 2019 by approximately SEK 17 billion.

Table 3.5 Effects of fiscal policy measures in relation to the previous year

		2017	2018	2019	2020	2021	2022
Public saving		-7.5	-31.6	-30.8	-5.9	-10.4	8.2
Percentage of GDP		-0.2	-0.7	-0.6	-0.1	-0.2	0.1
Of which:	Revenues	8.4	-3.2	-18.1	-0.6	-4.3	-0.5
	Expenditure	15.9	28.4	12.8	5.3	6.1	-8.7

Source: VP19 Table 7.8.

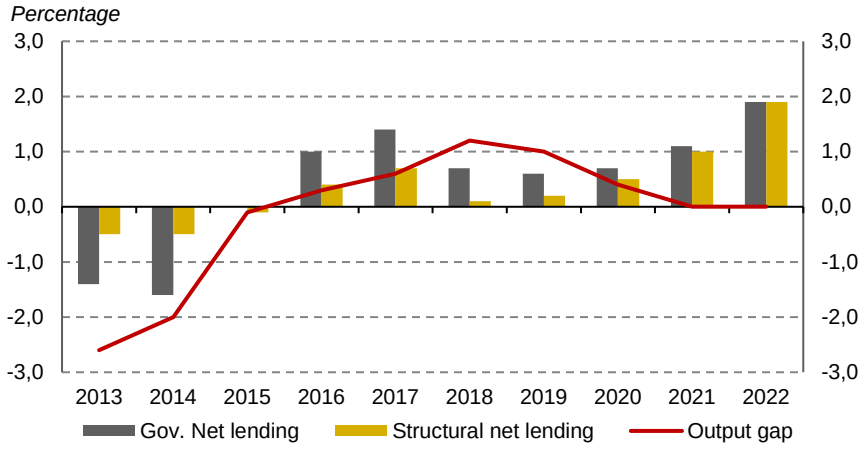
According to both the Government and NIER, the economic cycle peaked in 2018, and the output gap is expected to be somewhat lower in 2019 than in 2018. However, the output gap is also clearly positive in 2019, i.e., the economy is above its long-term production ability. In

[31] The Riksbank will reduce its currency reserve by around SEK 70 billion by not renewing the loans from the National Debt Office falling due in 2019.

the coming years, the output gap is expected to continue to decrease so that the economy reaches a balanced position in 2021.

Since 2014, the Council has consistently, but to varying degrees, considered that the economy has justified a tighter fiscal policy. We also considered that the policy was pro-cyclical for a couple of years, i.e., it contributed to strengthening instead of balancing the economic upturn. However, the situation now looks somewhat different. The economic cycle has entered a slowdown phase, and, in the opinion of the Council, it would not be justified, in terms of stabilisation policy, to tighten the fiscal policy for the time being. However, with a higher financial and structural net lending during the expansionary phase, the scope for action would have been greater in the economic slowdown.

Figure 3.1 Net lending and Output-gap, percentage of GDP



Source: VP19.

The Council stated in last year's report that neither the old nor the new surplus target has been reached in retrospect. As of 2019, the surplus target amounts to 1/3 percent on average over the economic cycle. Although the structural net lending in 2019 does not reach exactly that level, there is no clear deviation from the target (see section 3.3). We therefore believe that there is no reason to pursue a tighter fiscal policy by reason of the surplus target either.

Meanwhile, there are clear stabilisation policy risks a few years ahead. The fact that the repo rate is very low means that the Riksbank's opportunities to stimulate the economy during a recession are severely limited. A weaker economy also has a negative impact on public finances, limiting the scope of the fiscal policy action. Should the

economic slowdown be stronger or more protracted than is now predicted, public finances will weaken while the need for cyclical stimulus will increase. However, the scope for expansionary fiscal policy is narrow if the public sector net lending is to remain in line with the surplus target for a few years. All in all, the Council considers that fiscal policy is currently well balanced.

3.7 Long-term sustainability in public finances

The calculations in BP19 indicate that fiscal policy has good long-term sustainability. The Government uses the so-called S1 and S2 indicators used by the EU Commission to assess long-term sustainability. S1 shows the size of permanent measures required in 2019 for the public gross debt to correspond to 60 per cent of GDP in 2032. This indicator aims to show the extent of long-lasting measures required by a country to cope with the Stability Pact's debt limit at a given time. For a country like Sweden, whose gross debt is considerably lower than this limit, the S1 indicator is relatively uninteresting. The second indicator, S2, shows the permanent change in the net lending needed in 2019 in order for the net position of public finance to be stable in the very long term. Unlike S1, this indicator does not indicate any specific debt level, but concerns the requirements for the net position to be stable. The Government reports an S2 indicator in BP19 of -2.0, i.e., a permanent weakening of public finances by 2 per cent of GDP would be consistent with a long-term stable net position. However, these types of calculations are very sensitive to assumptions, in particular the starting point plays a major role, and the calculations of S2 are based on 2021. The budget principles and absence of measures in BP19 provide artificially high net lending in 2021. The calculations of long-term sustainability as reported in BP19 is therefore of limited value.

The calculations in NIER's sustainability report 2019 indicate poorer sustainability than the corresponding calculations the year before. The Sustainability Report 2018, which the Council commented on in Swedish Fiscal Policy 2018, showed that today's tax rules would suffice to maintain the public welfare commitment and at the same time lead to lasting surpluses in public finances and a stable gross debt

of around 30 per cent of GDP. [32] In November 2018, however, NIER published a correction of the report, revising tax revenues downwards in connection with unchanged tax rules. As a result of this correction, net lending was reduced by about 1 per cent of GDP from 2027 onwards.[33] According to the revised calculations, the current tax rules were therefore no longer compatible with maintaining both the welfare commitment and the surplus target

A large part of the weakened sustainability compared with the Sustainability Report 2018 is therefore a result of corrected calculations. Compared with the revised calculations for 2018, the deterioration in sustainability is mainly due to the fact that the number of hours worked, and thus the payroll sum, is growing more slowly.

NIER's Sustainability Report dated 20 February 2019 paints a gloomier picture than the Budget Bill.[34] In its main scenario, NIER calculates how public finances will develop in the event the public welfare commitment is maintained, combined with unchanged tax rules.[35] In addition, the calculations are based on a gradual increase in the standard of welfare services in line with historical patterns. Thus, the calculations do not show the development in case of compliance with the fiscal policy framework. Furthermore, the calculations are based on SCB's population forecast of April 2018. The average life expectancy is expected to continue to rise, and NIER assumes that the retirement age will also rise, so that by 2050 it has increased by an average of 1.5 years.[36] GDP in current prices is expected to increase by 4.2 per cent per year from 2018, and interest rates are expected to rise in the long term. The nominal interest rate rises in the calculations to 4.5 per cent in 2040 and then remains at that level. The sustainability report shows that, under these conditions, long-term deficits in public finances arise, and gross debt rises from the mid-2020s. Gross debt is estimated to reach the 60 per cent limit of the stability pact around

[32] NIER (2018c).
[33] The correction also affects the report submitted by NIER in spring 2018 on the effects of an abolition of the Swedish National Debt Office's on-lending to the Riksbank. The revised calculations result in a less favourable debt development, and gross debt is expected to be higher by around 10 per cent of GDP in 2040.
[34] NIER (2019c).
[35] The maintained public welfare commitment is defined as an unchanged staff density in publicly financed operations and an annual standard increase in line with historical patterns and retained compensation levels in the transfer systems.
[36] This refers to the average age at labour market exit.

2060 and stabilise around 70 per cent of GDP towards the end of the century.

As mentioned above, NIER's calculations are not based on compliance with the fiscal policy framework, but instead show the effects of a maintained public welfare commitment combined with the current tax rules. If, instead, net lending were to be in line with the surplus target, the net position and gross debt in 2027 are forecast to be near the bottom part of the interval for the debt anchor, i.e., 30 per cent of GDP, and then stabilise at this level. NIER also calculates the debt development if the surplus target is replaced by a balance sheet target at the next revision of the target in 2026–2027. In that case, the gross debt is expected to be slightly higher than in the case of the current surplus target, but will still stabilise at around 40 per cent of GDP, i.e., within the boundaries of the debt anchor.

The results of NIER's calculations can be described in various ways. One description is that demographic developments will put pressure on public finances. Today's tax rules, combined with today's welfare level, will result in public deficits and rising public debt. In order to maintain the public welfare commitment and at the same time maintain the surplus target, fiscal policy needs to be reinforced.

Another description of the results is that if the surplus target is maintained, it will be possible to maintain the level of welfare at today's level while public gross debt will stabilise just above 30 per cent of GDP. It would also be possible at the next review to lower the target to a balance sheet target, still maintaining the public welfare commitment while at the same time stabilising the gross public debt at a level in line with the debt anchor.

The assumption of a gradual improvement of the standard in welfare services also has major effects on the results. Sustainability is significantly improved by assuming a slightly lower rate of increase of the standard.

In VP19, the Government presents a detailed analysis of the long-term sustainability of fiscal policy. These calculations are also based on SCB's population forecast of April 2018 and on an unchanged welfare commitment. This means that the number of hours worked in welfare services increases as the population increases, and that the transfers develop in line with income. Unlike NIER, however, the Government does not assume any increase in standard of the public welfare services. The Government also makes a number of sensitivity calculations

concerning, for example, extended working life, improved establishment and higher demand for leisure and welfare services. The overall assessment is that sustainability of fiscal policy is good. In international comparisons, Sweden's public finances also appear strong in a long-term perspective.

3.8 Assessments and recommendations

According to the current guidelines for a transitional government, a budget bill should not contain proposals with a clearly party-political orientation. However, there is a potential conflict between these guidelines and the fiscal policy framework. If there is a conflict between the guidelines for a transitional government and the fiscal policy framework, the framework's statutory rules apply. In case of a risk of exceeding the expenditure ceiling, or a clear deviation from the surplus target, a transitional government is also obliged to act. In such a case, it is probably difficult to avoid a party-political orientation of necessary measures. It is therefore uncertain whether the budgetary principles applied in BP19 can establish a practice for how a transitional government should prepare a budget.

One of the main tasks of the Council is to assess whether fiscal policy complies with the fiscal policy framework. The surplus target dictates that net lending must amount to 1/3 per cent of GDP on average over an economic cycle. In order to assess this, structural net lending is used for the current and subsequent years as the main indicator. This indicator currently shows that there is no clear deviation from the target. In retrospect, however, neither the old nor the new surplus target has been achieved.

As of 2019, there is also an anchor for the public sector's gross debt of 35 per cent of GDP, with a tolerance range between 30 and 40 per cent of GDP. If the gross debt falls outside the tolerance range, the Government must explain this in a special letter to the Riksdag. Gross debt is close to 35 per cent of GDP in 2019 and is estimated by the government to fall below 30 per cent by 2022. However, this calculation does not include any future fiscal policy measures. It is therefore unlikely that gross debt will fall below 30 percent before the next review of the fiscal policy framework.

In the longer term, however, demographic developments will put a strain on public finances. Nevertheless, overall the long-term sustain-

ability is relatively good. Assessments of the long-term sustainability of public finances, however, are very uncertain and sensitive to assumptions made.

The expenditure ceiling was lowered by the Riksdag in December 2018 and the Government does not, in the Spring Bill, propose any significant changes to the new levels. The budgeting margins are thus more normal and the space below the expenditure ceiling is in better harmony with the space provided by the surplus target. We welcome this, but as the Council has previously called for, the principles and considerations governing the choice of expenditure ceiling should be clarified.

The Council's overall assessment is that fiscal policy 2019 is line with the fiscal policy framework.

In previous reports, the Council has pointed out that saving has been too low level during the economic expansion, which may mean that the surplus target will not be reached over the economic cycle. The economy peaked in 2018 and is expected to be weaker in the future. Structural net lending is virtually unchanged between 2018 and 2019 and fiscal policy can be described as cyclically neutral. The Council considers that the stabilizing contribution of fiscal policy is well balanced. However, there are stabilisation policy risks a few years ahead. The Riksbank currently has limited possibilities of stimulating the economy. The fiscal policy room for manoeuvre is also narrow if the public sector net lending is to remain in line with the surplus target a few years ahead.

4 Intergenerational income mobility

In this chapter, we begin a discussion on income differences and income mobility across generations. We intend to expand on this discussion in next year's report. In section 4.1, we discuss how the income differences in OECD countries have developed over time and whether there is any correlation between income differences and income mobility across generations. In section 4.2, we explain Swedish data material containing comparisons of 35-year-old men's and women's aggregated earned income with that of their parents and statistics descriptive of the material. Section 4.3 is a summary of the Council's analysis and assessments.

4.1 Income differences and income mobility

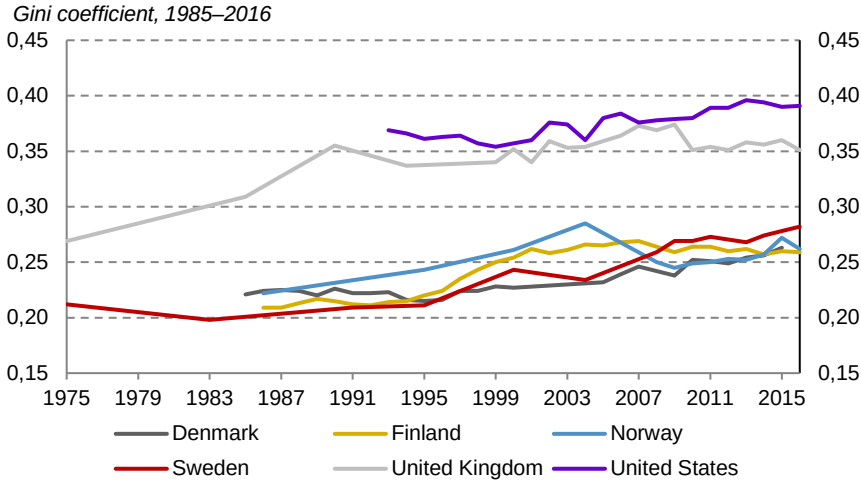
The term income differences, as used in this chapter, means differences in how household or individual annual income is distributed over the population.[1] By measuring income differences, we get an idea of how the market and policies allocate and redistribute the resources available in the economy. Growing income differences have been a trend in the OECD since the mid-1980s, including, in particular, Sweden (Figure 4.1). Regardless of the measures used, the development shows that income differences in Sweden have increased from around 1980 to date. This trend represents a break with previous developments. Between 1930 and 1950, income differences declined sharply in Sweden. The differences in income continued to decline, but at a slightly slower pace until 1965, and then declined rapidly until 1980.[2] Developments in Sweden after 1980 have been relatively dramatic. Although the income distribution in Sweden in the mid-1980s was one of the most even within the OECD, and Sweden still belongs to the group of countries where income differences are

[1] Both international and Swedish applied research on income distribution usually uses disposable income as a measure, where the household is the income unit, the individual is the analytical unit and is adjusted for the household's dependency ratio; see the discussion in Fiscal Policy Council (2013), chapter 7.2.1. Since no such long time-series are available for disposable income, in this chapter we will use what SCB refers to as *aggregate earned income*, see section 4.2.1.

[2] There is some uncertainty on the trends in the overall income differences before 1975, as these are estimated based on uncertain data (Björklund and Jäntti, 2011a).

relatively small, the Gini coefficient for disposable income in Sweden increased by as much as 40 per cent between 1983 and 2016 (Figure 4.1).[3]

Figure 4.1 Development of the Gini coefficient in some OECD-countries



Note: Based on disposable income adjusted for household size after taxes and transfers for the entire population. The disposable income includes both capital and income from employment and is adjusted for transfers and taxes.
Source: OECD Income Distribution Database (2019).

Literature distinguishes between two types of income mobility. *Intra*generational mobility describes income changes during a person's lifetime, while *inter*generational mobility describes the connection between the income levels of different generations, i.e., the importance of family background for an individual's income development. This chapter only discusses intergenerational income mobility.

Information about income mobility is important because it shows how often people change their financial status, as well as the importance of parents and the environment in which individuals grow up in relation to their success in the labour market. Scientific studies of intergenerational income mobility in Sweden show that mobility has been high by international standards.[4]

[3] Figure 4.1 shows that the Gini coefficient for Sweden was 0.20 in 1983 and 0.28 in 2016.
[4]Anders Björklund and Markus Jäntti have written, in several essays, about various aspects of intergenerational income mobility, e.g., comparisons of income mobility in Sweden, the US and the UK, and the relationship between parents' income and their children's birth weight, length, and school results. These studies have showed, for example, that the intergenerational income mobility in Sweden is high by international standards. See Björklund & Jäntti (1997), Björklund & Jäntti (2000), Björklund & Jäntti

In recent years, there has been an international discussion on whether there is any connection between income mobility and growing income differences. In the political debate, it is common to link the income differences at a certain point in time to the question of whether the adolescent generation has the same opportunities to create a good life, regardless of whether the individual's parents had a high or low level of income during the individual's upbringing, or whether the income differences indicate that life chances are unevenly distributed. It is a widespread view is that evenly distributed chances to create a good life is desirable.[5] Economic policy plays a central role in compensating, in various ways, individuals who for some reason have poorer chances of realizing the life they want to live. If it is possible to conclude that there is less intergenerational income mobility compared to previously, then this is an indication that it has become more difficult for an individual to change his or her financial situation. If so, a lower income mobility today than a few decades ago can be problematic.

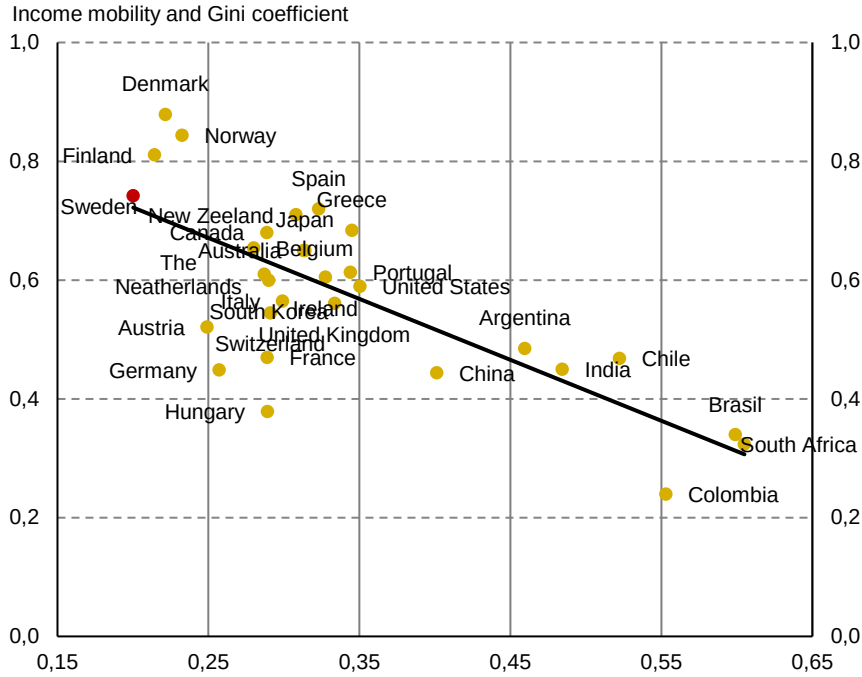
Of course, fiscal policy affects the distribution of income, both through the tax system and expenditure, but it also affects intergenerational mobility. There is therefore reason to investigate, as a first step, whether there is a connection between income differences and income mobility. There is no generally accepted theory as to the specific nature of a connection between income differences and income mobility. However, there is an empirical pattern in a number of countries indicating that there may be a causal relationship. In the data, a statistical connection has been found between income differences and income mobility, at least in relation to the income of sons in relation to their fathers. The connection is called the *Great Gatsby-curve* (Figure 4.2).[6]

(2009), Björklund, Jäntti & Lindquist (2009), Björklund & Jäntti (2011a), Jäntti & Jenkins (2014), Björklund, Jäntti & Nybom (2017).

[5] For a discussion, see Björklund, Jännti & Roemer (2012), Corak (2013), Jäntti & Jenkins (2014), and Roemer & Trannoy (2016).

[6] Allan Krueger first used this term in a speech in 2012. See also OECD (2018b) and Corak (2013) for a discussion. Here we follow the OECD and draw the curve as a negative correlation, but the *Great Gatsby-curve c*an also be described as a positive correlation; see e.g. Björklund et.al. (2017).

Figure 4.2 Income mobility across generations and economic inequality, the so-called Great Gatsby-curve



Note: Income mobility is calculated according to (1 – intergenerational income elasticity between father and son).
Source: OECD (2018b).

Mainly the income of fathers and sons is studied, among others because the income development among women in the past fifty years has also been strongly affected by rising employment in most OECD-countries.

Figure 4.2 shows a Great Gatsby curve with data from a number of countries. The horizontal axis shows the Gini coefficient for each country in the second half of the 1980s and early 1990s, i.e., a measure of the income differences at a certain point in time. Income differences increase as you move right along the horizontal axis. The vertical axis shows income mobility. This measure shows the relationship between sons born in the first half of the 1960s and the income they earned in the late 1990s relative to the income their fathers earned at the same age. Income mobility increases upwards along the axis. In Figure 4.2 we see that in countries with small income differences in the late 1980s there is also high-income mobility; we note that the Nordic countries stand out in this respect. Countries with low income mobility and large

income differences can be found in South America and South Africa. The picture is complicated by countries in the cluster around income differences corresponding to a Gini coefficient of 0.30: for example, a country like Hungary, where income mobility comparable to income mobility in Brazil and Canada, which is almost as high as in Sweden. At the same time, it should be noted that there are no countries in the diagram where both income differences and income mobility are high. The relationship therefore appears to be negative.

In light of these observations, it is not unreasonable to believe that the increased income differences since the beginning of the 1980s have also led to diminishing income mobility.[7] The OECD recently stated that there is insufficient knowledge about this issue, calling for more information about the relationship between the position of children and their parents in terms of income distribution, to determine whether the growing income disparities since 1980 have also affected income mobility across generations.[8]

Growing income disparities and reduced income mobility lead to a number of socio-economic problems. The absence of upward mobility for individuals who are in the lower income strata entails, for example, that society loses out on talents, ideas and investment opportunities that these individuals would otherwise potentially provide, which hinders productivity development and thus reduces the prospects for long-term growth.[9] Lack of upward mobility can also have serious social and political consequences, which in themselves can hamper economic development.

In this chapter, we begin an analysis of data material that SCB have prepared for us and which includes a comparison of 35-year-old men's and women's aggregate earned income with that of their parents. In this report, we will only provide descriptive statistics. In next year's report, we will analyse the data material in depth.

[7] ”Persistence in the advantages and disadvantages of income passed from parents to children/…/will rise by about a quarter for the next generation as a result of the rise in inequality that the US has seen in the last 25 years.”, Krueger (2012).
[8] OECD (2018b), p. 213.
[9] OECD (2015). See also Voitchovsky (2009) for a discussion of various theories on the correlation between equality and economic growth.

4.2 Children's income compared to that of their parents

4.2.1 Data

Our data material consists of a compilation of registry information on *aggregate earned income*. Aggregate earned income consists of *income from employment* plus *income from business activities*. Income from employment includes, in addition to wages, income from pension and taxable remuneration from the social insurance systems such as sickness benefit, parental benefit, unemployment benefit, etc. Income from business activities is generated from professional business activities if the income is not included in income from capital or employment. Earned income does not include tax-free remuneration, such as housing benefit, child benefit, financial assistance or student grants and loans; capital income is also not included.

A balance must be struck when selecting the age of children and parents at which earned income should be studied. We have tried to select an age at which the income gives an indication of the individual's life income, while we want as many cohorts as possible in our data material. For Swedish men, life income is best measured at about 35 years of age and for women somewhat later.[10] Additionally, in international surveys, 35-year-olds have often been studied in analyses of intergenerational mobility.[11] This material includes observations over a period of fifteen years. If we selected a higher age, such as 40 years, we would have fewer years to investigate.

The data material includes information on Swedish women and men who were 35 years old sometime during the period 2003–2017 and their respective accumulated income earned in relation to that of their parents. Expressed in a different way, we examine the total income earned by persons born between 1968 and 1982 when they reached the age of 35 compared to the earned income of their parents at the age of 35, which occurred during the period around 1973 until the second half of the 1980s. The parents' income in the data material was thus not affected by the severe economic crisis experienced by Sweden around 1992–1993. The children of these parents, i.e., the 35-year-old women and men who are the focus of our survey,

[10] Böhlmark and Lindquist (2006).
[11] Erikson and Goldthorpe (2002).

however, grew up, were educated and entered the labour market during a period when Sweden suffered two deep economic crises (the 90s crisis and the financial crisis 2008-2009). In these decades, income disparities have also increased significantly. The extensive data, relating to income for a total of 1,350,123 individuals, makes it possible to draw conclusions on how the intergenerational income mobility has developed for the examined cohorts.

4.2.2 Descriptive statistics

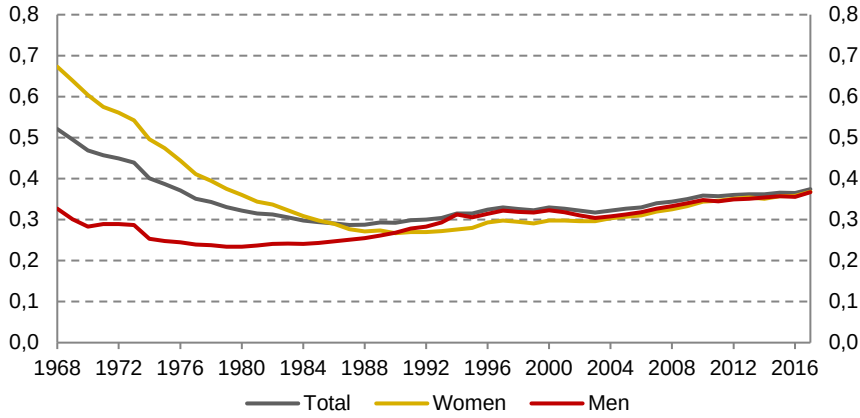
Figure 4.3 shows how the income disparities – calculated based on aggregate earned income at the age of 35 – have developed for women and men during the investigated period. Income disparities between 35-year old men dropped from 1968 until 1980; subsequently the Gini coefficient was around 0.25 up to the second half of the 1980s and continued to rise until the end of the 1990s. After a few years at just above 0.30, the Gini coefficient continued to rise after 2003 and has done so until 2017. In 2006, the income differences were as great as in 1968 and subsequently they have been greater. Figure 4.3 shows that the Gini coefficient for men for aggregate earned income increased by 50 per cent between 1983 and 2016.[12]

The Gini coefficient for women dropped significantly between 1968 and the beginning of the 1990s. An important explanation of this is a growing rate of employment among women (Figure 4.4) and that working women work increasing hours. From the beginning of the 1990s, income differences among women have been largely at the same level as among men.

[12] The Gini coefficient for men was 0.24 in 1983 and 0.36 in 2016.

Figure 4.3 Gini coefficient calculated on aggregate earned income for 35-year olds

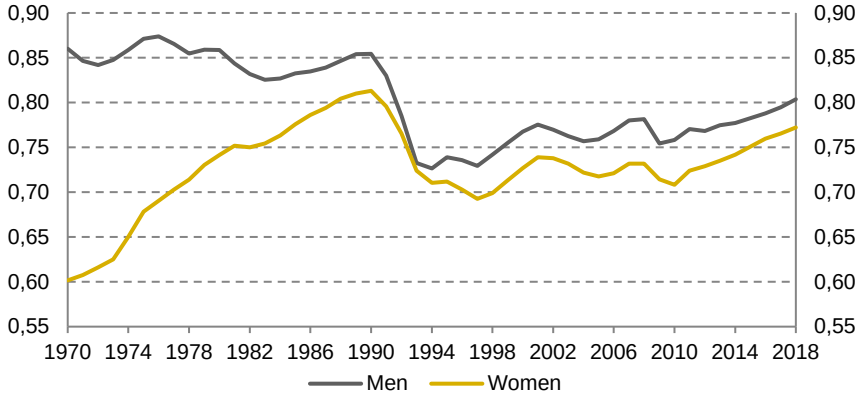
Gini coefficient, 1968-2017



Note: From 1971 and going forward, individuals without any income have not been included in the calculation. For the years 1968 to 1970, individuals who were registered in the population register but who do not have an income in the income register have been allocated an income equal to 0.
Source: SCB.

Figure 4.4 Employment rate for men and women

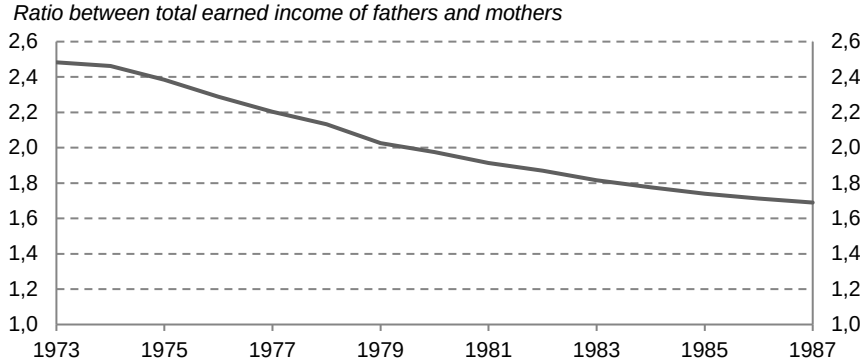
Employment rate 16-64 year-olds, 1970-2018



Source: SCB.

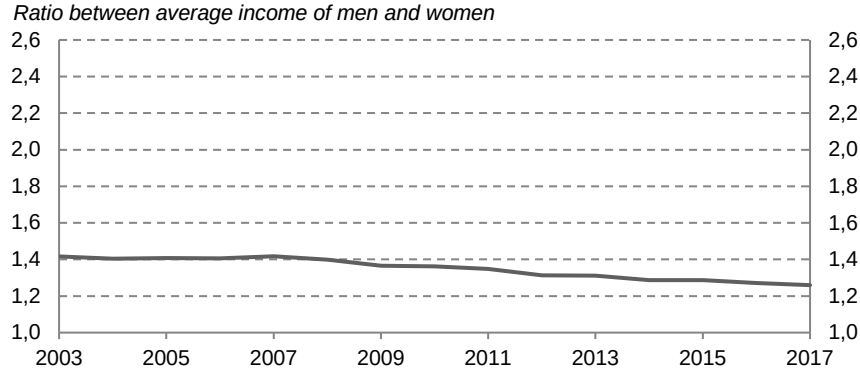
Figures 4.5 and 4.6 show how women's aggregate earned income at age 35 has developed relative to that of men of the same age. The figures indicate a clear trend, where women around 35 have gradually approached 35-year old men's aggregate earned income since the 1970s; in the 1970s, the aggregate earned income of men was more than twice as high as that of women, and in 2017 men's income was, on average, around 25 per cent higher than that of women.

Figure 4.5 Ratio between aggregate earned income of 35-year-old fathers and mothers, around 1973–1987



Note: We don't know the exact years when these parents were 35. The dates in the figure are based on the assumption that they were 30, on average, when they had children.
Source: SCB.

Figure 4.6 Ratio between aggregate earned income of 35-year-old men and women, 2003–2017

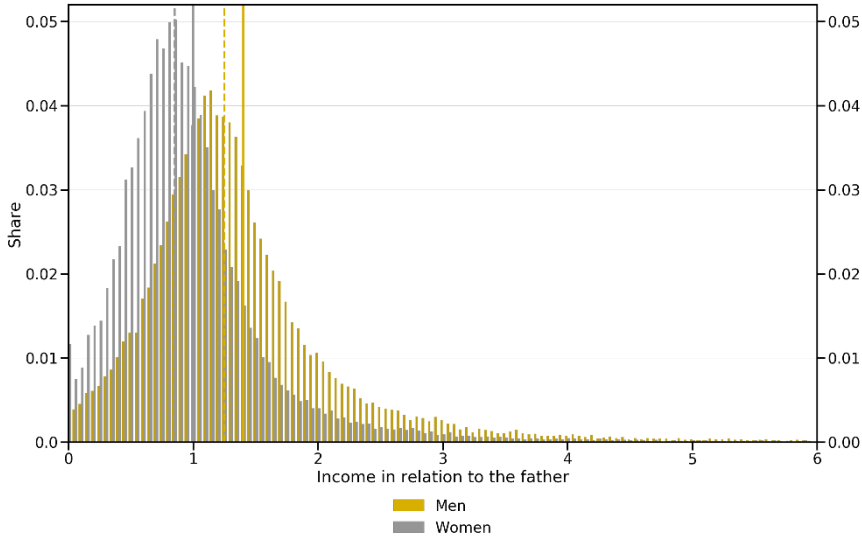


Source: SCB.

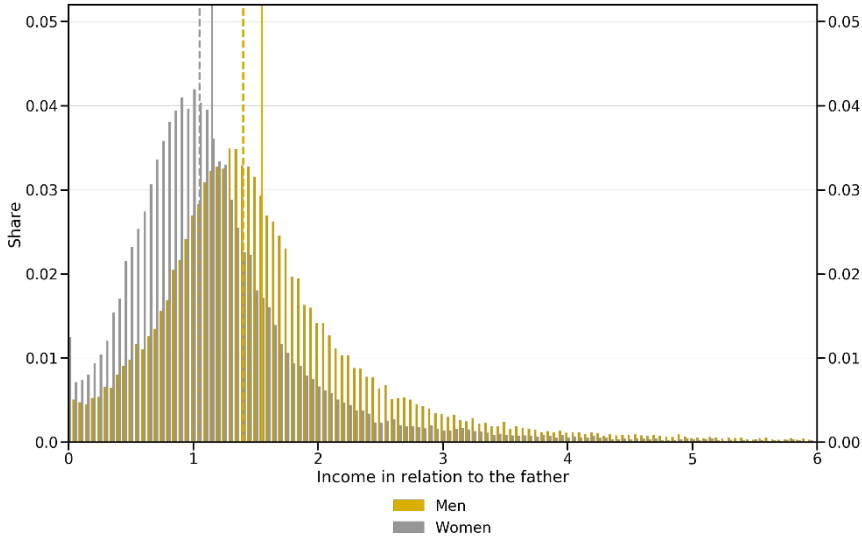
Figure 4.7 shows three examples of the whole frequency distributions of 35-year-old men's and women's total income earned relative to that of their fathers. Income is adjusted for inflation to be comparable in real terms. The solid vertical line shows the average value of the distribution and the dashed vertical line shows the median value of the distribution. The figure shows that 35-year-old men's aggregate earned income is generally higher than that of their fathers. In addition, over the period 2003–2017, men's income increases relative to that of their fathers; both the median value and the average are shifted to the right in the diagrams.

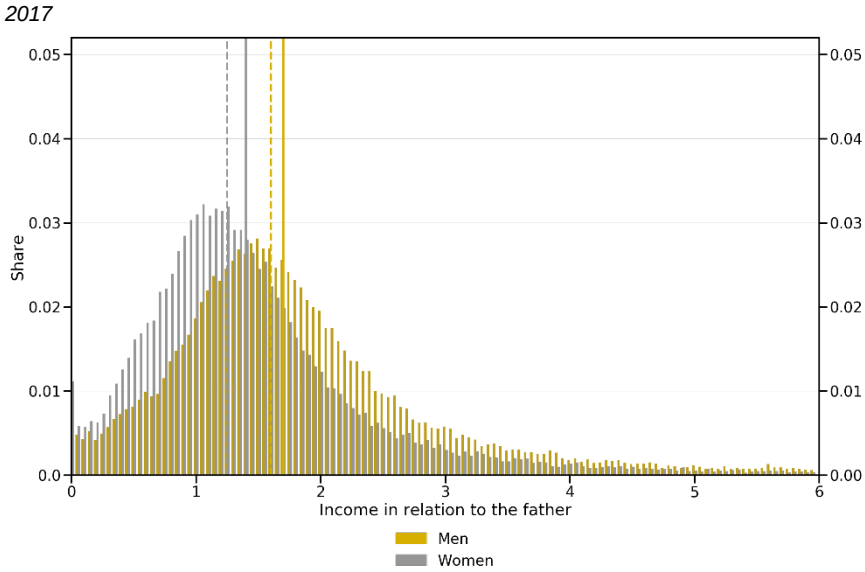
Figure 4.7 35-year old men's and women's aggregate earned income relative to that of their fathers

2003



2009





Note: The yellow colour shows the distribution of men's aggregate earned income relative to that of their fathers, while the grey colour shows women's aggregate earned income relative to that of their fathers. The bar at 1 on the x-axis corresponds to the proportion who earned the same income as their fathers. The extended solid line in the diagrams shows the mean for the two groups and the dashed line indicates the median for the same.
Source: SCB.

The distribution of 35-year-old women's income relative to that of their fathers shows a similar development. In 2003, the average aggregate earned income was as high as the fathers' and median income was slightly lower. In 2009, both the median value and the average value were higher than the fathers', and in 2017, the median and average values for 35-year-old women were even higher.

Table 4.1 Probability of having a lower real income than one's father

	2003	2009	2017
35 years, women	0.60	0.46	0.34
35 years, men	0.30	0.23	0.19
35 years, women and men	0.45	0.34	0.26

Source: SCB and our own calculations.

Table 4.1 we have calculated the probability that a 35-year-old will have a lower aggregate earned income than that of their father at the same age. The probabilities in Table 4.1 are a simple way of describing the distributions at Figure 4.7.

As table 4.1 indicates, the situation of 35-year-olds is constantly improving relative to that of their fathers. As the economy grows, more people earn a higher income. In Sweden, growth has not only benefited a few, which appears to be the case in the United States, for example.[13] It is noteworthy that women consistently had a higher risk than men of earning less than their fathers. For example, the probability that a 35-year-old woman in 2003 would have a lower aggregate earned income than that of her father was 60 per cent, while this risk had fallen to 34 per cent in 2017. The corresponding risk for 35-year-old man is consistently lower.

4.2.3 Transition matrices

So-called transition matrices provide a way of describing the intergenerational correlation between children's and parents' income.[14] Transition matrices show the probability of a child being found in different parts of the income distribution given their parents' (usually the father's) position in the income distribution among parents. At Figure 4.8 a, we present such transition matrices for the years 2003, 2009 and 2017. The matrices in panel 4.8 a show the probability that a 35-year-old man would be found in a certain decile group to his father belonged when he was 35. Figure 4.8 b shows the corresponding transition matrices calculated on the basis of the mother's and the father's aggregate earned income. The reason why we also examine the relationship between 35-year-olds' earned income and that of both their parents is that it can provide a more complete picture of the economic environment in which the 35-year-old grew up than if one only compares with the father's earned income.

An indication that there are equal opportunities for children born in a given year is that the income earned by the child as an adult is independent of the income earned by the child's parents during the child's upbringing. Low statistical correlation between parents' and children's income indicates high mobility between generations and a high degree of similar opportunities for the generation growing up. At Figure 4.8 a, for example, we see that in 2003, the probability that a

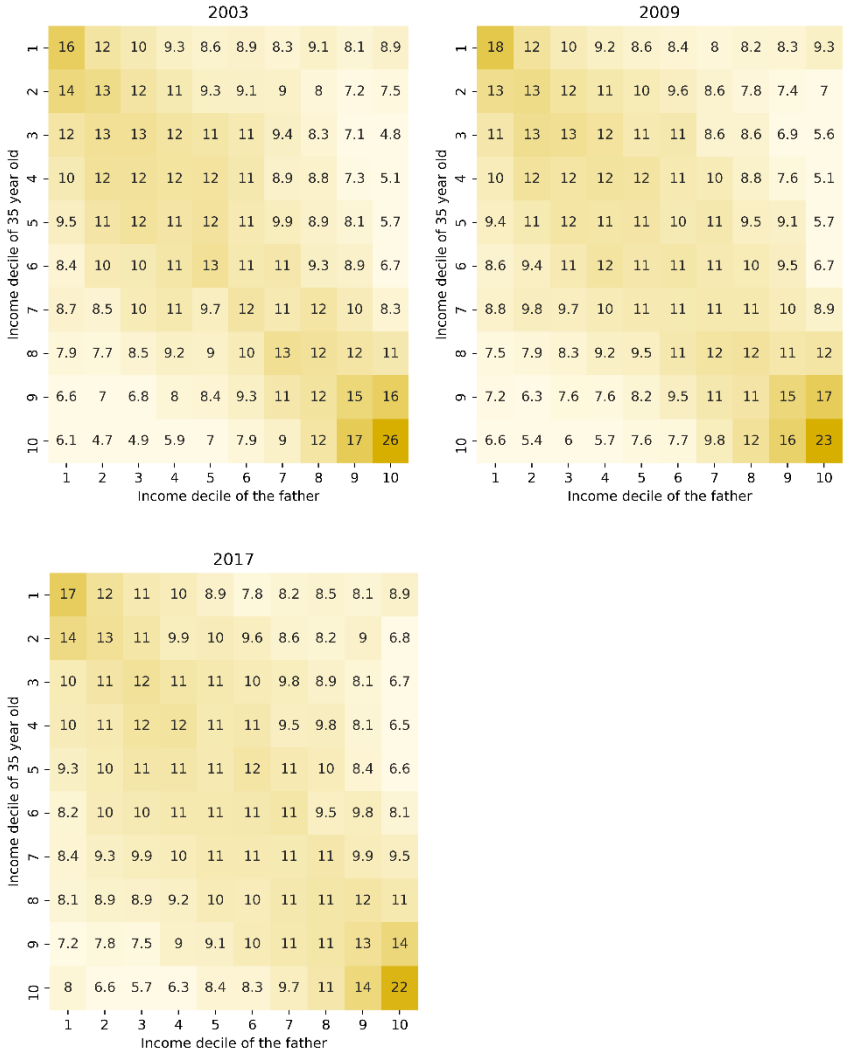
[13] Krueger (2012): "As the Congressional Budget Office noted in a recent report, the top 1 percent of families saw a 278 percent increase in their real after-tax income from 1979 to 2007, while the middle 60 percent had an increase of less than 40 percent."
[14] See, for example, Björklund and Jäntti (2011b).

man whose father was in decile group 1 when he was 35 would also be in decile group 1 was 16 percent, and the probability that he would be in decile group 10 was 6.1 percent . A comparison of the matrices for 2003 and 2009 and 2017, respectively, in Figures 4.8 a and b, shows no major changes. On the contrary, the figures in the matrix cells are fairly stable over time. This indicates that the intergenerational income mobility for men has not changed during the period examined.

Figures 4.9 a and b show similar matrices to those at 4.8, but for 35-year-old women. Women's transition probabilities also have not changed significantly during the period 2003–2017. A 35-year-old woman whose father was in, for example, decile group 4 when he was 35 years old, had a similarly high probability to be in decile group 10 in 2003 as she did in 2017 (6.4 percent in 2003 and 6.8 percent in 2017).

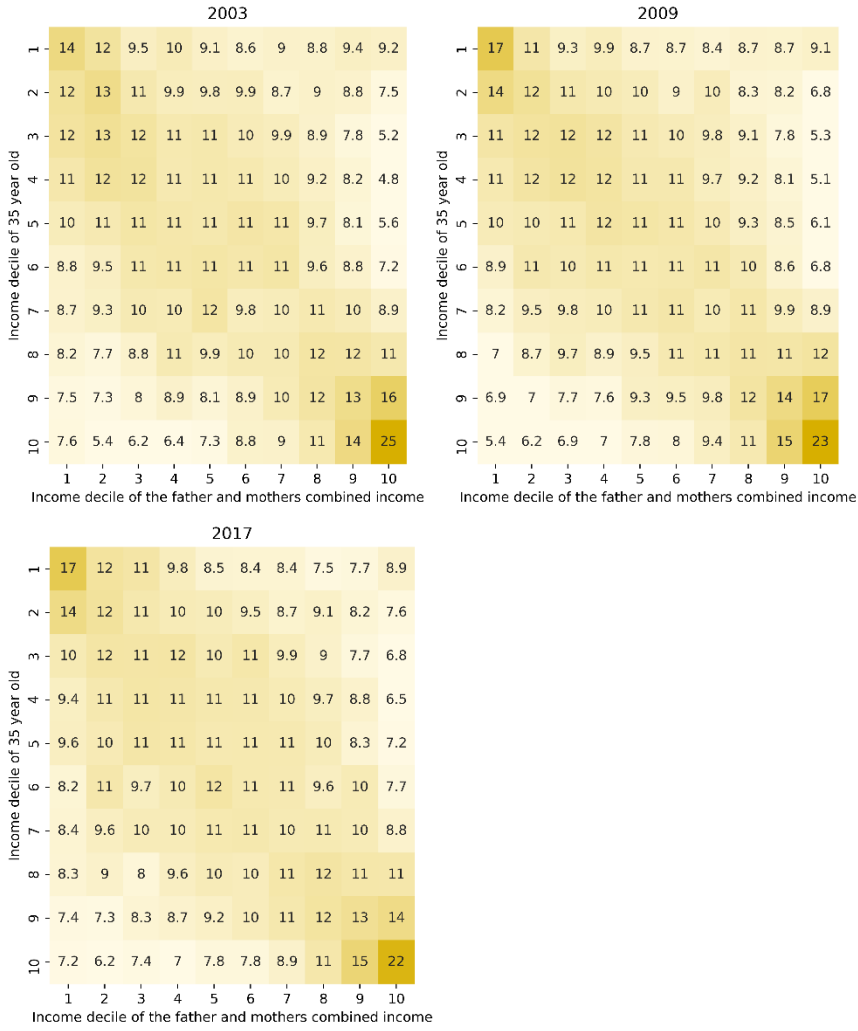
Figure 4.8 Transition matrices for men

a. 35-year-old men's decile group given the decile group of their fathers at age 35



Note: The matrix shows probabilities (as a percentage). Probabilities along the main diagonal (from the upper left corner to the lower right corner) capture immobility, and probabilities outside the main diagonal capture mobility. In the case of statistical independence between child and parent income, all cells in the matrix have a probability of 10 percent.
Source: SCB.

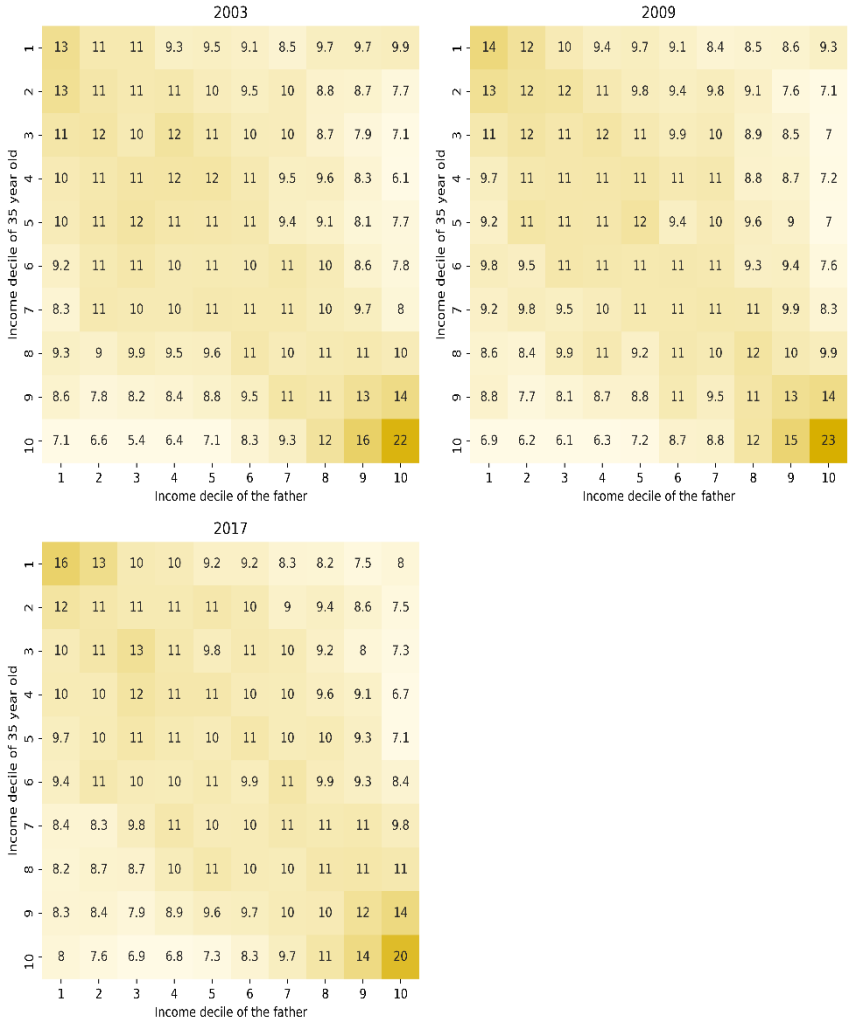
b. 35-year-old men's decile group given the decile group of their parents



Note: The parents have been divided into decile groups based on the sum of the mother's and father's accumulated income earned at the age of 35. The matrix shows probabilities (as a percentage). Probabilities along the main diagonal (from the upper left corner to the lower right corner) capture immobility, and probabilities outside the main diagonal capture mobility. In the case of statistical independence between child and parent income, all cells in the matrix have a probability of 10 percent.
Source: SCB.

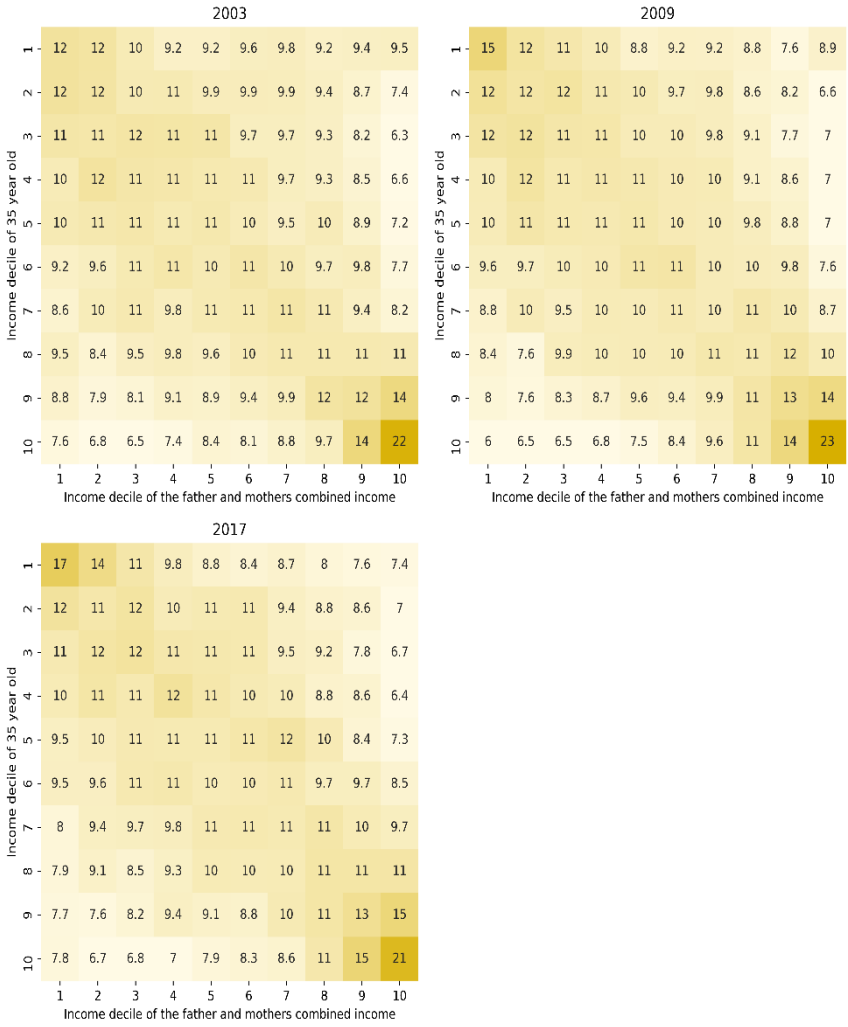
Figure 4.9 Transition matrices for women

a. 35-year-old women's decile group given the decile group of their fathers at aged 35



Note: The matrix shows probabilities (as a percentage). Probabilities along the main diagonal (from the upper left corner to the lower right corner) capture immobility, and probabilities outside the main diagonal capture mobility. In the case of statistical independence between child and parent income, all cells in the matrix have a probability of 10 percent.
Source: SCB.

b. 35-year-old women's decile group given the decile group of their parents



Note: The parents have been divided into decile groups based on the sum of the mother's and father's accumulated income earned at the age of 35. The matrix shows probabilities (as a percentage). Probabilities along the main diagonal (from the upper left corner to the lower right corner) capture immobility, and probabilities outside the main diagonal capture mobility. In the case of statistical independence between child and parent income, all cells in the matrix have a probability of 10 percent.
Source: SCB.

In studies of income mobility, a specific pattern in data is often noted: individuals in the "tails" of the income distribution, i.e., those with the lowest and highest incomes, remain to a greater extent in the same income group compared to individuals in the middle of the distribution who are more mobile. This is partly due to the fact that the income distribution tends to be more compressed in the middle than it is in the "tails". This means that a smaller income change is sufficient for individuals in the middle of the distribution to move to another decile group, than the change required for individuals who are in one of the distribution's "tails" to move to another income group. For example, moving from decile group 1 to 2 may require a larger increase in income than required to move from decile group 5 to 6.

Of course, this metrological explanation does not exclude other, deep-rooted socio-economic reasons for the lower mobility in the "tails" of the distribution. For example, at Figure 4.8 a, we see that the values for men in decile groups 1 and 10 are higher than in the surrounding cells. This may mean that men, whose fathers are in these income groups, to a greater extent "inherit" their father's position in the distribution of income than other men do. [15] At the same time, we know that movements away from the "tails" of the distribution are less common for the metrological reasons explained above. The same pattern appears at Figure 4.9 a, but the proportion of women in decile group 1 does not differ as much from the surrounding cells as the men's figures.

A simple measure of income mobility is the so-called *immobility average*. Probabilities along the main diagonal (from across the left corner to the lower right corner) in the matrix capture immobility and probabilities outside the main diagonal capture mobility. The immobility average is calculated as the sum of the main diagonal's figures in the matrices at Figures 4.8 and. 4.9 divided by 10.[16] The measure says nothing about the direction in which displacement within

[15] Björklund at el. (2012) concludes that intergenerational income mobility in Sweden i high, *except at the absolute top* of income distribution. Sons of fathers in the top thousandth of the income distribution inherently inherit their father's income almost fully inherit their fathers' income. Björklund at al.'s analysis indicates that the low mobility between generations in the income top is directly related to the fathers' capital income and financial wealth and that the sons in some way have access to the capital income generated by this financial wealth. However, even if we exclude the capital income, income mobility at the top layer of the distribution is significantly lower than for the rest of the population. Please note that capital income is not included in the data material that we examine in this chapter.

[16] See section 3 in SCB (2018). If the immobility average is 100, this means that 100 per cent of 35-year-olds are in the same decile group as their fathers/parents.

the distribution takes place, but only shows the average proportion of individuals who are in the same decile group as their fathers and parents at the age of 35, respectively. In Tables 4.2 and 4.3, we have calculated this measure for the matrices in Figures 4.8 and 4.9, as well as the average and standard deviation for all transition matrices during the period 2003–2017 which SCB has produced for us.

Table 4.2 Immobility average with the father as reference point

	35-year-old women	35-year-old men	35-year-old total
2003	12.3	14.0	12.8
2009	13.0	14.0	12.9
2017	12.5	13.1	12.6
Mean value 2003–2017	12.6	13.6	12.8
Standard deviation 2003–2017	0.20	0.38	0.14

Note: The immobility average is calculated as the sum of the main diagonal in the matrices of Figures 4.10 a and. 4.11 a divided by 10.
Source: SCB and our own calculations.

Table 4.3 Immobility average compared to the father and the mother as reference point

	35-year-old women	35-year-old men	35-year-old total
2003	12.5	13.2	12.5
2009	12.8	13.5	12.8
2017	12.8	13.0	12.7
Mean value 2003–2017	12.8	13.2	12.7
Standard deviation 2003–2017	0.18	0.17	0.13

Note: The immobility average is calculated as the sum of the main diagonal in the matrices of Figures 4.10 b and 4.11 b divided by 10.
Source: SCB and our own calculations.

Table 4.2 indicates that during the relevant period, on average 12.6 per cent of women and 13.6 per cent of men were in the same decile group as their fathers. This means that in the period 2003–2017 more than 85 per cent of the 35-year-olds were in a different decile group than their fathers. The 35-year-old women in our material show a slightly higher income mobility than men of the same age. We cannot detect any trend in the calculated immobility figures. This is the case even if we examine the income of women and men in relation to their parents' aggregate earned income (Table 4.3).

4.2.4 Intergenerational elasticity

The most common measure in the scientific literature for estimating intergenerational mobility in income, the so-called *intergenerational*

elasticity, indicates by how many percent a child's income is expected to deviate from the average in their generation's income distribution based on their parent's deviation from the average in the parents' income distribution.[17] The intergenerational elasticity is obtained by statistically estimating the following relationships:

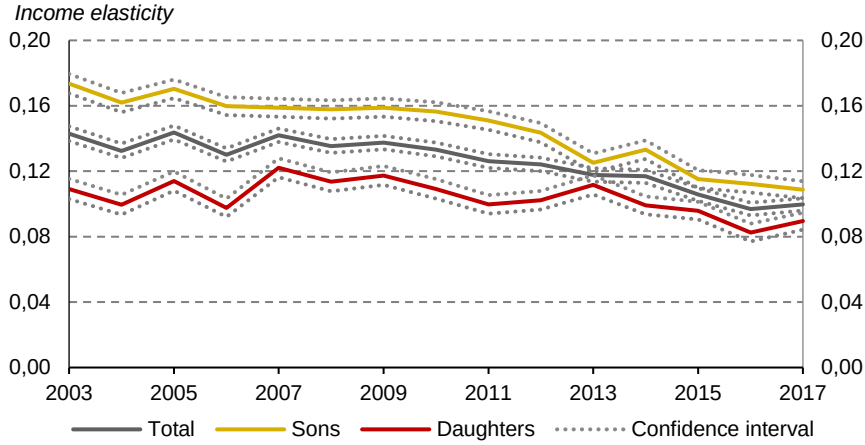
$$\textit{log (child's income)} = a + b \times \textit{log (parents' income)} + e$$

Where, log (·) is the logarithmic income, a is a constant and e a random term that captures everything except the parent's income that affects the children's income. The coefficient b is called the intergenerational elasticity. In the empirical studies that have been done, the Nordic countries obtained an estimate of b in the interval 0.12–0.25 and the United States obtained around 0.4.[18] For example, if the elasticity b is 0.25, which based on previous research is a reasonable estimate for Sweden[19], it means that children on average "inherit" about 25 percent of their parents' deviation from the average income. If the elasticity is 1 then we have a society where the children's income is statistically totally determined by the parent generation, i.e., society lacks intergenerational income mobility. If the elasticity is instead 0, we have a society with complete intergenerational mobility, i.e., the children's income is statistically completely unaffected by the parents.

[17] Solon (1999).
[18] Björklund and Jäntti (2011b).
[19] Nybom and Stuhler (2015).

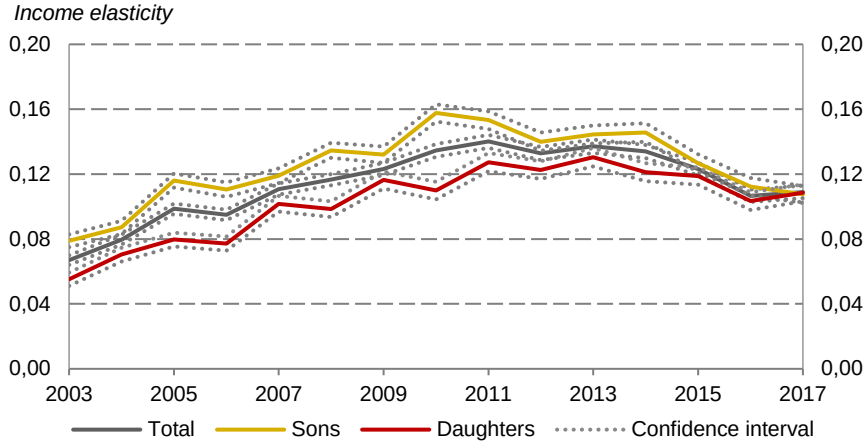
Figure 4.10 Estimated elasticity, 2003–2017

a. Compared to the father's income



Source: Calculations made by SCB. The coefficient of determination (R^2) in the regressions is between 0.0056 and 0.020.

b. Compared to both parents' income



Source: Calculations made by SCB. The coefficient of determination (R^2) in the regressions is between 0.0039 and 0.0197.

The estimates of the intergenerational elasticity *b* observed in our data material are low in relation to the reports of previous studies in Sweden.[20] An obvious difference between our study and previous studies is that the latter, in several cases, analysed total income and not just aggregate earned income. This might be a reason why we get such low estimates of the coefficient *b*. In relation to all 35-year-olds

[20] See, e.g., Heidrich (2017).

(women and men) in relation to the father's income, the elasticity drops from just over 0.14 in 2003 to 0.10 in 2017 (Figure 4.10 a). Part of both the level and the falling trend is probably explained by the fact that entry into the labour market has shifted upwards in age. In 1985, at least 75 per cent of all 21-year-olds were working, whereas in 2014 this was not the case until the age of 29.[21] This means that 35-year-olds over time on average had slightly fewer years in their careers and thus lower incomes the later in the 2003–2017 period we estimate the income equation. According to previous studies, intergenerational mobility tends to be highly overestimated before the age of 30. [22] At the same time, the level of education is higher in younger generations, which works in the opposite direction and tends to increase income (once entry into the labour market has occurred). Another important source of the relatively low elasticity is that there is a great risk of underestimating the intergenerational elasticity if one uses annual income in one single year to approximate life income, as we do in our analysis. Accordingly, in literature in recent years, averages of income over several years have been used in investigations.[23]

Most studies analysing intergenerational mobility focus on men (sons relative to fathers). The reason for this is that the rapid change of women's participation in the labour market complicates the analysis. However, we believe that it is important to examine women and men separately. Our earliest estimate is from 2003, i.e., children born in 1968. In 2005, which is the first year in the new labour force surveys, the employment rate among 35-year-old women was 83.0 per cent and in 2017 it was 84.1 per cent, i.e., relatively stable. The major change that characterized their mothers' lives was thus already over when the 35-year-olds in our study entered the labour market. As shown in Figure 4.10 a, the difference in elasticity is relatively large, especially for the earliest years we have examined. In 2003, the elasticity for men is 0.17, while that of women is 0.11. This suggests that mobility is somewhat greater for women than for men. Over time, the difference has become smaller and for the last year we examined, the difference dropped to two or three points.

At Figure 4.10 b, instead, 35-year-olds 'income is compared against the sum of their parents' income. This variant is intended to give an

[21] SCB (2015).
[22] Nybom and Stuhler (2015).
[23] Björklund, Jäntti and Romer (2012).

indication of the income in the household as a whole and how it has affected the younger generation's income. The pattern that appears is very different from what was shown at Figure 4.10 a. Firstly, the elasticity for the early years is very low, for all 35-year-olds: 0.07–0.08. In contrast to Figure 4.10 a, the elasticity rises for both women and men until the beginning of the 2010s, and then decreases. The pattern is probably a result of the fact that the mothers in the parent generation, who, for the earliest estimated years, were 35 in the early 70s, increasingly entered the labour market, which meant that the household's total income increased. The elasticity is highest in 2010 for men (0.16) and in 2013 for women (0.13). Subsequently, the elasticity has decreased. In the last years there is no difference in elasticity between women and men, they are both around 0.11. This is in line with the results we found for all 35-year-olds when we only used the father's income.

Our overall interpretation of the results from the transition matrices and the estimates of intergenerational income elasticity is that income mobility for women and men born in the period 1968–1982 – and who grew up, were educated and started working in decades when the income differences increased markedly – has not changed significantly.[24]

4.3 Assessments and recommendations

In our initial analysis of the data material, we note the following: income differences, calculated on 35-year-old men's aggregate earned income, declined from 1968 until the early 1980s; subsequently they have continuously grown until 2017.

Income differences between women fell sharply between 1968 and the beginning of the 1990s. An important explanation for this is a

[24] I Lindahl at el. (2015) analyzes a unique data material that is based on a total survey of all children who attended grade three in and around Malmö in 1938. The analysis focuses on how income and education have developed over four generations. The results show that family background has great, and long-lived, significance for both education and income. The authors argue that their results indicate that intergenerational transmission of aspects that "cannot be measured in available data, e.g. genes, culture and social factors, are important and that it also has influence over several generations /… / Inequalities in a generation thus take longer to even out than we previously thought ". The fact that income mobility in the material we have studied does not seem to have changed, despite the fact that income differences during the period examined have increased significantly, is probably explained, in light of Lindahl et al., by the genetic and socio-economic factors that they emphasize as being fundamental. These factors are apparently so significant that the changes that occurred during the period we studied are not substantial enough to alter more fundamental mechanisms.

rising employment rate among women. From the beginning of the 1990s, income differences between women have developed in much the same way as for men.

Women's accumulated earned income at the age of 35 has since the 1970s gradually approached the aggregate earned income of 35-year-old men: in 2017, men's incomes were on average about 25 per cent higher than women's incomes. In our data material, we see that the probability that women will have a lower aggregate earned income than their fathers is greater than for their male peers, even though the probability has gradually decreased over time. When we examine how the probability of an individual being in the same income group as their parents changes over time, we can conclude that the transition matrices indicate that income mobility during the period examined is stable. Furthermore, women's income mobility is slightly higher than that of men.

Our preliminary statistical estimates of the intergenerational income elasticity are relatively low compared with what has been reported in literature. The estimated intergenerational income elasticity compared to the father's income indicates that mobility has increased. This has happened at the same time as income differences have increased.

Our understanding is that intergenerational income mobility for women and men born in the period 1968–1982 has not changed significantly. The statistical correlation that can be noted between income mobility and income inequality in a comparison between different countries is not present in Sweden. We intend to investigate this issue in more depth and present a more detailed analysis in next year's report.

4.4 Tables – overview of data material

Table 4.4 Number of 35-year-olds in data material over the aggregate earned income where the comparison is made against the father

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Women	42,420	41,489	43,554	46,299	46,724	46,655	47,422	45,213	42,878	41,896	40,975	42,626	43,137	42,295	41,919
Men	44,714	44,365	45,932	49,318	49,590	49,498	50,438	47,710	45,486	44,679	43,224	44,976	45,665	44,472	44,554
Total	87,134	85,854	89,486	95,617	96,314	96,153	97,860	92,923	88,364	86,575	84,199	87,602	88,802	86,767	86,473

Source: SCB.

Table 4.5 Number of 35-year-olds in data material over the aggregate earned income where the comparison is made against both parents

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Women	48,453	46,687	48,456	50,665	50,501	50,124	50,454	47,764	45,047	44,050	43,013	44,701	45,273	44,325	43,969
Men	51,018	49,846	50,939	53,936	53,676	53,008	53,646	50,463	47,991	47,004	45,496	47,167	47,861	46,631	46,680
Total	99,471	96,533	99,395	104,601	104,177	103,132	104,100	98,227	93,038	91,054	88,509	91,868	93,134	90,956	90,649

Note: The number of individuals in the data material is greater in table 4.5 compared with table 4.4. This is because an individual is included in the data material only when we have data for the individual's income at the age of 35 and data regarding the parent's income at the age of 35 is also available. Table 4.5 compares the individual's income with the sum of the parents' income divided by two. If we only have data for one of the parents, the individual's income is compared with the parent for whom we have data. This has the effect that fewer individuals fall away when the comparison is made against both parents. Source: SCB.

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