

# Swedish Fiscal Policy

Fiscal Policy Council Report 2014

The Swedish Fiscal Policy Council is a government agency. Its 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 2014 report of the Swedish Fiscal Policy Council was published in Swedish on May 12, 2014. Barbara Burton has translated the report into English. Joakim Sonnegård, Head of Agency, led the preparation of the English version with the participation of Niklas Frank, Karolina Holmberg and Johanna Modigsson. All six members of the Council have been involved in this translation as well.

Stockholm, August 25, 2014

John Hassler  
*Chairman of the Council*

## Foreword

The Fiscal Policy Council is to “review and assess the extent to which the fiscal and economic policy objectives proposed by the Government and decided by the Riksdag are being achieved and thus contribute to more transparency and clarity about the aims and effectiveness of economic policy”. The Council will also promote more public debate in society about economic policy.

The Council consists of six members. Since the previous report in May 2013, Lars Jonung has left the Council. Since September 1, 2013, John Hassler has been Chairman and Oskar Nordström Skans 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), Karolina Holmberg (Senior Economist), Johanna Modigsson (Economist) and Charlotte Sandberg (Head of Administration). Charlotte Sandberg has been on leave for the past year and thus has not participated in the work on this report. During this time, Åsa Holmquist has been responsible for the Council’s administration.

This is the Council’s seventh report. In the work on this year’s report, eleven working meetings have been held. The analytical work was completed on May 2, 2014. The Council has commissioned four background papers. They will be published in the Council’s publication series, *Studier i finanspolitik* (Studies in fiscal policy):

1. Niklas Bengtsson, Per-Anders Edin and Bertil Holmlund: Löner, sysselsättning och inkomster – ökar klyftorna i Sverige? (Wages, employment and incomes – is inequality increasing in Sweden?)
2. Dirk Niepelt: Financial Policy.
3. National Institute of Economic Research: Analys av rörelser i inkomstfördelningen vid införande av jobbskatteavdraget (Analysis of mobility in the income distribution with the introduction of the earned income tax credit).
4. National Institute of Economic Research: Den offentliga sektorns skulder och finansiella tillgångar (Public Sector Debt and Financial Assets).

We have received many valuable comments. We would like to thank those who have presented reports at Council working meetings: Axel Arvidsson, Niklas Bengtsson, Peje Bengtsson, Urban Hansson Brusewitz, Peter Doyle, Per-Anders Edin, Johan Egebark, Jesper Hansson, Laura Hartman, Bertil Holmlund, Elisabeth Hopkins, Erik Höglin, Martin Jacob, Erik Jonasson, Niklas Kaunitz, Markus Mossfeldt, Dirk Niepelt, Cecilia Renmyr, Ulla Robling, Elin Ryner and Tord Strannefors.

Our dialogue with colleagues at the National Institute of Economic Research is valuable in our work. Over the past year, the special dialogue with Erik Höglin and Elin Ryner has been important. Aila Ahsin and Tommy Persson have given the Council excellent administrative support. In conclusion, we would also like to thank here Hans Sacklén and Albin Kainelainen, both working at the Ministry of Finance, for their constructive comments.

Stockholm, May 2, 2014

John Hassler  
*Chairman*

Eva Lindström  
*Deputy Chairman*

Anders Björklund

Steinar Holden

Irma Rosenberg

Oskar Nordström Skans

# Abbreviations

ADF	Automatic discretionary fiscal policy
AF	Arbetsförmedlingen (Swedish Public Employment Service)
BP	Budget Bill
CSN	National Board of Student Aid
ECB	European Central Bank
EEAG	European Economic Advisory Group
ESV	The National Financial Management Authority
EU	European Union
FASIT	Distribution analysis system for incomes and transfers (Statistics Sweden)
FiD	Ministry of Finance
GDP	Gross domestic product
HEK	Household Finances (Statistics Sweden)
IFAU	The Institute for Evaluation of Labour Market and Education Policy
IMF	International Monetary Fund
LFS	Labour Force Surveys (Statistics Sweden)
MTO	Medium Term Objective (EU)
NEET	Not in Education, Employment or Training
NIER	National Institute of Economic Research
OECD	Organisation for Economic Co-operation and Development
SALAR	Swedish Association of Local Authorities and Regions
SFS	Swedish Code of Statutes
SOU	Statens offentliga utredningar (Swedish Government Official Reports)
VP	Spring Fiscal Policy Bill

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## The Fiscal Policy Council's remit

The Fiscal Policy Council, in accordance with its instruction, is 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 contribute to more transparency and clarity about the aims and effectiveness of economic policy.<sup>1</sup>

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

1. long-term sustainable public finances, and
2. budgetary targets, particularly the surplus target and the expenditure ceiling.

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

1. assess whether the fiscal stance is consistent with cyclical developments in the economy,
2. assess whether fiscal policy is in line with healthy long-term sustainable growth and leads to long-term sustainable high employment,
3. examine the clarity of these bills, particularly with respect to the specified basis of economic policy and the reasons for proposed measures, and
4. analyse the effects of fiscal policy on the distribution of welfare in the short and the long term.

The Council may review and assess the quality of the forecasts presented and the models on which the forecasts are based.

The Council is also to work to stimulate more public debate of economic policy.

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<sup>1</sup> SFS 2011:446.

## The fiscal framework

The fiscal framework consists of the fundamental principles that fiscal policy is to follow to be sustainable in the long term.<sup>2</sup> Some of these principles are governed by law. Others follow practice.

The budgetary framework is a core component of the fiscal framework. The budgetary framework includes a surplus target for general government net lending, an expenditure ceiling for central government expenditure, excluding interest expenditure, and for old age pension system expenditure, and a balanced budget requirement for local governments.

Under the Budget Act, the Government is obliged to present a proposed target for general government net lending. The Riksdag has set the surplus target as follows: government net lending is to average 1 per cent of GDP over a business cycle.

Under the Budget Act, the Government must 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 will primarily act as a buffer if expenditures develop in an unexpected way because of cyclical developments.

The expenditure ceiling is the overarching restriction in the budget process. In the budget process, priorities are set for different expenditures 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.

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 Government has drawn up a number of principles to guide stabilisation policy. Fiscal policy's most important contribution to stabilising the economy is to maintain confidence in the long-term sustainability of the public finances. In the event of normal demand

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<sup>2</sup> This summary is based on Ministry of Finance (2011b).

shocks, monetary policy will stabilise both inflation and demand in the economy. The Government then sees no reason to take any active, i.e. discretionary, fiscal policy measures. Given shocks of this kind, fiscal policy will have a countercyclical effect via the automatic stabilisers.

In the event of very large demand and supply shocks, an active fiscal policy may be needed. The fiscal measures in this case will help limit the rise in unemployment, reduce the risk of unemployment becoming entrenched and mitigate the consequences for particularly vulnerable groups.

The stabilisation policy measures should also be designed in such a way that they do not prevent net lending from returning to a level compatible with the surplus target when capacity utilisation is once again normal.

It is the Government's view that in financial crises, it has to take special measures to contribute to financial stability. The Government presumes that the fiscal consequences of such measures should be limited. Possible losses that arise in the financial sector will first be borne by credit institutions themselves, their shareholders and others who have contributed risk capital.

## Summary

The main task of the Fiscal Policy Council is to review and evaluate the extent to which fiscal and economic policy objectives are being achieved. The principal conclusions in this year's report are the following:

1. The Council notes that in the past year, there have been clearer signs of an economic recovery, both globally and in Sweden. But there are still risks that could lead to slower growth.
2. Given the Government's assessment of the cyclical situation in the 2014 Budget Bill, estimated general government net lending for 2014 was consistent with a well balanced fiscal policy.
3. The Council's analysis shows that since 2006, the Government's active stabilisation policy has been well timed.
4. Since autumn 2013, the stabilisation policy outlook has changed. The Council now sees a risk that government net lending for 2014 may be lower than the level justified by stabilisation policy considerations. As the measures in the 2014 Budget Bill permanently weaken the budget, a return to a 1 per cent budget surplus will be more difficult. The low net lending in 2014 does not, in itself, present any threat to long-term fiscal sustainability.
5. The Government's view of how much the economy can grow before equilibrium capacity utilisation is reached is considerably more positive than that of the National Institute of Economic Research (NIER) and other forecasters. This is mainly due to a more optimistic view of equilibrium unemployment. The Government also has a more optimistic view of how rapidly the public finances will improve when capacity utilisation increases. The uncertainty indicated by various estimations should have been discussed by the Government and may have justified more prudence with respect to permanent budget weakening.
6. The Council does not expect that the surplus target will be met in the current business cycle. In the Council's opinion, the Government should have declared a deviation from the surplus target.

7. The Council is also of the opinion that the deviation from the surplus target may be justified by the long and deep downturn. In such circumstances, a deviation need not damage the credibility of the surplus target. Nor is long-term fiscal sustainability threatened.
8. In the 2014 Spring Fiscal Policy Bill, the Government makes an explicit commitment that net lending will return to 1 per cent of GDP in 2018. The Government makes it clear that this commitment implies a very tight policy that excludes unfinanced measures and requires other budget weakening measures to be fully financed. This commitment is a valuable contribution to maintaining confidence in the fiscal framework.
9. The Government has on a number of occasions postponed the time when net lending is to reach 1 per cent, referring to the more protracted than expected downturn. In the 2014 Spring Fiscal Policy Bill, there is another postponement, even though the economic situation has improved more rapidly than the Government previously expected. In the Council's opinion, the Government should have provided more justification for this postponement.
10. The Council thinks that the link between the fiscal policy proposed and the surplus target should be made clearer. It therefore proposes that structural net lending for the current and following years be used to assess whether there is a deviation from the target. If there is a deviation, the Government should explain it and present a realistic plan for meeting the target. Such a plan should be tailored to the business cycle.
11. The estimates of structural net lending can and should be improved. In the Council's opinion, the estimates should be disaggregated and formulated so that the average output gap is equal to zero. Improving the estimates is absolutely essential if, as the Council recommends, structural net lending is given a key role in assessing how fiscal policy relates to the surplus target.
12. Estimates by the Council and NIER show that neither general government net worth nor gross debt would develop in an unacceptable way if the surplus target were reduced to zero. But a lower surplus target leads to smaller margins for tackling a

sharp economic downturn. The consequences of not meeting the target also worsen if the target is lowered. Reducing the target also provides only a temporary increase in resources for higher expenditures or lower taxes. The Council's overall assessment is that the current level of the surplus target should be maintained for the time being.

13. The expenditure ceiling is tight for the next few years. In 2014 and 2015, there is no space beyond that needed for managing the normal variations in expenditures, and even in the following year, the space is limited. It is important to maintain adequate margins for the expenditure ceiling in order not to be forced to take short-term expenditure measures, which risk harming the effectiveness of government activities.
14. The Council notes that expenditures for the sickness benefit have been underestimated for the past few years. In the Council's opinion, fiscal space may be limited if sickness absence continues its rapid rise. It is the Council's view that Försäkringskassan (the Swedish Social Insurance Agency) can and should improve its forecasting methods for the sickness benefit appropriation. The Government should also report the basis for its own estimate of sickness benefit expenditures.
15. Labour force participation, the employment rate and the number of hours worked have grown relatively well during the downturn. This is particularly true if demographic changes are taken into account. Sound public finances have made an effective stabilisation policy possible and this has probably played a role in this growth. The Government's reforms, particularly the earned income tax credit, have also probably contributed.
16. Employment has not developed as positively as the labour force. Unemployment is thus higher than before the crisis. The increase in long-term unemployment is particularly worrisome. There are also indications that the percentage of unemployed who belong to vulnerable groups with job finding rates considerably below average has increased. This could lead to a permanent level of unemployment higher than the Government's forecasts for equilibrium unemployment.

17. The Council considers it inappropriate to use unemployment among 15–24-year-olds as a measure of young people's problems getting established in the labour market, as is often done in the public debate. In the Council's opinion, the measure of inactivity among young people that Eurostat estimates is generally a better measure of young people's difficulties entering the labour market. This measure includes young people who are not in employment or education. The share of inactive 18–24 year-olds has declined slightly since 2006.
18. Inactivity among young people is most common among 19–20-year-olds. This indicates that the transition between school and working life functions poorly. This suggests that the Government's support for vocational introduction for young people is a step in the right direction in making it easier for young people to enter the labour market.
19. Between 2006 and 2012, disposable incomes in constant prices have risen by about 13 per cent. The aggregated measure of income inequality, the Gini Coefficient, has increased marginally between 2006 and 2012. Incomes at the top and bottom of the income distribution have increased more slowly than those in the middle. This has led to less income inequality at the top of the distribution and a greater spread in the lower part of the distribution. The latter is reflected in the increase in relative poverty after 2006.
20. The earned income tax credit has contributed to higher average incomes for households. Analysis with the simulation model FASIT shows that the earned income tax credit has also contributed to a slight increase in the spread between the lower incomes in the income distribution and median incomes. The change is not large, but it should have been part of the Government's description of the earned income tax credit's income distribution effects.
21. The Council welcomes the Government's initiative to reform the housing market, but it notes that serious problems remain. Reviewing the utility value system, interest deductions, the property tax and the capital gains tax must be part of a

comprehensive approach in order to achieve a better functioning housing market in Sweden.

22. The Riksdag's consideration of the 2014 Budget Bill has made clear that there is political disagreement on how the Riksdag's framework model for budget decisions is to be interpreted. This disagreement has weakened this model and made it more difficult for minority governments to conduct a consistent economic policy. A broad political consensus on how the Riksdag's rules for budget decisions are to be interpreted and implemented is important.



# 1 The economic situation

The aim of Chapter 1 is to provide a clear picture of the economic situation that existed when the Budget Bill for 2014 (BP14) and the 2014 Spring Fiscal Policy Bill (VP14) were presented. The Council also discusses and evaluates the Government's economic policy in the light of the economic situation. The chapter is based on material published by other analysts and forecasters. When the Council makes its own estimate, it is indicated in the text.

In Section 1.1, there is an international overview. Section 1.2 describes economic developments in Sweden and puts the Swedish situation into an international perspective. It focuses on the economic situation, the labour market, public finances and income distribution developments. Section 1.3 summarises the Council's assessments.

## 1.1 International overview

In 2013, after a weak beginning to the year, the global economy began to recover. In the developed countries, a gradual relaxation of the tight fiscal policy of recent years aimed at strengthening public finances has begun. Inflation continues to be low and thus monetary policy is still very expansive. On balance, this helps support a recovery. In emerging economies, the picture is more diverse. In some countries, growth has continued at a good pace. In others, particularly countries with large current account deficits and high government debt, capital outflows and currency instability have slowed development and contributed to periods of financial market turmoil. Moreover, low global demand has led to weaker growth for a number of emerging economies that previously have been engines of growth for the global economy.<sup>1</sup> Nevertheless, increasing global trade and rising confidence indicators suggest stronger, albeit unevenly distributed, global growth in the coming period (Table 1.1).

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<sup>1</sup> OECD (2013b) and IMF (2014b).

**Table 1.1 Global growth 2013–2015 according to the National Institute of Economic Research (NIER)**

<i>Percentage change</i>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>Sweden</b>	<b>1.5</b>	<b>2.7</b>	<b>2.9</b>
Denmark	0.4	1.3	1.8
Finland	-1.4	0.7	1.5
Norway	0.8	1.7	2.0
France	0.3	1.1	1.5
Italy	-1.9	0.8	1.4
Spain	-1.2	0.9	1.3
United Kingdom	1.8	2.8	2.7
Germany	0.5	1.8	2.2
Japan	1.5	1.2	1.2
Canada	2.0	2.4	2.4
United States	1.9	2.7	3.2
Brazil	2.3	2.2	2.8
India	4.5	5.1	6.0
China	7.7	7.5	7.2
World	3.0	3.7	4.0
OECD	1.3	2.2	2.6
EU	0.1	1.6	2.0
Euro area	-0.4	1.2	1.7

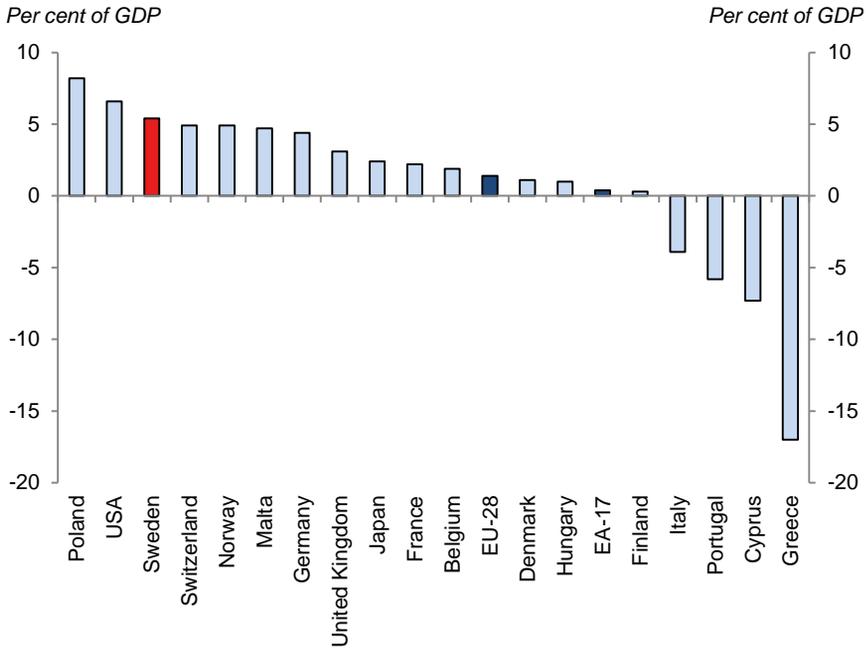
Note: Calendar adjusted values in fixed prices. 2014–2015 refers to the forecast year.

Source: NIER (2014c).

In the United States, the recovery continues and unemployment has fallen more rapidly than expected. Because of the stronger economic activity, the Federal Reserve has begun tapering quantitative easing, reducing its purchases of government bonds and housing related securities. But as inflation remains low, a delay in increasing the discount rate is expected.

Developments in Europe are weaker but growth did turn upwards in 2013. Domestic demand has increased and rising household and business confidence will contribute to more stable development in the future. But there are substantial differences between countries; growth in Sweden, Germany and the United Kingdom has been relatively strong since the financial crisis while many euro countries have experienced very weak growth (Figure 1.1).

**Figure 1.1 Cumulative GDP growth 2010–2013**

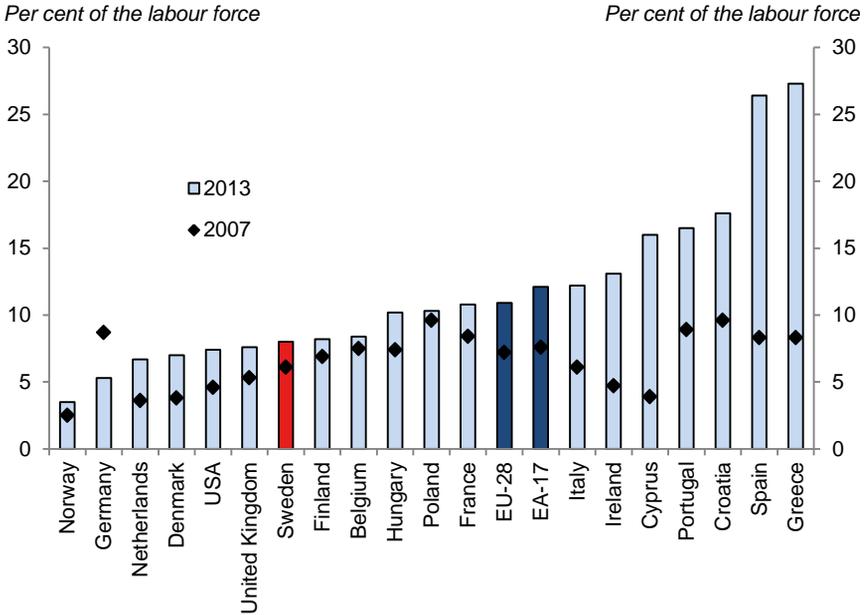


Note: Refers to cumulative real GDP growth 2010–2013.  
 Source: Eurostat (2014b).

Unemployment in the euro area stabilised in late 2013, but at a high level (Figure 1.2). There is also a very large difference in unemployment between countries, reflecting that the crisis in parts of the euro area is also a cost crisis.<sup>2</sup> In the euro countries with the weakest growth, relative labour costs need further adjustment in order to reduce the large current account deficits and stimulate employment.

<sup>2</sup> NIER (2014c).

**Figure 1.2 Unemployment 2007 and 2013**



Source: Eurostat (2014b).

Since the crisis, austerity policies in Europe have led to a consolidation of public finances in terms of higher government net lending in the majority of EU countries.<sup>3</sup> The austerity measures have entailed striking a balance between achieving long-term sustainable public finances on the one hand and not slowing growth and employment too much on the other hand. According to most analysts, however, the volume of austerity measures, measured as the change in government net lending, is expected to diminish in the next few years, supporting more rapid growth.<sup>4</sup>

Despite the improvement in government net lending, government debt is still high in many countries; the IMF expects the debt ratio in advanced<sup>5</sup> economies to stabilise at just under 110 per cent of GDP and in the euro area at about 95 per cent of GDP in 2014 (Figure 1.3). Further measures will be needed to reduce debt levels.

<sup>3</sup> IMF (2014a).

<sup>4</sup> EEAG (2014), IMF (2014a) and IMF (2014b).

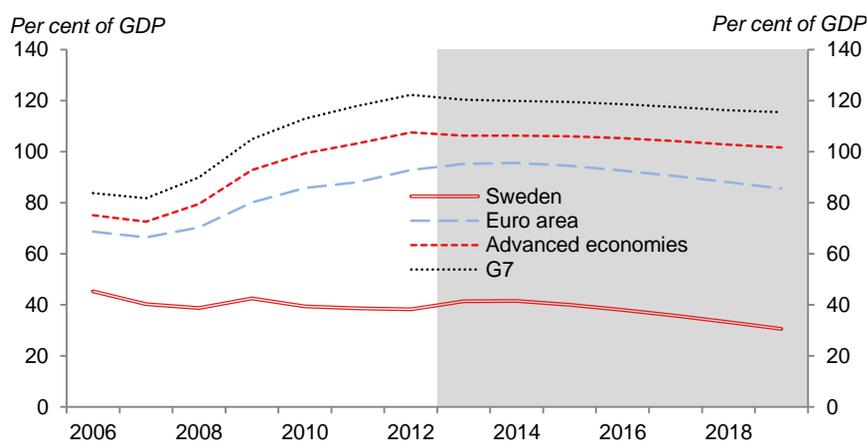
<sup>5</sup> IMF definition. See IMF (2014b), p. 160, for a complete list.

**Table 1.2 General government net lending 2012–2015 according to the IMF**

<i>Per cent of GDP and potential GDP</i>	Actual net lending				Cyclically adjusted net lending			
	2012	2013	2014	2015	2012	2013	2014	2015
<b>Sweden</b>	<b>-0.7</b>	<b>-1.0</b>	<b>-1.3</b>	<b>-0.5</b>	<b>-0.7</b>	<b>-0.8</b>	<b>-1.2</b>	<b>-0.6</b>
Denmark	-3.9	-0.4	-1.4	-2.7	-0.9	-0.2	-0.3	-0.4
Finland	-2.2	-2.6	-2.6	-1.9	-1.5	-0.8	-0.6	-0.5
Norway <sup>1</sup>	13.9	11.1	11.2	9.9	-5.2	-5.5	-6.0	-5.9
France	-4.8	-4.2	-3.7	-3.0	-3.5	-2.4	-1.9	-1.5
Greece	-6.3	-2.6	-2.7	-1.9	-2.3	2.1	1.5	1.1
Ireland	-8.2	-7.4	-5.1	-3.0	-6.1	-5.0	-4.0	-2.3
Italy	-2.9	-3.0	-2.7	-1.8	-1.6	-0.3	-0.8	-0.3
Portugal	-6.5	-4.9	-4.0	-2.5	-4.1	-3.1	-2.7	-1.7
Spain	-10.6	-7.2	-5.9	-4.9	-5.7	-4.9	-4.4	-3.7
United Kingdom	-8.0	-5.8	-5.3	-4.1	-5.7	-3.7	-3.8	-3.1
Germany	0.1	0.0	0.0	-0.1	-0.1	0.3	0.2	-0.1
United States	-9.7	-7.3	-6.4	-5.6	-7.7	-5.4	-5.0	-4.6
Japan	-8.7	-8.4	-7.2	-6.4	-7.6	-7.8	-6.9	-6.1
Advanced economies	-6.2	-4.9	-4.2	-3.6	-5.0	-3.7	-3.4	-3.0
Euro area	-3.7	-3.0	-2.6	-2.0	-2.3	-1.3	-1.2	-1.0

Note: 2013–2015 refer to forecasts. <sup>1</sup> Cyclically adjusted net lending for Norway refers to net lending excluding oil revenues and is stated as a percentage of potential mainland GDP.

Source: IMF (2014a).

**Figure 1.3 General government gross debt in advanced economies**

Note: Refers to gross debt in the consolidated public sector. Grey area, 2013–2018, shows the forecast year. The G7 includes Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.

Source: IMF (2014a).

There are several signs that on balance indicate that a global economic recovery has begun. The positive signals seen in confidence indicators in the past year have also begun to have an impact on the real economy. Low inflation in the advanced economies also makes it likely that growth may continue to have the support of an expansive monetary policy.

But there are still clear risks that could lead to slower growth. The normalisation of monetary policy introduced in the United States has considerable impact on other countries and will lead to a gradual tightening of credit conditions. It may hold back the recovery in other countries. There is also an obvious risk that the situation in the euro area could worsen again while the scope for fiscal stimulus measures is limited in many countries. It is not clear how much reform work is still needed before growth can be normalised. There is still considerable uncertainty about the state of the banks in the euro area and the new regulatory framework for handling banking crises is still not in place. Low inflation is a concern and the ECB has thus decided that it may also take quantitative measures. Problems in several emerging economies may also worsen and lead to more spillover effects in the financial markets. Events in Ukraine and what they may lead to are currently very difficult to judge, but could potentially have a significant impact on the global economy due to rising energy prices and financial market turmoil.

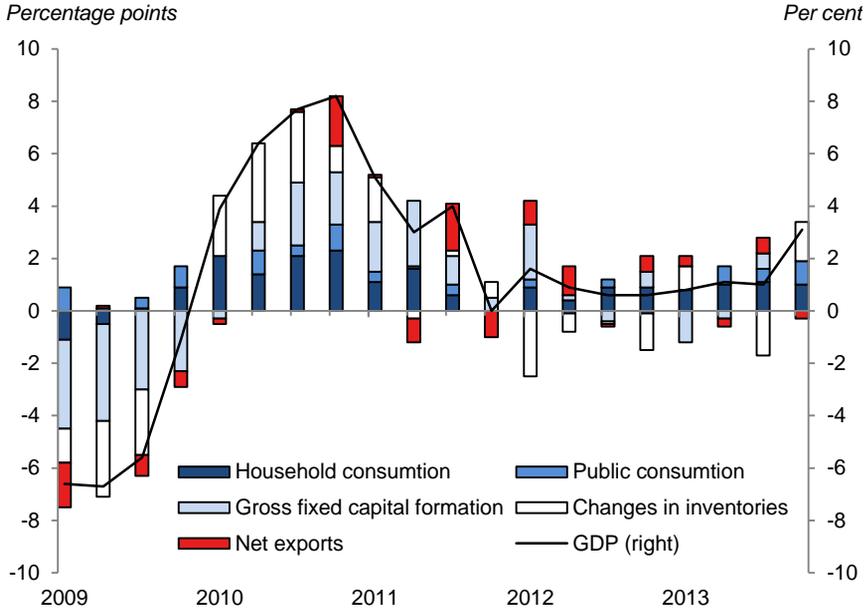
## 1.2 Developments in Sweden

After weak growth in early 2013, economic activity in Sweden rebounded in the latter part of the year. At 1.5 per cent, annual GDP growth in 2013 was stronger than expected. The forecasts indicate that the recovery is gaining momentum and will strengthen further in 2014.

The incipient recovery in the global economy contributed to the rebound to some extent but domestic demand was the primary propellant. Unlike the recovery after the 1990s crisis, net exports have made a relatively small contribution to GDP growth in recent years (Figure 1.4). After a few weak years, exports began to recover in the latter part of 2013. With the improvement in the global economy, Swedish exports are expected to continue to grow. However, imports also recovered and are expected to continue to

increase. Consequently, the net contribution to GDP from foreign trade is expected to continue to be small.

**Figure 1.4 GDP and expenditure components**



Note: The solid line shows percentage change in GDP compared with the same quarter in the preceding year. The bars show, in percentage points, the contribution of different expenditure components to the change in GDP.  
Source: Statistics Sweden (2014d).

Household consumption has held up relatively well. In recent years, real income growth has been positive due to low inflation, targeted tax cuts and growing employment. At the same time, the savings ratio has also risen, strengthening the expectation that household consumption can be maintained and continue to support the recovery in the future.<sup>6</sup>

Investment in the business sector fell last year, but investment in housing increased during 2013. Confidence indicators show that both businesses and households have a positive view of economic developments in the next few months, suggesting domestic demand will also be important in the coming period.

<sup>6</sup> NIER (2014c).

### 1.2.1 The labour market

This section provides a short overview of labour market conditions. An in-depth analysis of labour market developments and the Government's labour market measures can be found in Chapter 3.

The labour market has developed relatively well after the financial crisis, with an average annual growth of over 1 per cent in the labour force, employment and hours worked between 2009 and 2013, compared with an annual average population growth of 0.7 per cent in the same period.

The labour force has increased by more than 200 000 people since 2009 (Figure 1.5), due in part to a population increase but also to an increase in labour force participation. An increase in the labour supply creates favourable conditions for an increase in employment. Among several contributing factors are an upward trend in labour force participation among older people who work longer and among people born abroad and reforms designed to stimulate the labour supply. But demographic developments, such as an increasing share of older people in the population, suggest that the labour force will grow more slowly in the future.<sup>7</sup>

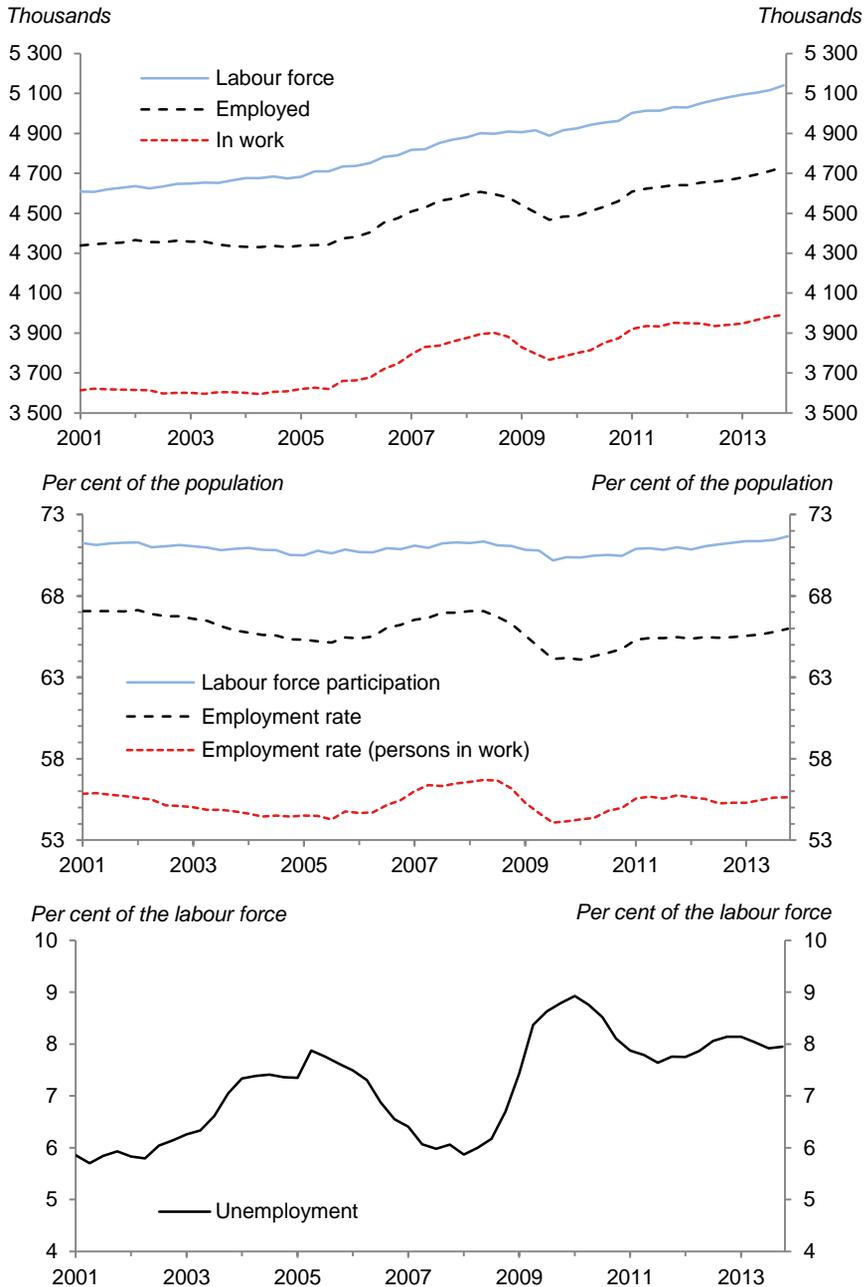
Employment has also increased in recent years. The employment rate has risen since 2009, but at the end of 2013, it still was lower than before the crisis. This is largely due to the composition of the population. In the working-age population, the share of young people, older workers and people born abroad – groups that generally have a lower employment rate than the average for the population – has increased, thus explaining why the employment rate for the population as a whole was largely unchanged in 2011 and 2012, even though the employment rate increased for most subgroups.

Unemployment was about 8 per cent in 2013 (Figure 1.5) and despite the increase in employment, has remained at a high level. According to most analysts, unemployment is expected to start falling as the economy improves.

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<sup>7</sup> NIER (2013e).

**Figure 1.5 Labour force, employment and unemployment**



Note: Seasonally adjusted quarterly data for the age group 15–74. Employed in work refers to employed persons who performed at least one hour’s work during the reference week (i.e. were not absent). Source: Statistics Sweden (2014a).

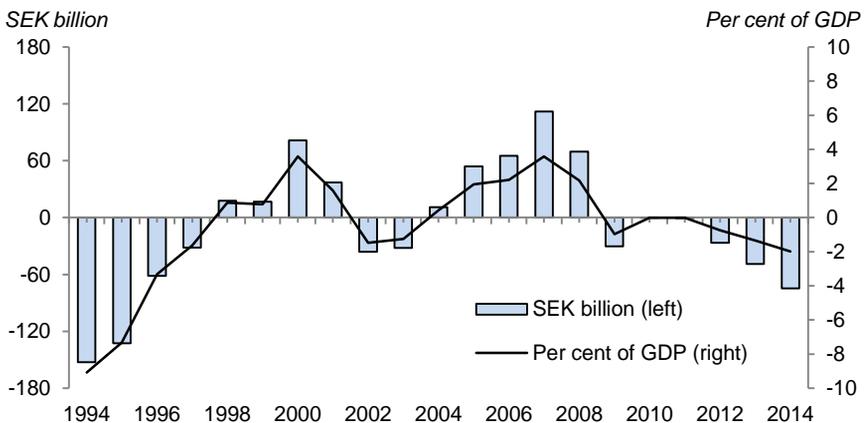
In BP14, the earned income tax credit and other labour market reforms are held up as important reasons for the strong increase in employment and the labour supply in recent years. In the long term, the Government expects the effects of all the labour market reforms to lead to 250 000 more employed, over half of them as a result of the earned income tax credit.<sup>8</sup>

With the stronger economy in 2014, the labour market has improved. In VP14, the growth in employment and the labour supply has been revised upwards compared with BP14, while unemployment has fallen more rapidly. According to government forecasts, unemployment will have fallen to just under 6 per cent by 2018, when equilibrium capacity utilisation is reached. In Chapter 3, there is an in-depth discussion of developments in the labour market and the Government’s labour market measures.

### 1.2.2 Public finances

Because of the weak economy and active fiscal policy, general government net lending has decreased in recent years. The deficit was 1.3 per cent of GDP in 2013 (Figure 1.6), the largest part of which was attributable to the central government.

**Figure 1.6 General government net lending**



Note: Refers to consolidated general government net lending. The year 2014 is a forecast.  
Source: NIER (2014c).

<sup>8</sup> BP14, Table 1.9, p. 51.

Table 1.3 shows forecasts of key indicators from the Government, NIER and the Riksbank. As the table makes clear, even though the estimates of future growth are relatively equal, their estimates of capacity utilisation, measured as the output gap, differ substantially.<sup>9</sup>

**Table 1.3 Key macroeconomic indicators for the Swedish economy**

BP14 September 2013				VP14 April 2014		
	2013	2014	2015	2013	2014	2015
GDP	1.2	2.5	3.6	1.5	2.7	3.3
Output gap	-3.5	-3.0	-2.1	-2.9	-2.4	-1.5
Employed	0.8	0.8	1.0	1.0	1.2	1.2
Unemployment	8.2	8.1	7.8	8.0	7.7	7.3
CPI	0.1	0.9	1.7	0.0	0.2	1.6
Net lending	-1.2	-1.5	-0.4	-1.3	-1.6	-0.3
NIER August 2013				NIER March 2014		
	2013	2014	2015	2013	2014	2015
GDP	1.1	2.5	3.3*	1.5	2.6	3.2
Output gap	-2.4	-1.9	-0.8	-2.0	-1.3	-0.6
Employed	0.9	0.8	0.9	1.0	0.9	1.3
Unemployment	8.0	7.8	7.5	8.0	7.9	7.3
CPI	0.1	0.8	2.0	0.0	0.1	1.2
Net lending	-1.3	-1.5	-0.6	-1.3	-2.0	-0.8
Riksbank September 2013				Riksbank April 2014		
	2013	2014	2015	2013	2014	2015
GDP	1.2	2.7	3.6	1.5	2.7	3.2
Output gap	-1.6	-0.8	0.2	-1.4	-0.5	0.2
Employed	0.9	0.8	1.2	1.1	1.0	1.2
Unemployment	8.1	7.9	7.2	8.0	7.9	7.3
CPI	0.1	1.3	2.6	0.0	0.2	2.2
Net lending	-1.4	-0.9	0.1	-1.3	-1.9	-0.9

Note: \*Calendar adjusted. Output gap as a per cent of potential GDP, unemployment as a per cent of the labour force (aged 15–74) and net lending as a per cent of GDP. Other annual percentage change. Sources: BP14 and VP14, NIER (2013d) and (2014c), and Sveriges Riksbank (2013c) and (2014).

<sup>9</sup>The output gap is a broad measure of capacity utilisation in the economy. It is measured as the difference between actual and potential GDP. Potential GDP is usually defined as the production level that can be maintained in a “normal” cyclical situation. See Fiscal Policy Council (2013), Chapter 3.2 for a discussion of potential variables’ importance in reviewing public finances.

In its September 2013 forecast, the Riksbank estimates that the output gap will close as early as 2015 while the forecast in BP14 is still negative at the end of the forecasting horizon in 2017. In its August 2013 forecast, NIER expects the output gap to close in 2017, but consistently has a considerably smaller negative gap over the forecasting horizon than the Government has. These differences are largely due to different calculation methods, but they also reflect forecasters' different estimates of potential GDP.<sup>10</sup> The Government has a considerably lower estimate for equilibrium unemployment than NIER, which – all other things being equal – results in a higher potential GDP. In VP14, the Government has made an upward revision in the output gaps for this year and the next few years. They are now expected to be less negative compared with BP14. NIER has also revised its estimated output gaps in its March 2014 forecast and there is still a difference between the Government's and NIER's estimate of capacity utilisation.

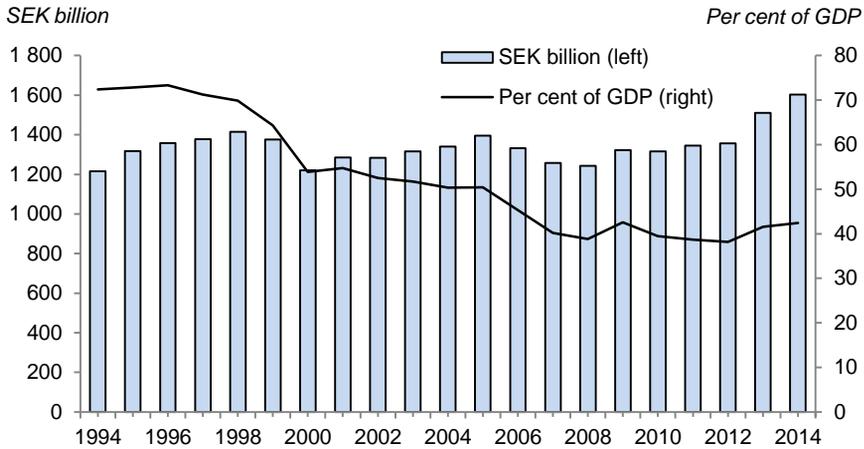
The differences between the Government, the Riksbank and NIER clearly illustrate the uncertainty in the estimate of potential GDP. The outlook for capacity utilisation in the economy is of great importance for both stabilisation policy considerations and monitoring budgetary targets. The fiscal stance in relation to the economic situation and stabilisation policy objectives is discussed in Chapter 2. In Chapter 5, there is an analysis of fiscal policy in relation to budgetary targets.

The public debt ratio (the Maastricht debt) amounted to about 42 per cent of GDP in 2013, a low level from a historical perspective (Figure 1.7). In 2009 and 2013, the Swedish National Debt Office borrowed SEK 100 billion for the Riksbank's account in order to strengthen the foreign exchange reserve. This contributed to an increase in the debt ratio in both these years.

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<sup>10</sup> The Riksbank's output gap estimate is calculated as the deviation between actual GDP and its trend. The Riksbank, however, uses a number of different measures and sources of information for its comprehensive assessment of capacity utilisation. See Ministry of Finance (2012) and NIER (2013b) for a description of how the potential variables are estimated.

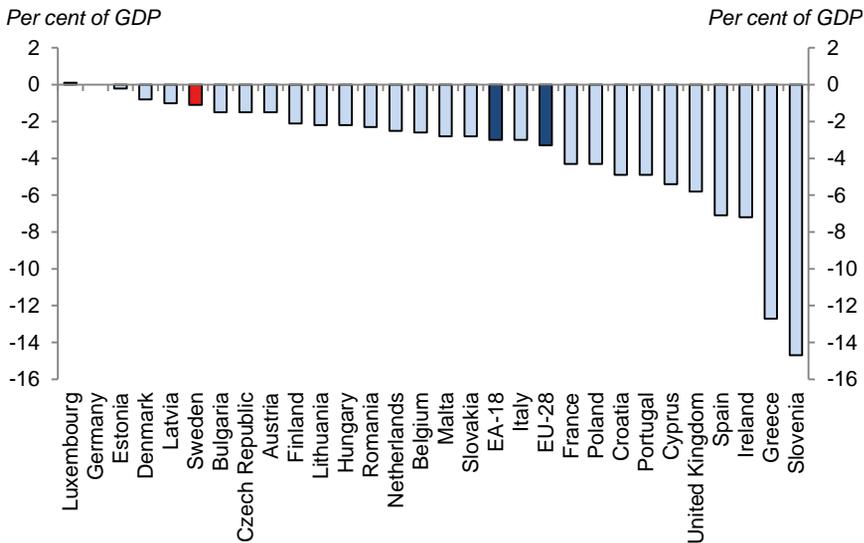
**Figure 1.7 General government gross debt**



Note: Refers to gross debt in the consolidated public sector. The year 2014 refers to the forecast year. Source: NIER (2014c).

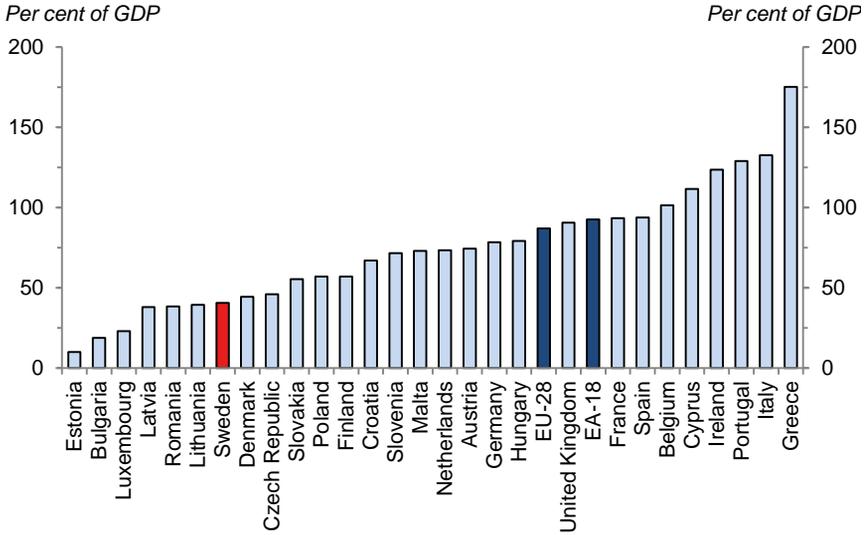
From an international perspective, public finances in Sweden appear strong despite the current fiscal deficit. Both the budget deficit and the debt ratio are low compared with other countries (Figures 1.8 and 1.9).

**Figure 1.8 Net lending in the EU in 2013**



Note: Refers to consolidated general government net lending. Source: Eurostat (2014b).

**Figure 1.9 Gross debt in the EU in 2013**



Note: Refers to gross debt in the consolidated public sector.  
 Source: Eurostat (2014b).

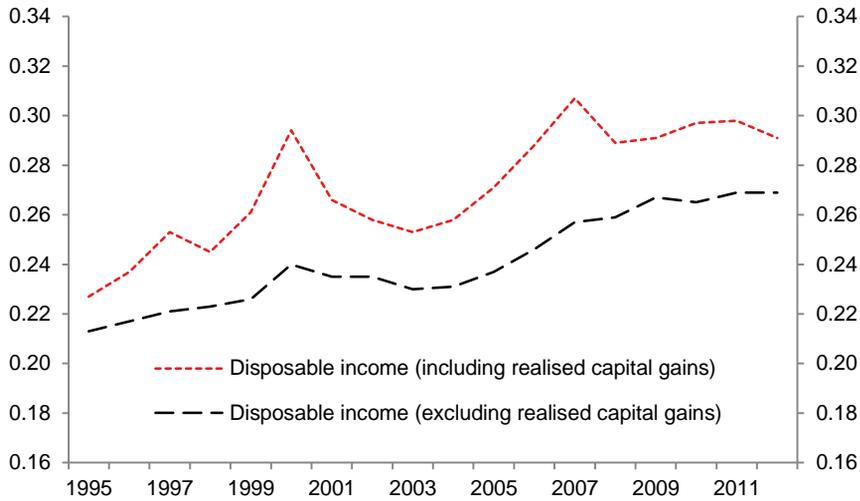
### 1.2.3 Income distribution 1995–2012

This section briefly describes income distribution developments in recent years. Chapter 4 has an in-depth analysis of the earned income tax credit’s income distribution effects.

Figure 1.10 shows the development of the most frequently used measure of general income differences, the Gini coefficient.<sup>11</sup> As the Gini coefficient is a distribution measure, the figure does not say anything about how the absolute income level developed in Sweden between 1995 and 2012. The figure shows only the change in the income distribution for two income concepts: disposable incomes with and without realised capital gains.

<sup>11</sup> The Gini coefficient assumes the value zero when everyone in the population has the same income and the value one when all the income in society goes to one person.

**Figure 1.10 Gini coefficient for disposable income**



Note: Disposable income is calculated with the household as the income unit and adjusted for household size. Disposable income consists of household factor incomes plus the net of transfer payments and taxes.

Source: Statistics Sweden (2014c).

The figure shows an upward trend in disposable income differences from 1995 to about 2006. The approximate size of the increase is from 0.23 to 0.29 up to 2006 if realised capital gains are included and from 0.21 to 0.25 if they are excluded.<sup>12</sup> It should be noted that the Gini coefficient for disposable income did not change appreciably between 2006 and 2012. Given the deep economic crisis and high unemployment Sweden has experienced after 2006, this may appear remarkable. But both historical experience and comparisons between countries show that unemployment does not affect the distribution of disposable income as much as often asserted in the political debate. The developments in Sweden depicted in Figure 1.10 have also been described by other observers. The OECD describes Swedish developments in a similar way in its reports.<sup>13</sup> The Ministry

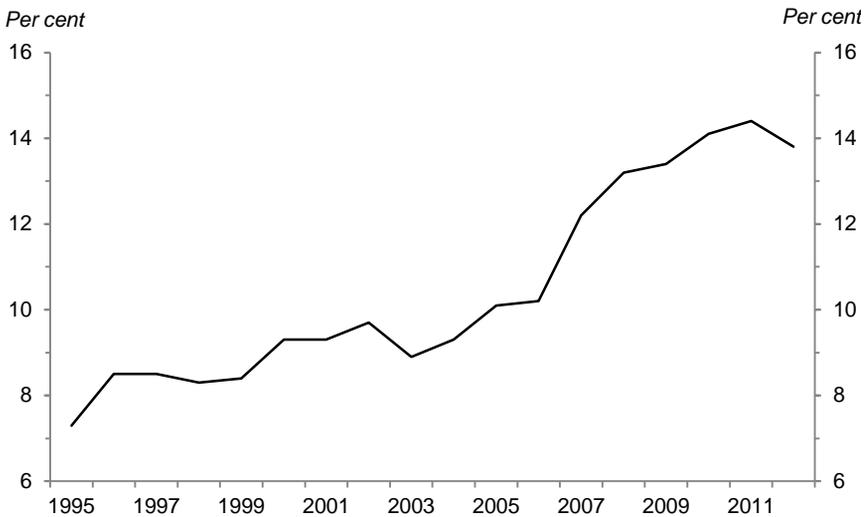
<sup>12</sup> The Gini coefficient has a mathematical property that is useful when interpreting changes in the coefficient. Multiplying the coefficient by two gives a measure of the expected percentage income difference between two people selected at random in the population. The increase in the Gini coefficient from 0.23 to 0.29 means that the expected relative income difference between two people selected at random in Sweden has increased from 46 per cent of average income to 58 per cent of average income.

<sup>13</sup> OECD (2008), OECD (2011) and OECD (2013a).

of Finance income distribution report also gives a similar description of developments.<sup>14</sup>

Another common income distribution measure in a society is relative poverty. It is also a distribution measure. The measure shows the percentage of the population with less than 60 per cent of the median income in the income distribution. With a relative definition of poverty, the level of real purchasing power at which a person is defined as poor may change from one year to the next.

**Figure 1.11 Relative poverty**



Note: The percentage of people whose disposable income is less than 60 per cent of the median for disposable income.

Sources: Bengtsson and others (2014) and Statistics Sweden (2014c).

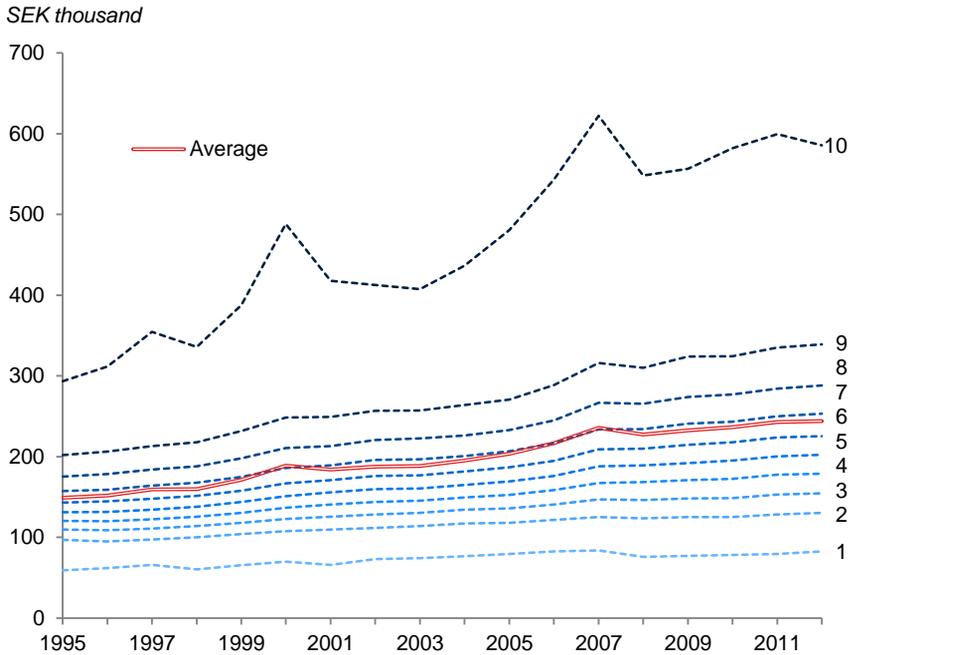
Figure 1.11 shows how relative poverty in Sweden developed between 1995 and 2012. Relative poverty has increased in Sweden since 1995. This development is also described in studies by the OECD and others.<sup>15</sup> In Figure 1.11, the rate of increase rose sharply after 2006, levelling out about 2010–2011. The explanation for this development is that the lowest incomes grew weakly between 2006 and 2012, while median income increased.

<sup>14</sup> VP13.

<sup>15</sup> OECD (2011) and OECD (2013a).

The Gini coefficient is an aggregate measure of the entire income distribution, whereas the relative poverty measure describes the bottom of the distribution. For a more detailed picture of income developments, it is informative to look at the change in income levels in each decile group over time.<sup>16</sup>

**Figure 1.12 Disposable income per person**



Note: Refers to average disposable income, including realised capital gains, by decile group (in SEK thousand). Incomes are estimated in 2012 prices. Since Statistics Sweden’s data sets cover a cross-section of the population, the decile groups do not necessarily consist of the same people each year. Source: Statistics Sweden (2014c).

Figure 1.12 shows the average income level in 2012 prices for each of the ten decile groups in the population and the average for all inhabitants of Sweden. The figure shows both actual income growth

<sup>16</sup> Decile group is a statistical concept whereby the first decile group in an income context consists of individuals below the tenth percentile in disposable income. The second decile group consists of those between the tenth and twentieth percentile, and so on. The tenth decile group is the highest income group and consists of those over the ninetieth percentile. A percentile is the income under which a specific per cent of the incomes in the distribution fall. Thus, for example, the tenth percentile is that part of an income distribution where 10 per cent of incomes are lower than the percentile and 90 per cent are higher. The median is called the fiftieth percentile as exactly 50 per cent of individuals have an income below this percentile.

in real terms for different income groups and the differences between various income groups.

As seen in Figure 1.12, even though income inequalities have grown from 1995 onwards, income levels have risen in all ten decile groups. As incomes increased less in the lower part of the income distribution, the percentage of those with incomes below the relative poverty threshold has increased, but all income groups are better off in absolute terms. Increasing relative poverty is thus consistent with rising incomes.

In Figure 1.12, one can also see that for 2008–2012, when the crisis hit, the income level for the lowest decile group is lower than in 2007. In Table 1.4 below, there is no change in income in decile group one between 2006 and 2012.

**Table 1.4 Change in disposable income 1995–2012**

<i>Percentage change</i>	<b>1995–2006</b>	<b>2006–2012</b>	<b>1995–2012</b>
Decile group 1	39.4	0	39.4
Decile group 2	25.7	7.1	34.6
Decile group 3	28.1	10.0	40.8
Decile group 4	31.5	12.9	48.5
Decile group 5	34.1	14.9	54.2
Decile group 6	36.0	15.8	57.5
Decile group 7	37.7	17.0	61.1
Decile group 8	39.5	17.6	64.2
Decile group 9	42.9	17.5	67.8
Decile group 10	85.2	7.9	99.8
All decile groups	45.5	12.6	63.9

Note: Refers to aggregate percentage change in average adjusted disposable income per capita (2012 prices) by decile group.

Sources: Statistics Sweden (2014c) and own calculations.

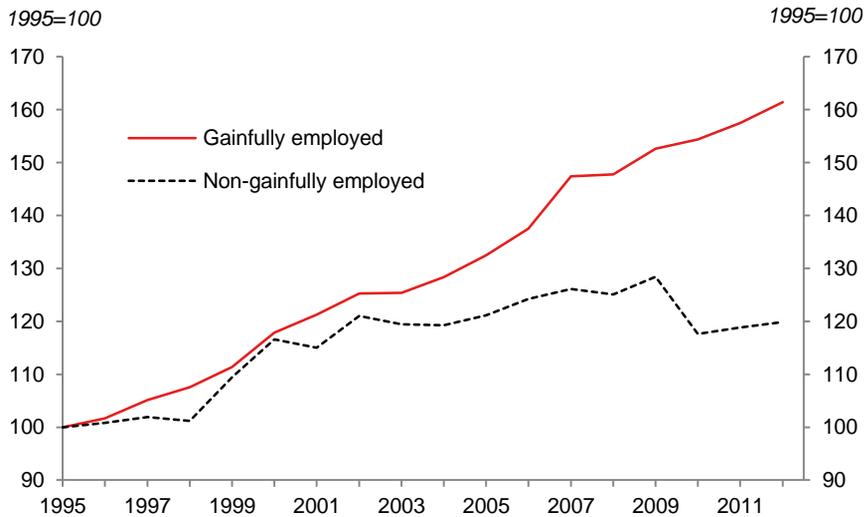
In the table, one can also see that income growth in decile group two has been weak since 2006. In the years after 2006, it is primarily decile groups seven to nine that have experienced a sizeable increase in income. In the groups with the lowest disposable incomes, relative income growth has thus been weak since the financial crisis erupted. In Table 1.4, the percentage income growth in decile group ten has been almost as weak as in decile group two. Seen over the entire period 1995–2012, disposable income in decile group ten has

doubled. Most of the increase in income occurred between 1995 and 2006.

To sum up, it is noteworthy that between 2006 and 2012, income inequality has increased in the lower half and decreased slightly in the upper half of the income distribution.

Another way of showing how income growth differs between various population subgroups is to study the difference in income growth between the gainfully employed and the non-gainfully employed. Figure 1.13 shows the growth in real disposable income for the gainfully employed and the non-gainfully employed aged 20–64. From 1995 to 2002, real disposable incomes for the gainfully employed increased by over 60 per cent. For the non-gainfully employed, there was a trend break in the early 2000s. Incomes for the non-gainfully employed generally followed the same path as incomes for the gainfully employed up to about 2002, but since then have largely been constant. Real disposable incomes for the non-gainfully employed were at the same level in 2012 as in 2002.<sup>17</sup>

**Figure 1.13 Real disposable income after employment**



Note: Non-gainfully employed refers here to the unemployed, people on sickness absence and pensioners. Note that the figure includes the group aged 20–64 in HEK.

Source: Bengtsson and others (2014).

<sup>17</sup> See Bengtsson and others (2014) for a discussion.

## 1.3 Assessments and recommendations

On balance, it appears that a global economic recovery has begun in the latter part of 2013. Increasing demand, rising confidence indicators and the continuation of an expansionary monetary policy suggest stronger growth in the coming period. But there are still risks that could lead to slower growth. The current normalisation of monetary policy in the United States may affect growth in other countries. There are still risks that could lead to slower growth in the euro area and new political risks have emerged with events in Ukraine. If the problems experienced in several emerging economies increase, there could also be spillover effects in the financial markets.

In Sweden, growth is expected to increase in the next few years. Rising global demand and continued stable domestic demand are expected to support the recovery. There has been a substantial increase in the labour force and employment in recent years and unemployment is expected to decline as the economic situation improves. However, unemployment is still high and remains a challenge for economic policy. The economic downturn in recent years and the active fiscal policy have caused net lending to decline. But from an international perspective, public finances in Sweden appear strong, despite the current fiscal deficit.

The Council notes that income inequality measured with the Gini Coefficient has increased marginally between 2006 and 2012. Incomes at the top and bottom of the income distribution have increased more slowly than those in the middle. This has led to less income inequality at the top of the distribution and a greater spread in the lower part of the distribution. Relative poverty rose sharply after 2006, levelling out about 2010–2011.

## 2 Fiscal policy

Fiscal policy consists of decisions on public revenue and expenditure made by the Riksdag and the Government with the intention of affecting the economy. The aim of fiscal policy measures may be structural policy, income distribution policy or stabilisation policy. Section 2.1 summarises the policy proposed by the Government in BP14 and in the autumn amending budget for 2013.<sup>1</sup> Section 2.2 discusses the economic forecasts on which the Government bases its policy. The stabilisation policy aspects of fiscal policy are discussed in Section 2.3. In conclusion, the Council's assessments and recommendations are summarised in Section 2.4.

### 2.1 The Budget Bill for 2014

Table 2.1 shows the effects of proposals and announcements in BP14 and the 2013 autumn amending bill on general government net lending and their breakdown by revenue and expenditure. The table shows at an aggregated level how the policy has changed since 2013. It is clear from the table that the greater part of the Government's policy for 2014 onwards affects the budget's revenue side; expenditure increases by about SEK 3 billion and revenue falls by about SEK 21 billion in 2014. This is primarily due to two tax reductions and a reduction in contributions: a fifth earned income tax credit, which involves about SEK 12 billion in tax cuts, lower taxes for pensioners, which lead to SEK 2.5 billion less in tax revenues; and abolition of the differentiation of contributions for unemployment insurance, which reduces revenue by about SEK 2.5 billion.

Also included in BP 14 was a proposal to raise the lower threshold for state income tax, which would have reduced tax revenues by a further SEK 3 billion. In the framework decision for the budget taken by the Riksdag on November 20, 2013, this was among the proposed tax reductions. However, on December 11, 2013, the Riksdag decided to retract the increase in the threshold for the state income tax. Consequently, general government net lending will be

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<sup>1</sup> From 2010 onwards, what was previously called the autumn supplementary budget has been redesignated the autumn amending bill.

SEK 3 billion higher than the Government's estimate in BP14. Chapter 6 contains a discussion of the Riksdag's handling of the framework model for the 2014 budget decisions.

**Table 2.1 Measures in BP14**

<i>SEK billion (change compared to VP13)</i>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Expenditure increases	5.2	3.1	4.3	4.8	4.4
Revenue	0.0	21.0	21.5	21.1	20.8
<i>Revenue reductions after the Riksdag's decision not to raise the threshold</i>		18.0	18.5	18.1	17.8
<b>Deterioration in net lending</b>	<b>5.2</b>	<b>24.2</b>	<b>25.8</b>	<b>26.0</b>	<b>25.2</b>
<b><i>Deterioration in net lending after the Riksdag's decision not to raise the threshold</i></b>		<b>21.2</b>	<b>22.8</b>	<b>23.0</b>	<b>22.2</b>

Note: The Riksdag decided on December 11, 2013 to retract the increase in the threshold for the state income tax proposed in BP14. Thus, the revenue reductions were SEK 3 billion less than the Government proposed in BP14. The table shows the impact this had in rows four and seven.

Sources: BP14, p. 602, and Ministry of Finance.

In the Government's opinion, the measures proposed or announced in BP14 together will lead to an increase of about 0.3 percentage points in GDP growth and about 10 000 more people employed in 2014 than without the measures.<sup>2</sup>

In the Government's opinion, the budget weakening measures proposed in BP14 also weaken long-term fiscal sustainability to some extent. Table 2.2 shows how the indicators used by the Government to measure long-term fiscal sustainability have changed between VP13 and BP14.

Table 2.2 shows that both the S indicators in BP14 have negative values, i.e. net lending can be permanently weakened a little without fiscal policy becoming unsustainable. But the values are less in absolute terms than the corresponding values in VP13. According to the Government, this is primarily due to the proposals for budget weakening measures presented in BP14.<sup>3</sup> An in-depth discussion of long-term fiscal sustainability can be found in Chapter 7.

<sup>2</sup> BP14, pp. 51–52.

<sup>3</sup> BP14, p. 195.

**Table 2.2 Indicators of long-term fiscal sustainability**

<i>Per cent of GDP</i>	<b>S1</b>	<b>S2</b>
VP13	-1.1	-2,4
BP14	-0.4	-1.5

Note: Here S1 shows how much the budget needs to be strengthened or can be weakened in order for the public debt to equal 60 per cent of GDP in 2030. S2 shows how much the budget needs to be strengthened or can be weakened in order for the public finances to break even over an infinite time horizon. A negative value for these indicators signifies that a permanent budget weakening is possible without fiscal policy becoming unsustainable, whereas a positive indicator value indicates that a permanent budget improvement is necessary. With an S1 measure of -0.4 per cent of GDP, for example, taxes can be cut and/or expenditure raised permanently by the equivalent of 0.4 per cent of GDP, without the public debt exceeding 60 per cent of GDP in 2030.

Source: BP14, p. 195.

In the autumn amending budget, the Government proposed an expenditure increase in 2013 of SEK 5.2 billion over the amount previously approved by the Riksdag. Most of this increase, SEK 5 billion, refers to expenditure changes that occurred in 2013 owing to changes in volumes (such as the increase in the number of sickness absences) and changes in macroeconomic conditions (such as an increase in Sweden's EU contribution on account of an expenditure increase in the EU annual budget).

### 2.1.1 The increase in sickness absences: a threat to other public commitments?

The largest individual expenditure item in the autumn amending budget is the SEK 3.2 billion added to the sickness benefit and rehabilitation, etc. appropriation. This is equivalent to more than 11 per cent of the appropriation. The Government's justification for the additional funding is that "the sickness benefit has increased more than estimated, mainly on account of a higher incidence of sickness absence".<sup>4</sup> The number of sick days increased by 10 per cent from 2012 to 2013.<sup>5</sup> In last year's report, the Council asked whether there was a risk of expenditure increases for sickness absence. It was the Council's opinion that the Government should systematically review expenditure risks and describe the forecasting methods used. In BP14, the Government responds to the Council's criticism. The

<sup>4</sup> The autumn amending bill for 2013, p. 19.

<sup>5</sup> Försäkringskassan (2014), p. 51.

Government agrees that reviewing risks on the budget's expenditure side and the forecasts for transfer payment expenditures could be improved. However, it does not see any need to report the forecasting methods used.<sup>6</sup> The Council considers it clearly important that the Government describe the forecasting method used for the sickness benefit appropriation. It is impossible for an external observer to get even a cursory understanding of the basis the Government uses for its budget forecast for the sickness benefit appropriation. It is thus also difficult to judge whether the recent increase in the sickness benefit expenditure is significant or if it is what can be expected, given the forecasting method used.

It is reasonable to assume that the number of sickness absences, at least in the long term, will tend to grow at the same pace as the labour force. The greater the number of people there are in the labour force, the greater the number of people with the right to some form of benefits in the event of loss of income when on temporary sickness absence.<sup>7</sup> However, as seen in Table 2.3 below, the percentage of absences due to illness is considerably lower now than it was in 1970.

**Table 2.3 Population, labour force and sickness absence 1970 and 2013**

	Population	Labour force (aged 16–64)	Sickness absence in full- year equivalents	Sickness absence as a per cent of the labour force
1970	8 081 000	3 850 000	180 000	4.7
2013	9 645 000	4 946 000	183 000	3.7

Sources: Ministry of Finance and Statistics Sweden (2014a).

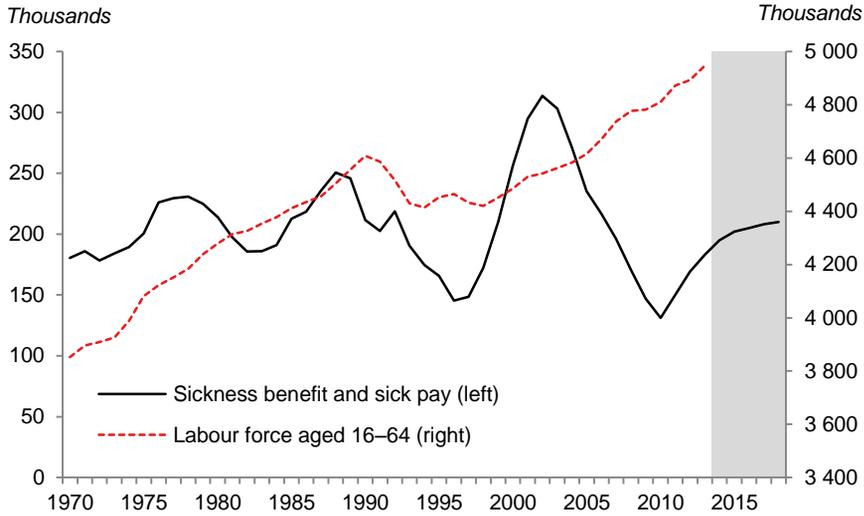
Seen over the long term, sickness absence has fluctuated sharply. Figure 2.1 below shows sickness absence over the last 40 years

<sup>6</sup> BP14, pp. 673–674.

<sup>7</sup> The sickness benefit and sick pay are paid out to the employed and the unemployed. Anyone who has been employed for at least one month or has worked 14 consecutive days normally has the right to sick pay from his or her employer for the first 14 days in a sick period. After that, Försäkringskassan (the Swedish Social Insurance Agency) pays out sickness benefits to the employed. Those who do not have an employer can get the sickness benefit from the beginning of the sick period. This applies to the unemployed, contractors or the self-employed. It also applies to those on leave with parental or pregnancy benefits. Regardless of whether one has sick pay or sickness benefits, the first day of the sick period is a qualifying day. The self-employed can choose to have one or up to 90 qualifying days. Source: Försäkringskassan.

expressed in full-year equivalents.<sup>8</sup> The figure also shows how the labour force has grown.

**Figure 2.1 Sickness benefit, sick pay and the labour force**



Note: Time series include both the sickness benefit, paid by Försäkringskassan, and sick pay, which employers are responsible for. The labour force refers to chained annual values for the 16–64 age group. The average number of full-year equivalents with the sickness benefit and sick pay for 1970–2013 is about 205 000 full-year equivalents. The variation around the mean (the standard deviation) comes to about 39 000 full-year equivalents. Grey areas indicate the forecast years 2014–2017.

Sources: Ministry of Finance and Statistics Sweden (2014a).

As seen in the figure, sickness absence peaked in the mid-1970s, in the late 1980s and in the early 2000s. The variations are remarkably large, particularly the most recent wave.<sup>9</sup> In only six years, between 1996 and 2002, sickness absence more than doubled. The drop in the number of sickness absences thereafter was equally dramatic. By 2010, sickness absence had fallen by about 60 per cent from its peak in 2002. This development is all the more remarkable as the labour force has grown relatively strongly since 2000. Since 2011, however, the number of people with sickness benefits has increased. The Government notes that since 2012 there has been an increase in the

<sup>8</sup> Full-year equivalents refer to the number of people that the sickness benefit or sick pay can provide for during a whole year with full benefits. For example, two people who have been sick for six months each, together constitute one full-year equivalent. The number of full-year equivalents is calculated by taking the total number of sick days and dividing them by 365.

<sup>9</sup> There are many explanations for the large variation in the number of sickness absences since 1970. One explanation is presumably the many rule changes made over the years in sickness insurance.

inflow of new cases and that the length of time on sickness benefits has increased.<sup>10</sup> The increase is not only the increase forecast due to the change in rules since July 1, 2008, but also an increase in new cases *exceeding* the Government's previous estimate.<sup>11</sup>

In BP13, the Government noted that volumes in the sickness benefit were also expected to increase in 2012 due to more and longer cases, but would then level out.<sup>12</sup> In BP14, the Government is less certain. Referring to the increase in new cases in 2012–2013, it is now the Government's view that it is too early to say whether sickness absence has stabilised at a "low level".<sup>13</sup> Försäkringskassan also maintains that there is considerable uncertainty about developments in the next few years.<sup>14</sup> The Council notes that Försäkringskassan as early as February estimated that 2014 expenditures for the sickness benefit and rehabilitation cash benefit, etc. would exceed the funds appropriated by almost SEK 750 million.<sup>15</sup>

To get an idea of how expenditures for the sickness benefit, etc. may vary in the next few years, the Council has made a simple calculation shown in Table 2.4 below.

The second column in Table 2.4 shows estimated expenditures for the sickness benefit, the rehabilitation cash benefit and the allowance for care of close relatives in BP14 where expenditures total about SEK 31 billion. In the third column, the number of sickness absences in 2014–2016 is assumed to increase as rapidly as in 2000–2002. Expenditures for the sickness benefit, etc. would in this case increase from the current level to almost SEK 42 billion in 2016. Column 4 in Table 2.4 shows what expenditures would be if the number of sickness absences in the next few years decline as they did between 2002 and 2004. In that case, the expenditure would be about SEK 22 billion in 2016.

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<sup>10</sup> BP14, vol. 6 (Ekonomisk trygghet vid sjukdom och funktionsnedsättning) (Financial security for the sick and disabled) p. 13. Försäkringskassan presents the same picture of developments in its budget documentation (Försäkringskassan, 2014, p. 51).

<sup>11</sup> BP14, vol. 6 (Ekonomisk trygghet vid sjukdom och funktionsnedsättning) (Financial security for the sick and disabled), p. 10.

<sup>12</sup> BP13, p. 373.

<sup>13</sup> BP14, vol. 6 (Ekonomisk trygghet vid sjukdom och funktionsnedsättning) (Financial security for the sick and disabled), p. 23.

<sup>14</sup> Försäkringskassan (2014), p. 53.

<sup>15</sup> Försäkringskassan (2014), pp. 47–50.

**Table 2.4 Expenditures for the sickness benefit, rehabilitation cash benefit and allowance for care of close relatives**

	<b>Estimated expenditures 2014 (BP14)</b>	<b>Scenario 1: More sickness absences 2016</b>	<b>Scenario 2: Fewer sickness absences 2016</b>
<i>Total number of full-year equivalents (SEK thousand)</i>	140	191	97
<b>Expenditures (SEK million)</b>			
Sickness benefit	29 026	39 287	20 029
Rehabilitation cash benefit	1 422	1 827	931
Allowance for care of close relatives	176	355	181
Other	454	454	454
<b>Total</b>	<b>31 078</b>	<b>41 922</b>	<b>21 595</b>

Note: These are simple rough estimates of how the appropriation for 2014 may develop if the number of sick days (in full-year equivalents) is the same as in 2000–2004, i.e. an increase equivalent to the actual increase in 2000–2002 or alternatively, a decrease equivalent to the actual decrease in 2002–2004. In each scenario, full-year equivalents are assumed to be divided among the sickness benefit, the rehabilitation cash benefit and the allowance for care of close relatives in the same way as in BP14. Other items include expenditures for vocational assistive devices for Försäkringskassan and the housing allowance and are assumed to be constant. The expenditure estimates include contributions to the national old-age pension system.

Sources: Ministry of Finance, Ministry of Health and Social Affairs and own calculations.

The budget documentation that Försäkringskassan provided to the Government in February 2014 includes a sensitivity analysis of the sickness benefit expenditure. Försäkringskassan estimates what the increase in expenditure would be if the number of sickness absences increased as rapidly over the next few years as they declined in 2005 and 2006. If this were to happen, expenditures for the sickness benefit and the rehabilitation cash benefit, etc. would increase to almost SEK 38 billion in 2016.<sup>16</sup> This is an expenditure increase to a level slightly below the estimate in Scenario 1 in Table 2.4.

As the number of sickness absences is currently at a historically low level and both the labour force and employment are at historically high levels, there is a high risk that the number of sickness absences will continue to rise. As the space under the expenditure ceiling is small, an unforeseen increase in sickness

<sup>16</sup> According to Försäkringskassan, expenditures would be as follows: in 2014: SEK 32 318; in 2015: SEK 35 444 million; in 2016: SEK 37 589 million; in 2017: SEK 38 689 million.

absence may sharply limit the room for other expenditures in the government budget. The room for stabilisation policy measures is also limited, as are the chances of meeting the surplus target. The Government's options in conducting economic policy worsen if sickness absences continue to rise rapidly. The possible consequences for the Government's budget policy of a rapid increase in the sickness benefit expenditure are discussed further in Chapter 5.

One fundamental difficulty that the Government needs to address is the lack of an applicable general theory for what it is that affects the number of sickness absences. Nor is it known why the number of sickness absences has varied so sharply in Sweden since 1970. The Government's forecasts of the number of sickness absences are thus of necessity uncertain. It is therefore important that the remits the Government has given Försäkringskassan, Karolinska Institutet and the Swedish Social Insurance Inspectorate result in greater understanding of the reasons behind the large variations in the number of sickness absences.<sup>17</sup>

The Council has studied Försäkringskassan's forecasting methods and is of the opinion that they could be considerably improved, even with what is currently known about what governs sick leave behaviour. In the Council's opinion, the Government should now instruct Försäkringskassan to prioritise the work on developing better forecasting methods for the sickness benefit appropriation.

### 2.1.2 The housing market

Several analysts have identified problems in the Swedish housing market as obstacles for growth and labour market mobility.<sup>18</sup> An ineffective housing market also entails risks for macroprudential stability because of the relationship between housing prices and household indebtedness. In the Council's 2013 report, the Government was urged to pursue an integrated approach to housing policy. The Council pointed out several obstacles to an efficient housing market and was of the opinion that the Government should

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<sup>17</sup> BP14, vol. 6 (Ekonomisk trygghet vid sjukdom och funktionsnedsättning)(Financial security for the sick and disabled) pp. 23–25. The work on trying to explain developments in the number of sickness absences continues and has already resulted in a number of reports; see, for example, Försäkringskassan (2013) and Thomsson (2013).

<sup>18</sup> See, for example, OECD (2012) and European Commission (2014).

handle matters concerning new construction, the utility value system, interest deductibility and property taxes in the same context.

The Government has taken various measures to improve the efficiency of the housing market in 2013–2014. These measures include simplified rules for the new construction of student housing and the letting of private dwellings, a clearer law on municipalities' responsibility for providing housing, a lower real estate charge for multiple dwellings and an extension of the time for presumption rates.<sup>19</sup> The Government has also presented bills to the Riksdag on coordinated noise limits, simplified rules for the construction of single-family homes and amendments to the Planning and Construction Act.

A number of inquiries on the housing market have been appointed, including inquiries on the housing situation in metropolitan areas, the housing situation for older people and municipal planning processes. Boverket (The Swedish National Board of Housing, Building and Planning) has been instructed to draw up a proposal to make it easier for disadvantaged households to become established in the housing market. The parliamentary Bostadsplaneringskommittén (Housing Planning Committee) will also evaluate the rules on housing planning at the regional level.

The Council welcomes the extensive examination of housing market issues, but notes that major housing policy issues concerning the utility value system, interest deductibility, property taxes and the capital gains tax have not yet been addressed. In the Council's opinion, it is particularly important to analyse and follow up these issues. To sum up, the Council would still like to see wide-ranging solutions in the housing area, with the objective of reducing lock-in effects, increasing mobility, ensuring adequate construction and creating the conditions for efficient use of the existing housing stock.

## 2.2 The Government's growth forecasts

Forecasts of economic developments provide an important basis for formulating fiscal policy both in the short and medium term. In last year's report, the Council discussed the Government's forecasts and

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<sup>19</sup> Presumption rates refer to derogations that make it possible to agree rents exceeding what is permitted under the utility value system for newly constructed apartments.

found that the forecasts for 2012–2013 deviated sharply from those of other forecasters.<sup>20</sup> In the following section, the Council compares these forecasts with the outcome and the Government's forecasts for 2014 with other forecasters.

### 2.2.1 Growth forecasts for 2012 and 2013: outcomes

Figures 2.2 and 2.3 show growth forecasts for 2012 and 2013, which have been published since early 2012. The horizontal axis shows the week of publication. The horizontal lines in the two figures represent the preliminary outcome for 2012 and for 2013 respectively. Red bars indicate the Government's forecasts and black indicate forecasts by the National Institute of Economic Research (NIER). Light blue bars indicate other forecasting institutions.

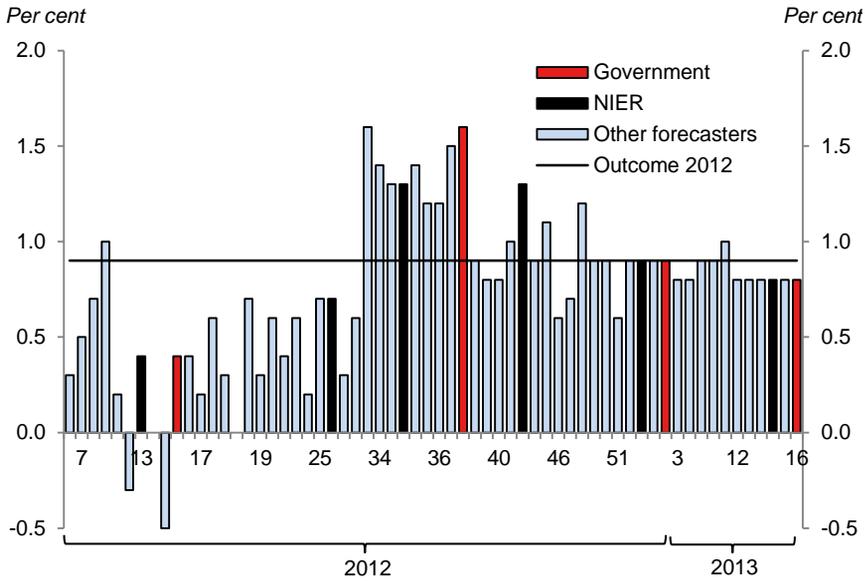
As can be seen in Figure 2.2, forecasters during 2012 were increasingly optimistic about growth in 2012, but this optimism faded in the autumn. The Government's forecast in BP13 was one of the highest even though it was published as late as week 38. After the Budget Bill, all the published forecasts are 0.5–1.0 percentage points lower than the Government's forecast.

One explanation for the Government's optimism may be that the Quick Statistics from Statistics Sweden indicated that the relatively strong growth would continue in the second quarter of 2012. Statistics Sweden revised the outcome downwards from 1.8 to 0.9 per cent in its regular forecast in September the week before the Budget Bill was published. The revision was unusually large, but for reasons of time, could not be taken into account in the Government's forecast. In the third quarter, growth slowed even more.

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<sup>20</sup> Chapter 3 in the Fiscal Policy Council (2013) and Chapter 5 in the Fiscal Policy Council (2010) discuss the Government's forecasts in more detail.

**Figure 2.2 GDP forecasts for 2012 published since 2012**

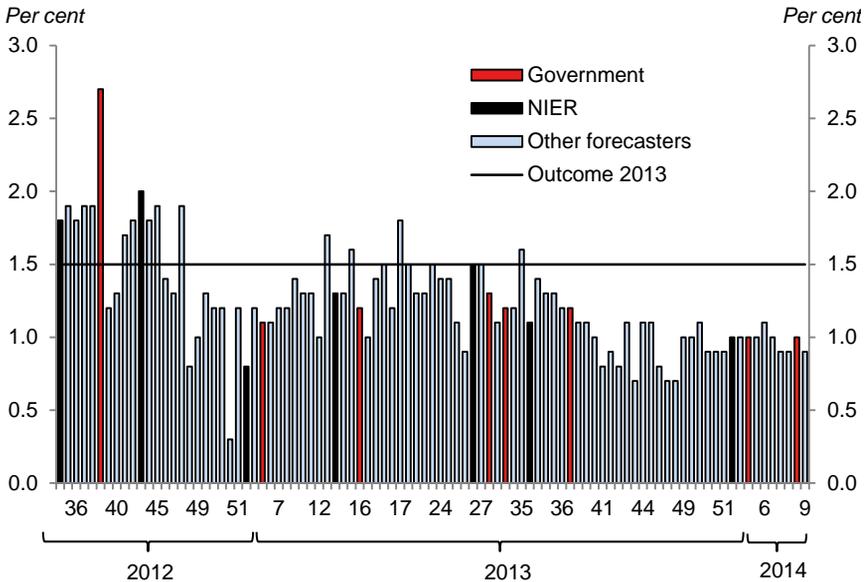


Note: The horizontal axis shows the week of publication for each forecast since the beginning of 2012. The solid line represents the preliminary outcome for 2012. Sources: NIER (2014d) and Statistics Sweden (2014d).

In the revised forecast presented by the Government on December 21, 2012 soon after the budget for 2013 had been adopted by the Riksdag, the forecast was adjusted downwards to 0.9 per cent, i.e. to a level in line with other forecasting institutions. The outcome from Statistics Sweden for growth in 2012 is 0.9 per cent.

Figure 2.3 shows growth forecasts for 2013 extending to week 9 in 2014. The growth forecast for 2013 forms the basis for BP13. The Government’s relative optimism about growth prospects is obvious, even though the forecast was toned down somewhat in the Budget Bill compared with VP12. The Government’s estimate of growth was decidedly higher than other forecasts published in the second half of 2012. In the forecasts published after the Budget Bill, i.e. after week 38, the measures proposed or announced by the Government are taken into account. Thus, the differences do not depend on different assumptions about the fiscal stance.

It is clear that, the Government’s forecast revision in December 2012 was considerable and the forecast was thus in line with other forecasts published at the end of 2012.

**Figure 2.3 GDP forecasts for 2013 published since 2012**

Note: The horizontal axis shows the week of publication for each forecast since the latter half of 2012. The solid line represents the preliminary outcome for 2013. Sources: NIER (2014d) and Statistics Sweden (2014d).

Hence, the government budget for 2013 was based on a more optimistic view of macroeconomic developments than that envisaged by all the forecasting institutions when the Government drew up BP13 and later when the Riksdag considered it. In BP14, the Government also agrees that the forecast for 2013 deviated from those of other forecasters.<sup>21</sup> The outcome for 2013 now clearly shows that the Government's forecast for 2013 in BP13 was in fact too optimistic. Furthermore, Figure 2.3 shows that after BP13, the Government, as late as week 8 this year, has instead underestimated growth in 2013, as did other forecasters.

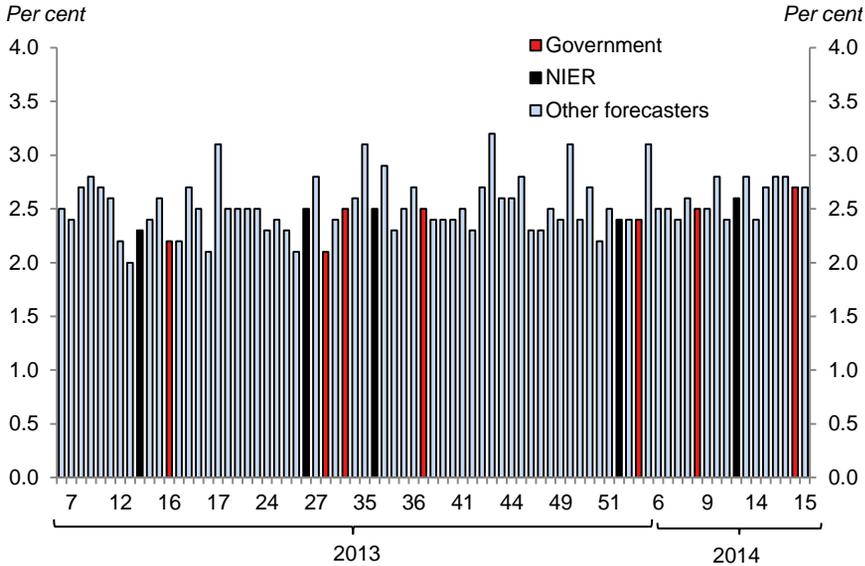
### 2.2.2 Growth forecasts for 2014

Figure 2.4 shows the different forecasting institutions' growth forecasts published since the beginning of 2013. The figure shows that the Government's GDP forecast for 2014 does not deviate from

<sup>21</sup> BP14, p. 673.

those of other forecasters. The Government’s growth estimate in 2014 is well in line with what could be termed a consensus opinion.

**Figure 2.4 GDP forecasts for 2014 published since 2013**



Note: The horizontal axis shows the week of publication for each forecast since the beginning of 2013.  
Source: NIER (2014d).

The Council in its 2013 report argued that the Government should report and justify possible deviations between the Government’s forecasts and those of other forecasters. In BP14, the Government writes that it shares the Council’s opinion on this point and describes how the Government’s forecast compares with those of other forecasters.<sup>22</sup> The Council welcomes the Government’s report in VP14 of how its own forecasts have compared with those of other forecasters over time.<sup>23</sup> When the Minister of Finance presented BP14 for the media on September 18, 2013, he also presented comparisons between the Government’s forecasts and those of other forecasters for the current year and the next two years.<sup>24</sup>

<sup>22</sup> BP14, p. 151 and p. 673.

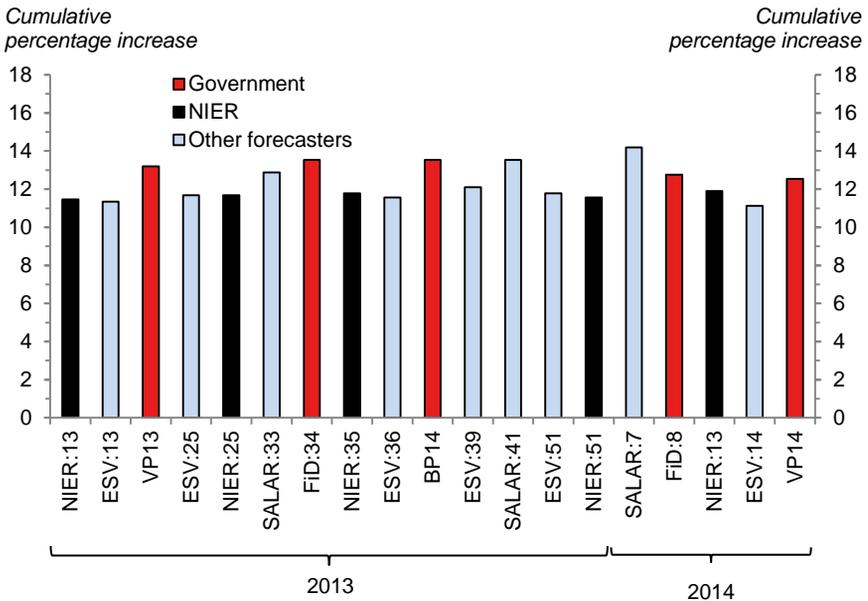
<sup>23</sup> VP14, pp. 83–84.

<sup>24</sup> Ministry of Finance (2013).

### 2.2.3 GDP growth forecasts 2014–2017

Many forecasters publish forecasts that only extend one to two years ahead. The Government’s forecasts cover a longer period as the fiscal framework has a medium-term perspective. In BP14, the forecast horizon is 2017.

**Figure 2.5 GDP growth 2014–2017**



Note: Refers to cumulative growth with base year 2013. The horizontal axis shows the forecasting institution and the week of publication for each forecast since the beginning of 2013: NIER, the Swedish National Financial Management Authority (ESV) and the Swedish Association of Local Authorities and Regions (SALAR). The Government’s forecasts are FiD, VP and BP. Sources: NIER (2014d) and own calculations.

In general, these forecasts, which extend several years ahead, are based on the economy at the end of the forecasting horizon when it has largely achieved macroeconomic balance with the closure of the output gap and unemployment close to the long-term equilibrium. In 2013 and 2014, NIER, ESV and SALAR also published estimates with 2017 as the outer year.

Figure 2.5 above compares the cumulative increase in GDP from 2014 to 2017. As evident from the figure, the Government makes forecasts that are relatively optimistic.

## 2.2.4 Output gap and structural net lending forecasts

An important basis for stabilisation policy considerations is an estimate of capacity utilisation in the economy. Capacity utilisation is usually measured as the output gap, i.e. the percentage deviation between actual GDP and the long-term sustainable level, potential GDP. The long-term sustainable level cannot be observed but has to be estimated. The aim of stabilisation policy is to reduce the variations in the output gaps by being expansionary when output gaps are negative and contractionary when they are positive. It is also not possible to decide whether the stabilisation policy is reasonably balanced without estimating the size of the output gap. Estimates of the output gap are also of central importance to estimates of the structural development of the public finances. They are crucial as the difference between actual and structural net lending indicates how large a share of the deviations from the target for net lending of 1 per cent can be expected to disappear automatically when the economy returns to normal.

Figures 2.6 and 2.7 below show the output gap and net lending for 2014 estimated by the Government in connection with BP14. These estimates are compared with the estimates made by NIER at approximately the same time.<sup>25</sup>

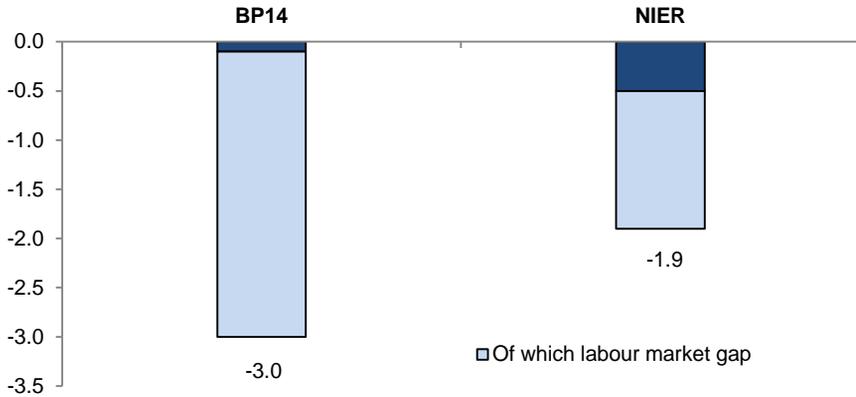
As can be seen in Figure 2.6, the Government expected that capacity utilisation in 2014 would still be substantially lower than the long-term sustainable level. The output gap was estimated at -3 per cent. NIER expected an output gap of -1.9 per cent. The differences in the estimates of the size of the output gap are significant in determining what is an appropriately designed fiscal policy. A more negative output gap is a direct argument for a more expansive fiscal policy. Furthermore, with a more negative output gap, a larger share of a given net borrowing automatically disappears when the economy stabilises.

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<sup>25</sup> There are risks in comparing forecasts, particularly for the public finances, between different forecasters as there may be different assumptions about the Government's policy behind the forecast. The Government's estimates for the 2014 public finances include the effects of the measures proposed in BP14 whereas NIER's forecast was made before BP14 was presented. However, NIER based its forecast on an assumption that the Government would take unfinanced measures equivalent to SEK 25 billion in 2014, which is well in line with what the Government announced in the Budget Bill.

**Figure 2.6 Output gap forecasts for 2014 made in autumn 2013**

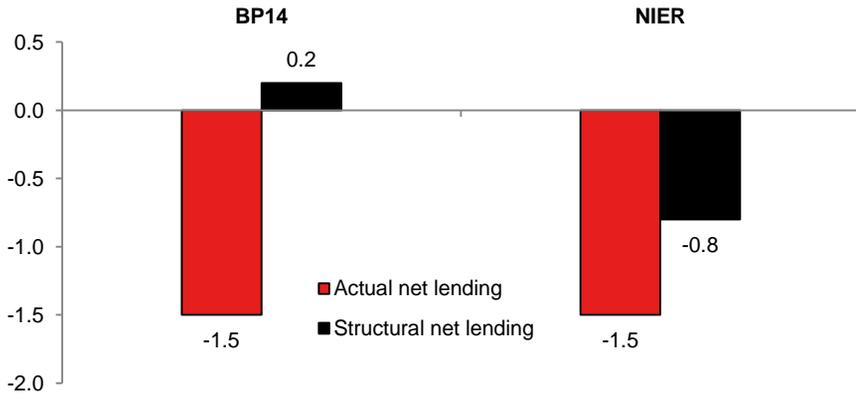
*Per cent of potential GDP*



Sources: BP14 and NIER (2013d).

**Figure 2.7 Net lending forecasts for 2014 made in autumn 2013**

*Per cent of GDP*



Sources: BP14 and NIER (2013d).

To examine the reasons behind the different estimates, the output gap can be divided into a labour market gap and a productivity gap. The labour market gap is defined as the percentage deviation in actual hours worked from the estimated potential level of hours worked and can be seen as a measure of capacity utilisation in the labour market. The productivity gap is likewise defined as the

deviation of actual labour productivity from the estimated potential level.<sup>26</sup>

It is clear from Figure 2.6 above that the difference in the output gap between the Government and NIER is mainly explained by differences in the labour market gap. A key component of the labour market gap is the deviation of unemployment from equilibrium unemployment. The Government estimates equilibrium unemployment at 5.7 per cent in 2014. NIER's estimate for equilibrium unemployment is 6.7 per cent. Chapter 3 discusses equilibrium unemployment.

Figure 2.7 shows the estimates of actual and structural net lending for 2014 made in early autumn 2013. In BP14, the Government expected a marginal structural surplus in 2014, unlike NIER, which expected a structural deficit. The difference is due to the Government's expectation of both a lower capacity utilisation and a higher cyclical sensitivity in the public finances than NIER. The Government thus considers a greater share of the deficit in net lending to be cyclical than NIER does. The Government and NIER use different methods to estimate cyclically adjusted net lending. The Government adjusts actual net lending based on a budget elasticity of 0.55. This means that actual net lending is adjusted downwards by the equivalent of 0.55 per cent of GDP if GDP is expected to fall below the potential level by 1 per cent. NIER uses a disaggregated method that takes into account the composition of GDP when net lending is cyclically adjusted. This is done by adjusting tax revenue in relation to cyclical swings in the large tax bases (household consumption expenditure, payrolls, etc.).<sup>27</sup> NIER's method implies an average budget elasticity of 0.4.<sup>28</sup> But it is the difference in estimating the economic situation that is most important in explaining why the estimate of structural net lending in 2014 differs so much (see Chapter 5 for a discussion of structural net lending).

In Figures 2.8 and 2.9, the Council compares the estimates of capacity utilisation and structural net lending respectively that were made by the Government and NIER in spring 2014 (the

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<sup>26</sup> For a more detailed description of how NIER, for example, estimates the output gap, see NIER (2013b).

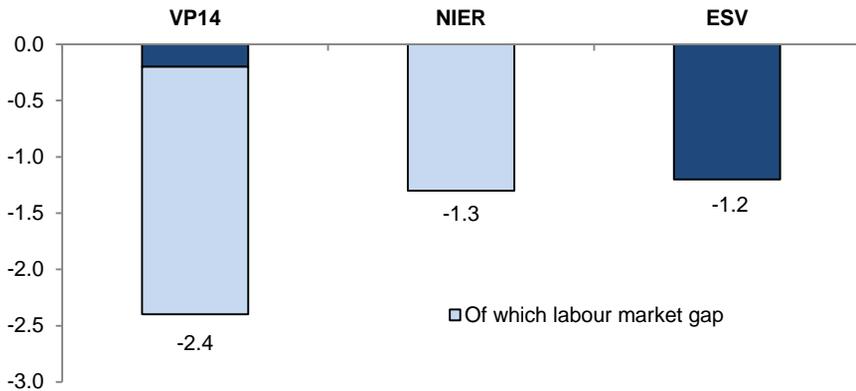
<sup>27</sup> See Fiscal Policy Council (2012) for a discussion of different ways of estimating structural net lending.

<sup>28</sup> See the in-depth discussion in "The Surplus Target for General Government Finances (Special Analysis)", NIER (2013c).

Government in VP14 and NIER in The Swedish Economy in March 2014). Also included is ESV’s estimate in April 2014.

**Figure 2.8 Output gap 2014 according to forecasts in spring 2014**

*Per cent of potential GDP*

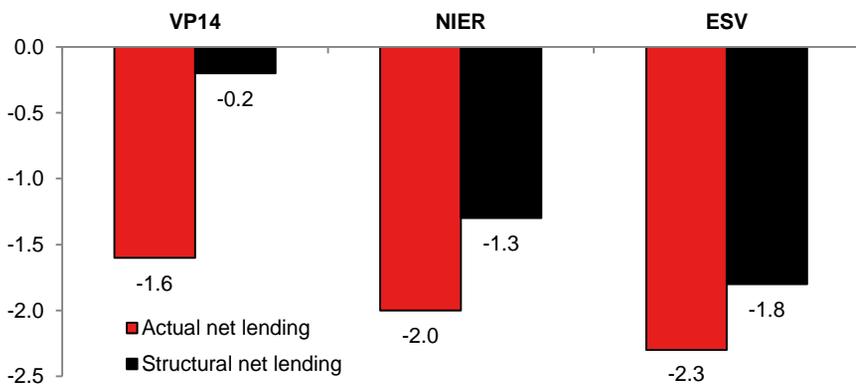


Note: The method ESV uses to estimate the output gap differs from the methods used by NIER and the Government, making it impossible to divide the output gap into a labour market gap and a productivity gap.

Sources: ESV (2014), NIER (2014c) and VP14.

**Figure 2.9 Net lending in 2014 according to forecasts in spring 2014**

*Per cent of GDP*



Sources: ESV (2014), NIER (2014c) and VP14.

ESV’s method for estimating capacity utilisation differs from the methods used by the Government and NIER. Instead of basing its estimate on the unused labour force, ESV uses the trend GDP growth and estimates a gap as the deviation in the actual GDP level

from the trend.<sup>29</sup> ESV uses a method to make a cyclical adjustment in actual net lending similar to NIER's and like NIER, expects lower automatic stabilisers than the Government.

A comparison of Figure 2.8 with Figure 2.6 above shows that both the Government and NIER expect a less negative output gap in spring 2014 than in autumn 2013. The downward revisions are due to better growth prospects and the downward adjustment in the estimate of the potential production level. Both the Government and NIER adjusted their estimates of the potential production level downwards after Statistics Sweden revised downwards the actual productivity level in the national accounts' outcome data from 2011 onwards at the end of 2013. Because of the change in the outlook for the current output gap, the Government's estimate also uses a higher capacity utilisation (less negative output gap) for the coming year in VP14 compared with BP14.

As the output gap estimate is less negative than it was previously, the Government's cyclical adjustment of net lending was also smaller. In VP14 the Government estimated that there will be some structural deficit in the public finances in 2014. As before, NIER expected in March 2014 a considerably larger structural deficit. ESV expected the largest structural deficit for 2014 with its forecast of a deficit of 1.8 per cent of GDP in 2014.

## 2.3 Stabilisation policy

Sweden has had a flexible exchange rate since November 19, 1992. According to the textbooks, in an economy with a flexible exchange rate, monetary policy is usually a more effective stabilisation policy instrument than fiscal policy. There are, however, good reasons to believe that an automatic weakening of net lending in an economic downturn (and vice versa) will stabilise the economy in a useful way. Furthermore, fiscal policy may sometimes need actively to support monetary policy. In Sweden, the Riksdag has delegated responsibility for monetary policy to the Riksbank. The Riksbank's primary objective is to maintain price stability. The Riksbank has specified its objective as an inflation target, which is an annual increase in the

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<sup>29</sup> The trend in GDP is estimated using the HP filter; see ESV (2014).

consumer price index of 2 per cent. While focusing on meeting the inflation target, monetary policy is to support the objectives of general economic policy with a view to achieving sustainable growth and high employment. Thus, the Riksbank, in addition to stabilising inflation close to the inflation target, also seeks to stabilise production and employment at levels that are sustainable in the long term. The Riksbank conducts a flexible inflation target policy, meaning that the Riksbank focuses not only on inflation, but also tries to reduce output gap fluctuations.

We limit our discussion of stabilisation policy to fiscal policy and take monetary policy as given. In its communication on the fiscal framework, the Government has described how fiscal policy may contribute to stabilising the economy and stated a number of principles for the design of stabilisation policy.<sup>30</sup> The discussion that follows is based on these principles.

### 2.3.1 General government net lending and stabilisation policy

General government net lending is a general indicator of whether fiscal policy is expansionary or contractionary. Fiscal policy's stabilisation policy stance refers to whether active fiscal policy measures that have an impact on general government expenditure and revenue rein in or stimulate demand. An *active* measure means that an active decision is required for the measure to take effect. For example, a tax may be lowered or an expenditure increased in order to stabilise the economy. Active measures are often called discretionary measures. It should be noted that fiscal policy also has an impact on the economy and net lending even in the absence of active decisions by way of the automatic stabilisers.<sup>31</sup> These stabilisers may have a significant impact on the economy, and this effect is

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<sup>30</sup> Ministry of Finance (2011b), pp. 32–36.

<sup>31</sup> *The automatic stabilisers* are fiscal policy's automatic response to cyclical swings. In a downturn, for example, tax revenue decreases while expenditures such as unemployment benefits increase without the need for any decisions to be taken. The resulting budget weakening helps counteract the downturn. Another common term is *semi-automatic stabilisers*, referring primarily to the strengthening of labour market policy that is routinely implemented when unemployment increases for cyclical reasons. In Chapter 2.4, semi-automatic stabilisers are included in active fiscal policy. One reason for this is that in the calculations presented by the Ministry of Finance, these measures are placed under the heading "Discretionary fiscal policy". Source: Ministry of Finance.

normally large enough to be the main fiscal policy contribution to stabilisation policy. Changes in net lending caused by active decisions and the automatic stabilisers' effects on net lending constitute the total fiscal policy impact on demand in the economy.

Table 2.5 below shows the development of net lending over time, according to BP14. From 2012 through 2015, there is a budget deficit. Provided that no unfinanced measures are taken, the Government estimates that the deficit will turn into a growing surplus in 2016–2017.

Under the surplus target decided by the Riksdag, actual net lending is to average 1 per cent of GDP over a business cycle. NIER forecasts that on average, the cyclical adjustment increases net lending by 0.2 per cent of GDP. Thus, according to NIER's method of estimation, average structural net lending must come to 1.2 per cent of GDP in order to meet the target of an average of 1 per cent of actual net lending. Deviations in structural net lending from a level of 1.2 per cent must therefore be temporary to avoid breaching the surplus target. These deviations may be justified for stabilisation policy reasons in order to counter harmful cyclical swings. If structural net lending is less than 1.2 per cent, we can conclude that fiscal policy has actively been made more expansionary than the cyclical situation would automatically have given rise to.

Table 2.5 shows that structural net lending is a few tenths of a percentage point above 0 per cent of GDP in 2013–2014. This indicates that fiscal policy in 2013–2014 can be described as actively expansionary.

**Table 2.5 General government net lending 2008–2017**

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Net lending (SEK billion)	69	-30	0	1	-22	-43	-58	-17	18	47
							(-55)	(-13)	(21)	(51)
<b>Per cent of GDP</b>	<b>2.2</b>	<b>-1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>-0.6</b>	<b>-1.2</b>	<b>-1.5</b>	<b>-0.4</b>	<b>0.4</b>	<b>1.1</b>
								<b>(-0.3)</b>	<b>(0.5)</b>	<b>(1.1)</b>
Cyclical adjustment	-0.1	3.8	1.7	0.8	1.5	2.0	1.7	1.2	0.5	0.1
Adjustment for one-off effects <sup>1</sup>	-0.2	-0.1	0.0	0.0	-0.3	-0.3	0.0	0.0	0.0	0.0
Adjustment for extraordinary capital gains	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
<b>Structural net lending</b>	<b>1.8</b>	<b>2.8</b>	<b>1.6</b>	<b>0.8</b>	<b>0.6</b>	<b>0.5</b>	<b>0.2</b>	<b>0.8</b>	<b>1.0</b>	<b>1.2</b>
							<b>(0.3)</b>			<b>(1.3)</b>
<b>Output gap</b>	<b>0.1</b>	<b>-6.5</b>	<b>-3.1</b>	<b>-1.4</b>	<b>-2.7</b>	<b>-3.5</b>	<b>-3.0</b>	<b>-2.1</b>	<b>-1.0</b>	<b>-0.2</b>

Note: Percentage of GDP unless otherwise stated. Outcome for 2007–2012, forecast for 2013–2017. Figures in parentheses are adjusted to exclude the proposal on raising the lower threshold for state income tax.

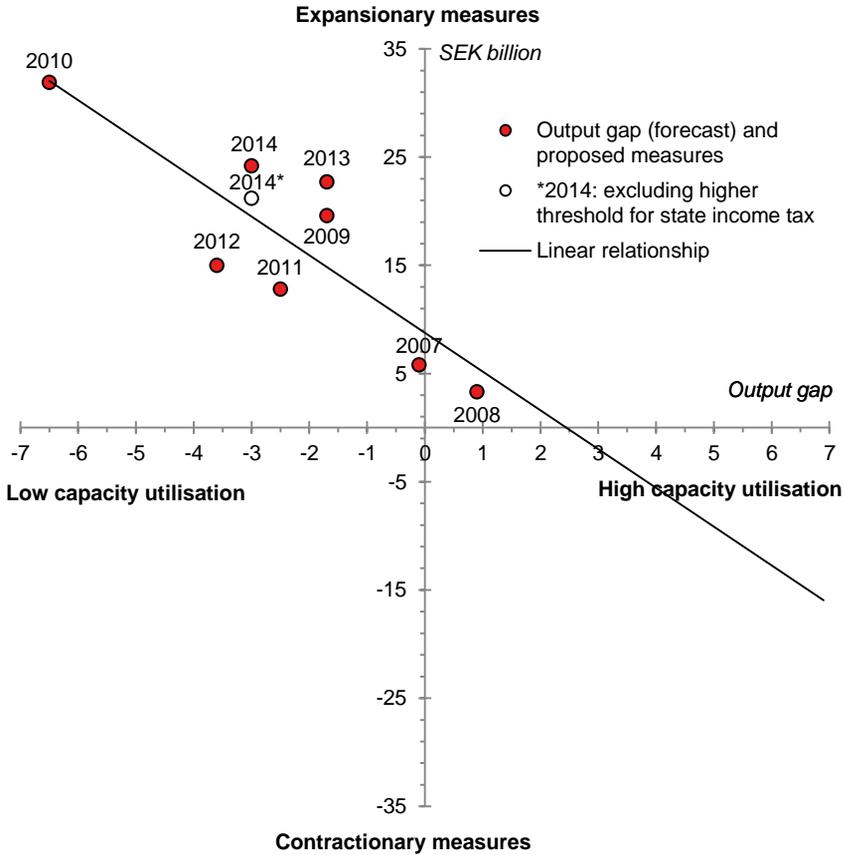
<sup>1</sup> The one-off effect in 2008 and 2009 is due to new rules for the VAT on construction, which temporarily increase VAT receipts by SEK 8 billion in 2008 and SEK 2 billion in 2009. The one-off effect in 2012 is the repayment of insurance premiums from AFA insurance.

Source: BP14, vol. 1, Appendix 2, p. 18.

How large is this active fiscal policy stimulus compared with the policy conducted earlier in the current business cycle?

In Figure 2.10 below, each point in the figure shows the proposed measures' effect on net lending and the Government's forecast for the output gap in each Budget Bill. For example, the point 2014 shows the measures and the forecast in BP14. In BP14, the Government proposed measures of SEK 24.2 (21.2) billion and in the same Budget Bill, the Government's output gap forecast for 2014 was -3.0 per cent of potential GDP.

**Figure 2.10 Impact on general government net lending of active measures and the Government's output gap forecast in BP07–BP14**



Note: Red points show active measures and output gap forecasts for each year, taken from the respective Budget Bill (i.e. measures and output gap for 2007 are taken from BP07 etc.). Sources: BP07–BP14.

Except for BP08, the points are clustered in the second quadrant of the figure. BP10 stands out as the most expansionary budget in a situation where the Government forecast a very low capacity utilisation. All the Budget Bills have led to a deterioration of the public finances. Except for BP08, every Budget Bill has been presented in a situation where the output gap was expected to be negative in the budget year in question. A countercyclical-reaction pattern emerges where an expected decrease in capacity utilisation has resulted in larger expansionary measures; we have illustrated this in the figure by showing an estimate of the linear correlation between

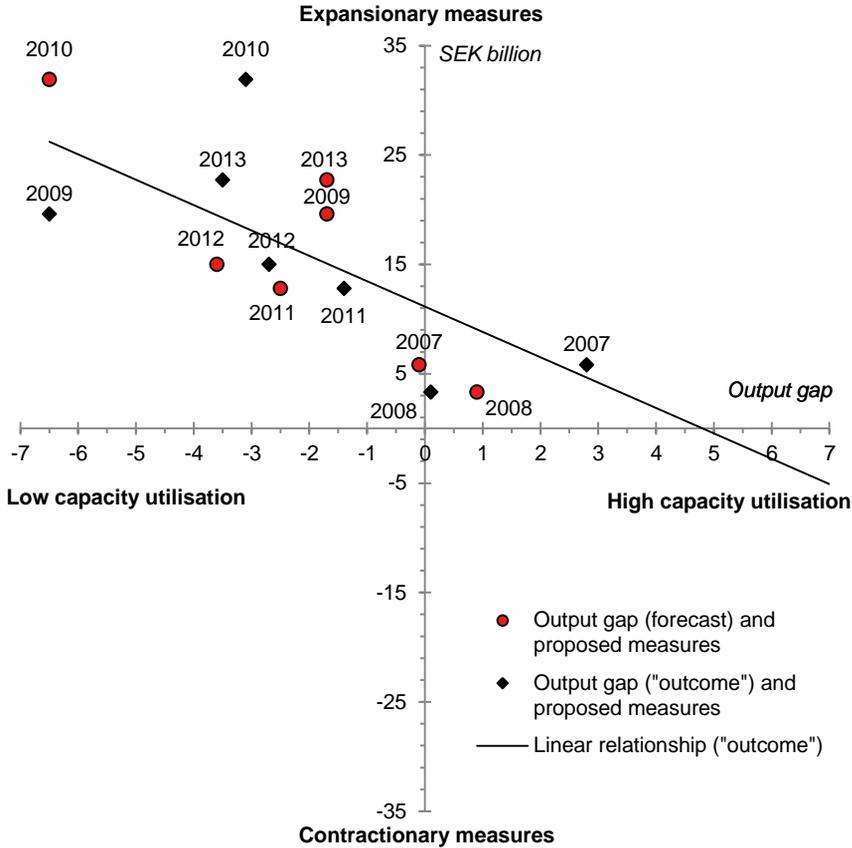
the observations. According to the estimated correlation, a widening of the negative output gap by one percentage point results in a SEK 3.6 billion increase in active fiscal policy measures. Except for 2007–2008, the Government estimated that capacity utilisation was low or very low.

Potential GDP is a variable that is difficult to estimate. Unlike actual GDP, there is no generally accepted method for estimating potential GDP. Potential GDP is therefore not included in the official statistics and thus cannot be evaluated against performance. Different forecasting institutions also use different methods to estimate potential GDP. Thus, there are not only different forecasts of future output gap developments. Estimates for past years may also differ.

In spite of these difficulties, Figure 2.11 below is an attempt to examine whether the output gap forecast on which the fiscal policy was based differs noticeably from the Government's estimate ex post of the capacity utilisation for the fiscal year in question. In addition to the output gap forecast made the year before the fiscal year (the red dots), Figure 2.11 also shows the estimates of past output gaps made by the Ministry of Finance in late summer 2013 (the black diamonds). We can see that the Government always made a different estimate ex post of the capacity utilisation than the forecast made the year before the fiscal year in question. This is not surprising in view of the difficulties in estimating potential GDP. The difference is large in many years, such as 2007, 2009, 2010 and 2013. But the differences do not follow any systematic pattern. The Government has both over and underestimated capacity utilisation. The mean absolute difference between the red dots and the black diamonds in the figure is more than two percentage points. In Figure 2.11, a regression line has been plotted for the black diamonds. According to this estimate, a widening of the negative output gap by one percentage point results in a SEK 2.3 billion increase in active fiscal policy measures. Thus, the Government's stabilisation policy measures can be described as countercyclical, also ex post. In academic literature, it is often emphasised how difficult it is to take active measures at the right point in the business cycle. In practice, an active fiscal policy risks becoming out of step with the business cycle and destabilising the economy rather than stabilising it. In light of

this discussion, the Government’s active stabilisation policy stands out as well timed.

**Figure 2.11 Proposed measures and output gaps in BP07–BP13**



Note: Output gaps as a per cent of potential GDP on the horizontal axis, proposed measures in SEK billion on the vertical axis. Red points show proposed measures and output gap forecasts for each year, taken from the respective Budget Bill (i.e. measures and output gap for 2007 are taken from BP07, etc.). Black diamonds show proposed measures and output gaps estimated ex post (from BP14). Sources: BP07–BP13.

To sum up, the size of the Government’s active measures in BP14 seems to be in line with the countercyclical fiscal policy followed from 2006 to 2013.

### 2.3.2 Fiscal policy's role in stabilisation policy

The *change* in general government structural net lending can be used to follow year by year how the Government's active fiscal policy measures affect the stabilisation policy stance. As Table 2.6 shows, the change in structural net lending between 2013 and 2014 is -0.3 per cent of GDP. This means that the active measures proposed by the Government in BP14 will further stimulate demand.

**Table 2.6 Change in structural net lending 2013–2017**

<i>Annual change as a percentage of GDP</i>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Change in net lending</b>	<b>-0.6</b>	<b>-0.4</b>	<b>1.1</b>	<b>0.8</b>	<b>0.7</b>
		<b>(-0.3)</b>			
<i>Of which</i>					
Automatic stabilisers	-0.4	0.3	0.6	0.6	0.4
One-off effects	0.0	-0.3	0.0	0.0	0.0
Extraordinary capital gains	0.1	0.0	0.0	0.0	0.0
<b>Change in structural net lending</b>	<b>-0.1</b>	<b>-0.3</b>	<b>0.6</b>	<b>0.2</b>	<b>0.2</b>
<i>Of which</i>					
Discretionary fiscal policy <sup>1</sup>	-0.5	-0.6	0.2	-0.1	-0.1
		<b>(-0.5)</b>			
Capital costs, net	-0.1	-0.2	0.1	0.0	0.0
Local government finances	0.3	-0.1	0.0	0.1	0.1
Other	0.2	0.5	0.3	0.2	0.2
<b>Output gap, change in percentage points</b>	<b>-0.8</b>	<b>0.4</b>	<b>0.9</b>	<b>1.1</b>	<b>0.8</b>

Note: Refers to expenditure and revenue changes in 2013–2017 compared with previous years of adopted, proposed and announced reforms. Figures in parentheses are adjusted to exclude the proposal on raising the lower threshold for state income tax.

<sup>1</sup> The total effect of the measures announced and proposed by the Government and of previously decided measures. Change compared with previous year. Includes also the effect of previously decided programmes that were concluded during the period in question.

Source: BP14, vol. 1, p. 181.

In Table 2.6, the effect of the Government's active fiscal policy for 2014 on structural net lending is segregated in the row "Discretionary fiscal policy"; the effect amounts to -0.6 (-0.5) per cent of GDP and the negative sign indicates that it involves a weakening of structural net lending. We note in Table 2.6, however, that this demand

stimulus is almost fully offset by the item “Other”, which amounts to 0.5 per cent of GDP in 2014.

As seen in Table 2.6, the item “Other” makes a substantial contribution to the improvement in the public finances in the Government’s policy in 2013–2017. The explanation for most of this contribution is that government revenue is more closely linked to growth than government expenditure and that several expenditure items are not indexed.<sup>32</sup> The Council notes that the net effect of the active fiscal policy and the automatic tightening is small (zero) in 2014. This need not in itself mean that the fiscal impulse to demand is weak. From a stabilisation policy perspective, it is important that the measures taken by the Government stimulate the parts of the economy that can grow in the short term and thus counteract an economic downturn.

### 2.3.3 The economic situation when the Government decided BP14

The Swedish economy is heavily dependent on international developments; Swedish exports account for almost 50 per cent of GDP.<sup>33</sup> The global crisis that began in 2008 has had a considerable impact on the Swedish economy. But Swedish GDP has recovered since the crisis erupted and is currently 6 per cent larger than in 2007 (Figure 2.12). Behind the overall picture, however, is a polarised development, where household finances have been particularly strong. Household disposable income has grown each year during and after the crisis (Figure 2.12). Consumption has also grown at a good pace. But business growth has been considerably weaker, as reflected in slow export growth and low investment (Figure 2.14).

Figure 2.12 shows that households’ own financial savings increased in 2007–2008, decreased slightly in 2009 and subsequently increased again.<sup>34</sup> Households’ own financial savings are now at a historically high level: the annual average was -4.7 per cent of disposable income in 1997–2007, it rose to -0.5 per cent in 2007–

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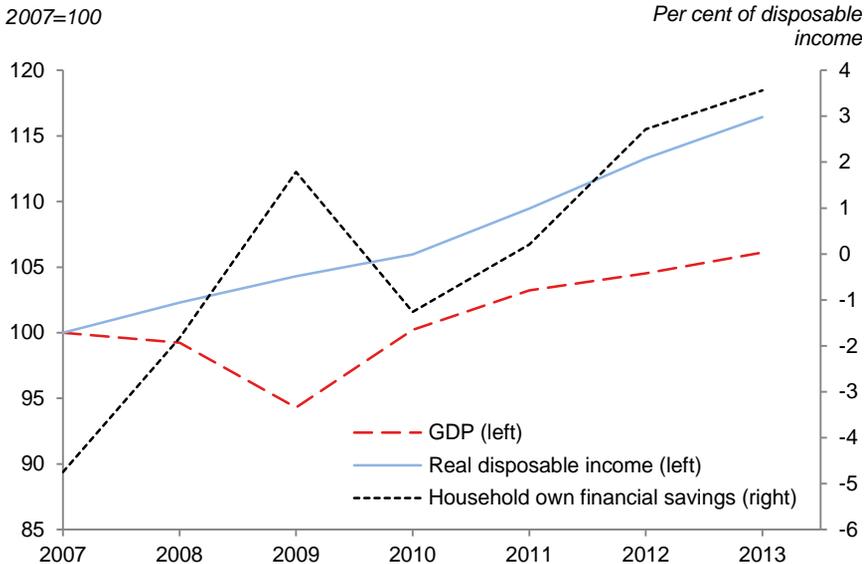
<sup>32</sup> For a discussion of this, see Fiscal Policy Council (2011), pp. 71–79 and ESV (2013). ESV estimates this effect to be about 0.5 per cent of GDP, which is equal to almost SEK 20 billion.

<sup>33</sup> In 2012 exports accounted for 48.5 per cent of GDP; see Statistics Sweden (2014d).

<sup>34</sup> Total household savings is shown in Figure 2.13.

2012 and in 2013 household financial savings were 3.6 per cent of disposable income.

**Figure 2.12 GDP, disposable income and household savings**



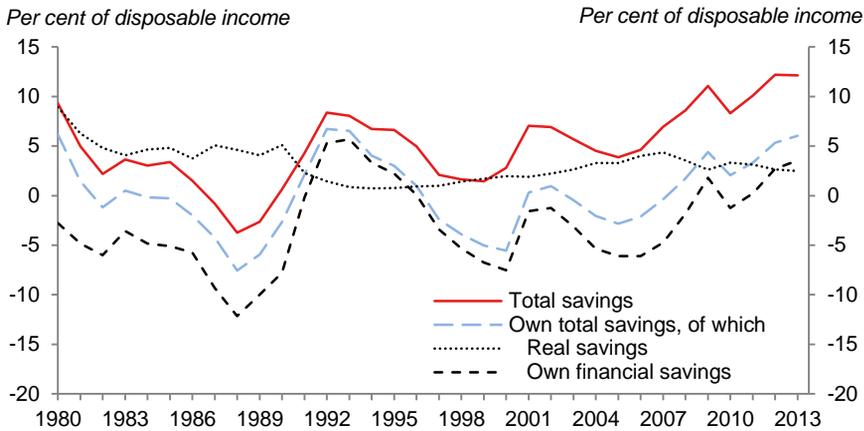
Note: Index with base year 2007 for GDP (constant prices) and real disposable income on the left axis. Household savings ratio for own financial savings (i.e. excluding savings in occupational and premium pensions and real savings in own homes) as a per cent of disposable income on the right axis.

Sources: Statistics Sweden (2014d) and own calculations.

As shown in Figure 2.13 below, household total savings have developed similarly to own financial savings. Figure 2.13 shows that household savings now are at a historic high. One explanation may be that households have increased their precautionary savings in reaction to the crisis. But the strong growth in disposable income has enabled households to keep on consuming and at the same time increase savings. This continued consumption may be interpreted as a sign that household confidence in the public commitment remains strong. Strong income growth has probably also contributed to the further increase in household indebtedness, for example, in connection with home purchases.<sup>35</sup>

<sup>35</sup> Households have probably perceived the income tax reductions as permanent. If so, it is probably financially rational for households to adjust their consumption to a new, higher income level. It is then also likely that households with a strong asset side in their balance sheet will choose to increase their indebtedness, for example, when buying homes.

**Figure 2.13 Household savings**

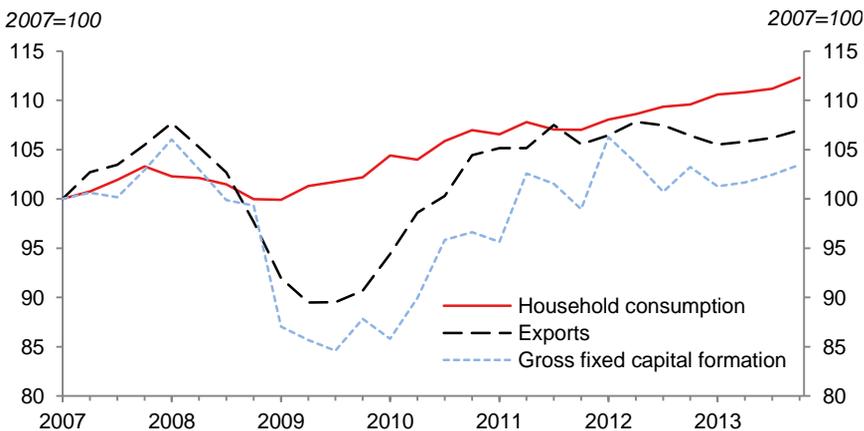


Note: Households’ total savings consist of own total savings and collective insurance savings. Own total savings consist of household savings excluding occupational and premium pensions. Own total savings can in turn be divided into real savings (such as household investment in housing) and own financial savings.

Sources: Statistics Sweden (2014d) and own calculations.

Figure 2.14 below clearly shows that the crisis in 2008–2009 hit the export industry hard and that it has grown significantly less than household consumption since 2011. Investment has also grown slowly after a steep fall in 2008–2010. In contrast, household consumption has grown by about 1.8 per cent annually from 2009 to 2013, after a weak period in 2008–2009.

**Figure 2.14 Exports, investment and household consumption**



Note: Index with Q1 2007 as the base period.

Sources: Statistics Sweden (2014d) and own calculations.

The Council notes that household consumption continued to grow in 2011–2013, even though no new measures to strengthen household finances were taken in these years. The four earned income tax credits introduced by the Government up to 2010 have probably helped stabilise private consumption. But household consumption cannot fully compensate for the drop in demand due to weak global demand. Households demand different goods and services than those produced by export industry.

The Council noted in Chapter 1 that the economic situation has improved since the Government presented BP14. But in late summer 2013, when the Government took the decision on BP14, the situation was different. Even though there were signs of increasing global activity, growth in Sweden was expected to be weak in 2013. A recovery was predicted to start in early 2014, but capacity utilisation was expected to remain low.<sup>36</sup> At that point in time, the Riksbank was of the opinion that monetary policy already provided a stimulus to the economy, while it took into account the risks associated with high household indebtedness.<sup>37</sup> The Riksbank therefore decided to leave the repo rate unchanged at 1 per cent and thus, more of the responsibility for additional expansionary measures fell on fiscal policy.<sup>38</sup>

### 2.3.4 Stabilisation policy considerations in fiscal policy

The fiscal framework emphasises that fiscal policy's most important contribution to stabilising the economy is to maintain confidence in the long-term sustainability of the public finances. If stabilisation policy measures are taken, they should be designed to enable actual net lending to return to a level in line with the surplus target when capacity utilisation returns to normal. Thus, the need to safeguard public finances imposes a limit on how large active measures can be.<sup>39</sup> In a situation in which the surplus target seems unlikely to be

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<sup>36</sup> NIER (2013d).

<sup>37</sup> Sveriges Riksbank (2013a).

<sup>38</sup> The repo rate was lowered from 1.0 to 0.75 per cent on December 17, 2013.

<sup>39</sup> Ministry of Finance (2011b), p. 35.

met, the Government must have very good reasons for taking permanent measures in order to support weak demand.

In BP14, the Government describes its new policy as a number of “measures to increase demand and employment” and states that the weak global economy justifies “measures that give priority to strengthening household finances”.<sup>40</sup> In particular, it is the Government’s view that a fifth earned income tax credit is “justified both from a stabilisation policy and a structural perspective”.<sup>41</sup> The Council, however, is not convinced that the stabilisation policy merit of additional household demand was large enough to justify an active expansionary measure.

We noted above that the economic downturn that followed the financial crisis has hit the export industry particularly hard. Exports and investment have grown weakly for a few years. Household consumption is expected to keep growing at a good pace owing to rising real wages.<sup>42</sup> Thus, in the Council’s opinion, it is not obvious that permanent measures targeting households were the most appropriate stabilisation policy measure. In BP 14, the Government does not present any analysis of why a fifth earned income tax credit is preferable to other possible stabilisation policy measures. In the Council’s opinion, this is a shortcoming.

In BP14 net lending for 2014 was estimated at -1.5 per cent, i.e. 2.5 percentage points below the surplus target. At the same time, the Government estimated that capacity utilisation was low. The output gap was estimated at -3 per cent, i.e. 3 per cent below the level in a normal economic situation. The relationship between these two deviations can be used as a basis for assessing whether the policy is appropriate. As we have noted before, the automatic stabilisers normally cause net lending to weaken by about half a percentage point for each per cent that the output gap widens. In BP14, net lending is expected to be one percentage point lower than what would be expected from this rule of thumb for the automatic effects. This does not appear unreasonable, given the Government’s estimate of capacity utilisation in BP14. The proposed net lending can

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<sup>40</sup> BP14, p. 3.

<sup>41</sup> BP14, p. 5.

<sup>42</sup> NIER (2013d).

therefore be considered appropriate from a stabilisation policy perspective.

The Council notes, however, that the measures proposed by the Government in BP14 involve a permanent weakening of public finances. In late summer 2013, it was not clear – given the surplus target – whether there was any fiscal space for permanent measures.<sup>43</sup> According to the Government's own estimates, the long-term sustainability of public finances was also weakened by the measures in BP14.<sup>44</sup> It could be argued that temporary budget weakening measures might have been preferable in the situation that existed in autumn 2013.

One basis for assessing whether fiscal policy is reasonably calibrated is that net lending should normally not change more than the output gap in cyclical fluctuations. If net lending normally fluctuates more than the output gap, then fiscal policy destabilises private sector incomes at the margin. The Council notes that in its August 2013 forecast, NIER estimated the output gap for 2014 at -1.9 per cent. Net lending, which was estimated at 2.5 per cent below the surplus target in BP14, seems too low according to the reasoning above, given the NIER output gap forecast.

That net lending should normally not change more than the output gap should of course not be regarded as a mechanical rule without exceptions. An unexpected fall in potential GDP normally results in lower net lending even if the output gap does not fall. A structural deficit that emerges in this way must be recovered, but not necessarily immediately. Specific measures taken in a financial crisis are another example of circumstances where letting net lending decline more than the output gap may be justified.

Since BP14 was presented, the stabilisation policy situation has changed. The global economic situation has improved while Sweden's net lending has become more negative and fragmented. In VP14, net lending is estimated at -1.6 per cent and the output gap at -2.4 per cent. In retrospect, the fiscal policy measures therefore seem less appropriate than when BP14 was presented.

This picture is reinforced when the NIER estimates are used instead. According to the NIER March forecast, net lending will

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<sup>43</sup> NIER (2013d), pp. 26–30.

<sup>44</sup> BP14, vol. 1, p. 195.

be -2 per cent and the output gap -1.3 per cent in 2014. With these figures, the ratio between the deviations from the normal values for net lending and GDP is more than two to one. It is difficult to argue that this relationship is compatible with a well calibrated stabilisation policy.

It is important to emphasise in this context that the output gap cannot be measured directly, and therefore different forecasters may have different opinions about its size. But since the output gap is nevertheless of crucial importance to stabilisation policy decisions, the Government should give notice if its forecasts deviate substantially from those of other key forecasters. If that is the case, as it is now, the Government should discuss the reasons for the differences and the likely consequences should the Government's forecasts turned out to be incorrect.

## 2.4 Assessments and recommendations

The Council notes that the sickness benefit expenditure has increased more than the Government had expected. In the Council's opinion, the Government's options in its conduct of economic policy will be limited if sickness absence continues its rapid rise. The Council has previously recommended that the Government describe the forecasting methods used for the sickness benefit, but the Government has rejected this request. The Council still considers it important for the Government to describe the forecasting method used for the sickness benefit appropriation.

The Council has studied Försäkringskassan's forecasting methods and can confirm that they could be considerably improved. In the Council's opinion, the Government should now instruct Försäkringskassan to prioritise the work on developing better forecasting methods for the sickness benefit appropriation.

The Council welcomes the extensive examination of housing market issues, but notes that the key issues have not yet been addressed. The Council would still like to see wide-ranging solutions in the housing area, with the objective of reducing lock-in effects, increasing mobility, and creating the conditions for the efficient use of the existing housing stock.

The Council welcomes the fact that the Government now reports how its forecast compares with other forecasters' estimates, in accordance with the Council's request.

Given the assessment of the cyclical situation in the 2014 Budget Bill, estimated general government net lending for 2014 was consistent with a well-calibrated fiscal policy. The Government has a considerably more positive view than NIER and other forecasters of how much the economy can grow before equilibrium capacity utilisation is reached. The Government also has a more optimistic view of how rapidly the public finances will improve when capacity utilisation increases. This is of considerable significance in determining how contractionary fiscal policy needs to be in the next few years in order to reach a surplus of 1 per cent when the economy returns to normal. The uncertainty indicated by various forecasters should have been discussed by the Government and may have justified more prudence with respect to permanent budget weakening.

Since autumn 2013, the stabilisation policy outlook has changed. The Council now sees a risk that government net lending for 2014 may be lower than the level justified by stabilisation policy considerations. The lower net lending in 2014 does not present any threat to long-term fiscal sustainability. But as the measures in the 2014 Budget Bill permanently weaken the budget, a return to a 1 per cent budget surplus will be more difficult. In the coming years, fiscal policy must be very tight to be consistent with the surplus target.

The Council has also examined the timing of the Government's stabilisation policy measures in 2007–2013. A clear countercyclical pattern emerges, which is likely to have contributed to stabilising the economy.

## 3 The labour market

### 3.1 Does the policy lead to sustainably high employment?

According to the instruction for the Fiscal Policy Council, the Council is to assess whether fiscal policy leads to long-term sustainable high employment. The employment level in the economy is usually measured as the number of employed in relation to the working-age population, the employment rate. The employment rate is of key importance to the economy for several reasons, not just as a measure of how successful the employment policy is. It is also of major importance for long-term output potential in the economy, for long-term fiscal sustainability and for income distribution in the economy.

The Government states that the primary aim of employment policy is a sustainable increase in employment.<sup>1</sup> With this aim in view, there have been reforms in a number of areas: taxes, unemployment insurance, labour market policy and sickness insurance. The Government estimates that in the long run, the measures will increase employment by 254 000 people and reduce equilibrium unemployment by 1.8 percentage points.<sup>2</sup>

In this chapter, there is first an analysis of labour force participation and employment rate developments in recent years and the role that the Government's reforms have played.

Next, the Council looks at how unemployment has developed and what the prospects are for a sustainable reduction in unemployment in the next few years. Finally, the Council examines the labour market for young people and explains why youth unemployment may be a misleading measure of the difficulties young people have getting established in the labour market. The challenges in making it easier for young people to get a job and expediting the process are also discussed.

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<sup>1</sup> VP14, Chapter 10.

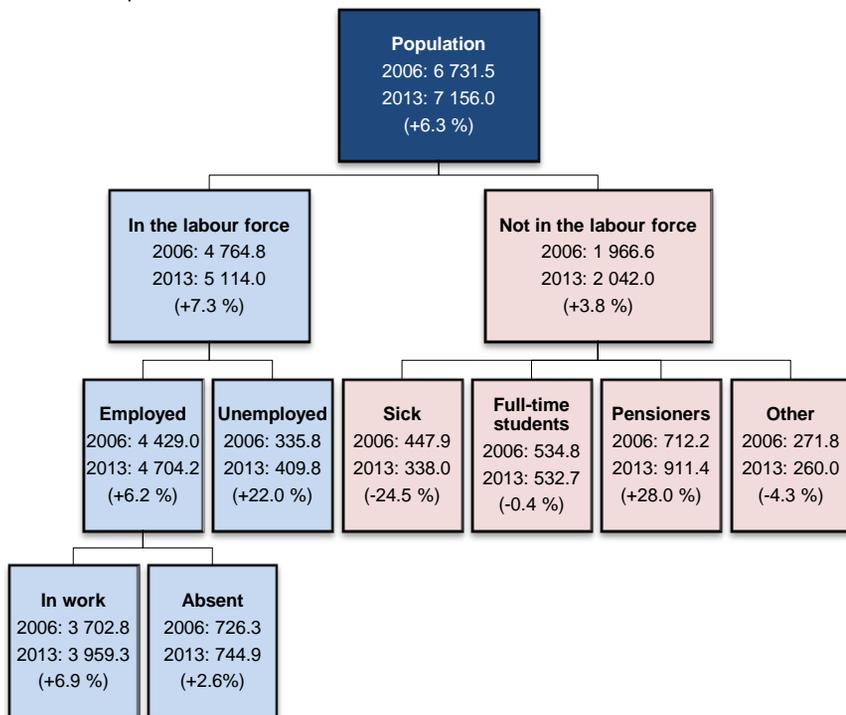
<sup>2</sup> VP14, Appendix 4.

### 3.2 Labour supply and employment

In the official statistics, a person is counted as employed if he or she works at least one hour during a reference week, or if the person in question has a job but is absent that week. Anyone actively looking for work or waiting to start a job soon, and who is also available to start work, is counted as unemployed.<sup>3</sup> Everyone who is either employed or unemployed participates in the labour force. The labour force thus comprises those who are either employed or actively seeking employment. Figure 3.1 shows the population distribution by labour force affiliation in 2013 compared with 2006.

**Figure 3.1 The labour market 2006–2013**

*Thousands of persons*



Note: Refers to annual averages (thousands) for the 15–74 age group.  
 Source: Statistics Sweden (2014a).

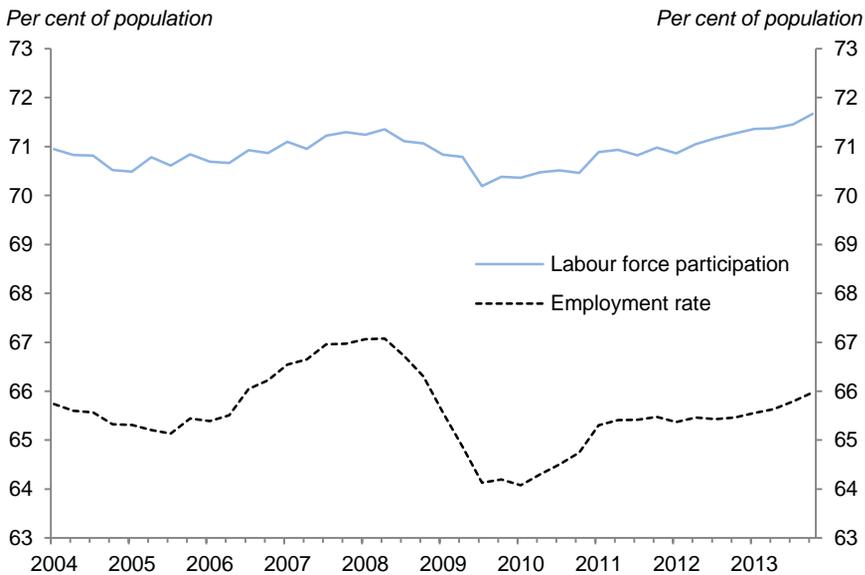
<sup>3</sup> Studying or participating in a labour market programme at the same time does not play any role in any of these cases.

### 3.2.1 Increased labour force participation

Labour force participation, i.e. the percentage of the population between the ages of 15 and 74 who participate in the labour force, is relatively high in Sweden. In 2013 average labour force participation came to 71.5 per cent.<sup>4</sup> This can be compared with an EU average of 64 per cent.

Labour force participation fell in connection with the financial crisis (Figure 3.2). It is common for labour force participation to fall when there is an economic downturn and the probability of getting a job decreases. When the economy rebounds and the labour market improves, labour force participation normally rises again. If labour force participation is low for a long time, the risk of people being permanently excluded from the labour market increases and labour force participation thus remains low, even after the economic downturn has ended.

**Figure 3.2 Labour force participation and the employment rate**



Note: Refers to the age group 15–74. Seasonally adjusted quarterly values.  
 Source: Statistics Sweden (2014a).

<sup>4</sup> Since 2007 the official definition of the working-age population refers to people aged 15–74. Chained statistics for this age group by Statistics Sweden go back to 2001 (and by NIER to 1992). Time series back to the 1970s and 1980s are only available for the previous target population, those aged 16–64.

It is clear from Figure 3.2, however, that labour force participation began to rise again already in 2009 and in 2013 was a little higher than in 2006. Labour force participation has increased most of all among the older ages (Table 3.1).

**Table 3.1 Labour force participation and the employment rate**

<i>Age</i>	<b>Labour force participation</b>			<b>Employment rate</b>		
	<b>2006</b> <i>Per cent</i>	<b>2013</b> <i>Per cent</i>	<b>Change</b> <i>Percentage point</i>	<b>2006</b> <i>Per cent</i>	<b>2013</b> <i>Per cent</i>	<b>Change</b> <i>Percentage point</i>
15–19	33.0	32.5	-0.5	23.0	20.7	-2.3
20–24	71.1	72.2	1.1	59.2	58.7	-0.5
25–34	88.0	87.8	-0.2	81.8	80.8	-1.0
35–44	91.2	93.5	2.2	86.8	88.5	1.7
45–54	88.8	91.2	2.4	85.2	86.7	1.5
55–64	73.0	77.6	4.6	69.8	73.7	3.9
65–74	10.3	14.9	4.6	10.1	14.6	4.5
<b>15–74</b>	<b>70.8</b>	<b>71.5</b>	<b>0.7</b>	<b>65.8</b>	<b>65.7</b>	<b>-0.1</b>

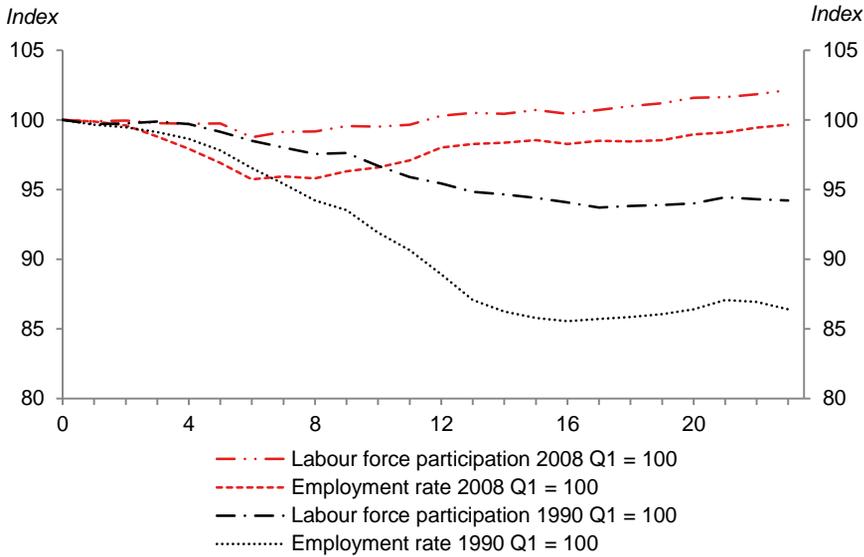
Note: Refers to the age group 15–74. Labour force participation and the employment rate are stated as a percentage of the population in the respective age group. The change in 2006–2013 is stated in percentage points.

Sources: Statistics Sweden (2014a) and own calculations.

Labour force participation fell considerably less than in the 1990s crisis and recovered much more rapidly during the financial crisis (Figure 3.3).<sup>5</sup> Five years after the 1990s crisis, there was still no sign of a recovery in labour force participation, which can be explained in part by the expansion in the regular education system in connection with the 1990s crisis.

<sup>5</sup> See Fiscal Policy Council (2010), pp. 29–40 for a more detailed comparison of developments during the 1990s crisis and the financial crisis.

**Figure 3.3 The Financial Crisis compared with the 1990s crisis**



Note: Refers to the age group 16-64.  
 Sources: Statistics Sweden (2014a) and own calculations.

### 3.2.2 Same employment rate as in 2006

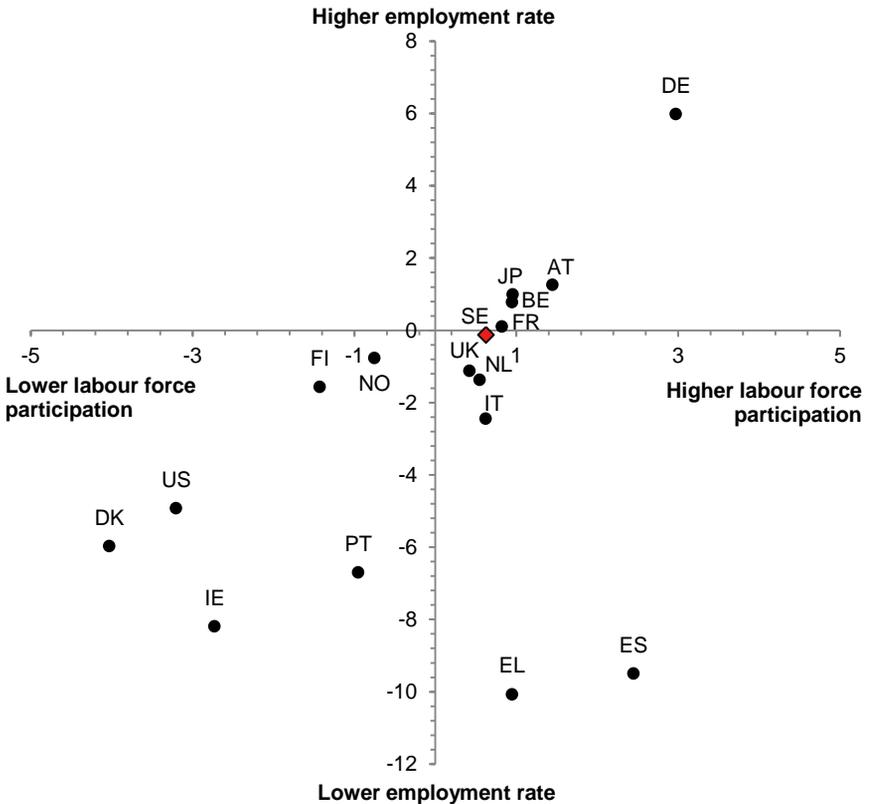
As most people who participate in the labour force also become employed, it is primarily the size of the labour force that determines the employment rate in the long run. Thus, high labour force participation is an important part of a policy aimed at long-term high employment.

The employment rate fell sharply in connection with the financial crisis. It fell more than labour force participation (Figure 3.2), which is the same as an increase in unemployment. At the end of 2009, the employment rate again began to increase. Compared with 2006, it was almost unchanged in 2013. As Table 3.1 shows, the employment rate has developed more negatively for younger people than for older people. This pattern can also be seen in other countries; during the financial crisis and the economic downturn that followed, the average employment rate fell more for young age groups than for older age groups in OECD countries.<sup>6</sup>

<sup>6</sup> OECD (2013c).

In the first years of the financial crisis, employment fell at approximately the same rate as it did during the crisis in the early 1990s (Figure 3.3). But developments since then have been considerably more positive. Five years after the crisis erupted, the employment rate was back at approximately the same level as before the crisis.<sup>7</sup> In the 1990s, the employment rate five years after the crisis erupted was nowhere near the pre-crisis level.

**Figure 3.4 Labour force participation and the employment rate – change since 2006**



Note: The change in labour force participation (aged 15–74) in 2006–2013 is stated in percentage points on the horizontal axis. The change in the employment rate (aged 15–74) 2006–2013 is stated in percentage points on the vertical axis. For a list of the country codes in the figure, see Eurostat (2014a). Sources: OECD (2014) and own calculations.

<sup>7</sup> Note that for reasons of data availability, the comparisons with the 1990s crisis in Figure 3.3 are made for the population group aged 16–64, unlike Figure 3.2, which refers to the official definition of the working age population, i.e. aged 15–74.

It is also interesting to compare how the labour market in Sweden has coped during the recent economic downturn from an international perspective. Figure 3.4 above shows how labour force participation and the employment rate have developed in Sweden compared with selected OECD countries.

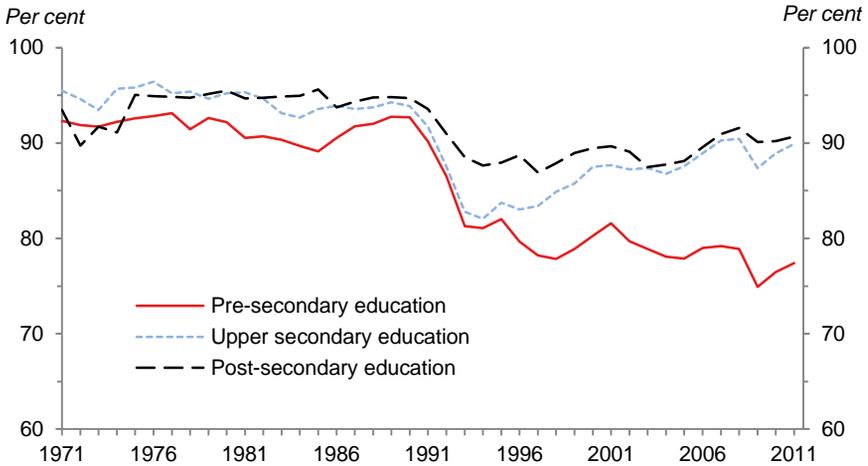
The figure shows the cumulative change in labour force participation and the employment rate since 2006. Unlike Sweden, a number of countries in 2013 still had both a lower labour force participation and a lower employment rate than in 2006. But there are also several countries that have improved more than Sweden has since 2006. In a number of countries, labour force participation and the employment rate have both increased in 2013 compared with 2006.

To sum up, the Swedish labour market has done considerably better during the financial crisis than during the 1990s crisis. From an international perspective, developments in the labour market have been positive but not exceptional.

### **Box 3.1 Employment rate by education level**

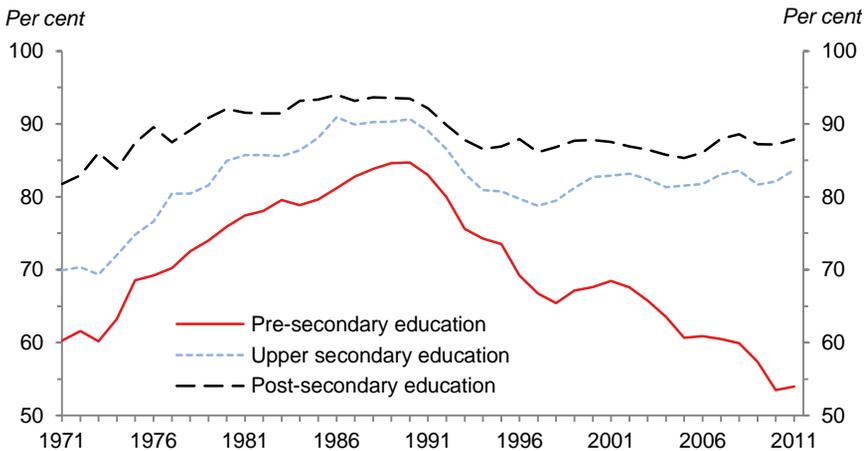
The background report “Löner, sysselsättning och inkomster – ökar klyftorna i Sverige?” (Wages, employment and incomes – is inequality increasing in Sweden?) by Niklas Bengtsson, Per-Anders Edin and Bertil Holmlund (BEH) shows the development of employment, wages and incomes from a longer-term perspective. In the report, the employment rate is shown by education level for the population aged 25–54 and for women and men. The report shows that education level makes a clear difference in the development of the employment rate for both women and men (Figures 3.5 and 3.6). In the group with no more than a pre-upper secondary education, the employment rate has been on a downward trend since the early 1990s. The decline in the employment rate for those with the least education is particularly clear for women (Figure 3.6). For low-skilled women, the developments in the 1990s are a clear break in the trend to a rising employment rate in the 1970s and 1980s.

**Figure 3.5 Employment rate by education, men**



Note: Refers to the age group 25-54.  
 Source: Bengtsson and others (2014).

**Figure 3.6 Employment rate by education, women**

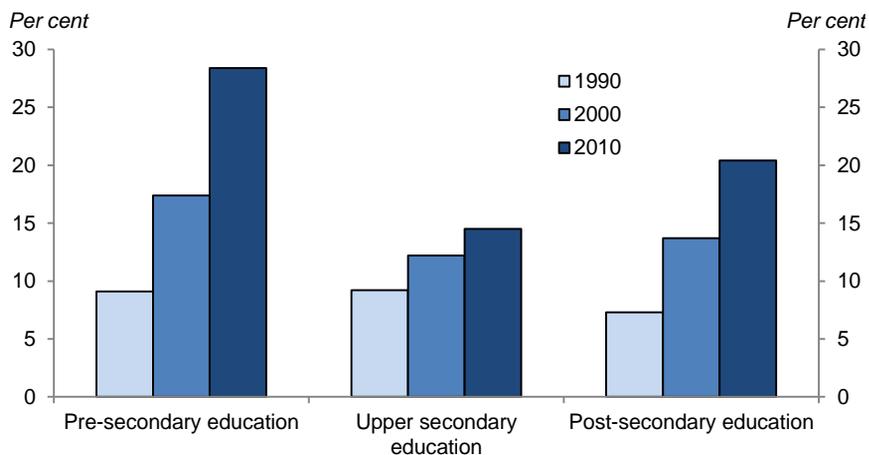


Note: Refers to the age group 25-54.  
 Source: Bengtsson and others (2014).

The drop in the employment rate for the low-skilled has to be seen in the context of the sharp decrease in the low-skilled group as a percentage of the population over the past few decades. It is clear from BEH's report, that the percentage of the population aged 25–54 having only a compulsory school education has fallen from close to 60 per cent at the beginning of the 1970s to 10 per cent in 2010.

This means that there has probably been a change in the composition of this group, with an increasing number of people who have difficulty getting established in the labour market for reasons other than education level. BEH uses military service enrolment data to show that people who continue their education past compulsory school generally have both higher cognitive and non-cognitive skills than those who do not. Earlier studies have shown that cognitive and non-cognitive skills, like those captured by the results from tests administered at the time of military service enrolment, are of great importance for success in the labour market.<sup>8</sup> There may also have been a shift in the group towards more people with greater difficulty entering the labour market, as the percentage of people born abroad has increased in this group in recent decades. As Figures 3.7 and 3.8 show, the percentage of people born abroad has increased among both the highly qualified and the low-skilled but the largest increase is in the group with no more than a compulsory school education. There has been a particularly sharp increase in the percentage of low-skilled women born abroad: from just over 10 per cent in 1990 to more than 40 per cent in 2010.

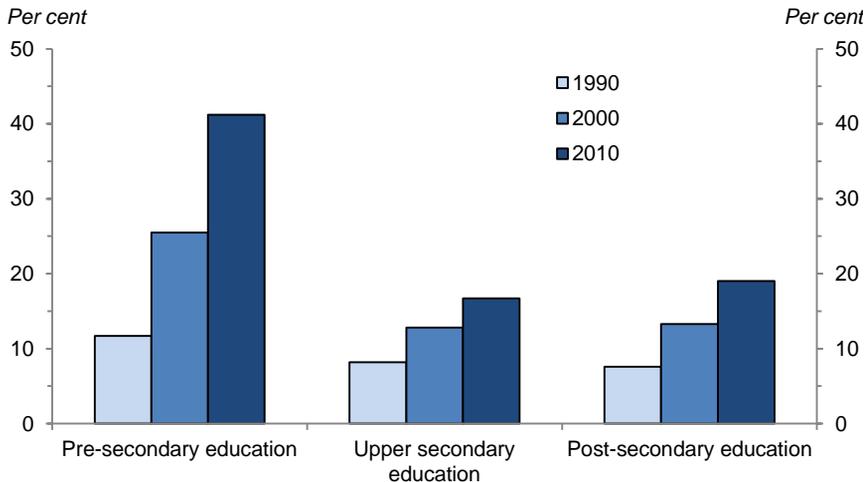
**Figure 3.7 The percentage of people born abroad in different education groups, men**



Note: Refers to the age group 25–54.  
 Source: Bengtsson and others (2014).

<sup>8</sup> Lindqvist and Vestman (2011).

**Figure 3.8 The percentage of people born abroad in different education groups, women**



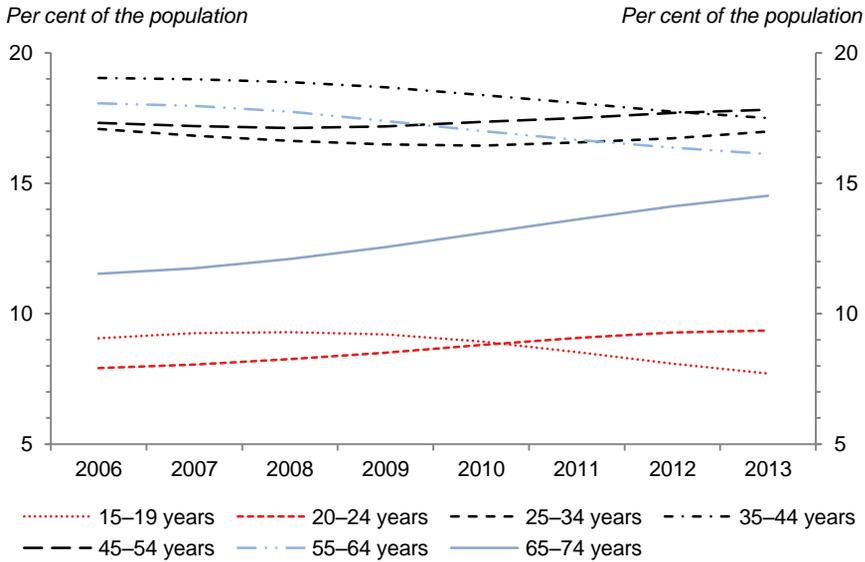
Note: Refers to the age group 25–54.  
Source: Bengtsson and others (2014).

It is also possible that the permanent downturn in the employment rate for the low-skilled is linked to economic developments in the 1990s. As shown above, the employment rate fell most sharply, particularly for men, in connection with the crisis in the early 1990s (Figures 3.5 and 3.6 above). There were signs of a recovery in the employment rate in subsequent years for those with a secondary or post-secondary education, but not for the low-skilled. It may indicate that some of those who lost their jobs in the 1990s crisis were eliminated from the labour market.

### 3.2.3 Demographic impact

In comparisons of labour force participation and the employment rate over time, demographic changes should be taken into account. Labour force participation and the employment rate vary not only cyclically but also structurally with demographic changes. Since 2006, particularly the share of 65–74-year-olds in the Swedish population has increased (Figure 3.9).

**Figure 3.9 Age composition of the population**

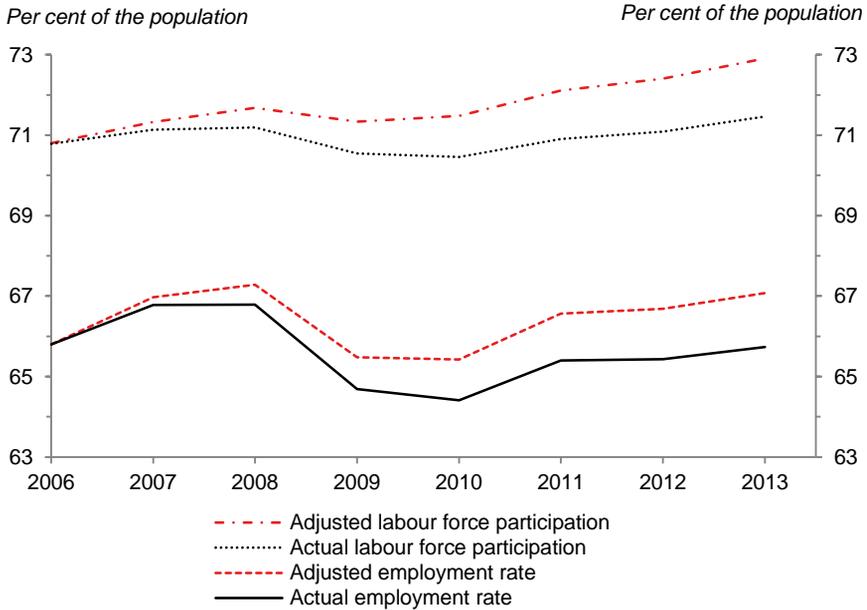


Note: Refers to respective age groups as a percentage of the population aged 15–74.  
 Sources: Statistics Sweden (2014a) and own calculations.

As older people, particularly those over 65, participate in the labour force much less than other age groups (Table 3.1 above), an increase in the percentage of the population in this age group, everything else equal, leads to a drop in labour force participation and the employment rate.

To see how the employment rate would have developed without the effect of changes in the age structure, Figure 3.10 shows the development of labour force participation and the employment rate controlled for the demographic effect from 2006 onwards. That is, the demographic composition has been locked at what it looked like in 2006 and labour force participation and the employment rate are only affected by how they have changed *within* the different age groups.

**Figure 3.10 Labour force participation and the employment rate adjusted for demographic trends**



Note: Refers to annual averages for the 15–74 age group. The employment rate and labour force participation are adjusted here for demographic developments by calculating the actual employment rate and labour force participation for the age groups 15–19, 20–24, 25–34, 35–44, 45–54, 55–64 and 65–74 for the years 2006–2013. The composition of the population is held constant at the 2006 level. Employment and the labour force are projected for each age group. The adjusted employment rate and the adjusted labour force participation therefore show developments adjusted for demographic changes in the population.

Sources: Statistics Sweden (2014a and 2014b) and own calculations.

A correction of this kind leads to an upward adjustment of labour force participation and the employment rate. Labour force participation then shows a larger increase since 2006 (over 2 percentage points instead of the actual increase of almost 1 percentage point). The adjusted employment rate shows an increase of almost 1 percentage point, compared with the actual rate, which, as mentioned above, is largely unchanged between 2006 and 2013.<sup>9</sup>

<sup>9</sup>The Government reports similar estimates in VP14, Chapter 10, “En uppföljning av sysselsättningspolitiken” (A follow-up of the employment policy). Instead of showing developments controlled for changes in the age structure as in Figure 3.10, the Government estimates employment and labour force developments as they would have looked if *only* demographic changes had driven growth. The Government assumes in its estimates that labour force participation and the employment rate are unchanged in the subgroups with respect to gender, age and country of birth.

### 3.2.4 Decomposition of the change in hours worked

This section studies the growth in the total number of hours worked in the economy since 2006. The change in hours worked per person is divided up into the contribution from more people in employment (change along the extensive margin) and that from more hours worked for those already employed (change along the intensive margin).<sup>10</sup> Developments over three sub-periods are studied: before the crisis, during the crisis and after the crisis. The different periods are defined based on the turning points in the hours worked per person.

The Council has previously argued that the average number of hours worked in the population is a more comprehensive indicator of the volume of work in the economy than the employment rate. Unlike the employment rate, this indicator also captures the changes in absenteeism and the labour input by those already in work.

The total number of hours worked per person since 2006 has increased a little more than the employment rate (Table 3.2). This is because there has also been a small increase along the intensive margin, i.e. there has been an increase in the average hours worked.

In the period after the financial crisis, the number of hours worked per person has increased by over 3 per cent.

The change in the employment rate may in turn be decomposed into contributions from an increase in labour force participation and a change in employment in the labour force. As the table shows, all the increase in the employment rate since 2006 can be attributed to an increase in labour force participation. Unemployment is still higher than in 2006, which means that the contribution from the employed in the labour force has been negative.

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<sup>10</sup> See Box 5.1 in Fiscal Policy Council (2012) for a derivation of the decomposition in this section.

**Table 3.2 Decomposition of the change in number of hours worked per person 2006–2013**

<i>Percentage change</i>	Before the crisis	During the crisis	After the crisis	Total period
	2006Q1 –2008Q2	2008Q2 –2009Q4	2009Q4 –2013Q4	2006Q1 –2013Q4
<b>Hours worked per person</b>	<b>3.4</b>	<b>-5.3</b>	<b>3.1</b>	<b>1.3</b>
Employment rate	2.5	-4.4	2.7	0.9
Of which labour force participation		-1.4	1.8	1.4
Of which the number of employed in the labour force		-3.0	0.9	-0.5
Average hours worked per person employed	0.9	-0.9	0.4	0.4
Of which the percentage of employed in work		-0.2	0	0.9
Of which hours worked per person in work		-0.7	0.4	-0.5

Note: The population refers to everyone aged 15–74. Changes are stated in cumulative log differences, which approximate the actual percentage change in the respective component. Estimated using seasonally adjusted data. The figures are rounded and therefore do not always add up exactly.

Sources: Statistics Sweden (2014a) and own calculations.

Average hours worked may also be further subdivided into contributions from the change in the percentage of the employed in work and hours worked per person in work. All the increase in average hours worked since 2006 is attributable to the increase in the percentage of employed people in work. Since the end of 2009, however, the increase in average hours worked is due to the increase in the hours worked among those who are in work. Such factors as sickness absence affect how many of the employed are in work. Since 2010, sickness absence has increased (see Chapter 2). This is probably one of the reasons why the percentage in work has not increased since then.<sup>11</sup>

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<sup>11</sup> But absences also include other types of absence such as parental leave.

**Table 3.3 Change in hours worked, women**

<i>Percentage change</i>	Before the crisis	During the crisis	After the crisis	Total period
	2006Q1 –2008Q2	2008Q2 –2009Q4	2009Q4 –2013Q4	2006Q1 –2013Q4
<b>Hours worked per person</b>	<b>4.6</b>	<b>-4.3</b>	<b>5.1</b>	<b>5.4</b>
Employment rate	2.5	-4.0	3.2	1.6
Of which labour force participation	0.8	-1.7	2.5	1.6
Of which the number of employed in the labour force	1.6	-2.3	0.7	0.1
Average hours worked per person employed	2.1	-0.3	2.0	3.8
Of which the percentage of employed in work	2.0	-0.3	0.4	2.1
Of which hours worked per person in work	0.1	0.1	1.5	1.7

Note: Refers to the age group 15–74. Changes are stated in cumulative log differences, which approximate the actual percentage change in the respective component. Estimated using seasonally adjusted data. Amounts are rounded and therefore do not always add up exactly.

Sources: Statistics Sweden (2014a) and own calculations.

**Table 3.4 Change in hours worked, men**

<i>Percentage change</i>	Before the crisis	During the crisis	After the crisis	Total period
	2006Q1 –2008Q2	2008Q2 –2009Q4	2009Q4 –2013Q4	2006Q1 –2013Q4
<b>Hours worked per person</b>	<b>2.5</b>	<b>-6.0</b>	<b>1.6</b>	<b>-1.8</b>
Employment rate	2.6	-4.7	2.3	0.2
Of which labour force participation	1.0	-1.0	1.2	1.2
Of which the number of employed in the labour force	1.6	-3.7	1.1	-1.0
Average hours worked per person employed	-0.1	-1.3	-0.7	-2.0
Of which the percentage of employed in work	0.4	-0.1	-0.4	-0.2
Of which hours worked per person in work	-0.4	-1.2	-0.3	-1.9

Note: Refers to the age group 15–74. Changes are stated in cumulative log differences, which approximate the actual percentage change in the respective component. Estimated using seasonally adjusted data. Amounts are rounded and therefore do not always add up exactly.

Sources: Statistics Sweden (2014a) and own calculations.

Separating the change in the volume of work done by women and by men (Tables 3.3 and 3.4) shows interesting differences. While women's labour input per person has increased by more than

5 per cent since 2006, men's input has declined by almost 2 per cent. On average, the crisis appears to have hit men harder than women. In particular, it is clear that after the crisis, hours worked for women have recovered much more than for men, most likely reflecting that male dominated sectors such as the export industry have not recovered as much as other sectors. The stronger growth in the number of hours worked per person for women than for men since 2006 may also be a reflection of a long-term trend towards an increase in women's participation in the labour market.

It is primarily along the intensive margin that women have increased their volume of work since 2006, both because among the employed, more women are in work (i.e. lower absenteeism) and because women in work have worked more hours. Among men, the changes have also been primarily along the intensive margin, seen over the period as a whole. It is primarily those who work who have reduced their labour input.

### 3.2.5 Effects of the Government's reforms

As noted above, the labour market has weathered the current crisis well compared with the crisis in the 1990s and also relatively well compared with other countries. However, substantiating the extent to which the reforms have affected labour market developments in recent years is not a simple matter. As different crises have different causes and affect some countries more severely than others, it is difficult to distinguish cyclical patterns from structural factors.

Some of the Government's reforms aimed at sustainably increasing employment have been evaluated individually. Studies have tried to estimate the employment effect in a measure's target group. The measures that have been evaluated are the reduction in the VAT for restaurant and catering services, the lower social contributions for young people and the higher earned income tax credit and lower social contributions for older workers. (Box 3.2).

The studies show positive effects on employment in the target groups, but the effects are generally small. In the Council's opinion, it is thus likely that the effects on *sustainable* employment will prove to be smaller than the short-term effects, as the estimates do not take into account dead-weight and displacement effects. This is particularly true of the reduced VAT on restaurant services and the

lower employers' social contributions for young people. Earlier studies also show that lower employers' social contributions have little impact on employment. In 2002, there were regional reductions in employers' social contributions in inland Norrland and inner Svealand. In a study by Benmarker, Mellander and Öckert (2009), the regional reduction is thought to have had hardly any impact at all on employment in these areas in 2001–2004 compared with nearby areas. Instead, the reduction is thought to have led to a relatively rapid increase in wages.<sup>12</sup> In contrast, the strengthened earned income tax credit for older workers provides strong incentives for older people to increase their labour supply. In the Council's opinion, therefore, this reform should have greater employment effects in the long run than the effects estimated to have occurred thus far. It is also the Council's opinion that the change in the reduction in the employers' social contributions for young people with more focus on the younger age groups, announced by the Government in BP14, was an improvement in the design of the reduced contribution for young people. Focusing on the younger age groups is probably a better targeted strategy to make it easier for young people having difficulty getting established in the labour market than general subsidies for everyone under the age of 25.<sup>13</sup>

### **Box 3.2 Employment effects of the Government's reforms – some evaluations**

At the end of 2013, evaluations of two of the Government's reforms were presented. The Institute for Evaluation of Labour Market and Education Policy (IFAU) published an evaluation of the effects of the reduction in employers' social contributions for young people<sup>14</sup> and the National Institute of Economic Research (NIER) published a study of the effects of the lower VAT on restaurant and catering services.<sup>15</sup> In 2012 IFAU also published an evaluation of the higher earned income tax credit and the lower employers' social

<sup>12</sup> Benmarker and others (2009), pp. 480–489.

<sup>13</sup> At the same time, the Council notes that as of spring 2014, this proposal seems unlikely to get support in the Riksdag.

<sup>14</sup> Egebark and Kaunitz (2013).

<sup>15</sup> NIER (2013a), written by Erika Ekström, Petter Hällberg and Marcus Mossfeldt. The report is an interim report of a government remit to follow up the effects on prices, wages and employment in the long term. The final report is to be delivered on January 1, 2016.

contributions for older workers.<sup>16</sup> Below is a concise report of the results of these three evaluations with respect to employment effects.

*Reduced employers' social contributions for young people*

Employers' social contributions for young people have been lowered in two stages since 2007. On July 1, 2007, the employers' social contributions for employees between the ages of 19 and 25 were reduced by about 11 percentage points. On January 1, 2009, these contributions were lowered by a further 6 percentage points and the target group was broadened to include everyone under the age of 27. The aim of the reductions has been to make it easier for young people to enter the labour market.

Egebark and Kaunitz (2013) estimate the measures' effects by comparing the growth in employment from 2007 to 2010 for those affected by the reduction in social contributions to employment growth for those who were a little older and thus not covered by the reductions. The first reduction is estimated to have created 6 000–10 000 new jobs for the target group in 2007 and 2008. There is little support to indicate that the broader reduction introduced in 2009 had any further effect on employment. Egebark and Kaunitz also look at how groups with a weak foothold in the labour market have been affected. They do not find any employment effects at all for young people born abroad and unemployed young people.

Their study emphasises that the total employment effects of the reform are probably smaller than the effect on the target group as the estimates of the employment effects do not include any displacement effects.

*VAT reduction for restaurant and catering services*

On January 1, 2012, the VAT for restaurant and catering services was lowered from 25 to 12 per cent. An important justification for the reduction was to boost sustainable employment in the economy, both by an increase in the labour supply (by a redistribution from housework to work in the labour market) and by an increase in demand for restaurant services.

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<sup>16</sup> Laun (2012).

The NIER study (2013a) estimates the effects of the reform on employment in the restaurant sector, i.e. the demand effect. There are no estimates of the possible effects on the labour supply. The employment effects are estimated by comparing payroll growth in the restaurant sector with growth in other sectors. The method probably is the best available, but it nevertheless suffers from a high degree of uncertainty. It is based on the assumption that payrolls in the restaurant and other sectors in the comparison would have developed similarly if the restaurant VAT had not been lowered. Developments before the reform do not provide much support for this assumption. Furthermore, it assumes, reasonably enough, that the difference in employment, not wage growth, is the explanation for differences in the payroll growth that have occurred.

NIER concludes that employment in the restaurant sector may have increased by almost 4 000 people since the reform was introduced. There is no analysis of the extent to which a sustainable increase in employment is likely to be involved. An increase in employment in the restaurant sector does not necessarily mean that structural unemployment will decrease as other sectors may experience a corresponding decline in the demand for labour.<sup>17</sup> NIER notes, however, that the restaurant sector more than other sectors employs people from groups with a weak foothold in the labour market, such as young people and people born outside Europe. There is thus reason to believe that the increase in employment in the sector at least to some extent has included those who otherwise would have had difficulty getting a job. It therefore seems likely that the reform will prove to have positive effects on sustainable employment, but the extent of these effects is uncertain.

*Higher earned income tax credit and a reduction in employers' social contributions for older workers*

On January 1, 2007, two targeted tax relief measures for older workers were introduced. First, the earned income tax credit, which was introduced for all ages at that time, was made considerably more generous for those over 65. Second, the employers' social

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<sup>17</sup> See Fiscal Policy Council (2012), Chapter 6, for a schematic review of the channels that a reduction in the VAT can use to affect structural unemployment.

contributions for those over 65 were lowered by over 16 percentage points. The aim of the reform was to increase labour force participation by older people by increasing the incentives for older people to work longer while increasing the demand for older workers.

Laun (2012) estimates the employment effects for the measures' target group by comparing the difference in the labour market outcome for people who had turned 65 before and after the beginning of 2007 with before and after the two tax relief measures were introduced. The results indicate that the targeted tax relief increased employment in the year immediately following the 65th birthday by 1.5 percentage points among those who had taxable earned income for at least part of the year for the previous three to five years. Laun notes that in this case, it is possible that the long-term effects may be greater than the short-term effects. The analysis captured only the short-term effects in terms of labour market outcome during the year immediately following the 65th birthday.

The evaluations that have been made concern less extensive reforms. According to the Government's estimates, the earned income tax credit is the single most important measure to increase sustainable employment. Approximately half of the total increase in employment that the Government expects as a result of the reforms is expected to be due to the earned income tax credit. The effects are expected to occur relatively rapidly, within the course of a few years.<sup>18</sup> As the implementation of the earned income tax credit began already in 2007, this would mean that to a large extent, the earned income tax credit has already had an effect on the labour market. The Council has previously expressed the opinion that the employment effects expected by the Government as a consequence of the earned income tax credit appear reasonable and sees no reason to change its opinion in light of developments in recent years.<sup>19</sup> The Council thus shares the Government's view that the earned income tax credit should have had a substantial effect on employment. All estimates of the size

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<sup>18</sup> Ministry of Finance (2011a).

<sup>19</sup> See Box 7.1 in Fiscal Policy Council (2011). At that time, the reasonableness of the Government's estimates was assessed by comparing them with developments in other countries that had previously carried out major labour market reforms, such as Denmark, Germany, the Netherlands and the United Kingdom.

of the employment effects of various reforms involve a high degree of uncertainty, as the Government also points out.

To sum up, the Council notes that the increase in labour force participation since 2006 is very positive, despite the severe economic slowdown. This suggests that unlike the crisis in the 1990s, the risk that this crisis will have sustainable adverse effects on the labour supply is limited. The employment rate has also done relatively well. This is particularly true when the effect of demographic developments is taken into account.

Because employment has not increased at the same pace as the labour force, there is still an unemployment problem. Unemployment is currently higher than in 2006 and has been about 8 per cent since 2009.

The persistent high unemployment is probably largely due to the prolonged low demand for labour in the wake of the crisis. But the high unemployment may also be a sign that after the Government's reforms, the labour market is slow in adjusting for structural reasons. One reason may be that matching between supply and demand in the labour market does not work well. Another may be that the share of unemployed with relatively worse employment opportunities has increased in recent years. Whether this is the case, and if so, what it would imply for opportunities to reduce unemployment, are discussed in the next section.

### 3.3 Changes in the composition of unemployment

Unemployment generally involves substantial welfare losses in the form of insecurity for those affected. Losing one's job or not entering the labour market normally also involves lost income and may therefore also have distribution policy consequences.

In 2013, unemployment averaged 8 per cent. The Government expects that unemployment will gradually decline in the next few years to less than 6 per cent in 2018.<sup>20</sup> It is then expected to be near its equilibrium level, i.e. the level of employment that it is possible to achieve in a balanced economy. The Government's estimate of

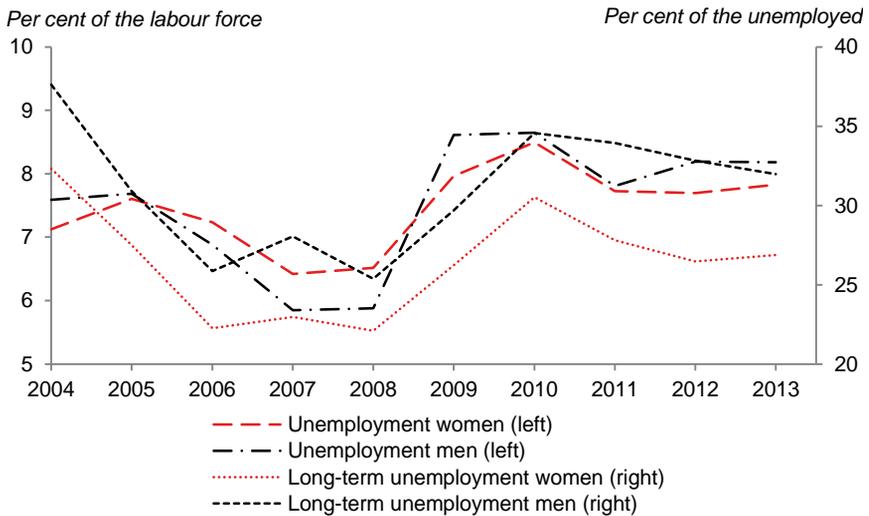
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<sup>20</sup> VP14, Chapter 3, p. 116.

equilibrium unemployment has been revised upwards in recent years, given both the persistence effects (i.e. lingering unemployment) from the financial crisis and new population forecasts from Statistics Sweden. In 2011, the Government expected equilibrium unemployment to be 4.9 per cent. Since then, its estimate has gradually risen to 5.2 per cent (VP12), 5.5 per cent (VP13) and 5.7 per cent (BP14).

The Council notes that despite these upwards revisions, the Government’s estimate of equilibrium unemployment is more optimistic than NIER’s. NIER estimates equilibrium unemployment at 6.7 per cent currently and 6.4 per cent in 2018. The Riksbank does not give any exact estimate of equilibrium unemployment but estimates that it lies in the interval 5.0–7.5 per cent.<sup>21</sup>

**Figure 3.11 Unemployment and the percentage of long-term unemployed by gender**



Note: Refers to the age group 15–74. The Labour Force Surveys (LFS) count anyone who has been unemployed for more than six months as long-term unemployed.  
 Source: Statistics Sweden (2014a).

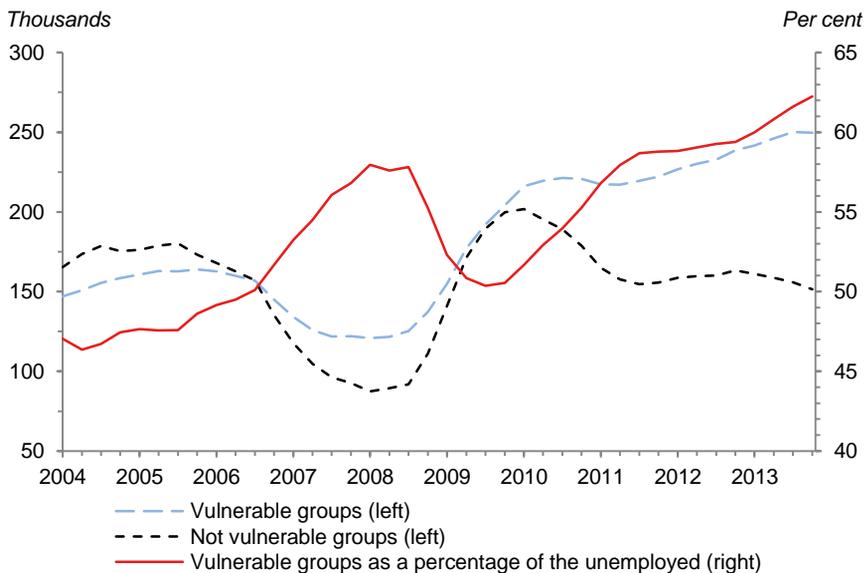
There are some indicators that suggest that the Government’s unemployment forecasts may be too optimistic. One such indicator is that a larger share of the unemployed are long-term unemployed now

<sup>21</sup> Sveriges Riksbank (2013b).

than before the financial crisis (Figure 3.11 above). Long-term unemployment is particularly high among men. To the extent that those who become long-term unemployed lose their attractiveness in the labour market, it can become more difficult to return to work. It may in turn create a persistence problem that may make the adjustment to the long-term equilibrium level proceed at a slower pace than the Government expected.

Another indicator that the Government’s unemployment forecast may prove too optimistic is that the composition of the unemployed may have changed to a larger share of people who have comparatively worse job finding rates already when they first become unemployed. Arbetsförmedlingen’s statistics on the registered unemployed suggest such a trend: the number of registrants with Arbetsförmedlingen who are in a vulnerable group, i.e. a group with a job finding rate much lower than average, has increased sharply in recent years (Figure 3.12).

**Figure 3.12 Number of employed registered with Arbetsförmedlingen**



Note: Refers to those registered as unemployed at Arbetsförmedlingen (those in open unemployment and jobseekers in programmes with activity support) in the age group 16–64. Included in vulnerable groups are the unemployed who have only a pre-upper secondary school education, are born outside Europe, are disabled, or are between 55 and 64. A person who is included in several of these groups is counted only once. Seasonally adjusted quarterly values.  
 Source: Arbetsförmedlingen.

Arbetsförmedlingen counts unemployed who have only a pre-upper secondary education, are born outside Europe or have an occupational disability as belonging to a vulnerable group. People older than 55 when they become unemployed are also counted as a vulnerable group.<sup>22</sup>

Arbetsförmedlingen estimates that in the mid-2000s, almost half of the unemployed came from a vulnerable group (Figure 3.12 above). This share then rose in 2007 and 2008 when the labour market generally improved. An increase in the share of the unemployed who have a worse job finding rate in good times is a common cyclical pattern. At the beginning of the crisis, the share of unemployed in a vulnerable group then fell when falling demand for labour led to rising unemployment also in groups with relatively good job finding rates.

But since the end of 2009, the share of unemployed in vulnerable groups has again increased. At the end of 2013, Arbetsförmedlingen estimated that 62 per cent of the unemployed came from a vulnerable group; this is a higher percentage than before the crisis. Unlike the crisis years, the explanation for the increase since 2009 is that the *number* of unemployed in vulnerable groups has increased.

If these changes among those registered with Arbetsförmedlingen reflect a general trend among the unemployed (and thus not only among the registered unemployed), it may indicate that reducing unemployment substantially in the future could be difficult. One explanation for this shift to more persistent unemployment may be that the share of people born outside Europe among newly arrived immigrants has increased since 2006 and this increase is reflected in the unemployment statistics. Arbetsförmedlingen's statistics show that by far the largest increase among vulnerable groups is in the group born outside Europe.<sup>23</sup> There is also reason to believe that the Government's supply side reforms may to some extent have contributed to an increase in the labour supply among people with below average job finding rates. If so, there is a risk that an increase in the labour supply will not only increase employment in the long term but also bring about a slight increase in equilibrium

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<sup>22</sup> Arbetsförmedlingen (2013).

<sup>23</sup> The group of unemployed born outside Europe registered with Arbetsförmedlingen increased by 183 per cent between 2005 and 2013.

unemployment. This would in turn make the return to low unemployment levels more difficult.

To ascertain whether there is a change in the composition of unemployed people similar to the change in the composition of those registered with Arbetsförmedlingen, we first compare the official statistics, the Labour Force Surveys (LFS) with Arbetsförmedlingen's statistics. We then describe how the composition of the inflow to unemployment has changed over time.

### 3.3.1 Comparing statistics from Arbetsförmedlingen and LFS

Arbetsförmedlingen's unemployment statistics for vulnerable groups cannot be directly compared with the official statistics (LFS). This is because the official statistics have no compilation of the number of unemployed from vulnerable groups like that found in Arbetsförmedlingen's statistics. The same person may belong to several of these groups in the official statistics. To solve this problem of double counting, we have had Statistics Sweden compile time series for the unemployed from any of the following groups: only a pre-upper secondary school educated, born outside Europe, and workers over 55. It is worth noting that it is those who are over 55 and unemployed who are considered vulnerable in Arbetsförmedlingen's statistics, not those over 55 in general.

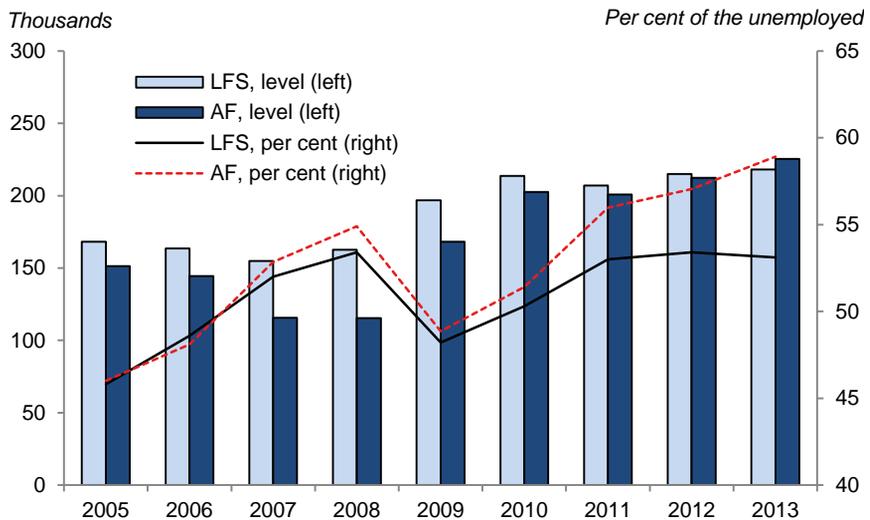
As shown above, unemployed people with an occupational disability are also counted as a vulnerable group in Arbetsförmedlingen's statistics. In LFS, however, there is no information about whether the unemployed have an occupational handicap. This group is therefore not included as a separate group in the time series compiled by Statistics Sweden, thus complicating the comparison between the registered unemployed and the unemployed in LFS. The number of people registered as unemployed who have an occupational disability has increased sharply in recent years, by about 40 000 between 2005 and 2013.<sup>24</sup> According to information from Arbetsförmedlingen, in April 2014, approximately 75 percent of the unemployed with an occupational disability also belonged to

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<sup>24</sup> However, the group born outside Europe accounts for the largest percentage increase.

another vulnerable group. This means that, provided that the percentage of unemployed who have an occupational disability but do not belong to any other vulnerable group is constant over time, 25 per cent of those with an occupational disability will not be included in the time series compiled by Statistics Sweden. To make Arbetsförmedlingen’s statistics and LFS as comparable as possible, we have therefore consistently removed the equivalent of a quarter of the group with an occupational disability from these time series.<sup>25</sup>

**Figure 3.13\* Unemployed people in vulnerable groups**



Note: Vulnerable groups here according to Arbetsförmedlingen are the unemployed with only a pre-upper secondary school education, the unemployed over 55 and the unemployed born outside Europe. For the best possible comparability with LFS, a quarter of the registered unemployed having an occupational disability have also been excluded. Included in vulnerable groups in LFS are the unemployed with only a pre-upper secondary school education, the unemployed over 55 and the unemployed born outside Europe.

\* Figure 3.13 was revised on June 11, 2014. See p. 194 for the corrected version.

Sources: Arbetsförmedlingen, Statistics Sweden (2014a) and own calculations.

Figure 3.13 above shows developments for the unemployed in some of these vulnerable groups according to LFS and Arbetsförmedlingen’s statistics after the above correction. Figure 3.13 shows that to begin with, the share of unemployed in a

<sup>25</sup> If the share of registered unemployed who have an occupational disability and are not part of any of the other vulnerable groups has increased since 2005, i.e. contrary to our assumption, the time series based on LFS will underestimate the increase in the number of unemployed in a vulnerable group.

vulnerable group is higher in Arbetsförmedlingen's statistics than in the LFS statistics over a large part of the period studied. This is probably because people in these groups turn to Arbetsförmedlingen to a greater extent than other groups. There are also differences in definitions between the two statistical sources that probably play a role (Box 3.3).<sup>26</sup>

### Box 3.3 Unemployment – various data sources

According to LFS, which provides the basis for the official Swedish unemployment statistics, a person is unemployed if he or she

- is without work during the reference week, and
- can work within two weeks, and
- is actively looking for work or is waiting for a job that will begin within three months.

A person is counted as *employed* in LFS if he or she has worked at least one hour during the reference week.

The main alternative data source is Arbetsförmedlingen's statistics on registered jobseekers. One important difference compared with LFS is the different definition of job opportunity. Someone registered as unemployed at Arbetsförmedlingen may under certain circumstances work. Thus, for example, those who have a form of employment where they are called in as needed can be counted as unemployed at Arbetsförmedlingen if they have only worked a little (a maximum of seven hours a week) but as employed in LFS. Another important difference compared with LFS is the design of search criteria. The openly unemployed must actively look for a job. For those in a programme with an activity grant, however, this requirement is not as explicit. As the unemployed's search behaviour is not fully monitored, there is no way of assuring that all those who are openly unemployed according to Arbetsförmedlingen actually actively search for a job. This means that someone counted as unemployed in Arbetsförmedlingen's statistics may be counted as outside the labour force in LFS if he or she does not actively search

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<sup>26</sup> For a detailed analysis of the differences, see Statistics Sweden (2013).

for a job. Finally, it is also likely that Arbetsförmedlingen's statistics on the registered unemployed are more sensitive to rule changes in the transfer systems than LFS. This is because of the requirement to be registered at Arbetsförmedlingen to get unemployment benefits but the unemployed without the right to benefits may not register.

What we are particularly interested in here, however, is the extent to which *changes* in Arbetsförmedlingen's statistics can also be found in LFS. Both statistical sources show that the number of unemployed in vulnerable groups increased sharply in 2009, early in the financial crisis. In subsequent years, it is primarily among those registered at Arbetsförmedlingen that there is an increase in vulnerable groups. This period coincides with one of the Government's reforms. The change in the sickness insurance rules is estimated to have caused a large group to lose their sickness benefits at the beginning of 2010.<sup>27</sup> There should also have been a similar increase in the official statistics reflecting the extent to which those who lost their benefits entered the labour market. LFS statistics show an increase in 2010 but it is smaller. Low job search activity by those who became uninsured could explain why LFS does not count some of them as unemployed. The exclusion of some of the occupationally disabled in the vulnerable groups in LFS may also have some significance.<sup>28</sup>

On balance, the comparison with the official statistics indicates that to some extent, it is the composition of the unemployed at Arbetsförmedlingen that has changed. The same increase in the share of unemployed from vulnerable groups cannot be seen in the official statistics. But it is possible that the official statistics for the reasons described above to some extent understate the changes in the composition of unemployment in recent years. Nor can changes in the search behaviour be ruled out when it concerns the extent to

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<sup>27</sup> Source: Försäkringskassan (the Swedish Social Insurance Agency), (2012).

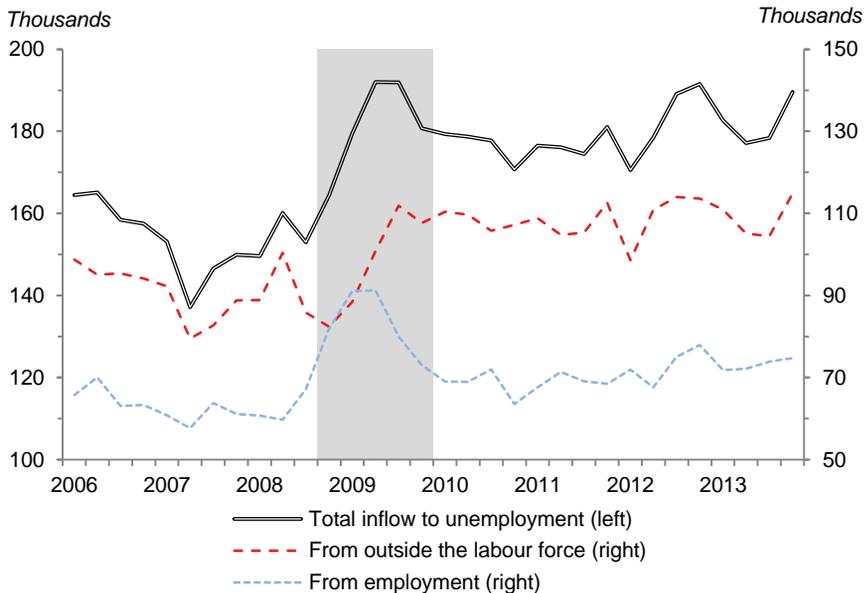
<sup>28</sup> Another labour market reform, the establishment reform, entered into force at the end of 2010. Its aim was to speed up and facilitate the establishment of newly arrived immigrants in working life by having Arbetsförmedlingen assume coordinating responsibility from the municipalities for those immigrants. The change in handling newly arrived immigrants may have affected the increase in the registered unemployed in vulnerable groups if they were not counted as unemployed in the official statistics. It is reasonable to assume, however, that many of them would have been registered with Arbetsförmedlingen all the same, but a little later, and thus, the establishment reform in particular should have played a role in the time profile in the increase in the number of unemployed from vulnerable groups.

which the unemployed with better job finding rates turn to Arbetsförmedlingen. That may also affect the comparison between Arbetsförmedlingen’s statistics and LFS.

### 3.3.2 Inflow to unemployment

This section looks at the change in the composition of the inflow into unemployment over time. The extent to which the Government’s supply side reforms have increased labour force participation comparatively more in groups with weak job finding rates may be reflected in an increase in the inflow to unemployment from groups previously not in the labour force, such as the group “sick”. As shown in Figure 3.1 (p. 72), it was particularly the group on sick-leave outside the labour market that decreased between 2006 and 2013. One likely explanation for this decrease is that the inflow to this group has declined because of stricter rules. Another explanation may be that more people previously on sick-leave entered the labour market to a larger extent than they had before.

**Figure 3.14 Inflow to unemployment**



Note: Refers to the age group 15–74. Seasonally adjusted quarterly values. Grey areas indicate the financial crisis, defined as quarters with large negative output gaps (2008Q4–2009Q4). Sources: NIER and Statistics Sweden (2014a).

We begin by dividing the inflow into people who come from outside the labour force to unemployment and people who have gone from employment to unemployment. In Figure 3.14, we see that the flow from employment to unemployment increased sharply when the financial crisis erupted in 2008. But this flow receded relatively rapidly. The flow from outside the labour force increased a little later and has not decreased in the same way.

In Table 3.5, we further subdivide the inflow from outside the labour force to get an understanding of what may explain this increase in the flow from outside the labour force to unemployment.

**Table 3.5 Inflow to unemployment before, during and after the crisis**

From:	Level (thousands)			Share of total inflow (per cent)		
	Before the crisis	During the crisis	After the crisis	Before the crisis	During the crisis	After the crisis
	2006Q1–2008Q3	2008Q4–2009Q4	2010Q1–2013Q4	2006Q1–2008Q3	2008Q4–2009Q4	2010Q1–2013Q4
Employed	63.0	83.5	70.9	40.9	46.0	39.3
Outside the labour force, of which	91.1	98.2	108.6	59.1	54.0	60.7
Students	59.3	61.8	70.1	38.5	34.0	38.9
On sick-leave and in early retirement	3.3	3.0	3.2	2.2	1.7	1.8
Retired	1.2	0.7	1.2	0.8	0.4	0.6
Other <sup>1</sup>	27.2	32.7	34.0	17.7	17.9	19.4

Note: Refers to the age group 15–74. <sup>1</sup> The group “other” includes latent jobseekers, conscripts and those working in the home. The figures in the table refer to average values in each period.

Sources: NIER, Statistics Sweden (2014a) and own calculations.

The flow from outside the labour force can be classified as those who previously were sick entering the labour market, students joining the labour market, pensioners returning to work or someone from the group “other” entering the labour market. Because the flow statistics are a relatively imprecise statistic, we describe in table form the aggregated flow in three periods: before the financial crisis

(2006:1–2008:3), during the crisis (2008:4–2009:4) and after the crisis.<sup>29</sup>

This further breakdown shows that the increase in the inflow from outside the labour force that took place from the period before the crisis to the period after is mainly due to an increase in the group students and the group other. In relative terms, the flow from the group other increased the most in connection with the crisis. This group includes latent jobseekers, i.e. people who wanted to work and were able to do so the week in question but had not looked for a job.

The flow analysis shows no increase in the flow from the sick-leave and early retirement group to unemployment over the period as a whole.<sup>30</sup> As mentioned above, stricter sickness insurance rules may have led people who no longer had the right to benefits after the reforms to enter the labour market in greater numbers. But the flow analysis indicates that to the extent that this happened, it did not lead to any noticeable increase in the net flow to unemployment.

It may be interesting to relate the above flow analysis to the Government's objective to reduce exclusion. In VP14, the Government writes that exclusion has decreased by almost 200 000 people since 2006.<sup>31</sup> But a reduction in labour market exclusion is not the same as a flow to employment. The Government defines exclusion as people supported by social benefits or allowances.<sup>32</sup> Exclusion thus decreases by definition if people who previously received sickness or unemployment benefits are denied benefits because of stricter requirements (and also do not receive welfare benefits). In this way, a person may still be in the group sick

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<sup>29</sup> The uncertainty in the flow statistics is due to their design, which consists of a smaller sample than LFS statistics and also has a larger non-response. LFS includes 29 500 people every month. People in the flow statistics are questioned quarterly over a two year period – thus, each time 7/8 of the usual LFS sample are included (7/8 consist of people who have been part of the survey since the previous quarter and 1/8 consists of new participants). The estimated number of unemployed from the flow panel will thus differ slightly from the estimated number from the larger LFS sample. The non-response will also be larger as people need to be asked twice in order to be registered in a flow, and one missing observation on one of these occasions is enough for that person to be removed. The measurement errors (for example, people assigned an incorrect labour market status) also have a substantial impact on flow statistics, as random errors do not offset each other (as is often the case with cross-sectional data). Statistics Sweden therefore reports uncertainty numbers for all flow tables.

<sup>30</sup> By design, the level of this flow is underestimated as the group largely consists of people who are only questioned once a year in LFS.

<sup>31</sup> VP14, p. 23.

<sup>32</sup> The exact definition is the number of full-year equivalents aged 20–64 supported by benefits and public transfer payments.

or unemployed in the official statistics by continuing to declare that he or she is sick or unemployed in LFS and at the same time, estimated exclusion decreases.

To sum up, a comparison between the official statistics and Arbetsförmedlingen's statistics indicates that the increasing share of people from vulnerable groups among the registered unemployed to a large extent reflects a change in the composition of the unemployed at Arbetsförmedlingen. This has been particularly true in the past three years. The official statistics do not show equally large changes in the composition of the stock of unemployed for people with relatively low job finding rates. The flow analysis provides a similar picture: the largest increase in the flow to unemployment has been from students. This group consists mostly of young people whose average unemployment spells are short.

The Council wishes to point out that the preceding analysis does not provide grounds for questioning the Government's view of equilibrium unemployment. The Council notes, however, that the official statistics show that in 2013 more than half of the unemployed were from vulnerable groups, a considerably higher level than in 2005. It is not easy to judge what this means for the level of equilibrium unemployment. But the uncertainty around the Government's estimate of equilibrium unemployment and the risk that it will prove too optimistic may at least not be dismissed.

### 3.4 Young people in the labour market

In both BP14 and VP14, the Government highlights the labour market for young people as an area where the Swedish labour market functions relatively poorly and where measures continue to be important. The Government stresses that the risk of becoming stuck in long-term unemployment is particularly high for some groups of young people. This refers particularly to young people who have not completed an upper secondary education, young people born outside Europe and young people with an occupational disability.<sup>33</sup> But in the public debate, the level of total unemployment among young people

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<sup>33</sup> Bengtsson and others (2014) note that the difference in the employment rates between young people with an upper secondary education and a pre-upper secondary school education has been on an upward trend in the last twenty years.

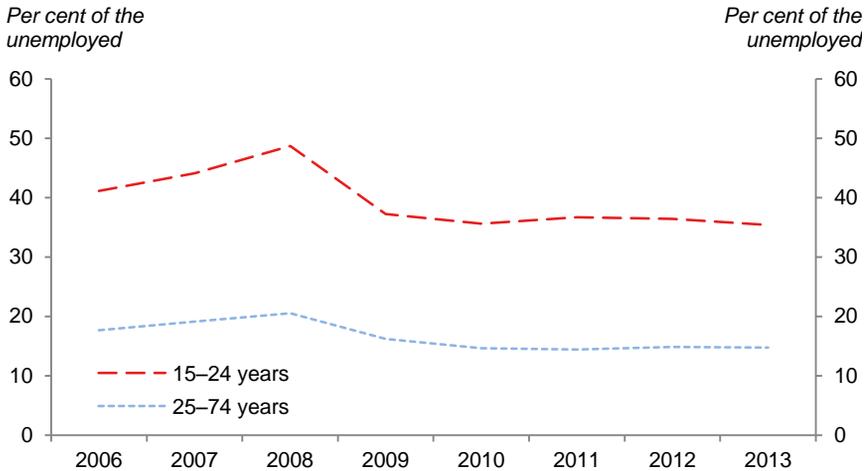
is often used to illustrate young people's problems in the labour market. Unemployment among young people is high. It came to 24 percent in 2013, compared with an EU average of 23 per cent. Youth unemployment is serious from a social perspective as those who do not enter the labour market when they are young risk being stuck outside the labour market for a long time. But youth unemployment is often misleading in estimating the extent of the problems that young people encounter when they enter the labour market.

### 3.4.1 Problems measuring unemployment

International comparisons of youth unemployment are also problematic for several reasons, even though Sweden now uses the same definition as other countries. One reason is that the education system differs from country to country. In some countries, those in apprenticeship programmes in upper secondary school are counted as employed as they already receive an apprenticeship wage during their time in upper secondary school. This is true of Austria, Denmark, and Germany, for example, but not Sweden. Differences in the design of state study grants may also play a role. In Sweden, for example, no student aid is paid during the summer vacation, giving Swedish young people a stronger incentive to look for summer jobs than young people in countries where they also receive study grants during their vacation.

There are also other problems in a one-sided focus on the level of youth unemployment. The measure does not take into account how unemployment is distributed with respect to the length of the unemployment spell. Most young people are unemployed for a relatively short time. As seen in Figure 3.15, more than one in three of the young people who were unemployed in 2013 had been unemployed for less than one month at the time of the survey.

**Figure 3.15 Unemployed for less than one month**



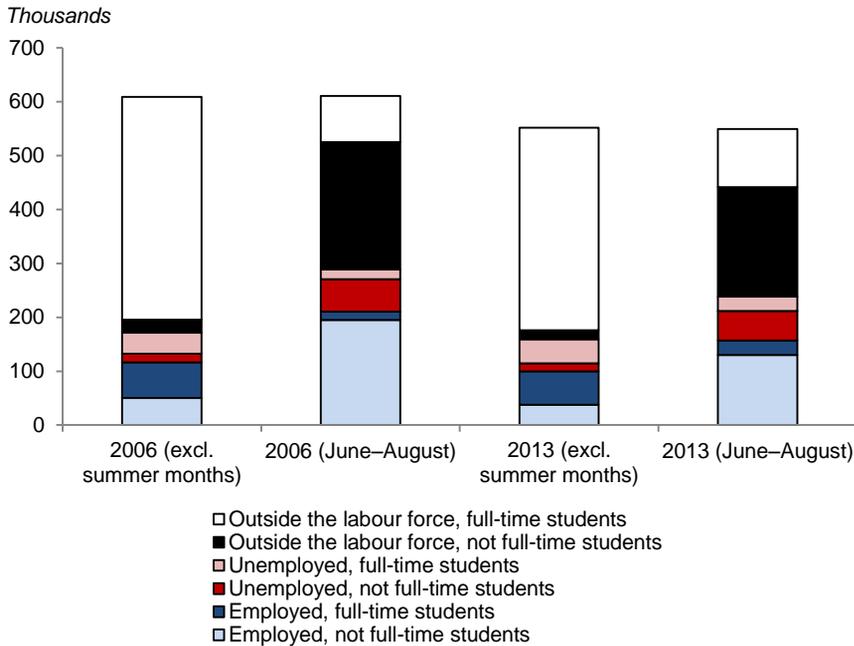
Note: Refers to unemployed who have been unemployed less than one month, as a percentage of the total number of unemployed in each age group. Annual averages.  
 Source: Statistics Sweden (2014a).

Another dimension overlooked by the unemployment measure is that a large number of unemployed young people are students. Thus, both unemployment and employment almost exclusively refer to extra income alongside studies or summer jobs. Below we describe the distribution of young people across different groups in the official labour market statistics and the changes that have taken place since 2006. We then discuss alternatives to the unemployment measure to describe young people’s difficulties entering the labour market. Finally, the Council highlights some conclusions about measures to tackle youth unemployment.

### 3.4.2 Young people’s labour market status

In the official statistics, people between the ages of 15 and 24 are counted as young people. This covers a broad range of young people. Few young people aged 15–18 seriously participate in the labour market and there are on average large differences in the qualifications of a 15-year-old entering the labour market and those of a 24-year-old. For this reason, the Council has had Statistics Sweden make a further subdivision of young people into two groups, ages 15–19 and 20–24 for 2006–2013.

**Figure 3.16 Young people aged 15–19 by labour market status**



Note: Refers to young people aged 15–19 (as a per cent of everyone in the age group) according to labour market status. The first bar shows the average value for 2006 excluding the summer months of June through August and the second bar shows the average value for the summer months of 2006. The third and fourth bars show the corresponding information for 2013.

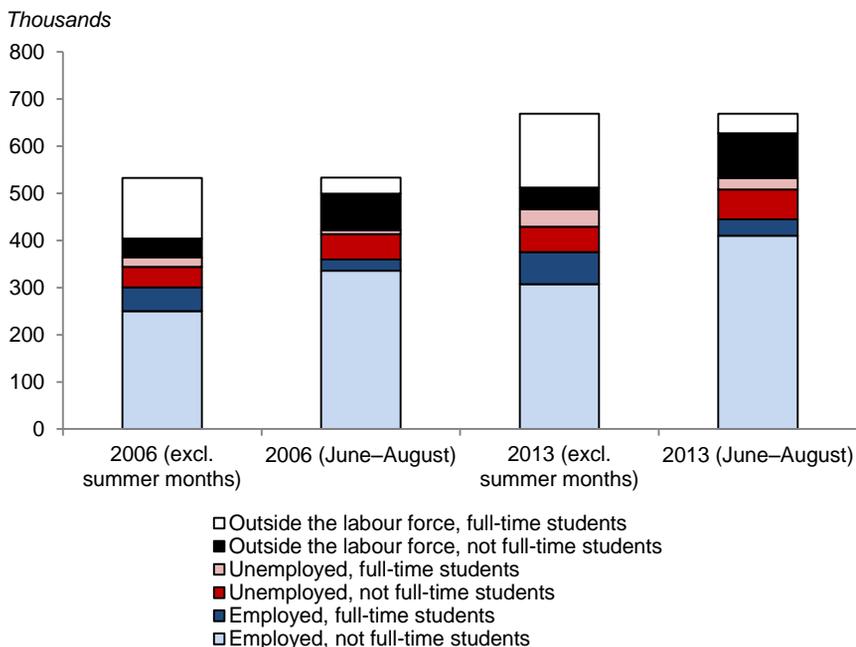
Sources: Statistics Sweden (2014a) and own calculations.

It is clear from Figure 3.16 above that most young people aged 15–19 are students outside the labour force (white bars). It is worth noting that the youngest are thus not included in the youth unemployment statistics as they do not on the whole offer their labour.

Young people on school vacation are not counted as students. For this reason, the summer months are shown separately in the figure above. The figure shows that during the school year, a very small number of young people aged 15–19 are unemployed while they study (red field). Most of those unemployed at that time attend upper secondary school (rose field).

As expected, there are considerably fewer young people who are a little older who are not in the labour market (Figure 3.17). Most of them are full time students. Likewise, for older young people, the number of unemployed is highest during the summer months as many want to work during school vacation.

**Figure 3.17 Young people aged 20–24 by labour market status**



Note: Refers to young people aged 20–24 (thousands) according to labour market status. The first bar shows the average value for 2006 excluding the summer months of June through August and the second bar shows the average value for the summer months of 2006. The third and fourth bars show the corresponding information for 2013.

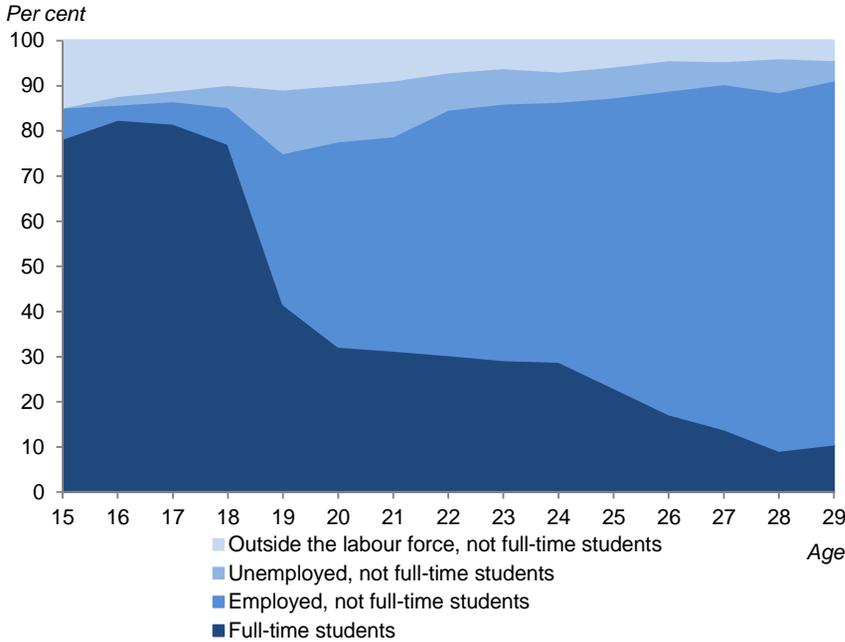
Sources: Statistics Sweden (2014a) and own calculations.

As the figure also makes clear, a not inconsiderable number of young people neither participate in working life nor are students (black field in the figure). In 2013, 7 per cent of young people aged 20–24 did not study, work or look for a job.<sup>34</sup> The percentage has declined slightly since 2006, but it is still remarkably large.

To more clearly illustrate how the distribution of young people across different activities changes during adolescence, Figures 3.18 and 3.19 show a breakdown of each cohort into the groups full-time students, the employed, the unemployed and those who are inactive outside the labour force. We have also subdivided young people by gender.

<sup>34</sup> The figure refers to the average for the year excluding the summer months.

**Figure 3.18 Young people by labour market status and age, men**



Note: Refers to labour market status in 2013.  
 Sources: Statistics Sweden (2014a) and own calculations.

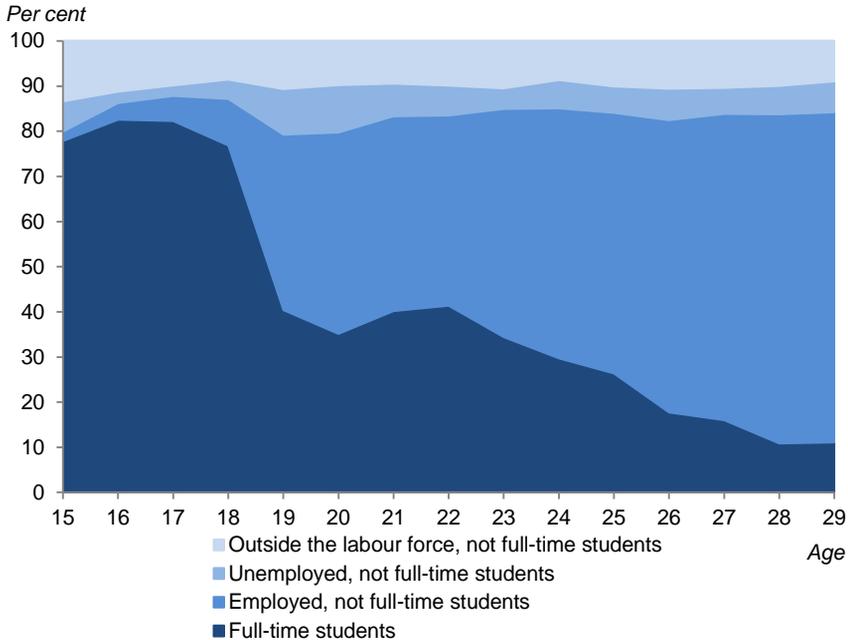
The figure shows that unemployment is highest for both men and women around the age of 19, i.e. in connection with the transition from upper secondary school to further studies or a job. The increase in unemployment after upper secondary school is particularly evident for young men.

For young women, there is a hump for full-time students aged 21–22. There are thus more women studying who come from this age group than the group directly out of upper secondary school. This pattern for young people as a whole is also seen in the 2011 Long-Term Survey, which notes that no corresponding hump can be seen in the EU 15.<sup>35</sup> The breakdown into women and men shows that the hump only applies to women. The Swedish pattern can be seen as an expression of the comparatively long time it takes for Swedish young people, particularly women, to enter the labour

<sup>35</sup> See Long-Term Survey 2011 (SOU 2011:11), Chapter 3 and Appendix 2 of the Survey (SOU 2010:88), for a comparison between Sweden and other countries in this respect.

market, as many often take a break in their studies before they begin higher education.

**Figure 3.19 Young people by labour market status and age, women**



Note: Refers to labour market status in 2013.  
Sources: Statistics Sweden (2014a) and own calculations.

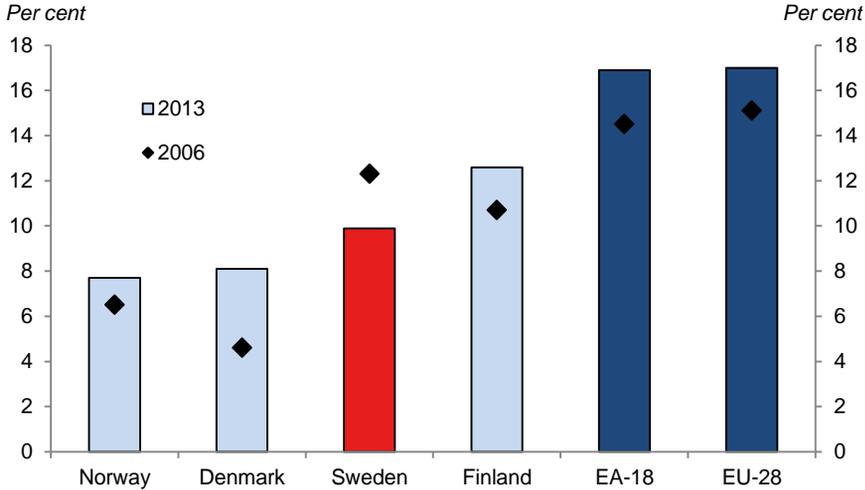
### 3.4.3 Measures of inactivity among young people

Eurostat annually calculates a measure aimed at measuring young people’s problems entering the labour market in a better way than the unemployment measure does. In the Eurostat measure, the group consists of young people who are not in employment, do not study and do not participate in any labour market programme (Figure 3.20).<sup>36</sup> Unlike the unemployment measure, those looking for work while they study are thus not included. But those who are outside the labour market but do not study are included. However, this measure does not capture only young people who have problems entering the

<sup>36</sup> Eurostat calls this group NEET – Not in Employment, Education or Training.

labour market as a time of inactivity after studies may be a voluntary choice.

**Figure 3.20 Inactivity among young people aged 18–24**



Note: Young people are counted as inactive if they do not study, work or participate in a labour market programme.  
 Source: Eurostat.

The percentage of inactive young people is higher in Sweden than in Denmark or Norway, but lower than the EU average. In Sweden, the percentage of young people in this group has fallen since 2006 while it has increased in the other countries in the comparison. But in 2013, there was nevertheless a large group, one in ten of all young people between the ages of 18 and 24, included in this group of inactive young people.

### 3.4.4 Measures to tackle youth unemployment

Regarding young people as a homogeneous group may result in overlooking groups in the young workforce with a weak foothold in the labour market. Some of the Government’s reforms, such as support for vocational introduction for young people and the reduction in employers’ social contributions for young people, broadly target all young people. Support for vocational introduction may be an important part of the policy to expedite young people’s labour market entry generally. As Figures 3.18 and 3.19 show, it is

just at the age when young people finish upper secondary school that unemployment is highest, indicating that the transition between school and working life functions poorly. But there is also a risk of considerable displacement effects from the support for vocational introduction as employers are free to choose which young people will be offered vocational introduction places. Young people with relatively poorer prospects risk not being included in these measures. The Council emphasises the importance of supplementary measures targeting young people with a weak foothold in the labour market in particular.

### 3.5 Assessments and recommendations

The Council notes that labour force participation, the employment rate and the number of hours worked have grown well since 2006. This is particularly true if the increasing number of working-age people in age groups where labour force participation has traditionally been low (i.e. particularly those aged 65–74) is taken into account. If labour force participation and employment rate growth are controlled for changes in the age structure, labour force participation shows an increase of more than 2 percentage points since 2006 and the employment rate an increase of more than 1 percentage point.

It is difficult to provide a clear answer as to why growth has been relatively strong. A number of factors may have interacted. The Council notes, however, that evaluations of the reduction in employers' contributions for young people, the cut in the VAT in the restaurant sector and the increase in the earned income tax credit and lower employers' contributions for older workers indicate that the effects are too small to explain the bulk of the positive employment trends. But assessments of the earned income tax credit indicate that this reform may have been responsible for a substantial part of the positive effects. It is also worth noting that sound public finances have meant that unlike the crisis in the 1990s, public sector employees have not had to be dismissed in connection with the financial crisis.

The Council notes that unemployment is considerably higher than before the crisis. To some extent, this is probably due to the continuation of a lower than normal demand for labour on account

of the economic downturn. But in the Council's opinion, the increase in the percentage of long-term unemployed is also a cause for concern; it may give rise to a permanent higher level of unemployment. The Council also notes that Arbetsförmedlingen reports a sharp increase in the percentage of registered unemployed in vulnerable groups, i.e. groups with a job finding rate much below the average. The same dramatic development is not seen in LFS statistics, but the percentage of unemployed in vulnerable groups is also high in LFS. The Council's analysis shows an associated risk that the Government's forecast for equilibrium unemployment will prove too optimistic.

The Council considers it inappropriate to use unemployment among 15–24-year-olds as a measure of young people's problems entering the labour market. In the group aged 15–19, the overwhelming majority of young people are enrolled in upper secondary school and thus both unemployment and employment almost exclusively refer to extra income alongside upper secondary studies or summer jobs. For the group over 19, there are large differences depending on age. In the Council's opinion, Eurostat's measure of inactivity among young people is generally a better measure of young people's difficulties entering the labour market. This measure includes young people who are not in employment, do not study or do not participate in a labour market programme. The share of inactive 18–24 year-olds has declined slightly since 2006.

The Council notes that inactivity is particularly common among young people aged 19–20, while slightly older young people have a better situation in the labour market. This indicates that the transition between school and working life could be improved. This suggests that the Government's recent measures providing support for vocational introduction are a step in the right direction in making it easier for young people to enter the labour market.



## 4 Income distribution and earned income tax credits

The Council's remit also includes analysing the effects of fiscal policy on the distribution of welfare in the short and the long term. In last year's report, the Council examined the possible effects of a fifth step in the earned income tax credit on labour supply and the distribution of disposable income. When the Council's report was published, the Government had not yet proposed a further earned income tax credit. BP14 includes a proposal for a fifth step in the earned income tax credit and it was introduced on January 1, 2014. In BP14, the Government discusses the Council's analysis of a further earned income tax credit. The Council comments below on the Government's response to its analysis. It also broadens its analysis of the earned income tax credit implemented by the Government this year and analyses the income distribution effects of all five earned income tax credits.

### 4.1 The earned income tax credit: a short introduction

The earned income tax credit was introduced in 2007 and has since then been strengthened on four occasions, most recently in BP14. The purpose of the tax credit is to make it more profitable to work.<sup>1</sup> As the earned income tax credit makes it more profitable to work, the tax credit is expected to result in higher employment: more people are expected to join the labour force and the unemployed are expected to look more intensively for work. According to the Government's assessment, the earned income tax credits (1–5) will in the long run increase sustainable employment by about 120 000 people.<sup>2</sup>

A tax credit that applies to earned income, but not to other income, boosts the relative return to labour. It encourages more people to choose to work rather than not to work. The labour supply thus increases. But it is not the effects on the labour supply that are

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<sup>1</sup> See, for example, the box in BP14, pp. 22–23.

<sup>2</sup> See VP14, Table 5.5.

interesting but the effects on employment. Analysing these effects requires taking the effects on wage formation and search behaviour into account. Theoretical and empirical research indicates that the employment effects are also positive.<sup>3</sup> An earned income tax credit makes it more attractive to have a job. Presumably, it will contribute to more restrained wage demands. Lower wage costs give companies an incentive to hire and reduce the share of the labour force that is unemployed. Thus, total employment can be assumed to increase both because more people choose to participate in the labour market and because a larger share of them get a job. Lower wages may, however, reduce the effects on participation. But lower unemployment, and thus better chances of getting a job, have a countervailing effect by increasing participation.

While an earned income tax credit is most likely to increase employment, its effects on income distribution are less clear. On the one hand, income dispersion tends to decrease because the incentives to leave dependency on benefits and get an earned income increase. On the other hand, income differences between those with a job and those still dependent on benefits increase.

## 4.2 The fifth step in the earned income tax credit

In the Council's 2013 report, it used the FASIT model<sup>4</sup> – the model used by the Government – to analyse the effects that a further earned income tax credit, as proposed by the Ministry of Finance in 2011, would have on employment and income distribution. The Council also examined what effect abolishing the earned income tax credits already implemented would have. The results of the Council's simulations showed that the earned income tax credit has a significant effect on employment at the margin. But the Council did not find any support for the Government's claim that the earned income tax credit has reduced the spread in disposable income

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<sup>3</sup> Fiscal Policy Council (2008).

<sup>4</sup> FASIT is the acronym for Fördelningsanalytiskt Statistiskt System för Inkomster och Transfereringar, (Distributional Analysis System for Income and Transfers). It is a microsimulation model developed by Statistics Sweden and the Ministry of Finance; see NIER (2014a).

among households. Commenting on the Council's analysis, the Government writes in BP14:

With respect to the Council's analysis of the effects of the earned income tax credit on income distribution, it should be noted that the Council's results are not based on the four steps of the earned income tax credit already implemented. Instead, the simulation is based on the proposal for an expansion of the earned income tax credit that was referred for comments in April 2011 (Fi:2011/1936), which is essentially identical to the expansion of the earned income tax credit proposed in this Bill. The expansion analysed has a distribution profile that is different from that of the four implemented steps and does not deviate from the Government's assessment in this respect. The Council's generalisation applying the income distribution effects from the simulation of the proposal referred for comment to the earned income tax credit as a whole risks giving rise to an unclear interpretation of the results. The Government's analysis shows that the earned income tax credit as a whole will in the long term increase incomes more for those with low incomes. The earned income tax credit has a good income distribution profile as it strengthens the incentives to work and gives the largest relative tax relief to low- and medium-income earners.<sup>5</sup>

To highlight the issues related to the earned income tax credits' distribution effects that emerged from the Council's analysis in last year's report, the Council has again asked the National Institute of Economic Research (NIER) to do a number of simulations using the FASIT model; see NIER (2014a). The analysis below is based on NIER's background paper. The Council will make a thorough analysis of the simulations done by NIER. The aim is to clarify the basis for the Council's conclusions.

#### 4.2.1 A broader income distribution analysis

The Government has painted an unambiguously positive picture of the income distribution effects of the earned income tax credits. The key result of its analysis is that the lowest decile group clearly receives

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<sup>5</sup> BP14, p. 675.

the highest increase in income when the long-term effects are included.<sup>6</sup> The policy thus appears to have a remarkably precise distribution effect. In the distribution analysis reported by the Government, the division into decile groups with respect to the effects of the reform is based on the income distribution *before* the implementation of the earned income tax credit. In the text below, the Council will call this “the Government’s method”. From a policy maker’s perspective, it is natural to ask what happens to a specific group of people when an earned income tax credit is introduced. The distribution analysis reported by the Government answers this question. But a distribution analysis of this kind does not take into account the movements in the income distribution caused by the earned income tax credit. However, the simulated changes in the FASIT model result in such movements. The Government’s distribution analysis therefore does not answer the question of how an earned income tax credit changes the income distribution as a whole, i.e. when the movements between decile groups caused by the measure are taken into account.

The movements in the distribution may have several causes. People who do not change their supply of labour, but whose income is affected by the tax reduction, will move together with other household members in the distribution as a result of the direct change in income. People who change their supply of labour will move together with other household members in the distribution as a result of the change in income caused by the change in the labour supply. Changes in labour supply along the extensive margin (to work or not) can be expected to result in larger movements than changes along the intensive margin (the number of hours those who work decide to work). These movements will also lead to a change in position in the income distribution for those who are not directly affected by the reduced tax on earned income.

Based on these movements, the Council supplements – as it did in last year’s report – the Government’s analysis of the short-term and long-term effects of the earned income tax credit with an analysis of how the movements affect the income distribution. By a division into deciles *before* and *after* the tax reduction, the Council can examine how

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<sup>6</sup> The concept decile group is explained in footnote 16, p. 33.

many people change decile group as a result of the tax reduction. The Council also examines how much the median income changes in the respective decile groups because of the tax change. In the latter case, the Council does not necessarily follow the same people, but analyses the group of individuals belonging to, for example, decile group four before the tax reduction and then those belonging to the new decile group four afterwards. Based on these two income divisions, we examine how the limits of the respective decile groups have changed relative to the median income as a result of the tax reduction on earned income. We call this “the Council’s method” in the text below. An analysis of this kind shows whether the measure has caused a concentration or an increase in the dispersion in the income distribution. Our analysis thus clarifies a key dimension of the introduction of the earned income tax credit that the Government’s analysis does not.

#### 4.2.2 Short-term effect: distribution effects

In 2014, the fiscal cost of introducing a fifth step in the earned income tax credit is estimated at about SEK 12 billion using FASIT. State tax revenue is reduced by SEK 12 billion due to the increase in the tax reduction on earned income. Household disposable income thus increases by the same amount.<sup>7</sup>

Below follows a description of the direct, short-term income distribution effect, according to the model simulation, of introducing the fifth step in the earned income tax credit. The direct effects are the effects caused by changes in the tax rules. A description of the long-term effects of the fifth step follows in Section 4.2.3. The long-term effects are the sum of the direct effects and the effects that can be expected when people change their labour supply.<sup>8</sup> In both

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<sup>7</sup> *Disposable income* in this chapter refers to what is also called adjusted disposable income or economic standard. Household disposable income is the household’s aggregate income from work, capital, business activities and positive transfers minus negative transfers (primarily taxes). Adjusting disposable income for the size of the household provides a measure which is comparable between households of different size; see NIER (2014a).

<sup>8</sup> It is conventional to call the effects caused by a change in the labour supply “long term” as it may take time for them to emerge. This is not an unreasonable assessment but it is not a result that follows from the estimated model, which is static and has no time dimension. We assume in the model that everyone supplying labour gets a job. A description of FASIT and the labour supply model linked to FASIT can be found in NIER (2014a).

sections, the Council analyses people's movements relative to others in the income distribution.

Table 4.1 shows the percentage change in the average disposable income per decile group caused by the introduction of the fifth step in the earned income tax credit in 2014. The second column shows the direct effect for people belonging to each decile group before the implementation of the fifth step. The third column shows the percentage change in average income when comparing the respective decile groups before and after the introduction of the fifth step.

The table shows that there is no significant difference between the two ways of showing the effect. The reason for this is that the change in disposable income is relatively small and that only the short-term effect is shown here, i.e. no change in behaviour caused by the tax reduction has been taken into account in the analysis. The movements in the income distribution are therefore small. Significant movements only emerge when taking into account the change people make in their labour supply after the introduction of the measure.

**Table 4.1 Percentage change in disposable income**

Decile group	Direct effect, Government's method	Direct effect, Council's method
1	0.25	0.24
2	0.36	0.36
3	0.50	0.50
4	0.64	0.63
5	0.75	0.75
6	0.85	0.85
7	0.88	0.88
8	0.92	0.92
9	0.84	0.84
10	0.48	0.47

Note: The change refers to the average in the decile group. The direct effects are the income increases that occur immediately after the tax rules change.

Source: NIER (2014a).

Table 2 below shows the decile group affiliation before and after the implementation of a fifth step in the earned income tax credit. In the short-term analysis, few individuals change decile group.

As a result of the introduction of a fifth step, households with earned income pay less income tax. They thus have a higher

disposable income. But households without any earned income are not directly affected by the introduction. Consequently, they may move downwards in the income distribution and may belong to a lower decile group after the introduction (as they will have a lower relative income). Similarly, households affected by the introduction move upwards in the income distribution.

**Table 4.2 Number of people per decile before and after step 5 of the earned income tax credit (excluding labour supply effects)**

		Decile group after										
		1	2	3	4	5	6	7	8	9	10	
Decile group before	Thousands											
	1	934	5	0	0	0	0	0	0	0	0	
	2	5	921	13	0	0	0	0	0	0	0	
	3	0	13	909	18	0	0	0	0	0	0	
	4	0	0	18	907	15	0	0	0	0	0	
	5	0	0	0	15	916	9	0	0	0	0	
	6	0	0	0	0	9	916	15	0	0	0	
	7	0	0	0	0	0	15	915	10	0	0	
	8	0	0	0	0	0	0	10	922	7	0	
	9	0	0	0	0	0	0	0	7	926	6	
10	0	0	0	0	0	0	0	0	6	934		

Note: The table should be read in the following way: in decile group 3, for example, after the implementation of the fifth step of the earned income tax credit, there are 909 000 people left of those originally belonging to decile group 3 (*italics*). There were 31 000 people who left decile group 3; of these, 13 000 moved down to decile group 2 and 18 000 moved up to decile group 4. There were 18 000 people belonging to decile group 4 before the implementation who moved down to decile group 3. Thirteen thousand people were also added from decile group 2. In decile group 3 – as in all the other decile groups – there are 940 000 people both before and after the introduction of the fifth step in the earned income tax credit. However, the number of individuals shown in the ten decile groups may vary between 940 000 and 938 000 due to rounding errors.

Source: NIER (2014a).

Table 4.3 below shows the percentile values in relation to the median of the income distribution before (second column) and after (third column) the introduction of the fifth step in the earned income tax credit.

The distance to the median income increases in the lower half of the income distribution, particularly up to and including decile group 3 ( $p_{30}/p_{50}$ ). The distance to the median income increases in the upper half (but not in percentile six). The increase in the distance is smaller in the upper half than in the lower half. The Gini coefficient – which is a commonly used comprehensive

measure of income dispersion – is unchanged to the third decimal place. We will come back to the Gini coefficient below.

**Table 4.3 Percentile values compared with the median**

	Excluding earned income tax credit	Including earned income tax credit	Difference	Percentage change
p10/p50	0.537	0.534	0.003	0.47%
p20/p50	0.673	0.670	0.003	0.39%
p30/p50	0.786	0.784	0.002	0.22%
p40/p50	0.894	0.893	0.001	0.07%
p50/p50	1.000	1.000	0.000	0.00%
p60/p50	1.116	1.116	0.000	-0.02%
p70/p50	1.254	1.254	0.000	0.03%
p80/p50	1.445	1.446	0.001	0.10%
p90/p50	1.767	1.768	0.001	0.04%
Median (p50)	SEK 219 952	SEK 221 744	SEK 1 792	-
Gini	0.294	0.294	-	-

Note: In the fourth and fifth columns, the values have been normalised so that a positive value means that the distance to the median has increased and a negative value that it has decreased. Column four shows the difference between the values in columns two and three. Column five shows the values in column four as a percentage of the values in column two. The values in columns two to five have no units.

Source: NIER (2014a).

### 4.2.3 Long-term effect: labour supply and distribution effects

Table 4.4 below shows the labour supply effects, according to the model simulation, that result from the introduction of the fifth step in the earned income tax credit. In the long term, the increase in the earned income tax credit leads to an increase in the total labour supply of 0.27 per cent, corresponding to almost 13 000 annual work units. The increase in the total labour supply is largest in the first quartile group. Many people in this quartile did not work at all or worked only a little before the reform. About a third of the total increase in the labour supply occurs along the intensive margin (working more hours), of which the largest increase occurs in the lowest quartile group. Along the extensive margin (choosing to work), the number of people in work increased by more than 8 300,

most of whom came from the group “other”. The largest increase in labour supply occurs in the first quartile group.

**Table 4.4 Labour supply effects**

<i>Per cent, number</i>	<b>Change</b>	<b>Quartile group</b>			
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<i>Total</i>					
Hours worked, per cent	0.27	1.98	0.40	0.09	0.07
Annual work units <sup>1</sup>	12 823	6 062	3 930	1 480	1 351
<i>Intensive margin</i>					
Annual work units <sup>1</sup>	4 309	2 441	1 232	281	355
<i>Extensive margin</i>					
In work	8 311	4 488	2 137	763	922
Unemployed	-759				
Sick	-623				
Other	-6 930				

Note: The table shows the simulation effects obtained from FASIT.

<sup>1</sup> One annual work unit is equivalent to 1 800 hours.

Source: NIER (2014a).

Table 4.5 below shows the percentage change in average disposable income. Compared with the simulation of the short-term effects, the direct effects here are slightly less positive for the two lowest decile groups and slightly more positive for the other decile groups. The explanation for this is the way in which the simulation model is constructed.<sup>9</sup>

In the second and third columns of Table 4.5, the division into decile groups is based on income excluding the fifth step in the earned income tax credit. The larger labour supply reinforces the positive effect on disposable income in all the decile groups (compare the second and third columns). The largest increases are in decile groups one and four. The fourth column shows how much average disposable income in the respective decile groups has changed when the average before the tax reduction is compared with the average after the tax reduction, including the adjustment in the labour supply.

<sup>9</sup> In the long-term analysis, the direct effect is the change in income occurring immediately after the change in the tax rules. See NIER (2014a) for a technical explanation of why the direct effect differs between the short-term and the long-term analysis.

**Table 4.5 Percentage change in disposable income**

Decile group	Direct effect, Government's method	Long-term effect, Government's method	Long-term effect, Council's method
1	0.20	0.98	0.52
2	0.31	0.52	0.50
3	0.53	0.62	0.68
4	0.68	1.02	0.83
5	0.81	0.92	0.98
6	0.90	0.93	1.02
7	0.97	1.02	1.09
8	0.94	0.96	1.01
9	0.92	0.95	0.94
10	0.54	0.59	0.60

Note: The change refers to the average in the decile group. The direct effects are the income increases that occur immediately after the tax rules change. The long-term effects are the sum of the direct effects and the effects that can be expected when people change their labour supply. See also footnotes 8 and 9 p. 117 and p. 121.

Source: NIER (2014a).

If we compare the long-term effect according to the Government's method (the third column) with the same effect according to the Council's method (the fourth column), i.e. when we do not necessarily compare the same people before and after the rule change, we see that the differences are significantly larger than what we saw in Table 4.1. The difference between Tables 4.1 and 4.5 is that the effects on the labour supply have been included in Table 4.5. In the third column, only the change in disposable income is taken into account, not the movements in the income distribution. In the fourth column, movements in the income distribution are also taken into account.

Table 4.6 below shows the number of persons in different decile groups before and after the tax reduction, including after the adjustment in the labour supply. Downward movements in the income distribution are mainly to the decile group below the original decile group (from decile groups five and seven, there is also a small movement downwards two decile groups). One explanation for this is that households not affected by the earned income tax credit because they do not have earned income move downwards in the income distribution. Another explanation is that some people reduce their labour supply. This applies, for example, to households where

one member increases his or her labour supply at the same time as another member reduces it. Otherwise, longer movements are limited to upward movements in the income distribution due to an increase in the labour supply.

**Table 4.6 Number of persons per decile group before and after earned income tax credit step 5 (including labour supply effects)**

Thousands		Decile group after									
		1	2	3	4	5	6	7	8	9	10
Decile group before	1	925	6	3	2	1	0	0	0	0	0
	2	13	<i>914</i>	9	0	2	0	0	1	0	0
	3	0	17	<i>910</i>	10	1	1	0	0	0	0
	4	0	0	16	<i>906</i>	10	3	1	1	1	0
	5	0	0	1	20	<i>902</i>	12	0	1	1	0
	6	0	0	0	0	22	<i>905</i>	12	0	0	0
	7	0	0	0	0	1	17	<i>910</i>	10	0	0
	8	0	0	0	0	0	0	15	<i>916</i>	8	0
	9	0	0	0	0	0	0	0	10	<i>924</i>	5
	10	0	0	0	0	0	0	0	0	5	<i>933</i>

Note: The table should be read in the following way: in decile group 3, for example, after the implementation of the fifth step of the earned income tax credit, there are 910 000 people left of those originally belonging to decile group 3 (*italics*). There were 29 000 people who left decile group 3; of these, 17 000 moved down to decile group 2 and 10 000 moved up to decile group 4, 1 000 to decile group 5 and 1 000 to decile group 6. There were 16 000 people from decile group 4 and 1 000 from decile group 5 who moved down to decile group 3 after the tax change. There were 9 000 people from decile group 2 and 3 900 from decile group 1 who were added to decile group 3. In decile group 3 – as in all the other decile groups – there are 939 000 people before and after the introduction of the earned income tax credits. However, the number of people shown in the ten decile groups may vary between 940 000 and 938 000 due to rounding errors.

Source: NIER (2014a).

Table 4.7 shows the percentile values in relation to the median of the income distribution before and after the introduction of the fifth step in the earned income tax credit, including the labour supply adjustment. The distance to the median income increases slightly, particularly in the lower half of the distribution. The income distribution is thus pulled slightly apart.

A comparison between the short-term effect (Table 4.3) and the long-term effect (Table 4.7) shows that the spread in the income distribution does not increase quite as much when the labour supply has been adjusted. This is due to the interaction of a number of factors. People's income is affected in two ways: more people decide

to work and those who do work, work more hours. In the long term, people who are not directly affected and therefore do not change their labour supply have a lower disposable income compared to others. There are also people who reduce their labour supply (i.e. increase their leisure) but keep their disposable income more or less unchanged because of an increase in the tax reduction. These people may end up in a lower position in the income distribution.<sup>10</sup>

**Table 4.7 Percentile values compared with the median**

	Excluding earned income tax credit	Including earned income tax credit	Difference	Percentage change
p10/p50	0.549	0.547	0.001	0.27%
p20/p50	0.673	0.671	0.003	0.38%
p30/p50	0.790	0.786	0.003	0.44%
p40/p50	0.897	0.897	0.000	0.02%
p50/p50	1.000	1.000	0.000	0.00%
p60/p50	1.112	1.113	0.001	0.05%
p70/p50	1.247	1.248	0.001	0.09%
p80/p50	1.418	1.417	-0.001	-0.05%
p90/p50	1.701	1.702	0.001	0.05%
Median (p50)	SEK 233 117	SEK 235 313	SEK 2 196	
Gini	0.282	0.282		

Note: In the fourth and fifth columns, the values have been normalised so that a positive value means that the distance to the median has increased and a negative value that it has decreased. Column four shows the difference between the values in columns two and three. Column five shows the values in column four as a percentage of the values in column two. The values in columns two to five have no units.

Source: NIER (2014a).

#### 4.2.4 Summary of the analysis of the fifth step in the earned income tax credit

The model simulation shows that the fifth step in the earned income tax credit will lead to an increase in the labour supply; in the long term, the total labour supply will increase by close to 13 000 annual work units. The increase in the total labour supply is largest in the first quartile group.

<sup>10</sup> See NIER (2014a) for further details.

The analysis shows that the fifth step in the earned income tax credit results in higher average income and a tendency for the distance between the median income and incomes in the lower part of the income distribution to increase.

### 4.3 Analysis of the entire earned income tax credit

Analysing the total effect of the five steps in the earned income tax credit on income distribution using a model simulation requires some simplified and counterfactual assumptions. The simulation is made in the economic environment of 2014 and is based on a projection of statistics from 2011. An introduction of the earned income tax credit in this environment is not the same as if steps 1–4 of the credit had never been introduced. In our analysis, we simply assume that no steps in the earned income tax credit have been implemented before we implement the entire earned income tax credit (1–5) in the model simulation. In the years 2007–2010, the labour supply may have been adjusted for steps 1–4 in the earned income tax credit. This also has to be disregarded in the simulation.

We start by describing the short-term distribution effect of introducing the entire earned income tax credit in the economic environment of 2014. There is then a description of the long-term effects of the reform, i.e. after the labour supply has adjusted to the new tax rules. In both these steps, we broaden the analysis by also examining people's movements in the income distribution.

#### 4.3.1 Short-term effect: distribution effects

Table 4.8 shows the percentage change in average disposable income per decile group after the introduction of the entire earned income tax credit. The second column shows the direct, short-term effect on people in their respective decile group before the introduction of the earned income tax credit. The third column shows the percentage change in average income when comparing each decile before and after the implementation of the earned income tax credit. Thus, in the third column we take the movements in the income distribution into account.

The introduction of the earned income tax credit gives households with earned income a higher disposable income. Households with earned income move upwards in the income distribution, while households with no or low earned income move downwards. This effect is largest in the lower decile groups, as households in these decile groups receive a larger part of their income from sources other than work, such as pensions, sickness benefits, housing allowances, etc. Table 4.8 shows that the difference between the second and the third columns is primarily in decile groups one to four.

**Table 4.8 Percentage change in disposable income**

Decile group	Direct effect, Government's method	Direct effect, Council's method
1	3.81	3.51
2	4.49	4.05
3	5.20	5.09
4	6.43	6.27
5	6.96	6.99
6	7.52	7.56
7	7.46	7.56
8	7.43	7.52
9	6.72	6.78
10	3.73	3.79

Note: The change refers to the average in the decile group. The direct effects are the income increases that occur immediately after the tax rules change.

Source: NIER (2014a).

Table 4.9 shows the decile group that a person was in before and after the simulated tax reduction. There are both upward and downward movements in the income distribution.

As only the short-term effect is analysed in this section, upward or downward movements in the income distribution depend on whether or not the household has earned income, i.e. not on a change in labour supply. As a result of the earned income tax credit, households with earned income pay less income tax. The change in tax rules has no direct effect on the income of households without earned income. These households thus move downwards in the income distribution and may end up in a lower decile group. Similarly, people in households directly affected by the tax change move upwards in the income distribution.

**Table 4.9 Number of persons per decile group before and after earned income tax credit (excluding labour supply effects)**

Thousands	Decile group after										
	1	2	3	4	5	6	7	8	9	10	
<b>Decile group before</b>	<b>1</b>	894	45	1	0	0	0	0	0	0	0
	<b>2</b>	46	779	115	0	0	0	0	0	0	0
	<b>3</b>	0	115	706	118	0	0	0	0	0	0
	<b>4</b>	0	0	118	687	134	0	0	0	0	0
	<b>5</b>	0	0	0	134	690	116	0	0	0	0
	<b>6</b>	0	0	0	0	116	721	102	0	0	0
	<b>7</b>	0	0	0	0	0	102	762	75	0	0
	<b>8</b>	0	0	0	0	0	0	75	812	53	0
	<b>9</b>	0	0	0	0	0	0	0	53	856	31
	<b>10</b>	0	0	0	0	0	0	0	0	31	909

Note: The table should be read in the following way: in decile group 3, for example, after the introduction of the entire earned income tax credit, there remain 706 000 of those originally in decile group 3 (*italics*). There were 233 000 people who left decile group 3; 115 000 of them moved down to decile group 2 and 118 000 moved up to decile group 4. There were 118 000 people in decile group 4 before the implementation who moved down to decile group 3. There were also 1 000 people from decile group 1 and 115 000 people from decile group 2 added to decile group 3. In decile group 3 – as in all the other decile groups – there are 939 000 people both before and after the introduction of the earned income tax credits. However, the number of people shown in the ten decile groups may vary between 940 000 and 938 000 due to rounding errors.

Source: NIER (2014a).

Table 4.10 shows the percentile values in relation to the median of the income distribution before and after the introduction of the earned income tax credit.

In the fourth and fifth columns in the table, the distance between the decile limit and the median in the income distribution increases by between more than 1 and more than 3 per cent in decile groups one to three, while the increase in distance in decile groups four and six is small. The dispersion decreases in decile groups seven to ten. But the decrease in the upper decile groups is smaller than the increase in the lower decile groups. The income distribution is thus pulled apart after the introduction of the earned income tax credit. The Gini coefficient is basically unchanged (it decreases by one-thousandth). We will come back to the Gini coefficient below.

**Table 4.10 Percentile values compared with the median**

	Excluding earned income tax credit	Including earned income tax credit	Difference	Percentage change
p10/p50	0.552	0.534	0.018	3.25%
p20/p50	0.694	0.670	0.023	3.37%
p30/p50	0.796	0.784	0.012	1.50%
p40/p50	0.900	0.893	0.008	0.83%
p50/p50	1.000	1.000	0.000	0.00%
p60/p50	1.115	1.116	0.001	0.09%
p70/p50	1.256	1.254	-0.002	-0.17%
p80/p50	1.452	1.446	-0.005	-0.36%
p90/p50	1.787	1.768	-0.019	-1.07%
Median (p50)	SEK 206 136	SEK 221 744	SEK 15 608	-
Gini	0.295	0.294	-	-

Note: In the fourth and fifth columns, the values have been normalised so that a positive value means that the distance to the median has increased and a negative value that it has decreased. Column four shows the difference between the values in columns two and three. Column five shows the values in column four as a percentage of the values in column two. The values in columns two to five have no units.

Source: NIER (2014a).

### 4.3.2 Long-term effect: labour supply and distribution effects

Table 4.11 shows the labour supply effects of the earned income tax credit. The introduction of the entire earned income tax credit results in an increase in the total labour supply of 2.4 per cent, corresponding to almost 113 000 annual work units. The increase in the total labour supply is largest in the first quartile group. About a fifth of the total increase in the labour supply occurs along the intensive margin, of which the largest increase occurs in the lowest quartile group. Along the extensive margin, the number of people in work increased by over 90 000, most of whom came from the group “other”. The largest increase in labour supply occurs in the first quartile group.

**Table 4.11 Labour supply effects: long-term change**

<i>Per cent, number</i>	<b>Change</b>	<b>Quartile group</b>			
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<i>Total</i>					
Hours worked, per cent	2.40	20.39	2.18	0.93	0.42
Annual work units <sup>1</sup>	112 704	69 184	21 708	14 081	7 730
<i>Intensive margin</i>					
Annual work units <sup>1</sup>	21 297	15 334	3 581	1 947	435
<i>Extensive margin</i>					
In work	90 063	58 437	15 117	10 327	6 182
Unemployed	-9 201				
Sick	-5 541				
Other	-73 038				

Note: The table shows the simulation effects obtained from FASIT.

<sup>1</sup> One annual work unit is equivalent to 1 800 hours.

Source: NIER (2014a).

Table 4.12 below shows the percentage change in average disposable income when the increase in the labour supply is taken into account. The direct effects here are slightly less positive for almost all decile groups, compared with the simulation of the short-term effects.<sup>11</sup> An exception is decile group nine, which is slightly more positive (compare the second column of Table 4.12 with the second column in Table 4.8).

In the second and third columns, the division into decile groups is based on income excluding the earned income tax credit. The labour supply effects reinforce the positive effect on disposable income in all decile groups (compare the second and third columns). The reason is the larger labour supply. The largest increases are in decile group's one and two.

The fourth column shows how much average disposable income in the respective decile groups has changed when the average before the tax reduction is compared with the average after the tax reduction, including the adjustment in the labour supply. In the third column, only people's change in disposable income is taken into account, not people's movements in the income distribution. In the

<sup>11</sup> See footnote 9, p. 121.

fourth column, movements in the income distribution are also taken into account.

**Table 4.12 Percentage change in disposable income**

Decile group	Direct effect, Government's method	Long-term effect, Government's method	Long-term effect, Council's method
1	2.31	13.24	7.11
2	3.49	6.52	5.15
3	4.84	6.09	6.30
4	5.87	7.07	7.09
5	6.76	7.59	8.03
6	7.07	7.63	8.22
7	7.28	7.92	8.28
8	7.22	7.55	7.91
9	6.76	6.91	7.30
10	3.69	3.87	4.11

Note: The change refers to the average in the decile group. The direct effects are the income increases that occur immediately after the tax rules change. The long-term effects are the sum of the direct effects and the effects that can be expected when people change their labour supply. See also footnotes 8 and 9 on p. 117 and p. 121 respectively.

Source: NIER (2014a).

If we compare Table 4.12 with Table 4.8, we see the difference between the short-term and the long-term effects of the earned income tax credits. The difference between the short-term and the long-term effects in the lower decile groups, particularly in decile group one, is due to the fact that many who belonged to decile group one at the outset no longer do so after the change in rules when the labour supply has been adjusted. Instead, individuals from higher decile groups now belong to decile group one after the rule change. This is obvious when we look at Table 4.13.

Table 4.13 shows the number of persons in different decile groups before and after the tax reduction, when households have adjusted their labour supply. Downward movements in the income distribution are primarily to one decile group below the original decile group. In some decile groups, there are also small movements downwards two or as much as four decile groups in the income distribution. One explanation for these movements is that some people reduce their labour supply. Another explanation is that households that are not affected by the earned income tax credit

because they do not have earned income move downwards in the income distribution.

**Table 4.13 Number of persons per decile group before and after the earned income tax credit (including labour supply effects)**

<i>Thousands</i>		Decile group after									
		1	2	3	4	5	6	7	8	9	10
<b>Decile group before</b>	<b>1</b>	839	45	24	8	11	3	4	2	1	1
	<b>2</b>	99	725	77	10	13	4	6	4	0	0
	<b>3</b>	0	167	665	88	6	4	3	4	1	0
	<b>4</b>	0	0	169	657	85	14	6	4	2	0
	<b>5</b>	0	0	3	175	647	98	7	6	1	1
	<b>6</b>	0	0	1	1	174	679	74	5	3	1
	<b>7</b>	0	0	0	0	1	135	735	59	6	3
	<b>8</b>	0	0	0	0	0	1	103	770	61	2
	<b>9</b>	0	0	0	0	1	0	0	83	817	38
	<b>10</b>	0	0	0	0	0	0	0	1	45	892

Note: The table should be read in the following way: in decile group 3, for example, after the introduction of the entire earned income tax credit, there remain 665 000 of those originally in decile group 3 (italics). A total of 273 000 people left decile group 3, of these 167 000 moved down to decile group 2, 88 000 moved up to decile group 4, 6 000 to decile group 5, 4 000 to decile group 6, 3 000 to decile group 7, 4 000 to decile group 8 and 1 000 to decile group 9. There were 169 000 people from decile group 4 who moved down to decile group 3, 3 000 from decile group 5 and 1 000 from decile group 6 after the tax change. There were also 24 000 people from decile group 1 and 77 000 people from decile group 2 added to decile group 3. In decile group 3 – as in all the other decile groups – there are 939 000 people both before and after the introduction of the earned income tax credits. However, the number of people shown in the ten decile groups may vary between 940 000 and 938 000 due to rounding errors.

Source: NIER (2014a).

In the model simulation, those who start working in response to the earned income tax credit receive a higher disposable income. They thus move upwards in the income distribution. The upward movements in the income distribution are more frequent and longer in the two lowest decile groups than in the others. It is primarily all the people who previously did not work who in the simulation now begin to work.

When some people move upwards in the income distribution, others move downwards at the same time. People moving downwards in the decile groups have a higher disposable income than those who leave the decile group had before the tax reduction. Average income in the lower decile groups thus increases. How

much the average in each decile group is affected depends on the inflow of people from higher and lower decile groups and their income in relation to the average of the decile group in question.

Table 4.14 shows the percentile values in relation to the median of the income distribution before and after the introduction of the earned income tax credit, after the labour supply adjustment. The distance to the median income increases for the lower incomes. The distance to the median also increases for percentile values six and seven, while it decreases for percentile values eight and nine. But the increase in distance is larger in the lower decile groups. The income differences between the top and bottom decile groups have thus increased.

**Table 4.14 Percentile values compared with the median**

	Excluding earned income tax credit	Including earned income tax credit	Difference	Percentage change
p10/p50	0.560	0.547	0.013	2.35%
p20/p50	0.688	0.671	0.017	2.46%
p30/p50	0.796	0.786	0.010	1.20%
p40/p50	0.899	0.897	0.002	0.27%
p50/p50	1.000	1.000	0.000	0.00%
p60/p50	1.111	1.113	0.002	0.15%
p70/p50	1.245	1.248	0.003	0.24%
p80/p50	1.424	1.417	-0.006	-0.45%
p90/p50	1.719	1.702	-0.018	-1.02%
Median (p50)	SEK 217 845	SEK 235 313	SEK 17 468	-
Gini	0.285	0.282	-	-

Note: In the fourth and fifth columns, the values have been normalised so that a positive value means that the distance to the median has increased and a negative value that it has decreased. Column four shows the difference between the values in columns two and three. Column five shows the values in column four as a percentage of the values in column two. The values in columns two to five have no units.

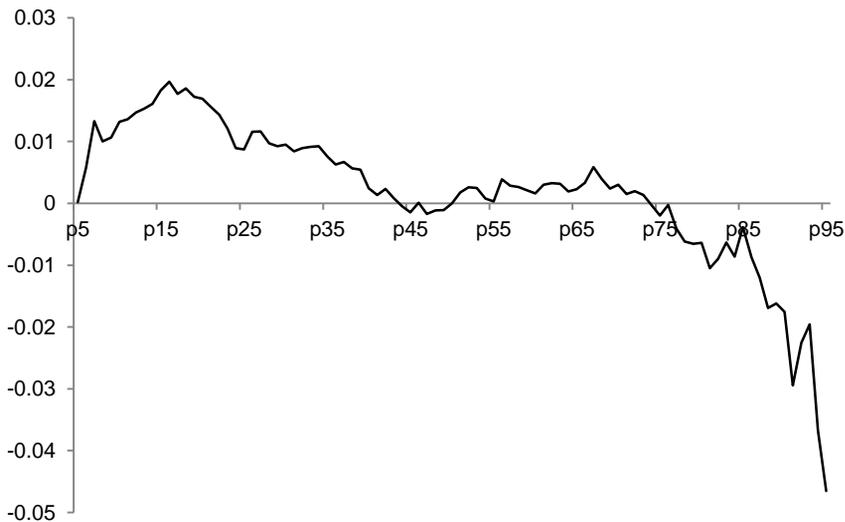
Source: NIER (2014a).

Table 4.14 also shows how the overall income distribution has been affected before and after the introduction of the earned income tax credit, measured by the Gini coefficient. The Gini coefficient has fallen by three-thousandths. This is a very small change, but it could in principle indicate that the income dispersion has decreased. But the Gini coefficient is an overall measure that may fall if the income

distribution decreases in one part of the distribution and increases in another. In a situation like this, it is not possible to determine unambiguously the direction in which the income distribution has changed. A more in-depth analysis shows that this is exactly what happened.<sup>12</sup>

As shown in Table 4.14, the earned income tax credit has affected the income distribution. The fourth column of Table 4.14 shows the difference between nine percentile values before and after the introduction of the earned income tax credit. To get a more detailed comparison of the income distributions, we compare each percentile between the fifth and the ninety-fifth percentiles in the two distributions in Figure 4.1. The figure shows the same difference as that shown in the fourth column of Table 4.14. However, the figure shows not only the differences between the nine percentiles, but also all the differences between the fifth and the ninety-fifth percentile.

**Figure 4.1. Change in income distribution after earned income tax credit**



Note: The figure shows the same difference as the fourth column of Table 4.14, but here it also shows the differences between all the percentile values between the fifth and the ninety-fifth percentile. The difference has no unit. A positive value means increased dispersion and a negative value means decreased dispersion.

Source: NIER (2014a).

<sup>12</sup> NIER (2014a).

The figure shows that the income dispersion increases up to the forty-fifth percentile: up to this percentile, the difference between each percentile and the median increases after the introduction of the earned income tax credit. The dispersion also increases between the fiftieth and the seventy-fifth percentile. The figure also shows that the differences between the two distributions are relatively small compared to the changes in disposable income that were actually observed (see Section 1.2.3).<sup>13</sup>

A comparison between the short-term effect (Table 4.10) and the long-term effect (Table 4.14) shows that the dispersion in the income distribution does not increase quite as much when the labour supply has been adjusted. People who were not working in the analysis of the short-term effect may have begun to work in the analysis of the long-term effect. Therefore, people may move upwards in the distribution in the long term. But even if we take labour supply into account, the earned income tax credit has led to an increase in the distance between incomes and the median income in the lower part of the income distribution.

### 4.3.3 Summary of the analysis of the entire earned income tax credit

According to the model simulation, the introduction of the earned income tax credit in its entirety results in an increase in the total labour supply of almost 113 000 annual work units. The increase in the labour supply is largest in the first quartile group.

The result is in line with the Government's analysis and shows that the earned income tax credit has a significant effect on the income of those located in the lower part of the income distribution before the reform. The analysis also shows that a short-term effect of the earned income tax credit as a whole is an increase in the income dispersion in the lower part of the income distribution. Also when the long-term increase in the labour supply is taken into account, the earned income tax credit results in increased differences between

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<sup>13</sup> NIER (2014a) also has a comparison which includes the whole income distribution. The differences between the outermost percentile values are larger than other differences in the distribution, but they are qualitatively the same as those shown in Figure 4.1.

incomes in the lower half of the income distribution and the median income. The changes are small, but the trend is clear.

## 4.4 Assessments and recommendations

Our analysis is based on a model simulation. Hence, the analysis must be based on several simplified assumptions. It therefore may not be possible to transfer the results we have observed in the simulations to the real world, where people live and work. But the results are a distinct indication of what can be expected when an earned income tax credit is introduced.

From a theoretical analysis, we know that an earned income tax credit most likely boosts employment. This result was also obtained in the model simulation. But the distribution effects of the earned income tax credit are not obvious from a theoretical analysis. Income dispersion tends to decrease as a result of the earned income tax credit because the incentives to leave dependency on benefits and get an earned income increase. The earned income tax credit also results in an increase in the income differences between those with a job and those still dependent on benefits. In our model simulation, the latter effect dominates.

The simulation shows that the earned income tax credit has resulted in higher average household income. The simulation model also shows that the earned income tax credit has contributed to a slight increase in the spread between the lower incomes in the income distribution and the median income.

As shown in Chapter 1, disposable incomes in constant prices increased by about 13 per cent between 2006 and 2012. The Gini coefficient for disposable income did not change appreciably between 2006 and 2012. Furthermore, incomes increased more slowly in the lower part of the income distribution, which is also shown by the increase in relative poverty since 2006. It should also be noted that real disposable income of the non-gainfully employed has been almost unchanged since 2002 and that the distance to the gainfully employed has increased after 2006. The results obtained from the model simulations are thus in line with the developments observed.

In our opinion, the earned income tax credit has had an impact on the growth in actual incomes between 2006 and 2012. But we do not

know how much of the growth can be explained by the earned income tax credit. But the earned income tax credit is not the main explanation for the increase in income inequality in the lower half of the income distribution and the slight decrease in the upper half.

In VP14, the Government analyses the distribution effects of its policies between 2006 and 2014.<sup>14</sup> The Government concludes that the long-term effects of the policies as a whole in 2006–2010 have not had “any tangible effect on the overall income differences as measured by the Gini coefficient”.<sup>15</sup> The Government also notes that the short-term effects of the policies as a whole in 2006–2010 have resulted in an increase in average disposable income of over 7 per cent and that the earned income tax credit was one factor making the increase in income larger for the gainfully employed than for the non-gainfully employed. In the Government’s opinion, the long-term effects of the policies are largest for people who were in the lower part of the income distribution before the reform. The Council notes that the analysis presented by the Government in VP14 provides no grounds for changing the conclusion that the earned income tax credit results in an increase in the differences between the lower incomes and the median income. The change is not large, but it should have been part of the Government’s description of the earned income tax credit’s income distribution consequences.

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<sup>14</sup> The description of the analysis for the period 2006–2010 is very brief; the Government refers to earlier Bills for a detailed discussion. See VP14, *Fördelningspolitisk redogörelse* (Income distribution policy report), Appendix 2.

<sup>15</sup> VP14, *Fördelningspolitisk redogörelse*, Appendix 2, p. 32.

## 5 The surplus target and the expenditure ceiling

### 5.1 The Government's assessment of the surplus target in BP14

In its communication on the fiscal framework, the Government explains its view of how the surplus target should be interpreted and implemented. General government net lending should be allowed to vary with the business cycle and adjustments in order to meet the target should be made with due regard for the economic situation. The basis for the analysis is that deviations from the surplus target should be eliminated and that this should be done at a pace in line with both the economic situation and the size of the deviation. The Government uses a number of indicators (Table 5.1) to determine whether or not the surplus target has been met. A backward-looking ten-year average is used to assess whether there have previously been systematic deviations. A seven-year indicator based on both the current year and forecasts for coming years and on structural net lending is used to forecast whether or not the surplus target will be met in the future. Cyclically adjusted versions of both the ten-year average and the seven-year indicator are also used.

**Table 5.1 Surplus target indicators in BP14**

<i>Per cent of GDP</i>	2012	2013	2014	2015	2016	2017
Net lending	-0.6	-1.2	-1.5	-0.4	0.4	1.1
Backward-looking ten-year average	0.7					
Cyclically adjusted	1.5					
Seven-year indicator	-0.8	-0.6	-0.4			
Cyclically adjusted	1.1	0.8	0.7			
Structural net lending	0.6	0.5	0.2	0.8	1.0	1.2
<b>Output gap</b>	<b>-2.7</b>	<b>-3.5</b>	<b>-3.0</b>	<b>-2.1</b>	<b>-1.0</b>	<b>-0.2</b>
Seven-year average	-3.2	-2.4	-2.0			
Backward-looking ten-year average	-1.2					

Source: BP14, p. 184.

The Government points out that net lending does not have to be 1 per cent every year, but it should reach that level on average over a business cycle. If net lending had to come to 1 per cent every year, or over a pre-determined period, there would be a risk that fiscal policy would reinforce cyclical swings instead of smoothing them. The Government points out that it is therefore important to differentiate between meeting the surplus target and achieving the targeted net lending of 1 per cent of GDP. The Government notes that the indicators suggest that general government net lending will be less than the target level in 2012–2015. Furthermore, the Government points out that net lending will be strengthened towards the end of the forecast period and is expected to reach 1.1 per cent of GDP in 2017, when the economic situation, as measured by the output gap, is forecast to be balanced. When the output gap is zero, actual and cyclically adjusted net lending coincide; thus structural net lending is also forecast to be just over 1 per cent in 2017.

The Government's interpretation is that even though there is a deviation from 1 per cent over the next few years, the policy conducted will result in a surplus of 1 per cent in 2017. In the Government's view, fiscal policy is therefore compatible with the surplus target and the fiscal framework.<sup>1</sup> The Government does not explicitly state its view on whether or not there currently is a deviation from the target. But in our view, BP14 should be construed to mean that the Government regards the target as met and that the deviation from a surplus of 1 per cent is cyclical. Therefore, according to the Government, there is no deviation from the target as such, and the current level lies within the flexibility allowed under the surplus target.

## 5.2 The Government's assessment of the surplus target in VP14

In VP14 the Government clearly states that it regards fiscal policy as well calibrated, that it is in line with the fiscal framework and that it meets the surplus target.<sup>2</sup> The downturn has been protracted and

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<sup>1</sup> BP14, p. 16.

<sup>2</sup> VP14, p. 34 and p. 139.

deep, justifying a period of low net lending, and forecasts up to 2018 indicate that net lending will be slightly over 1 per cent of GDP at that time. Indicators of whether or not the target is met according to VP14 are shown in Table 5.2.

**Table 5.2 Surplus target indicators in VP14**

<i>Per cent of GDP</i>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Net lending	-1.3	-1.6	-0.3	0.2	0.7	1.2
Backward-looking ten-year average	0.7					
Cyclically adjusted	1.5					
Seven-year indicator	-0.6	-0.5	-0.4			
Cyclically adjusted	0.5	0.4	0.4			
Structural net lending	0.0	-0.2	0.5	0.4	0.8	1.2
<b>Output gap</b>	<b>-2.9</b>	<b>-2.4</b>	<b>-1.5</b>	<b>-0.5</b>	<b>-0.2</b>	<b>0.0</b>
Seven-year average	-2.0	-1.6	-1.4			
Backward-looking ten-year average	-1.3					

Source: VP14, p. 128.

Net lending is estimated to be slightly weaker than in BP14 and the year when net lending is forecast to reach 1 per cent has been moved from 2017 to 2018. It is also worth noting that the Government has moved the output gaps for 2013–2016 closer to zero, leading to a weakening of the cyclically adjusted indicators. Thus, in VP14 the Government forecasts a slightly more rapid economic upturn than it did in BP14. Nevertheless, the return to a surplus of 1 per cent occurs more slowly than in BP14.

### 5.3 Assessments of the surplus target by NIER and ESV

ESV published a forecast for public finances on 3 April 3, 2014, in which it paints a more negative picture than the Government has in VP14. Net lending in 2014 shows a deficit of 2.3 per cent of GDP, compared with the Government's deficit of 1.6 per cent, and net lending strengthens gradually to 2018, when it is estimated at 0.4 per cent. Based on its forecasts, ESV also estimates values of the indicators used by the Government for following up the surplus target. ESV uses a different method than the Government for estimating output gaps. ESV's estimates of the negative output gaps

are significantly lower than the Government's estimates. The cyclical sensitivity of the public finances estimated by ESV is also lower than the Government's estimates. Consequently, the cyclical adjustment of net lending is also smaller. Thus, ESV's forecast for the public finances is more pessimistic than the Government's forecast, and the difference increases when the cyclical adjustment is taken into account. ESV does not give a precise estimate of the deviation from the target, but it is obvious that ESV regards the deviation as substantial. According to ESV, cyclically adjusted net lending is -1.8 per cent in 2014 and improves to 0.4 per cent in 2018. ESV concludes that the surplus target will not be met.

In its March 2014 forecast, NIER concluded that the surplus target will not be met.<sup>3</sup> In NIER's opinion, the surplus target is met if structural net lending is 1.2 per cent of GDP in a normal cyclical situation, i.e. when the output gap is zero. The output gap is expected to close in 2017 but net lending will not have reached 1.2 per cent then. NIER bases its forecasts on both a smaller output gap and a lower cyclical sensitivity in the public finances than the Government does, and thus the economic recovery will have less impact on the public finances than in the Government's estimates. According to NIER, both meeting the surplus target and maintaining the public sector commitment would require revenue to be strengthened by about SEK 100 billion in 2018. Half of this sum would be needed to meet the surplus target in 2018 and the other half to finance higher expenditure in order to maintain the public sector commitment. Like ESV, NIER concludes that a substantial budget consolidation is required to meet the surplus target.

Thus, both the ESV and NIER estimates indicate that the automatic budget consolidation – which results when revenue follows GDP growth, while expenditure in the absence of new decisions develops more slowly – will not be sufficient to meet the surplus target. Active measures will be required in addition to the automatic budget consolidation.<sup>4</sup>

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<sup>3</sup> NIER (2014c), p. 91 ff.

<sup>4</sup> In December 2013, ESV published an analysis of the automatic budget consolidation, called automatic discretionary fiscal policy (ADF) by ESV. ESV estimates the effect of ADF to be about 0.5 per cent of GDP. The report concludes that in the absence of fiscal policy decisions, public finances are normally strengthened by about 0.5 per cent of GDP annually because of a falling expenditure ratio; see ESV (2013).

## 5.4 The surplus target will not be met

In its 2013 report, the Council stated that there was a clear deviation from the surplus target according to the estimates in both BP13 and VP13. In BP14, the indicators used for follow up were weaker than in the two previous Budget Bills and in VP14, they were again adjusted downwards. According to the Government, the surplus target should primarily be followed up with a forward-looking perspective and for this purpose, forward-looking indicators are used. The seven-year indicator is based on the current year, the previous three years and the coming three years. It is reported in two variants, one cyclically adjusted and one unadjusted, and structural net lending is reported for each year. All three indicators include the years up to and including 2018. The seven-year indicator is substantially lower than 1 per cent both with and without cyclical adjustment, and structural net lending is less than 1 per cent for every year except 2018.

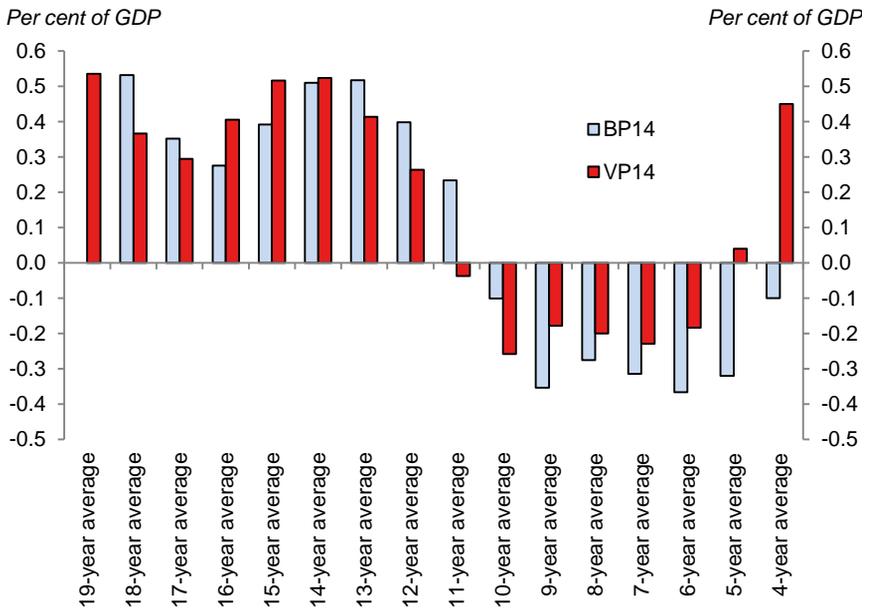
According to VP14, actual and structural net lending are estimated at more than 1 per cent in 2018, when the economy is forecast to be in equilibrium. In the Council's opinion, this does not mean that the surplus target will be met. The Riksdag has defined the target as an average of actual net lending over a business cycle. The Government's interpretation seems to be that the target is met if net lending reaches 1 per cent when the output gap is closed. Such an interpretation implies a weaker requirement than an average over a business cycle as it has no decisive influence on net lending when the output gap deviates from zero.

The difficulty in assessing compliance with the target is not primarily to measure net lending or GDP but to determine the length of the business cycle. The way the target is expressed says nothing about how much net lending may deviate from 1 per cent in a year or for how long the average may deviate from 1 per cent. Nevertheless, the target means that actual net lending is to average 1 per cent over a time span corresponding to a business cycle.

But calculations based on BP14 and VP14 show that no period ending in 2017 or 2018 has an average net lending of more than about 0.5 per cent of GDP (Figure 5.1). Nor will the inclusion of both the boom before the crisis and the strengthening that is forecast for 2016–2017 result in a net lending higher than 0.5 per cent. The

Council is not arguing that this way of looking at the target should be used as a general follow-up method, but it is obvious that the developments forecast in BP14 and VP14 will not result in a surplus in actual net lending averaging 1 per cent. However, it should be taken into account that the international downturn affecting Sweden in recent years has been significantly deeper and more protracted than normal downturns. This may explain why net lending deviates both more and for a longer time than in a normal economic downturn.

**Figure 5.1 Average general government net lending**



Note: Refers to average net lending over different periods of time ending in 2017 (BP14) and 2018 (VP14).

Sources: BP14, VP14 and own calculations.

Another way of assessing whether net lending is compatible with the surplus target is to estimate how large net landing must be in future to reach an average of 1 per cent. Reaching a seven-year average of 1 per cent of GDP in 2020 would – based on BP14 – require an annual surplus of 2.5 per cent of GDP in 2018–2020. If we instead use ten-year averages, as the Government does in its backward-looking follow-up, the requirement for meeting the target is even

larger. Then there will need to be an annual surplus of more than 4 per cent of GDP in 2018–2020.

The conclusion from these calculations is that average actual net lending over a business cycle – which is the basis for the surplus target<sup>5</sup> – does not currently come to 1 per cent nor will it do so over the business cycle ending when the output gap is forecast to be closed in 2017 or 2018.

But the Council’s opinion that the surplus target will not be met should not be construed as a recommendation that fiscal policy should be tightened enough to meet the target in the current business cycle. As shown above, returning to the target in the strict sense would require very large surpluses for several years. Returning to a net lending of 1 per cent when the output gap is closed would also require a very tight fiscal policy up to 2018.

## 5.5 The Government’s plan for meeting the surplus target

In the Council’s view, a deviation from the surplus target need not damage the credibility of fiscal policy in either the short or the long term as long as there are convincing arguments for the deviation and a plan for correcting it. Does the Government present such a plan in BP14 or VP14?

In BP14, the Government emphasises the importance of maintaining confidence in fiscal policy and states that considerable fiscal restraint will be required in the future. Fiscal space is expected to be very limited for the next few years.<sup>6</sup> But in the same section, the Government also states that “provided that there is confidence in the long-term sustainability of the public finances, fiscal policy should not be restrictive as long as unemployment is high and capacity utilisation low”. The Government expects a net lending of 1.1 per cent in 2017 with unchanged policies, which could be interpreted as a plan for returning to surplus. The forecasts after 2015 do not include any such cyclical development. They assume that

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<sup>5</sup> When the target was last proposed to the Riksdag, the Government expressed it in the following way: “The surplus in general government net lending is to average 1 per cent of GDP over a business cycle.” (VP07, p. 85).

<sup>6</sup> BP14, p. 15.

the economy will gradually approach full capacity utilisation and reach it in 2017. Revenue and expenditure are calculated assuming unchanged rules. The Government writes that fiscal space will be very limited for the next few years and that new measures to a larger extent than before will need to be financed. But it also writes that provided there is confidence in the long-term sustainability of the public finances, fiscal policy should not be restrictive as long as unemployment is high and capacity utilisation low.

In the Council's opinion, the wording in the Budget Bill leaves several possibilities open. A tight fiscal policy could be justified based on the surplus target, and if pursuing a more expansionary policy is desirable, it could be justified by the continued low capacity utilisation. In the Council's view, the wording in BP14 does not bind the Government to a particular policy stance.

In VP14, the Government is much more categorical and emphasises that net lending is to return to over 1 per cent in 2018. All measures in 2015 and 2016 must be financed to the last krona and the Government writes that current estimates indicate that the same will also apply in 2017 and 2018. Likewise, the Government also writes, it will be important to finance expenditure increases caused by volume changes as they normally weaken public finances. We understand the wording in VP14 as a strong and clear commitment to keep public finances strictly within the parameters given by the projections in the Bill in order to reach a surplus of more than 1 per cent in 2018. In line with this commitment, the measures presented in VP14 are fully financed.

To estimate developments under unchanged rules is a natural and necessary part of budget work. Basing projections on the rules in force in the absence of new decisions provides a starting point for discussions about what would be a desirable development. But a projection based on unchanged rules does not contain any assessments or trade-offs between stabilisation policy and meeting the surplus target, nor does it say anything about which policy mix the Government considers appropriate. The concept of unchanged rules may erroneously be interpreted as the status quo, but in practice it means a tight fiscal policy, since revenue is expected mostly to follow GDP growth, whereas expenditure grows more slowly. The

Ministry of Finance describes this in Ds 2010:4 about the follow-up of the surplus target.<sup>7</sup>

The expenditure projection in the Budget Bill, the consequence estimate, shows how expenditure is expected to grow under unchanged rules without including temporary programmes (which are very often extended). For example, central government grants to local governments are normally assumed to be nominally unchanged at the level of the budget year concerned. The purpose of this projection is to provide a basis for estimating the room for policy changes on the expenditure side for the next fiscal year. But this method often leads to underestimates of central government expenditure for the years t+2 and t+3 compared with the final outcome. Thus, general government net lending is usually overestimated for those years.

The point at which net lending is forecast to reach 1 per cent has been postponed one year. In BP14, net lending is expected to exceed 1 per cent in 2017 and in VP14, this is instead forecast to happen in 2018. The year when net lending is expected to reach 1 per cent has also been postponed before, but on those occasions, the postponement has been because the economic downturn has proved more protracted than expected, justifying a longer period of deficits. But the forecast for the economy has improved between BP14 and VP14 and the output gaps are now expected to be smaller than forecast in the autumn. How these changes are compatible with postponing the return to a surplus of 1 per cent by one year is not immediately clear.

In the Government's plan, fiscal policy will be significantly more restrictive in 2015–2018 than in recent years. The Government's clear indication in VP14 that the projection based on unchanged rules is not only a technical assumption but also a political commitment makes it more credible that the public sector surpluses will be restored.

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<sup>7</sup> Ministry of Finance (2010), pp. 188–189.

## 5.6 The follow-up of the surplus target needs to be clarified

A prerequisite for assessing the appropriate balance between approaching the target and stabilisation policy's room for manoeuvre is the ability to determine whether there is a deviation from the surplus target and if so, how large the deviation is. The Government's follow-up of the surplus target provides only limited guidance in this respect. The information provided by the many indicators about whether the target has been met can be contradictory and difficult to interpret. Furthermore, the Government takes many other factors into account, such as the market's confidence in the public finances, the risks and the uncertainties in the estimates. The Government does not present any figure or interval for the size of a possible deviation from the surplus target.

In principle, the Government seems to agree that a clear follow-up of the surplus target is required to make an assessment of the appropriate balance between tightness and flexibility possible. The Government writes, for example, that "clear targets are a prerequisite for both internal and external evaluation and follow-up" and "a vaguely defined target, which is not followed up in a transparent manner, will not be binding on fiscal policy."<sup>8</sup> The Budget Process Committee also notes that a transparent follow-up is required for the system with the surplus target to function properly.<sup>9</sup>

In the Council's view, less scope for differing interpretations of the surplus target would be preferable. This could be achieved by a more stringent follow-up. Identifying and quantifying deviations from the target more clearly would help focus the discussion on how the target should be met rather than on assessments and interpretations of whether or not it has been met.

The criticism that the follow-up of the surplus target is too vague is usually countered by the argument that a stricter follow-up would force fiscal policy to adapt mechanically to the target and thus not take the economic situation sufficiently into account. The Council does not recommend that fiscal policy be conducted mechanically.

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<sup>8</sup> Ministry of Finance (2010), p. 185.

<sup>9</sup> SOU 2013:73, p. 109.

But in the Council's opinion, a transparent identification of the state of the public finances in relation to the target should be a basis for designing fiscal policy. Policy must be designed taking into account the economic situation and other relevant circumstances, but too vague an assessment of whether the surplus target has been met provides inadequate policy guidance. The wording in BP14 illustrates this. It can be interpreted as saying that there is currently some deviation from the surplus target, but it can also be interpreted as saying that the deficit is only a normal variation around 1 per cent, so there is no deviation from the target. Different analysts may reach different conclusions, not only because they base their assessments on different forecasts, but also because they interpret estimates and indicators differently. Such lack of transparency weakens the disciplining role of the target in fiscal policy and risks undermining its credibility.

The current situation also shows that there is no unambiguous way to determine whether the target has been met. The Government's indicators suggest that the target will not be met. The seven-year indicator and structural net lending are far from 1 per cent and the Government's conclusion that the target will be met is largely based on forecasts that actual and structural net lending in 2018 will be over 1 per cent under unchanged rules. Both NIER and ESV do not expect the surplus target to be met and in their opinion, substantial consolidation measures will be required to meet it. The Council's view, as stated above, is that the target will not be met.

The Council does not share the Government's view that a stricter follow-up of the target would not provide room for a well-designed fiscal policy. In the Council's opinion, a clear determination of the status of the public finances in relation to the surplus target should be fully compatible with a cyclically adjusted fiscal policy. The existence of a deviation from the surplus target does not have to be a problem, nor does it necessarily imply that the Government has abandoned the surplus target or violated the fiscal framework. But it is essential that the deviation can be justified and that the Government shows a credible commitment to return to the target. It must take the economic situation and other relevant circumstances into account and not mechanically force compliance at a particular point in time.

In the Council's opinion, the surplus target's disciplining role for policy is too weak and the ambiguity surrounding the target risks creating credibility problems. In the long term, it is hardly possible to maintain the credibility of a target if it is not possible to determine whether or not it has been met. Thus, a more transparent follow-up and a stronger link between the surplus target and fiscal policy is needed. Based on the Budget Process Committee's work, the Government submitted a Bill on March 18, 2014 with a proposal for clarifications of the budget process.<sup>10</sup> One proposal is that the Government should submit a plan for returning to the surplus target if a clear deviation exists. The Council considers this proposal to be a step in the right direction, but in its opinion, as the Government does not identify deviations from the target in a transparent way, it is not clear when a plan of this kind would have to be submitted. A more stringent definition of a deviation from the target would significantly strengthen the requirement for a plan.

Under the fiscal framework, there is no reason to take any fiscal action in the event of normal cyclical demand shocks. The main responsibility for stabilisation policy then rests with the Riksbank, and fiscal policy contributes through the automatic stabilisers. But in the event of major demand shocks, monetary policy may need to be supported by fiscal policy measures.<sup>11</sup> In the event of normal shocks, structural net lending would remain fairly stable at the "targeted level". However, some cyclical variations should be allowed to enable the use of the semi-automatic stabilisers, such as the volume of labour market programmes, in stabilisation policy. Nor does structural net lending thus need to be kept strictly at 1 per cent each year to be compatible with the surplus target.

But in the event of normal cyclical swings, cyclically adjusted (structural) net lending should come to, or at least be close to, 1 per cent each year as deviations from 1 per cent caused by cyclical swings or one-off effects are mostly eliminated when net lending is cyclically adjusted.

In the event of major shocks, structural net lending may deviate from the target as a result of the policies pursued. Such deviations do not disappear automatically when the economy stabilises. They must

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<sup>10</sup> Govt. Bill 2013/14:173.

<sup>11</sup> Ministry of Finance (2011b), pp. 32–36.

be corrected by active measures. A structural net lending deviating from 1 per cent may well be justified by stabilisation policy considerations, but it indicates a need for government action to maintain the surplus target in the long term. Structural net lending for the current and the coming years could function as a main indicator of whether or not fiscal policy is in line with the surplus target. This would make it possible to identify deviations from the target earlier and more clearly and to discuss how they should be handled. The Council proposes the following guidelines:

1. A deviation from the target exists if structural net lending for the current or the following year deviates from 1 per cent. In this way, a deviation from the target is clearly identified and quantified. Forecasts based on unchanged rules will thus no longer form the basis for assessing whether the target has been met.
2. If there is a deviation from the target, the Government should report the deviation and explain the reasons for it.
3. The Government should also be obliged to submit a credible plan for meeting the target. This plan should include estimates of the size of the measures required to return to the target, the rough direction of these measures and the point when the surplus target would be met.

The budget is annual, and the Government cannot normally be expected to make precise proposals for a longer period. The Council is not of the view that a plan for returning to the target has to be exact or that it should be adopted in detail by the Riksdag. Nor is it the Council's opinion that all deviations, regardless of size, must be corrected by active measures. Structural net lending is uncertain, and some variations around 1 per cent are normal and need not be corrected by measures. But a plan for returning to the target should specify the direction and the order of magnitude of the measures deemed necessary. Unlike the current situation, it should also be clear how planned developments deviate from developments under unchanged rules.

Applying the guidelines outlined by the Council should provide better conditions than currently exist for getting an early and measurable signal on the position of the public finances relative to

the target. A signal like this should improve the potential for using the surplus target as a rudder for fiscal policy. It would probably also reduce the existing possibilities of postponing decisions on returning to the target that are due to the lack of a clearly defined deviation from the target.

The follow-up of the target should be backward-looking. The backward-looking follow-up can continue to have a ten-year time frame and it should also take any cyclical bias during this period into account. There should thus be a current assessment, a plan for the future and a follow-up of whether the target has been met in the past. In the Council's outline for the handling of the surplus target, the forward-looking element is a plan for correcting an observed deviation from the target, not, as it is now, an assessment of whether the target has been met.

## 5.7 Structural net lending estimates

One objection to using structural net lending to estimate deviations from the target is that the estimates are too uncertain. The Council fully agrees but is of the view that there is considerable potential for improving the estimates of structural net lending. The Council has repeatedly criticised the Government's estimation methods and has proposed changes.<sup>12</sup> The Government is aware that the current method has weaknesses and has for a long time been referring to ongoing development work in the Ministry of Finance.<sup>13</sup> The Council considers it important that the development work be given high priority and that improved estimation methods be implemented.

Furthermore, the development of structural net lending four years ahead is already very important in assessing whether the surplus target has been met, even though it is not the only indicator. The estimates of the cyclically adjusted seven-year indicator are also very uncertain. It is not clear that it would be more uncertain to base the assessment only on structural net lending, particularly not if it is a short-term assessment. The matter of improving the estimation methods would certainly become even more important if structural

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<sup>12</sup> See for example Fiscal Policy Council (2012), pp. 68–75.

<sup>13</sup> VP14, pp. 197–198.

net lending were to be used for estimating deviations from the target in the way recommended by the Council.

In its 2012 Report, the Council discussed in more detail its view that it would be desirable and feasible to improve the estimates of structural net lending. These views are still valid. The Council recommended a disaggregated estimation method and pointed out that both the ECB and NIER use disaggregated methods for estimating structural net lending. The same is true of the Ministry of Finance in Norway (2011). There are, however, differences between the methods. NIER's and ECB's methods are based on actual net lending and endeavour to adjust it for the economic situation (tax base gap). The Norwegian method is based on a direct estimate of the underlying levels for the large tax bases. One advantage of this method is that it is simpler to take structural changes in the tax system into account in estimating the underlying levels.

The Council also raised the issues surrounding these estimates in its 2011 report and stated its opinion that the Government needed to improve its estimation methods. The Government responded in the 2012 Budget Bill that there is no generally accepted method of estimating structural net lending and that all methods have their strengths and weaknesses. The uncertainty in the calculations is one of the reasons why the Government uses several indicators to follow up the surplus target. The Government also pointed out, as it did in the VP11, that there is currently work under way analysing different methods of estimating structural net lending.

The Council would like to repeat that it is important that the Ministry of Finance improve its methods for estimating structural net lending. The method should be disaggregated and the cyclical adjustments should sum to zero over time. The calculations should also include a concrete and thorough analysis of whether tax revenues are temporary or permanent. A method like this could be an adaptation of the method used by NIER or the ECB, or the method used by the Norwegian Ministry of Finance. The Government should also analyse whether the balanced budget requirement for local governments affects budget sensitivity to fluctuations in the business cycle. If so, it should also be taken into consideration in the estimate of structural net lending.

## 5.8 The expenditure ceiling

### 5.8.1 The expenditure ceiling in BP14 and VP14

The Riksdag had earlier decided the expenditure ceilings for 2014 and 2015. Under the Budget Act, the Government must propose an expenditure ceiling for the third year ahead in the Budget Bill. Since 2010, the Government has also chosen to report and estimate the expenditure ceiling for the fourth year ahead. In spring 2013, the Government thus presented estimates of the expenditure ceilings for both 2016 and 2017, and in BP14 the Government proposed a ceiling for 2016 and a new estimate for 2017. There is no requirement that the final proposal for the expenditure ceiling for the third year must be equal to the estimate made the preceding spring but this has normally been the case. But with a four-year time horizon for the expenditure ceiling, there is a one-and-a-half-year time lag between the first estimate of the expenditure ceiling and the final proposal presented to the Riksdag. Thus, the ceiling for 2016 proposed by the Government in autumn 2013 in BP14 was first estimated back in spring 2012. At that time, the Government estimated the ceiling at SEK 1 155 billion. One year later, in VP13, the Government raised the estimate to SEK 1 165 billion. The SEK 10 billion increase was justified by the argument that it was important to have room to take active measures on the expenditure side to support the economy in case of weaker economic development. In VP13, the Government also made a first estimate of the expenditure ceiling for 2017, which came to SEK 1 195 billion. In BP14, the Government stuck to its estimates of appropriate expenditure ceilings for 2016 and 2017.<sup>14</sup>

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<sup>14</sup> A technical adjustment was made, however, which raised the ceilings by SEK 2 billion for 2016 and SEK 1 billion for 2017.

**Table 5.3 Expenditure ceiling and budget margin**

<i>SEK billion</i>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Expenditure ceiling BP14	1 107	1 127	1 167	1 196	
Expenditure ceiling VP14	1 107	1 127	1 167	1 214	1 254
Expenditure subject to the ceiling BP14	1 091	1 105	1 124	1 156	
Expenditure subject to the ceiling VP14	1 091	1 108	1 132	1 169	1 197
Budget margin BP14	16	22	43	40	
Budget margin VP14	16	19	35	45	57
Guideline for safety margin BP14	16	22	34	35	
Guideline for safety margin VP14	11	17	23	35	36
Space in excess of safety margin BP14	0	0	9	5	
Space in excess of safety margin VP14	5	2	12	10	19

Sources: BP14 and VP14.

The space under the expenditure ceiling is very limited in the next few years. Part of the space is needed to manage the uncertainty in the estimates and to allow the automatic stabilisers to work freely on the expenditure side. This part is the safety margin.<sup>15</sup> Any additional space under the expenditure ceiling may be used for active expenditure measures, if the surplus target allows it. In autumn 2013 (BP14), expenditure for all the years was estimated to be higher than in the estimates in spring 2013 (VP13). Of the increases, SEK 3–5 billion were due to the Government's measures in BP14, but most were due to other factors, primarily higher volumes in the transfer systems.<sup>16</sup> But the estimates of the expenditure ceilings were not changed. There was thus very little space left in BP14 above the safety margin. For 2014 and 2015, there was no space at all and for 2016 and 2017, the space was SEK 9 billion and SEK 5 billion, respectively.

In BP14, the Government notes that there is no space other than the safety margin in the expenditure ceilings for 2014 and 2015 and therefore only minor measures can be taken on the expenditure side. It is the Government's view that most of the measures to support growth and jobs should therefore be on the expenditure side

<sup>15</sup> The Government's guidelines for safety margins are:  $t \rightarrow 1$  per cent;  $t+1 \rightarrow 1.5$  per cent;  $t+2 \rightarrow 2$  per cent;  $t+3 \rightarrow 3$  per cent;  $t+4 \rightarrow 3$  per cent.

<sup>16</sup> BP14, Table 8.8, p. 572.

in order to safeguard the expenditure ceiling and the safety margins.<sup>17</sup> The ceiling for 2016, however, is said to leave space for “forceful measures”<sup>18</sup> in case of a poorer economic performance. For 2017, the Government states that the ceiling is estimated to leave room for managing uncertainties in the economic outlook and for automatic stabilisers, but that the ceiling decreases as a percentage of GDP and thus supports a consolidation of public finances. The Government also mentions other factors that limit the room for measures on the expenditure side.<sup>19</sup> The Government primarily points to the surplus target’s limitations on the fiscal space in 2016 and 2017.

In VP14, the Government presents a revised picture of expenditures and the expenditure ceiling. Expenditures in 2015–2017 are respectively estimated to be SEK 3.8 billion and SEK 13 billion higher than in BP14, which is mainly due to changes in macroeconomic estimates and larger underlying volumes. The space under the expenditure ceiling is thus very limited in the next few years. It should also be noted that in VP14, the Government announced measures that increase expenditures by SEK 4–6 billion annually from 2015 onwards but these are not included in the calculations. When the proposals are made in BP15, the budget margins will thus decrease by an equivalent amount.

The budget margins in 2015 and 2016 are smaller than in BP14 but the margin is SEK 5 billion larger in 2017. The reason for this is that the Government has raised the expenditure ceiling estimate by SEK 18 billion since BP14. This is a substantial increase. According to BP14, the Government regards the new level as appropriate, but it is not clear what caused the increase. But the expenditure forecast for 2017 has been raised by SEK 12.5 billion since BP14. Of this amount, more than SEK 6 billion is due to increased volumes, primarily caused by a higher number of asylum seekers and increased sickness benefit outlays.<sup>20</sup> The remainder of the increase is largely due to higher outlays for old-age pensions. The expenditure ceiling for 2017 has thus been raised so there is now space for both the higher expenditure forecast and a larger budget margin than before.

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<sup>17</sup> BP14, p. 15.

<sup>18</sup> BP14, p. 190.

<sup>19</sup> BP14, p. 189.

<sup>20</sup> VP14, p. 223.

In VP14, the Government very clearly signals that new measures are to be fully financed in the next term of office. Furthermore, writes the Government, expenditure increases resulting from higher volumes in the transfer systems also need to be financed as they normally weaken public finances.<sup>21</sup> In these circumstances, it would have been appropriate to discuss how the expenditure increases in 2015–2017 should be financed instead of allowing them to have an impact as unfinanced expenditure increases. If the Government is to live up to its commitment to finance expenditure increases, it would have to handle increased volumes differently in the future.

### 5.8.2 Limited space under the expenditure ceiling

In both 2014 and 2015, there is no space for active measures under the expenditure ceiling. In principle, the whole budget margin is needed for managing uncertainty. The expenditure ceiling is thus a binding restriction on fiscal policy. Over time, a calculated space under the ceiling emerges as the need for a safety margin decreases when the year in question approaches. The guideline for the safety margin is 1.5 per cent (of the expenditure subject to the ceiling) in the year  $t+1$  and 2 per cent in the year  $t+2$ . When BP15 is submitted, 2015 will be  $t+1$  and therefore a slightly smaller safety margin will be required than when BP14 was presented. In this way, some space will be created for that year. Similarly, some space will also be created for 2016 and 2017 as these years approach. These estimates, however, are based on the presumption that no space is used in future bills and that there are no other expenditure increases.

Expenditure is sensitive to macroeconomic developments and to expenditure developments in the transfer systems, which in turn depend on rules and on changes in behaviour and volumes. In last year's report, the Council pointed out that lower sickness absence and the smaller share of people in open unemployment entitled to unemployment insurance benefits have contributed to the decrease in the expenditure ratio in recent years and that these trends may not

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<sup>21</sup> VP14, p. 133.

continue. Instead, there is a risk that expenditure risks have accumulated in these areas.

Sickness benefit expenditure resumed growing in 2010 after having fallen substantially from its peak in 2002. In spite of the recent increase, the current levels are historically low. But the knowledge about the reasons and incentives behind sickness benefits developments is limited. If, for example, the number of sickness absences were to return to the average for the years 1990–2012, expenditure would increase by over SEK 7 billion annually. If the number of sickness absences were to increase to the levels of the early 2000s, the amounts would be significantly larger. Between spring 2013 (VP13) and autumn 2013 (BP14), the expenditure subject to the ceiling increased by about SEK 10 billion in 2015 and about SEK 15 billion in 2016, largely due to increasing volumes in the transfer systems. Between BP14 and VP14, increasing volumes have led to further upward adjustments in the expenditure estimates for 2015–2017.

The expenditure ceiling as a percentage of GDP has been on a downward trend since the late 1990s. The ratio increased in 2009, when GDP fell sharply, but the decreasing trend is expected to continue for the entire forecast period. The Government has consistently set the expenditure ceilings so that they decrease in relation to GDP, and the ceilings for 2016–2018 follow this pattern. The ceilings thus imply a restrictive expenditure growth in the long term. The expenditure forecasts to 2018 are based on the assumption of unchanged policies, i.e. that no new decisions are taken by the Government or the Riksdag. The nominal levels in the transfer systems and the central government grants to local governments are assumed to be unchanged. ESV estimates that the contractionary effect of unchanged rules is about 0.5 per cent of GDP and that it will almost entirely affect expenditure.<sup>22</sup> The expenditure forecasts are thus based on a tight policy stance. In its 2013 Report, the Council noted that expenditure growth had been restricted. The Council noted that from 1997 to 2016, GDP is estimated to grow by about 70 per cent in real terms, whereas real expenditure subject to the ceiling will increase by slightly over 25 per cent.<sup>23</sup>

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<sup>22</sup> ESV (2013).

<sup>23</sup> Fiscal Policy Council (2013), pp. 78–79.

It is also worth noting that the forecast that results in a net lending of 1 per cent in 2018 assumes that the budget margins are not used. Thus, all expenditure increases including those due to increased volumes, etc., must be financed by either lower expenditure or increased revenue.

The expenditure ceiling is under the most strain in 2015, but the ceilings for 2016–2018 also require tight policies. The Council is doubtful about the Government's assessment in BP14 that the expenditure ceiling for 2016 leaves room for strong measures in case of a worse economic outlook. Under the Budget Act, the Government is obliged to take measures to avoid exceeding the ceiling if it is considered to be under threat.<sup>24</sup> The Council wishes to emphasise that it is important to avoid a situation where short-term measures are necessary to meet the requirements of the Act. In 2005, for example, the Government more or less completely prevented the authorities from using saved resources or their appropriation credits in order to comply with the expenditure ceiling. There is a risk that short-term measures of this kind will have an adverse effect on governance and run counter to one of the fundamental objectives of the fiscal framework, namely strengthening the medium-term perspective in budget policy and providing the authorities with stable planning conditions. It is therefore crucial to maintain sufficient margins under the expenditure ceiling.

## 5.9 Assessments and recommendations

In the Council's opinion, net lending will not meet the surplus target. Average actual net lending will not reach 1 per cent with the current forecasts in BP14 or VP14, and large surpluses for several years after 2017 would be required to reach that average. The economic downturn in Sweden in recent years has been much longer and deeper than normal downturns. Stabilisation policy considerations therefore justify a deviation in net lending from 1 per cent that is larger and lasts longer than in a normal downturn.

In VP14, the economic situation is expected to improve slightly more rapidly than expected in BP14. Nevertheless, reaching a surplus

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<sup>24</sup> SFS 2011:203, Chapter 2, Section 4.

of 1 per cent of GDP has been postponed to 2018. There have been deferrals in previous Budget Bills, but then they have been justified by delays in the economic upturn. In BP14, the justification for postponing the return to surplus has not been adequately explained.

In VP14, the Government states in relatively strong language that all measures must be financed in 2015 and 2016 and that this also applies in 2017 and 2018, given the current forecasts. There is thus no space for unfinanced measures up to and including 2018. The Government makes a clear commitment to keep public finances within the limits given by the assumption of unchanged rules in order to reach a surplus of 1 per cent in 2018. The commitment implies a very tight policy that not only excludes unfinanced measures but also requires that other budget weakening measures due to changes in volumes in the transfer systems, for example, be fully financed.

There is considerable uncertainty about the size of the output gap, which is reflected in the significant differences between the estimates by the Government, ESV and NIER, and there are also different opinions about the cyclical sensitivity of public finances. These uncertainties also imply uncertainty about the size of the budget consolidation that will be generated when the economic situation returns to normal. In this respect, the Government is more optimistic than other forecasters. In the Council's opinion, the differences in the forecasts and the consequences for public finances if the Government's forecasts are not realised should have been discussed more explicitly.

The disciplinary role of the surplus target in fiscal policy needs to be strengthened. It is the Council's view that the surplus target should be assessed using structural net lending for the current and the following year. This would provide a clearer link between deviations from the surplus target and the proposed policies. If structural net lending deviates from 1 per cent, there is a deviation from the surplus target. The Government is then to report and explain the reasons for the deviation and present a credible plan for meeting the target. There should also be a backward-looking follow up of whether previous targets have been met.

The methods for calculating structural net lending should be developed in accordance with the Council's previous proposals. Improving the estimates is absolutely essential if, as the Council

recommends, structural net lending is given a key role in assessing how fiscal policy relates to the surplus target.

The expenditure ceiling is tight for several years ahead. There is practically no space for increased expenditure in 2014 and 2015 and the space is limited for 2016 and 2017.



## 6 The Riksdag's rules for budget decisions

### 6.1 The Framework model for budget decisions

The Riksdag has used the framework model for budget decisions since the mid-1990s to decide the government budget. With this model, the budget decision is made in two stages. First, the framework decision is taken. It includes upper limits (frames) for each of the 27 expenditure areas. In the same decision, the Riksdag also adopts the revenue estimate in the government budget. In the second stage, appropriations are established by taking one decision per expenditure area; the appropriations cannot exceed the expenditure area frames from the first stage. The revenue estimate is based on current tax rules and includes the effects of proposed changes in the tax legislation. The intent when the model was designed was that changes in the tax laws would be included in the framework decision but this was not implemented in its entirety. Through the years, proposed revenue legislation has either been included in the formal framework decision or decided separately, but with the presumption that the economic effects will be considered in the revenue estimate in the Budget Bill.

### 6.2 The Riksdag's consideration of BP14

On November 20, 2013, the Riksdag adopted the framework decision on the budget for 2014, which included an increase in the state income tax threshold. Two weeks later, the Committee on Finance used its right of initiative and proposed that the threshold be lowered to its previous level. On December 11, 2013, a majority in the Riksdag supported the Committee's proposal and thus part of the framework decision was reversed.

The Riksdag took this position after an intensive debate on how the rules for budget decisions should be interpreted. The Opposition maintained that the aim of the rules was to strengthen public finances and therefore putting a stop to an increase in the threshold was in

order. The parties in the Alliance Government for their part stressed that the aim of the rules is to create an integrated budget preparation and that changing the decision on raising the threshold was in conflict with the Riksdag Act's requirement for a single comprehensive budget decision.

On November 28, 2013, the Committee on Finance held a public hearing on the Riksdag Act's provisions on the framework model for budget decisions but the experts who participated in the hearing did not agree on how the rules should be interpreted.<sup>1</sup> The Speaker is not allowed to present a proposal for a vote in the Riksdag if it contravenes the Constitution. Given the diverging views among both politicians and experts, the Speaker had a legal review done, which concluded that most arguments supported the view that the proposal by the Committee on Finance contravened the Riksdag Act. The Speaker thus refused to put the matter to a vote. Nevertheless, a majority in the Riksdag voted to have the proposal presented for a vote and the Speaker then sent the matter on to the Committee on the Constitution for a final decision. The opinion of the Committee on the Constitution differed from that of the Speaker. It held that the proposal by the Committee on Finance to lower the threshold for the state income tax was not in conflict with the Riksdag Act's rules on the budget process. But the Committee on the Constitution was not unanimous. The parties in the Alliance Government unanimously dissented from the majority's interpretation of the rules.

### 6.3 The framework model for budget decisions has been weakened

The situation thus created is problematic. The Committee on the Constitution used two main arguments to justify its position. First, the proposal would lead to stronger public finances and was therefore in line with the intentions of the budget rules on a strict budget process. Second, the Riksdag Act did not explicitly prohibit budget revenue from deviating from that stipulated in the framework decision. But the parties in the Alliance Government gave the

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<sup>1</sup> Four experts participated in the hearing, Fredrik Sterzel, Per Molander, Ove Nilsson and Sverker Gustavsson.

Committee on the Constitution's position a broader meaning. In their opinion, the decision meant that it was now possible to change revenue items in the budget after the framework decision, regardless of whether the change leads to weakening or strengthening the public finances, as the Riksdag Act makes no such distinction.<sup>2</sup>

Thus, there is political disagreement on how the Riksdag's decision-making procedure for the budget should be interpreted. The emergence of disagreement on the decision-making procedure for the budget in a situation where there is political disagreement on an actual budget issue is most unfortunate and weakens the budget process. Mutual agreement on the budget process in the Riksdag is particularly important as there are no detailed rules for every possible situation. This case breaks the tradition of cross-party consensus about the forms of decision-making. The political majority can change the interpretation of the decision-making rules in the Riksdag Act.

The framework model for budget decisions – regardless of how the intentions behind the rules are perceived – has made it easier for minority governments to get their budget through the Riksdag. The rules involve a trade-off between the principle that a majority should decide and the desire for minority governments to be able to govern, even in difficult parliamentary situations. The autumn budget decision in the Riksdag has resulted in a shift in this balance. The position of minority governments has been weakened and the majority in the Riksdag has a stronger position. Experience from both economic research and Swedish politics shows that it is difficult for minority governments to conduct economic policy and that there is considerable risk of weak government finances in these situations.<sup>3</sup> The Council is therefore concerned that minority governments' prospects of getting the Riksdag's support for its budget proposals have worsened.

It is still too early to say what long-term consequences the disagreement on the budget process may have. This depends on both how the matter is handled politically and how majority relations in

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<sup>2</sup> Bet. 2013/14:KU32, Alliance Government parties' unanimous reservation.

<sup>3</sup> For academic studies, see for example. Persson and Tabellini (1999), Alesina and Perotti (1996), Edin and Ohlsson (1991) and Roubini and Sachs (1989). Feldt (1991), Chapter 59 in particular describes experience from Swedish politics.

the Riksdag look in the future. Against this background, it is the Council's opinion that the autumn budget conflict has created an unfortunate situation. Uncertainty about how the budget rules should be interpreted damages confidence in the fiscal framework.

In the Council's opinion, what appears to be the majority in the Riksdag's interpretation of the decision-making system – i.e. that changes in the framework decision are permissible as long as they involve budget consolidation – may cause interpretation and demarcation problems. Situations may arise, for example, where a combination of measures strengthens state finances whereas individual parts may do the opposite. A measure may also provide a short-term budget consolidation and therefore be removed from the framework decision even though it weakens the budget in the long term. Nor can it be ruled out that a measure may be removed from a framework decision because it will strengthen the budget in the long term even though it weakens it in the short term. If in the future the Riksdag were to interpret the rules in the way that the parties in the Alliance Government do in their reservation to the Committee on the Constitution's report, the risk of weakening the framework model for budget decisions would be even greater. That would give a green light to remove individual items from the framework decision as long as there is a majority in favour, regardless of the effects on the public finances.

In the Council's view, there is an obvious risk that the framework model for budget decisions will gradually be watered down and become both less clear and less strict. The possibility of removing individual items from the framework decision will doubtless also result in a weakening of the principle that the budget alternatives should each be compared in their entirety. The Budget Process Committee was intended to find a long-term solution to the question of how revenue should be handled in the Riksdag's budget process. Unfortunately, the all-party Committee, which presented its final report in September 2013<sup>4</sup>, failed to reach an agreement on this question. The work in the Committee on the principles for the Riksdag's budget preparation was conducted in tandem with the conflict on the threshold for the state income tax. The chances of

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<sup>4</sup> SOU 2013:73.

reaching an agreement on the budget rules would probably have been better if the matter had been discussed without any association with an ongoing debate of a heated political issue.

After the Committee on the Constitution took a position in autumn 2013, the discussion on the budget rules may seem settled and closed. But there are still major differences of opinion between the political parties on how the rules should be interpreted. If the election in the autumn were to result in a minority government, the issue of the budget rules may soon be raised again. The Council considers it very important that the political parties unite on the forms for handling the budget in the Riksdag and that the framework model is both strict and stable enough to function even in a complicated parliamentary situation.

## 6.4 Assessments and recommendations

After the dissensions in the Riksdag in its consideration of BP14, the question of how the rules for budget decisions should be interpreted remains politically polarised. This weakens the fiscal framework, which is largely dependent on broad political support.

The Council views with concern the weakened framework model for budget decisions and the erosion of the broad political consensus on the Riksdag's budget process. It is very important to come to a broad consensus on applying the framework model for budget decisions and find a stable solution as soon as possible.

The Council is also concerned that the chances of a minority government getting the support of the Riksdag for its budget proposals in their entirety have worsened and considers it important that the decision-making model in the Riksdag be both strict and sufficiently stable to function under changing parliamentary conditions.



# 7 The surplus target and general government net worth

## 7.1 Introduction

Since 2000, the Government has used an overall target for the public finances whereby general government net lending is to show a surplus of 1 per cent of GDP over a business cycle. The justification for the target has varied a little over the years but the Government in its communication on the fiscal framework<sup>1</sup> presents four reasons:

- Long-term sustainable public finances so that the public, the business community and the financial markets have confidence in fiscal policy.
- Adequate margins to enable the Government to pursue an expansive fiscal policy during economic downturns without creating large deficits.
- An equitable distribution of resources between generations by means of relatively high net lending in demographically favourable years.
- Economic efficiency by creating the conditions whereby the tax burden will not have to vary over time due to demographic developments.

Under the Budget Act, the Government is responsible for presenting proposals to the Riksdag for targets for general government net lending.<sup>2</sup> But the law does not have anything further to say about the design of the target, its level or its application.<sup>3</sup> This has been done by the Government in its communication on the fiscal framework. In 2007, the Riksdag decided that the surplus target was to average 1 per cent of GDP over a business cycle, and this would apply until further notice.

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<sup>1</sup> Ministry of Finance (2011b).

<sup>2</sup> SFS 2001:203, Chapter 2, Section 1.

<sup>3</sup> The text of the law includes in parentheses the word “surplus target”, but there is no formal requirement that the target must exceed zero.

In this chapter, we discuss the extent to which it is necessary to meet the surplus target in order to achieve the target's underlying aims. We present some simple estimates of how general government net worth and central government gross debt would develop under simplified assumptions and under different levels of the surplus target. These estimates are based on simplifications and they contain significant uncertainties. All conclusions must therefore be interpreted with caution.

## 7.2 The link between net lending and net wealth

As observed, the surplus target is not the ultimate objective of economic policy. It should rather be seen as a tool for achieving more fundamental policy objectives: long-term sustainability, room for manoeuvre for stabilisation policy to be effective, intergenerational equity and economic efficiency via stable and predictable tax levels. In its 2012 report, the Council pointed out that from an economic perspective, these reasons are related to the level and growth of the public debt rather than to the budget balance.<sup>4</sup> Long-term sustainable finances mean that the public debt can be financed and will not grow unchecked. The surplus target contributes to the accumulation of general government net worth that makes deficit spending possible in an economic downturn – without calling the sustainability of the public finances into question. The intergenerational distribution of resources in terms of net worth is captured by the debt and the assets that one generation leaves to the next. If instead the debt is permitted to vary, a stable tax level is possible even if expenditures and tax bases vary over time. For a policy of this kind to succeed, however, the debt cannot be allowed to become so large that the financial markets lose confidence in the central government's ability to pay its debts. The Council also points out that the surplus target over time results in a stable debt ratio<sup>5</sup> with a specific expected adjustment path and that the Government should discuss both whether this debt ratio meets fundamental

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<sup>4</sup> Fiscal Policy Council (2012), Chapter 3.

<sup>5</sup> Debt-to-GDP ratio.

economic policy objectives and whether the adjustment path to the long-term debt level is well designed.

Under simplified assumptions, a given net lending leads to a long-term stable net worth ratio dependent only on the ratio between the surplus target and nominal GDP growth. In the simplest model, the net worth ratio  $a$  tends to approach  $(f/g)$  where  $f$  is the surplus target and  $g$  is the nominal GDP growth rate. With a surplus target of 1 per cent and a nominal annual growth rate of 4 per cent, the net worth therefore tends to stabilise at 25 per cent ( $0.01/0.04$ ), i.e. near the current level. The deviation between actual net worth and the long-term level is halved at a time determined by the nominal GDP growth rate. This time can be approximated by  $0.70/g$ , in this case about 17 years. It is important to note that the surplus target does not therefore automatically lead to a continued increase in the net worth ratio but to its stabilisation. But the calculation should only be seen as a simple rule of thumb. In this chapter, we deepen the discussion by taking into account some aspects not considered in the simple calculation.

In its 2012 report, the Council wrote that general government net worth had improved much more rapidly than would have been the case if the improvement had only been dependent on a surplus target of 1 per cent of GDP over a business cycle. In addition to net lending, the valuation changes in general government financial assets not included in net lending also affect net worth. Valuation changes occur in many ways, such as changes in share prices, corporatisation, the sale of companies, and write-ups and write-downs of assets in unlisted companies. The effects of valuation changes have been significant. General government net worth increased between 1995 and 2012 by about SEK 1 300 billion, only about 20 per cent of which is attributable to net lending. The remaining 80 per cent of the increase can be attributed to valuation changes.

The yield varies between different types of financial assets, and thus the composition of net worth also affects its development. Another factor is that a large part of net lending and the increase in value is generated in the pension system. Thus, a substantial part of general government net worth is not directly available for stabilisation purposes.

Below, we first make a simple estimate of the increase in net worth under the current surplus target and under a balance objective,

and take the factors mentioned into account in a standardised way. We then present more detailed estimates of general government net worth for different surplus targets, done by the National Institute of Economic Research (NIER) at the Council's request.

### 7.3 General government net worth

The general government financial position has improved sharply since the mid-1990s. From a net debt of 31 per cent of GDP in 1995, a net worth equivalent to about 27 per cent of GDP has instead been built up (Table 7.1). This improvement is primarily due to a reduction in the debt as a percentage of GDP.

**Table 7.1 General government financial position**

<i>Per cent of GDP</i>	<b>1995</b>	<b>2004</b>	<b>2013</b>
<b>Assets</b>	<b>62.3</b>	<b>67.3</b>	<b>80.3</b>
Central government	24.2	33.2	36.3
Old-age pension system	30.6	24.6	30.1
Local government	7.6	9.5	13.9
<b>Debt</b>	<b>93.4</b>	<b>65.3</b>	<b>53.8</b>
Central government	84.7	54.8	39.2
Old-age pension system	0.0	0.2	0.8
Local government	8.7	10.3	13.8
<b>Net worth</b>	<b>-31.1</b>	<b>2.1</b>	<b>26.6</b>
Central government	-60.5	-21.6	-2.9
Old-age pension system	30.6	24.5	29.4
Local government	-1.1	-0.8	0.1

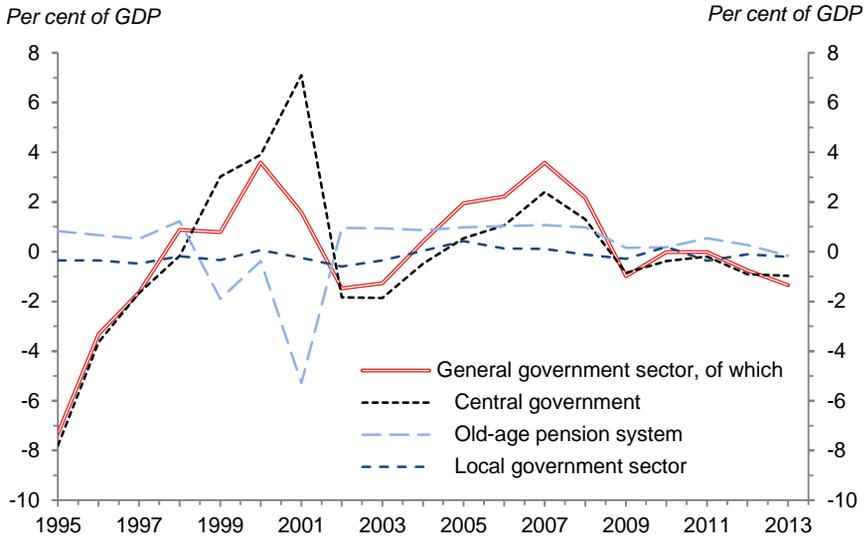
Source: NIER (2014b).

It is the central government debt that has declined. There is virtually no debt in the old age pension system. Instead, debts in the local government sector have increased slightly. The central government debt ratio has been more than halved since 1995, from over 85 to about 39 per cent of GDP in 2013. Central government financial assets have only increased by about 12 percentage points of GDP during the same period.

Estimated in kronor, the development of central government debt since 1995 is less dramatic. Government debt peaked in 1998 at about SEK 1 450 billion and had fallen to SEK 1 119 at the end of

2012. The decline in the debt is due to a strict budget policy as well as a number of one-off effects such as transfers from the Swedish National Pension Funds totalling almost SEK 250 billion and sales of central government owned shares. Government debt increased again in 2013, primarily because of borrowing to strengthen the foreign exchange reserve, and at the end of 2013 came to SEK 1 266 billion.<sup>6</sup> A very rough description of the change in central government debt since the mid-1990s is that the nominal debt has been relatively stable and the debt ratio has thus declined at the same pace as GDP has increased.

**Figure 7.1 General government net lending per sector**



Source: NIER (2014c).

In addition to debt, the public sector also has substantial financial assets. Simplified, these can be classified as interest bearing and non-interest bearing. A loan to the Riksbank to strengthen the foreign exchange reserve and loans to households – student loans via CSN (National Board of Student Aid) – make up about 80 per cent of the interest-bearing assets in the central government. Since the mid-1990s, the interest-bearing assets have been relatively stable at 10 per cent of GDP and have had a return of almost 3 per cent a

<sup>6</sup> BP14, Table 9.14, p. 615.

year. The non-interest bearing assets consist mainly of listed and unlisted shares. Between 1995 and 2013, the value of shares held by the central government increased from 13 to 22 per cent of GDP. The listed shares are valued at market price and their appreciation is mostly due to the rise in the stock market since 1995. The unlisted shares are valued in accordance with the company's adjusted equity, which is prudent.

The return to central government shareholdings consists of both the direct return, which is included in net lending, and the appreciation, which is not included in net lending. Since 1995, the direct return has averaged 4 per cent.

In 2013, the old-age pension system's net financial worth amounted to 29 per cent of GDP.<sup>7</sup> Of this, about 60 per cent was invested in shares and about 30 per cent in interest-bearing securities. From 1999 to 2002, assets declined from 35 to 20 per cent of GDP, as a result of both transfers to the central government and a weak stock market. Assets have subsequently recovered to 29 per cent of GDP. The return targets for the Swedish National Pension Funds vary between 4 and 5.5 per cent, and seen over a ten-year period, the return has been in line with the targets.

The local government sector has financial assets and debts, each of which comes to about 14 cent of GDP. The sector's net worth is thus, in effect, zero. Assets are for the most part interest bearing and consist mainly of loans to municipal corporations. The debts are mostly short-term loans to municipal corporations, but also include pension debts.

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<sup>7</sup> Financial net worth refers only to financial assets and is not to be confused with the pension system's balance sheet ratio, which also includes expected future revenues and expenditures in the system.<sup>8</sup> This box is based on Niepelt (2014).

**Box 7.1 Debt dynamics<sup>8</sup>**

This box shows how general government net worth stocks develop over time, given the size of net lending and how net lending is used. In the simplest model, which has also been presented in previous reports, there is only one asset that pays an interest denoted as  $r$ . Net worth in this asset in period  $t$  is designated as  $A_t$ . The following equation then describes how this net worth develops over time:

$$A_{t+1} = A_t(1 + r) + P_t$$

Here  $r$  is the return and  $P$  is the primary balance in the asset. We can define net lending, which includes the return to the asset, as  $F_t = P_t + rA_t$ , which gives  $A_{t+1} = A_t + F_t$ .  $F_t$  then is the general government net lending used to increase the holdings of interest-bearing assets (or reduce the debt). We now express both net lending and net worth in relation to GDP for the same year. We then get:

$$a_{t+1}(1 + g_{t+1}) = a_t + f_t$$

where  $g_{t+1}$  is GDP growth between  $t$  and  $t + 1$ .  $a_t$  and  $f_t$  denote net worth and net lending respectively as a percentage of GDP, which we call the net worth ratio and the net lending ratio. We now note that if growth is a constant  $g$  and the net lending ratio is a constant  $f$  then the net worth ratio over time reaches a long-term equilibrium where  $a_t$  is constant. The intuition behind this result can be seen by rewriting the preceding equation to:

$$a_{t+1} - a_t = f_t - g_{t+1}a_{t+1}$$

where the left side is the change in the net worth ratio between  $t$  and  $t + 1$ . The right side consists of two terms. The first is the net lending ratio and the second is a term that we call a dilution effect. This term captures the fact that when GDP grows, a given net worth will be a smaller percentage of GDP. We see from the preceding equation that if net lending is greater than the dilution effect, then the net worth ratio grows and vice versa. When they are equal, the net worth ratio is constant – a long-term equilibrium has been reached. For a constant net lending ratio  $f$  and a constant growth rate  $g$  this

<sup>8</sup> This box is based on Niepelt (2014).

equilibrium is denoted as  $f/g$ . When the net worth ratio has the value  $f/g$  it will thus not change over time.

We also see from the equation that the dilution effect is proportional to the net worth ratio and thus increases with the latter. As a result, if the net lending ratio and growth are constant, the net worth ratio will then always move towards equilibrium if it deviates from it. If the asset ratio is less than equilibrium, the dilution effect is also less than the net lending ratio and the asset ratio increases until the dilution effect is equal to the net lending ratio. The opposite is true should the net worth ratio exceed equilibrium.

We now make the analysis a little more realistic by adding non-interest bearing assets, i.e. shares. We call this asset  $S_t$  and note that it both gives a direct return and appreciation. We now have an additional dynamic equation that we can write as:

$$s_{t+1} - s_t = f_t^s - g_{t+1}s_{t+1} + s_t v_t$$

Here  $f_t^s$  is net lending channelled to share purchases,  $s_t$  the net worth ratio in the form of shares and  $v_t$  appreciation. The direct return is included in net lending but appreciation  $v_t$  is not included to conform with the national accounts and therefore has to be shown separately in the equation. This is the last term on the right side. The first two terms on the right side have the same interpretation as the corresponding terms for interest-bearing assets, namely, net lending in shares followed by the dilution effect.

In the same way as for the interest-bearing assets above, we can now derive an equilibrium for the central government net worth ratio in shares if growth, appreciation and net lending in shares are constant with the values  $g$ ,  $f$  and  $v$ . The equilibrium is given as the value of  $s$  which means that the right side is zero, i.e.  $s = f/(g - v)$ .

Unlike interest-bearing assets, the new component in the contribution to net worth, namely appreciation  $s_t v_t$  increases the larger the asset ratio is. This may not necessarily lead to equilibrium. It is easy to show that if  $g > v$  shareholdings as a percentage of GDP will automatically converge towards an equilibrium. If instead  $g \leq v$  there will be no convergence. If the net worth ratio in this case is greater than equilibrium, the two contributions will thus be greater than the dilution effect, and the net worth ratio will grow even farther from equilibrium. The opposite occurs if the net worth ratio is less than equilibrium (which now is negative).

We have now defined two net lending ratios,  $f_t$  and  $f_t^s$ . Total net lending is given by the sum  $f_t + f_t^s$ . And total general government net worth is the sum of the two asset classes  $a_t + s_t$ . As the surplus target specifies a level for total net lending (the sum of  $f$  and  $f^s$ ) the development of both net worth and the assets in the two asset classes will therefore depend on how net lending is divided between  $f$  and  $f^s$ . If the surplus target is 1 per cent and the entire surplus is used for interest-bearing assets ( $f = 1$  per cent) the interest-bearing assets and net worth will converge towards  $0.01/g$  and the non-interest-bearing assets towards zero (if  $g > v$ ). If instead  $f$  is set at zero and thus  $f^s$  to 1 per cent, the interest-bearing assets converge towards zero while the development of non-interest bearing assets and of net worth is determined by the difference between the GDP growth rate and the appreciation rate on shares.

A special situation occurs when the appreciation rate  $v$  is equal to the GDP growth rate  $g$ . If no share purchases or sales are made ( $f^s = 0$ ) the non-interest bearing assets will grow at the same rate as GDP, i.e. net worth in the form of shares will be constant as a percentage of GDP. When no purchases or sales are made, net lending in shares is zero, i.e.  $f^s = 0$ . The direct return on shares is thus used for something other than share purchases. With a target given for net lending  $\bar{f}$  net lending in interest-bearing assets  $f$  must then be  $\bar{f}$ , i.e. all net lending is channelled to interest-bearing assets. Interest-bearing assets as a percentage of GDP thus converge towards  $\bar{f}/g$ . If the surplus target is 1 per cent of GDP and the nominal GDP growth rate is 4 per cent a year, the interest-bearing assets will thus converge towards 25 per cent of GDP while net worth in shares is constant.

If instead the target is a balance target, the interest-bearing assets will converge towards zero. If the central government also lends money, for example, via CSN, then this lending has to be financed by borrowing of the same magnitude. The gross debt is thus in this case evident from how large government lending is.

Lastly, we note that the Swedish surplus target is defined for the general government sector as a whole. It is particularly important here to note that net lending in the pension system is included in general government net lending and that net lending in the pension system normally deviates from zero. In the period 2002–2014, average net lending in the pension system was 0.6 per cent, and in

some of these years, it was higher than 1 per cent. This net lending is determined by pension system rules and demographic and economic trends that in this context can be regarded as exogenous. This means that we can use the above estimates to analyse developments in the *central government* financial position (excluding the pension system), but we must then define  $f + f^S$  as the established surplus target (1 per cent) *minus* net lending in the pension system.

## 7.4 Net worth and debt with different surplus targets

As we noted above, if the total return to financial assets is included in net lending, it can be shown that under simplified assumptions, the general government net worth ratio approaches  $f/g$ , where  $f$  is the surplus target and  $g$  the nominal GDP growth rate. We now expand the analysis to include the following:

- Central government financial assets consist of both interest-bearing assets (claims) and assets where a considerable part of the return is in the form of appreciation.
- The return to different assets is not necessarily the same.
- Appreciation of government financial assets increases net worth even though it is not included in net lending.
- Some net lending takes place in the old-age pension system.
- The central government has substantial assets in the form of lending to households via CSN and to the Riksbank. The size of these assets is independent of the level of the surplus target.

To get an idea of the consequences of a change in the level of the surplus target, we make a simple calculation in this section. This should not be seen as anything more than a slightly expanded but still rudimentary calculation. As we will see, however, the results of this analysis are close to those from a more sophisticated analysis we asked NIER to do (see Section 7.6). This simple analysis has the advantage that it is transparent and clearly shows the core elements.

We now analyse the long-term consequences first, of keeping the surplus target and second, of lowering it to zero. What happens to

central government net worth and debts depends on the assumptions made about the government portfolio strategy, as different assets have different expected returns and this return is handled differently in the financial accounts. As described above, total central government and pension system holdings of non-interest bearing assets are currently about 40 per cent of GDP, half of which is held by the pension system. In the base scenario, the value of the share portfolio stays at this level.<sup>9</sup> Specifically, we assume that the rate of appreciation of shares is equal to the GDP growth rate and that no new purchases or sales are made. In this case, this part of the net worth lives its own life, so to speak. As changes in net worth are excluded from net lending, no net lending will be accumulated in this part of the general government sector financial portfolio. Total net lending will instead drive the development of interest-bearing assets. This, in turn, means that the development of the general government sector interest-bearing assets as a percentage of GDP will follow the simple equation of motion:

$$a_{t+1}(1 + g_{t+1}) = a_t + f_t$$

where  $a_t$  is the net value of the interest-bearing assets in period  $t$  as a percentage of GDP,  $g_t$  nominal GDP growth between period  $t$  and  $t + 1$  and  $f_t$  net lending as a percentage of GDP. If growth is a constant  $g$  and net lending a constant  $f$ , then the net value of interest-bearing assets will converge towards  $f/g$ . This means that the well-known formula shown above for the case with only one asset class is also valid in this case, but unlike the previous analysis, it now refers only to interest-bearing assets. The speed of the convergence is determined by the nominal rate of growth  $g$ .

If we assume that nominal GDP growth is 4 per cent annually, a surplus target of 1 per cent will cause interest-bearing assets to converge towards  $f/g$ , i.e. towards 25 per cent of GDP. With a surplus target of zero, assets will converge towards zero.

It is important to note that we have estimated development of *net worth* in the form of *interest-bearing* assets for the general government sector as a *whole*, i.e. including the pension system.<sup>10</sup> The

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<sup>9</sup> This may be reasonable in the medium term. In the long term, NIER estimates show that much larger net worth may accumulate in the social insurance system. We will come back to this issue below.

<sup>10</sup> We assume that the balanced budget requirement for local governments is met so that no net lending, positive or negative, is generated in that sector.

central government has substantial interest-bearing assets, primarily in the form of loans to the Riksbank and student loans to households via CSN. For a long time, the value of these assets has remained relatively constant at about 10 per cent of GDP. Interest-bearing assets in the pension system also amount to about 10 per cent of GDP. It is reasonable to assume that central government interest-bearing assets grow at the same rate as GDP. We also assume that interest-bearing assets in the pension system remain at the current level as a percentage of GDP and that net lending in the pension system in the shape of non-interest bearing assets is negligible. Based on these assumptions, we can examine how *central government gross debt* will develop, depending on the level of the surplus target.

With a surplus target of 1 per cent of GDP, net worth in interest-bearing assets will converge towards 25 per cent of GDP. This is more than enough to finance the 20 per cent of GDP in interest-bearing assets in the form of loans to the Riksbank, loans to households via CSN and assets in the pension system. The central government gross debt will then disappear. If the surplus target is set at zero instead, the net value of interest-bearing assets will converge towards zero. Then, the Government will have to borrow to finance its own and the pension system's interest-bearing assets and the central government gross debt will be 20 per cent of GDP.

Last, we can add the assets in the form of shares to the interest-bearing assets to estimate the total net worth of the central government and the pension system, i.e. the net value of interest bearing and non-interest bearing assets and liabilities. As we have assumed that the value of shares is 40 per cent of GDP (half of which are in the pension system) the long-term financial net worth will be  $40 + 25 = 65$  per cent of GDP with a surplus target of 1 per cent of GDP and 40 per cent of GDP with a surplus target of zero.

The estimates are based on the assumption that the surplus target is met. If the shares appreciate less than we have assumed or if the central government sells part of its shares, the value of the share portfolio will be less, resulting in a smaller net worth. But neither the gross debt nor the net worth in the form of interest-bearing assets will be affected. Nor are they affected by the direct return to the share portfolio. But if the interest-bearing assets develop differently than assumed, then the gross debt will be affected. If, for example,

larger interest-bearing assets are accumulated in the pension system, central government gross debt will grow. The gross debt will also grow if part of central government net lending or net lending in the pension system is used to buy shares. One way of understanding this is to note that the target for net lending applies the central government and the pension system taken together. An increase in the assets in the pension system also means higher net lending in the pension system.<sup>11</sup> Since the surplus target applies to the entire general government sector, higher net lending in the pension system must be offset by lower central government net lending, resulting in a deterioration of central government net worth. We will come back to this below.

## 7.5 Intergenerational consequences

To get an idea of the intergenerational consequences of lowering the surplus target to zero, we compare the primary balance, i.e. net lending excluding interest on assets and debt, at long-term equilibrium. The differences show the extent to which a lower surplus target affects public resources that can be used for lower taxes or higher expenditure. The only relevant difference if the surplus target is lowered to zero is that the consolidated general government gross debt is 25 percentage points of GDP higher than with a surplus target of 1 per cent. With a nominal interest of 4 per cent a year, the higher debt generates interest costs of 1 per cent of GDP.<sup>12</sup> At the same time, the surplus target is 1 per cent lower and thus the primary surplus is unchanged. Thus, in this context, a decrease in the surplus does not imply a burden for future generations. This is a well-known consequence of the assumption that the interest rate is equal to the GDP growth rate. In the adjustment phase, a lower surplus target leads to an increase in resources for lower taxes or higher expenditure. It is important to note that if the temporary increase in resources is used at this time, it

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<sup>11</sup> If the increase does not depend solely on appreciation of assets.

<sup>12</sup> Interest varies over time and cannot be exactly forecast. From a long-term perspective, Swedish short real interest rates have been about 2 per cent a year. See Sveriges Riksbank (2008). If the central government chooses to borrow in the form of bonds with a longer maturity, interest costs will be slightly higher, approximately 0.5–1 per cent. With the assumed inflation, the interest rate on Swedish government debt will then be 4–5 per cent.

cannot be used later.<sup>13</sup> Furthermore, if in the future the interest rate permanently exceeds the growth rate, a decrease in the surplus target will have adverse consequences for future generations. A lower surplus target thus does not lead to a permanent increase in resources that can be used for lower taxes or higher expenditure. In the long term, a lower surplus target leads to higher debts and higher interest costs. If the interest is the same as GDP growth, the effects cancel each other out, but if interest exceeds growth, the lower surplus target leads to reduced resources in the long term.

Instead, we assume that the central government gradually sells its shares and buys interest-bearing assets or reduces the government debt.<sup>14</sup> In the last few decades, the return to shares has been about 4 per cent, which is probably higher than the expected long-term return. Selling central government shares results in a revenue loss of almost 1 per cent of GDP (a 4 per cent return to assets worth 20 per cent of GDP). The value of the interest-bearing assets is temporarily higher (or the debt lower) but if the surplus target is not changed, this positive effect declines over time as the net worth ratio in interest-bearing assets returns to its equilibrium. Thus, in the long run, the primary balance must increase as much as the decrease in the value of the direct return to shares, thus permanently reducing the resources for lower taxes or higher expenditure by the same amount. Furthermore, the current buffer of 25 per cent of GDP also disappears. The consequences of a change in the surplus target, however, are the same as above, i.e. in the long term, the interest-bearing assets converge towards 25 per cent of GDP or zero respectively.

A last scenario could be to assume that net lending is used to buy shares. We also assume that current gross debt, lending to the Riksbank and via CSN and pension system assets are all held

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<sup>13</sup> If there is no further reduction in the surplus target. As consolidated general government debt cannot keep growing indefinitely without resulting in higher interest rates, a strategy with continual reductions in the surplus target cannot go on indefinitely.

<sup>14</sup> Using these funds for day-to-day activities is incompatible with the surplus target.

constant as a percentage of GDP.<sup>15</sup> If as above, each share purchased is assumed to generate an appreciation that coincides with the GDP growth rate, the result will be a continual increase in central government net worth. This would of course generate gradual and continually increasing room for tax reductions or expenditure increases as the increasing net worth generates higher and higher returns in the form of dividends.

There is considerable uncertainty about the values that can be given to the different parameters in the above estimates, but the most important is the level of net lending that will actually be achieved. There is a significant risk that deviations from the surplus target in economic downturns will not be adequately compensated for by deviations in the opposite direction. As a result, actual average net lending will be lower than the target. If a base scenario were to have neither sales nor new investments in shares, and the actual surplus was -1 per cent, general government net debt in interest-bearing assets would converge towards 25 per cent. With the same assumptions as above about interest-bearing assets equal to 20 per cent of GDP, the gross debt will then be 45 per cent. A debt of this size could limit the options for dealing with a severe economic slowdown, at least if it coincides with a financial crisis that both sharply reduces the value of central government shareholdings and requires bank recapitalisation. For estimates of this kind to provide correct indications, it is thus also very important to meet the surplus target that has been decided.

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<sup>15</sup> This means that more than 1 per cent of GDP can be used to buy shares with the current surplus target. The exact number depends on the size of the general government sector's interest-bearing net debts. The above scenario assumes a general government net debt in interest-bearing assets equal to 20 per cent of GDP. Under the assumption that this debt will increase at the same pace as GDP, the debt will increase by  $0.20 \times 0.04$ , i.e. 0.8 per cent of GDP each year. Net lending in interest-bearing assets is thus -0.8 per cent. To achieve a surplus target of 1 per cent, 1.8 per cent of GDP has to be invested in shares each year. This leads to a very rapid growth in general government net worth which then grows by about 20 per cent a decade. If the direct return to shares is 2 per cent, taxes can then be lowered or expenditure increased by almost half a per cent of GDP each decade and twice that if the direct return in the last few decades should prove sustainable.

## 7.6 Net worth and debt – an alternative estimate

The Council has had NIER estimate the long-term trend in general government net worth under different assumptions about the return to financial assets and the level of net lending. The estimates are based on a number of assumptions.<sup>16</sup> Long-term GDP growth is the same as in NIER's estimates of the long-term sustainability of the public finances from March 26, 2014.<sup>17</sup> For the years 2013–2018, net lending follows NIER's estimate with unchanged rules according to its publication *Swedish Economy* (December 2013) and demographic trends follow Statistics Sweden's population forecast from 2013. From 2019 to the end of the estimates' forecasting horizon in 2060, the surplus target is assumed to be met every year. Local government net lending is assumed to be zero for the entire period, as are valuation changes in the sector's financial assets. Thus, in practice, the local government sector does not affect the estimates.

The old-age pension system's net worth can in principle be changed in three ways: by an increase in the value of financial assets, by the direct return to assets or by the primary balance, which consists of revenue from contributions minus pension payments. The growth in the net worth of the pension system thus depends on the total growth in value of the old-age pension system's assets and on the net contributions. The growth in net worth in the old-age pension system is thus independent of the surplus target for the general government sector. The surplus target does not measure the increase in net worth. It is only a target for net lending. This includes both the primary balance and the direct return for both the old-age pension system and the central government. But appreciation is not included in net lending and consequently it is not included in the surplus target. Net lending in the old-age pension system thus contributes to the surplus target, but the net lending created in the old-age pension system does not depend on the surplus target's level.

The central government net worth can in principle be changed by offsetting factors, i.e. an increase in value and in the direct return on financial assets and the primary balance. Central government net

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<sup>16</sup> The estimate are described in detail in NIER (2014b), Section 7.

<sup>17</sup> See also Section 7.7.

lending consists of the direct return and the primary balance. The central government primary balance thus in principle acts as a residual that varies in order for the surplus target to be met. Net lending in the old-age pension system and general government net lending are interconnected. The more net lending in the pension system increases, the lower the general government net lending required to meet the surplus target and vice versa.

Thus, the portfolio choice strategy for public assets, both in the pension system and in the central government, affects the primary balance required in the central government. The larger the share of the return that consists of a direct return, the lower the central government primary balance needs to be. Variations in the pension system's primary balance also need to be offset by general government net lending in order to keep to the surplus target. If the burden on the pension system increases due to demographic factors, there must thus in principle be a corresponding strengthening of central government net lending. But the pension system has a balancing mechanism, the "brake" that reduces the upward adjustment of pensions if needed to ensure the system's long-term sustainability. Therefore, an increase in the demographic pressure on the pension system does not necessarily lead to a compensating increase in central government net lending in order to meet the surplus target.

But the system is asymmetrical and there is no reverse mechanism that adjusts pensions upwards if the system is "over financed". If demographic developments are favourable for the pension system, net worth instead grows as contributions paid in will exceed pensions paid out. As this bolsters general government net lending, it must be offset by a reduction in central government net lending in order to meet the surplus target, i.e. net lending must not be too high.

NIER has estimated the growth in net worth up to 2060 in the central government, the old-age pension system and the public sector as a whole using different assumptions about appreciation and different levels for the surplus target. In the most realistic alternative, it is assumed that the return to interest-bearing assets, like the interest on debt, is 5 per cent, which is in line with the historical average. The appreciation on central government shares is assumed to be the same as GDP growth: 4 per cent a year. It is also assumed that the central government neither buys nor sells shares; assets and

the value of the central government share portfolio are therefore unchanged in relation to GDP. Central government shares are also assumed to give a direct return of 2.3 per cent a year and this is included in net lending. The return to the shares held in the pension system is assumed to total 7 per cent; about one third of the return consists of a direct return and two thirds is appreciation. Under these assumptions, general government net worth in 2060 is estimated at 69 per cent of GDP if the surplus target of 1 per cent of GDP is maintained. This figure can be compared with 27 per cent of GDP in 2013. The figure 69 per cent is also roughly consistent with the result that the net worth ratio in the long term will converge towards 65 per cent of GDP as described in Sections 7.4 and 7.5. With a surplus target of 0 per cent, net worth is instead 49 per cent, which is also consistent with the 45 per cent that our previous estimate gave. The calculation results are summarised in Table 7.2.

**Table 7.2 Net worth, assets and debts with different surplus targets**

<i>Per cent of GDP</i>	<b>2013</b>	<b>2060</b>	<b>2060</b>	<b>2060</b>
Surplus target		1 %	0 %	-1 %
<b>Net worth</b>				
Public sector	27	69	49	28
<i>Of which</i>				
Central government	-3	17	-4	-25
Old-age pension system	29	52	52	52
<b>Assets</b>				
Central government	36	35	35	35
Old-age pension system	30	54	54	54
<b>Debt</b>				
Central government	39	18	39	60
Old-age pension system	1	2	2	2

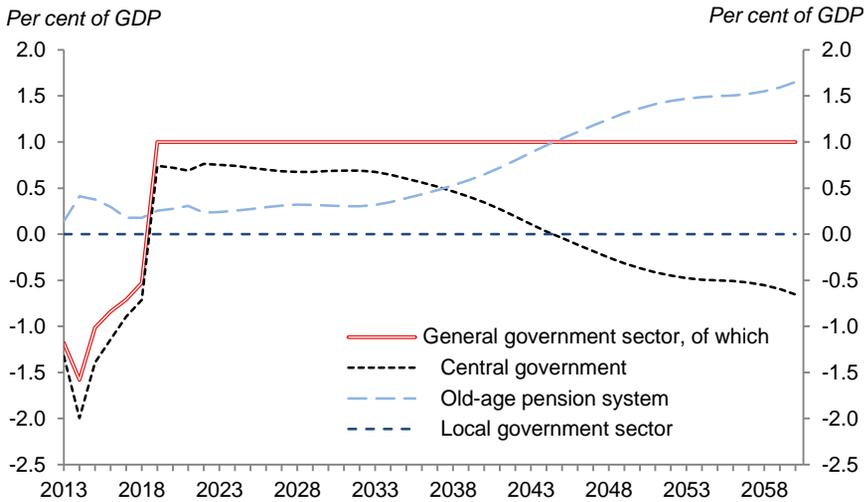
Source: NIER (2014b).

A comparison of the three estimates yields the following observations. The only difference in the alternatives is the level of the surplus target. The other assumptions with respect to economic growth, return, demography, etc. are the same. As noted previously, the old-age pension system is not affected by the surplus target, but by macroeconomic developments, the increase in value of the

pension funds’ assets, demography, pension rules, etc. Old-age pension system developments are identical in all three cases. Central government assets are also the same in all three cases. Nor is their development affected by the surplus target’s level.

The effects of the change in the surplus target are instead the result of a weaker net position for the entire general government sector and are reflected in the larger central government debt. This in turn is because central government net lending is the item that varies in order to meet the surplus target. The lower the target for general government net lending, the higher government debt will be. With the current surplus target, estimated central government debt in 2060 is 18 per cent of GDP, and with a surplus target of 0, i.e. a balance target, central government debt will be 39 per cent of GDP. These figures represent a debt 23 and 19 percentage points higher than the rough estimate gave, because in NIER’s estimates, in about 20 years, net lending in the pension system will be substantial (Figure 7.2).

**Figure 7.2 Net lending with a surplus target of 1 per cent**



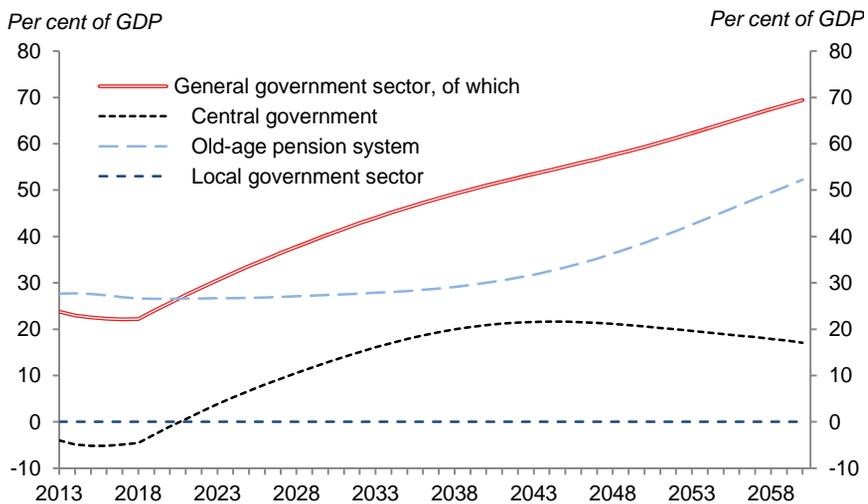
Source: NIER (2014b).

Thus, regardless of the surplus target level, pension system assets as a percentage of GDP will increase by 24 percentage points (from 30 to 54) compared to their 2014 level. The direct consequence is that government debt will increase by about the same amount, illustrating that the surplus target is formulated for the general government

sector as a whole. With a stated surplus target, positive net lending in the pension system has to be offset by weaker central government net lending. A surplus in the pension system is thus offset by a deficit in the central government, as Figure 7.2 clearly shows. From the beginning of the 2030s, central government net lending will decline. It is estimated to be less than zero from the mid-2040s even though the surplus target is expected to be met.

Developments can roughly be seen as two different phases. The first phase extends over more than 20 years to about 2040 and the second from about 2040 to the end of the forecasting horizon in 2060. In about 20 years, according to Statistics Sweden's population forecast, the age dependency ratio will fall and the burden on the pension system will lessen. Together with capital income, there is thus a growing positive net lending in the pension system. To keep general government net lending constant, this needs to be matched by reduced central government net lending, which in turn lead to a gradual rise in the gross debt (central government debt). Central government net worth levels out about 2040 and is subsequently stable at around 20 per cent of GDP. Net worth in the pension system remains stable at almost 30 per cent of GDP but begins to rise about 2040, reaching over 50 per cent of GDP in 2060 (Figure 7.3).

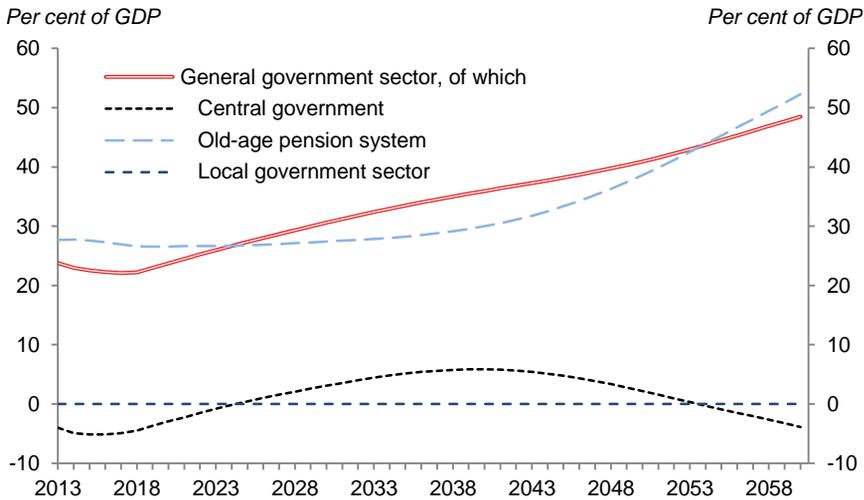
**Figure 7.3 Net worth with a surplus target of 1 per cent**



Source: NIER (2014b).

Alternatives with lower targets for general government net lending follow a similar pattern. The increase in net lending in the pension system is also offset by a weakening in net lending in the central government; the lower the surplus target level, the more the central government net lending deteriorates. In the case with a balance target, central government net worth is estimated to turn into a net debt of about 4 per cent of GDP. Net worth in the pension system is not affected. It amounts to over 50 per cent of GDP in 2060, just as it would with a surplus target of 1 per cent (Figure 7.4). After 2040, net lending improves in the pension system and there is a corresponding deterioration in central government net lending.

**Figure 7.4 Net worth with a balance target**



Source: NIER (2014b).

## 7.7 NIER’s analysis of long-term sustainability

On March 26, 2014, NIER published an analysis of long-term fiscal sustainability<sup>18</sup> and calculated the S2 indicator<sup>19</sup> for several different

<sup>18</sup> NIER (2014e).

<sup>19</sup> S2 is the measure of fiscal sustainability used by the EU Commission. The measure shows the permanent annual budget improvement that would be needed to meet the intertemporal budget constraint, i.e. government debts as a percentage of GDP should be stable in the long run.

scenarios. It discussed whether an unchanged public sector commitment is compatible with sustainable public finances. Unlike the above calculations, no commitment to a specific net lending is made. Instead, the starting point is the current tax rules. NIER points out that it is not clear what can be considered an unchanged public commitment and uses three alternatives. Under one alternative, staffing levels in public activities are unchanged. NIER assumes a productivity increase of 0.7 per cent each year. Thus, with unchanged staffing levels, resources in the public sector increase with productivity. This is NIER's resource-intensive alternative. Under another alternative, there is no change in the resources used per person. A reduction in staffing levels thus offsets an increase in productivity in the public sector. In this alternative, resources do not increase in public activities. Instead, they are used outside the public sector. NIER also estimates an alternative in which public activities grow in line with GDP. This is an intermediate alternative in the estimates.

The S2 indicator, i.e. the need for permanent budget reinforcements to achieve long-term sustainability, varies considerably from one scenario to another, from room to weaken public finances by 3.9 per cent to a need to strengthen them by 1.5 per cent. Different macroeconomic developments can thus further increase the spread between alternatives. Furthermore, the estimates are very sensitive to different assumptions for developments after 2060 and for the choice of the end of the forecasting horizon. Likewise, NIER assumes that the retirement age is unchanged. If it instead were raised as average life expectancy increases, fiscal sustainability would improve considerably. The results must accordingly be interpreted with particular caution, as NIER also points out.

## 7.8 The Government's estimates of long-term sustainability

In VP 14, the Government presents estimates of long-term fiscal sustainability. Its main conclusion is that the public finances are sustainable and essentially unchanged since spring 2013. The Government constructs its base scenario on developments to 2018 as presented in VP14 and from then to 2100 on an assumption of an

unchanged fiscal policy in the sense that tax rates are kept at the same level and that the standard in tax-financed activities is unchanged when measured as the resource input per user.

In this scenario, the Government estimates that the S2 indicator will come to -1.6, i.e. the public finances can be permanently weakened by 1.6 per cent of GDP without jeopardising their long-term sustainability. But the estimates are sensitive to variations in the assumptions and also to the starting point for the projection, i.e. developments to 2018. The Government also makes a number of sensitivity calculations that take into consideration factors that both improve and worsen sustainability. For example, increased demand for welfare services or a higher standard of services worsens sustainability whereas better health or a longer working life improves sustainability.

The Government also refers to sustainability assessments from the OECD and IMF and also points out that long-term fiscal sustainability in Sweden is sound in an international perspective.

## 7.9 Surplus target level

Based on rough estimates (Sections 7.4–7.5) as well as the estimated effects of a change in the surplus target on general government net worth done by NIER at the Council's request (Section 7.6), lowering the target for net lending to zero does not appear problematic, either for net worth or for central government gross debt. According to these estimates, net worth would almost double up to 2060 from 27 per cent to 49 per cent of GDP. Even with a surplus target of -1 per cent, general government net worth would stay at its current level. Nor does the impact on government debt appear troublesome. With the current net lending target of 1 per cent, government gross debt is estimated to shrink during the first phase, i.e. up to the mid-2040s, and be about 18 per cent in 2060. With a balance target for net lending, the gross debt is estimated at 39 per cent and with a target of -1 per cent, at about 60 per cent of GDP in 2060.

As well as estimates of the consequences of a change in the surplus target, we have also presented estimates for long-term fiscal sustainability. These estimates answer another question, namely whether general government revenue and expenditure offset each

other, given forecast developments. NIER's estimates indicate that in the scenario with a real increase in resources for public activities resulting from productivity growth – which the Council considers the most realistic scenario – public finances will require a moderate increase to be long-term sustainable. This indicates the need for caution when considering a reduction in the surplus target.

But reducing the surplus target cannot be based solely on the type of estimates presented by the Council. The estimates in Sections 7.4–7.6 contain significant uncertainties and several simplifying assumptions. The estimates also exclude the local government sector where net lending is assumed to be zero, which may not prove to be the case. Demographic trends are also uncertain over such a long time frame.

Possibly the most important uncertainty factor for the surplus target level is whether the target set will actually be met. Regardless of whether or not deviations from the target are justified by stabilisation policy, deviations can obviously occur and are important for the general government finances' long-term development.

Changing the surplus target, or even considering a change, risks damaging the credibility of fiscal policy. It is therefore important not to base consideration of the surplus target level on the short-term need for measures or difficulties meeting the surplus target in the near future. Should a possible lowering of the surplus target be perceived as stemming from the inability or lack of will to live up to existing targets, it would damage fiscal policy credibility. However, adjusting the surplus target given a carefully considered and long-term sustainable fiscal stance does not have to damage fiscal policy credibility.

In Chapter 5, the Council criticised the follow-up of the surplus target as unclear, making it difficult both to quantify deviations from the target and to assess the need for measures. This criticism would be all the more relevant if lowering the surplus target were to be considered. The surplus target is an intermediate target. One of the aims of a target like this is to serve as a guide for the annual budget decisions so that they are consistent with fundamental economic policy objectives. One difficulty is that the surplus target is formulated over an unspecified time span, one business cycle. The reason is that it is necessary to allow room for manoeuvre for stabilisation policy. With a well-designed fiscal policy, the budget

balance normally weakens in economic downturns and strengthens in upturns. Nonetheless, the way the target is formulated and followed up makes it difficult to decide whether or not a particular budget is in line with the surplus target. But determining whether there is a deviation is a key component of the framework. The Council in several of its previous reports has called attention to the problems in making a clear determination of whether there is a deviation. In the Council's opinion, the discussion on changes in the surplus target level should start with improving the capacity to evaluate the surplus target in real time, and being able to do this without limiting stabilisation policy's room for manoeuvre too much.

A lower target for net lending brings a reduction in in the safety margin, both with respect to countercyclical policy's room for manoeuvre in economic downturns and the Stability Pact requirement that the deficit may not exceed 3 per cent of GDP. The distance to the Stability Pact requirement for general government gross debt decreases as does the distance to Sweden's Medium Term Objective (MTO), which means that in principle, the structural deficit in the general government sector may not exceed 1 per cent of GDP. Prudence thus suggests maintaining the surplus target at the current level.

The Council also wants to underline the importance of having broad political support for the fiscal framework. The Riksdag decides the surplus target level and can change it with a single decision. The Budget Act states that a target for government net lending is to apply – but it does not specify the target's level<sup>20</sup>. The level of the surplus target is an expression of the need for long-term stability in the public finances rather than for short- and medium-term considerations. There has been broad political support for the current surplus target and it is very important that it remains broad. It is the Council's view that possible changes in the surplus target level should therefore be made with the greatest possible political consensus. The surplus target should be stable in the long term, as it has been since it was introduced.<sup>21</sup> But this should not prevent

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<sup>20</sup> The text of the law does use the concept of a surplus target, but this does not necessarily mean that the level must be higher than zero.

<sup>21</sup> The Council notes that in VP14, the Government is of the opinion that the surplus target level should continue to apply in the next mandate period. VP14, p. 36, p. 40 and p. 140.

discussion and re-examination of the surplus target level in the light of changes in the estimates of long-term fiscal sustainability or other structural changes in the economic environment.

## 7.10 Assessments and recommendations

The Council's conclusion from its analysis is that it does not recommend lowering the surplus target. According to the Council's estimates, a reduction in the surplus target to zero is probably compatible with sustainable public finances and with maintaining an adequate buffer for stabilisation policy. But several other factors also have to be taken into account when considering changing the surplus target.

Lowering the surplus target would free up resources for other objectives such as expenditure increases or tax cuts. However, it is important to note that these resources are only temporary. In the long term, after a few decades, there will no longer be any additional room. Lowering the surplus target can thus not be used for permanent resource needs.

Prudence and the uncertainties in the estimates suggest that the target should not be lowered. Market players and other analysts may interpret a reduction in the surplus target as an indication of a less responsible fiscal policy in the future. Furthermore, experience shows that the surplus target will not necessarily be met, and this may lead to problems unless the deviations are duly justified and particularly, if the public debt has not become, or at risk of becoming, too large. The estimates for a lower surplus target assume that the established target level is met. If the target were reduced, it should be combined with changes to the fiscal framework that improve the chances of meeting the target in the future.

It is important that considerations about the surplus target level not be based on the short-term need for measures or difficulties meeting the surplus target in the near future. Should a possible lowering of the surplus target be perceived as stemming from the inability or lack of will to live up to existing targets, it would damage fiscal policy credibility.

The framework should possibly be supplemented by rules that would trigger an increase in the surplus target if the public debt becomes too high or is at risk of becoming so. Here, a reasonable

presumption may be that the gross debt at least should not be permitted to grow substantially larger than the current level of about 40 per cent of GDP unless a major crisis makes this necessary. The framework plays a key role in fiscal policy, and it is essential that there be a broad political consensus on such matters. If a framework is to be sustainable and credible, it must withstand both economic volatility and shifting political majorities. Possible changes in the framework should therefore be made with the broadest possible political support.

## A correction in Chapter 3

The following correction applies to Chapter 3, The labour market, concerning the share of unemployed with an occupational disability in Arbetsförmedlingen's statistics.

On page 96, the Council compares how the composition of the unemployed has evolved over time according to Arbetsförmedlingen's (AF) statistics and the official statistics, the Labour Force Surveys (LFS). According to the statistics from Arbetsförmedlingen, 62 percent of the unemployed belonged to a vulnerable group<sup>1</sup> by the end of 2013. This share has increased over time. The Council expressed the view that, to the extent that these changes among those registered unemployed reflect a general trend among the unemployed, it might indicate that reducing unemployment substantially in the future could be difficult.

However, as noted in the report, Arbetsförmedlingen's unemployment statistics for vulnerable groups cannot be directly compared with the official statistics (LFS). This is because the official statistics have no compilation of the number of unemployed from vulnerable groups like that found in Arbetsförmedlingen's statistics. The same person may belong to several of these groups in the official statistics. To solve this problem of double counting, the Council asked Statistics Sweden to compile time series for the unemployed from any of the vulnerable groups. In LFS, however, there is no information about whether the unemployed have an occupational handicap. This group was therefore not included as a separate group in the time series compiled by Statistics Sweden, thus complicating the comparison between the registered unemployed and the unemployed in LFS.

To make the statistics from Arbetsförmedlingen and LFS as comparable as possible, the unemployment statistics from Arbetsförmedlingen was adjusted by excluding unemployed who solely belong to the group with an occupational handicap, i.e. those unemployed who have an occupational handicap without also belonging to another vulnerable group. This share was estimated to 25 per cent. However, this estimate was incorrect. The correct share

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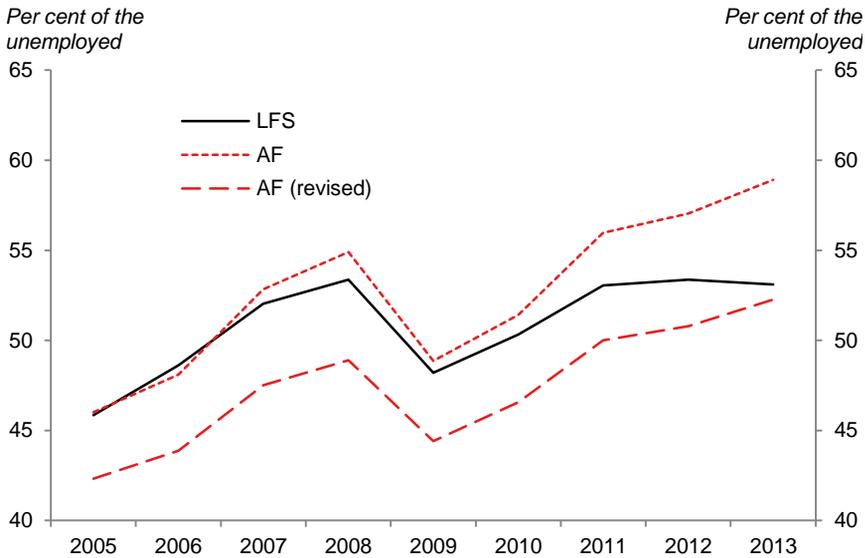
<sup>1</sup> Included in vulnerable groups are the unemployed who have only a pre-upper secondary school education, are born outside Europe, are disabled, or are between 55 and 64.

of the unemployed in Arbetsförmedlingen’s statistics who only had an occupational disability was 45 per cent in April 2014.

In the figure on page 96, which shows unemployed people in vulnerable groups, the abovementioned adjustment had been made in Arbetsförmedlingen’s statistics. In the figure below, the corrected time series is shown. The time series of vulnerable groups in Arbetsförmedlingen’s statistics is now below the time series of vulnerable groups of unemployed in LFS. This should not be seen as an indication that the official statistics give a more gloomy view of the composition of the unemployed than Arbetsförmedlingen’s statistics. The difference between the two series is due to the fact that a large share of the registered unemployed belong to a group which cannot be identified in LFS. Hence, it is uncertain how many more of the unemployed in LFS should be included among vulnerable groups due to an occupational handicap.

In terms of change over time, the revised series is similar to the series in Chapter 3. The correction thus does not alter the assessment in the chapter.

**Revised Figure 3.13 Unemployed people in vulnerable groups**



Sources: Arbetsförmedlingen (AF), Statistics Sweden (LFS) and own calculations.

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