

Swedish Fiscal Policy

Fiscal Policy Council Report 2013

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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ISSN 2000-3641
ISBN 978-91-980242-3-4

Foreword to the English translation

The 2013 report of the Swedish Fiscal Policy Council was published in Swedish on 15 May 2013. 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, Johanna Modigsson and Tomas Nordström. All six members of the Council have been involved in this translation as well.

Lund, Oslo and Stockholm 27 August 2013

Lars Jonung
Chairman of the Council

Foreword

The task of 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 also promotes debate on economic policy.

The Council is composed of six members, who have signed this foreword. Since the previous report in May 2012, Michael Bergman and Helena Svaleryd have left the Council (2012-06-30). Anders Björklund and Irma Rosenberg were appointed as new members (2012-07-01).

The Council is assisted by a secretariat consisting of Joakim Sonnegård (Head of Agency), Niklas Frank (Deputy Head of Agency and Senior Economist), Magnus Allgulin (Senior Economist), Johanna Modigsson (Economist) and Charlotte Sandberg (Head of Administration). Magnus Allgulin has been on leave and thus has not participated in the work on this report. Tomas Nordström has acted as a consultant to the Council. Åsa Hansson and Peter Danielsson have assisted in writing this report. Pär Nyman has participated in the final editing.

This is the Council’s sixth report. In the work on this year’s report, nine meetings have been held. The analytical work was completed by May 3, 2013. The Council has commissioned five

background reports. They will be published in the Council's publication series, *Studier i finanspolitik* (Studies in fiscal policy):

1. Jörgen Holmquist and Per Molander: Reforming Sweden's budgetary institutions – background, design and experiences.
2. National Institute of Economic Research: Effekter på inkomstfördelning och arbetsutbud av olika regelförändringar simulerade med FASIT (Income distribution and labour supply effects of regulatory changes simulated with FASIT).
3. The Swedish National Road and Transport Research Institute (VTI): Systemfel i transportsektorn (Systemic errors in the transport sector).
4. Erling Steigum: Sovereign wealth funds for macroeconomic purposes.
5. Peter Birch Sørensen: The Swedish housing market: trends and risks.

We have received valuable comments from many. We would like to thank the following who have presented reports at Council meetings: Mats Dillén, Harry Flam, Jesper Hansson, Jörgen Holmquist, Stéphanie Jamet, Kristian Jönsson, Helena Knutsson, Lars Lindvall, Per Molander, Jan-Eric Nilsson, Johan Nyström, Lena Sellgren, Erling Steigum and Peter Birch Sørensen. We have also benefited from a dialogue with many colleagues at the National Institute of Economic Research. Aila Ahsin has provided valuable administrative support as have Anneli Hedeland, Birgit Kaur, Marianne Larsson, Vivi Larsson, Kerstin Malmborg Jarnestedt and Tommy Persson. We wish to thank Marie Hyllander and Joel Billinger in the Ministry of Finance. The Council would also like to thank Robert Boije, Aino Bunge, Bengt Hansson, Magnus Karlsson, Alexandra Leonhard, Hans Lind and Markku Rummukainen.

Lund, Oslo and Stockholm 3 May 2013

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Chairman

Anders Björklund

Eva Lindström

John Hassler
Deputy Chairman

Steinar Holden

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Abbreviations

AMR	Alert Mechanism Report (European Commission)
BKN	National Housing Credit Guarantee Board
BP	Budget Bill
CPI	Consumer price index
CPIF	Consumer price index with fixed interest rate
DARA	Development Assistance Research Associates
EDP	Excessive Deficit Procedure
EEA	European Economic Area
EEAG	European Economic Advisory Group
ESV	The Swedish National Financial Management Authority
EU	European Union
FASIT	Distributional Analysis System for Income and Transfers
FI	Finansinspektionen (Swedish Financial Supervisory Authority)
GDP	Gross domestic product
HEK	Household Finances (Statistics Sweden)
IDR	In-Depth Review
ILO	International Labour Organization
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
LFS	Labour Force Surveys (Statistics Sweden)
NIER	National Institute of Economic Research
OECD	Organisation for Economic Co-operation and Development
PESETA	Projection of Economic impacts of climate change in Sectors of the European Union based on bottom-up Analysis
SALAR	Swedish Association of Local Authorities and Regions
SCB	Statistics Sweden
SFS	Svensk författningssamling (Swedish Code of Statutes)
SGP	Stability and Growth Pact
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.¹

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 run.

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

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

¹ Swedish Code of Statutes SFS 2011:446.

The fiscal framework

The fiscal framework consists of the fundamental principles fiscal policy is to follow in order to be sustainable in the long run.² 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 will be an average of 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 to be 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 shocks, monetary policy will stabilise both inflation and demand in

² This summary is based on the Swedish Fiscal Framework (*Ramverk för finanspolitiken*, skr. 2010/11:79).

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's objective is that the fiscal consequences of such measures should be limited. Possible losses that arise in the financial sector will first be borne by financial institutions, 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 policy objectives are being achieved. Its remit includes scrutinising fiscal policy to see whether it is compatible with long-term sustainable public finances. Its remit also includes analysing the effects of fiscal policy on the distribution of welfare in the short and the long run. In this year's report, the Council for the first time presents a more detailed review of the distributional aspects of economic policy. The principal conclusions of this year's report are the following:

1. The Council notes that the Swedish economy so far has fared comparatively well in the economic crisis that spread around the world starting in 2008. Employment has increased. Government debt measured as a percentage of GDP has remained relatively stable. However, the Council does see problems in the immediate future with inadequate growth, high unemployment and continuing international economic and financial instability.
2. The Council considers Swedish fiscal policy to have been successful from an international perspective. The Council notes that the deep and protracted international crisis poses a difficult trade-off for fiscal policy and puts the fiscal framework to the test.
3. The Council notes that the indicators reported by the Government suggest that the surplus target will not be met. The Council's evaluation, like those of the National Institute of Economic Research and the Swedish National Financial Management Authority, shows that correcting the deviation from the surplus target presents a considerable challenge for fiscal policy. To maintain credibility in the fiscal framework, the Government should present a clear plan for meeting the surplus target during the relevant business cycle.
4. It is the Council's view that fiscal policy is compatible with long-term sustainable public finances and that the expenditure ceilings are not threatened. The Council welcomes the Retirement Age Inquiry's proposal on raising the retirement age and is of the

opinion that this should help strengthen long-term sustainability in the public finances.

5. The Council concludes that the fiscal policy in the Budget Bill for 2013 and the 2013 Spring Fiscal Policy Bill does not provide any further stimulus to total demand. From a purely stabilisation policy perspective, a more expansive policy would have been justified in 2013.
6. The Council endorses the Government's preparedness to take temporary measures in the event that an acute need for an economic stimulus emerges in 2013 and 2014. But the scope for a more expansive fiscal policy is limited. Further expansive measures in the current economic environment need to be supplemented with budget improvements when the economic upturn has begun in order not to jeopardise the surplus target.
7. The Council's overall assessment is that fiscal policy is generally well balanced. In the Council's opinion, however, the conflict between the short-term stabilisation policy perspective and a surplus target formulated over the business cycle should be given more attention in the Government's bills.
8. In the Council's opinion, Swedish housing prices are probably in the interval from being in line with fundamental factors to some overvaluation. The risk of a major and abrupt price correction is currently considered limited.
9. The Council notes that a better functioning housing market helps increase mobility in the labour market and contributes to higher economic growth. Making better use of the existing housing stock should be an important goal. In the Council's opinion, the Government should pursue an integrated approach to housing policy covering all factors crucial to the performance of the housing sector such as the legal rules concerning new construction, real estate and capital gains taxes, interest deductibility in private income taxation and the utility value system (bruksvärdesystemet – a form of rent control).
10. The Council notes that the 2013 Budget Bill was based on a macro forecast for 2013 that deviated sharply from other institutions' forecasts. In the Council's opinion, significant

deviations from other forecasters should be reported and justified in detail in the budget bills.

11. The Council notes that potential GDP plays a key role in assessing the cyclical situation and the fiscal stance in relation to the surplus target. There is no generally accepted method of estimating potential GDP and revisions are often made ex post, making evaluations more difficult.
12. The Council welcomes the improved reporting of the revision of potential GDP in the 2013 Spring Fiscal Policy Bill, compared with the 2013 Budget Bill. The Government should also report and comment on significant deviations from other forecasters such as the National Institute of Economic Research, the Riksbank, the European Commission, the OECD and the IMF.
13. As the Council has previously stressed, the methods for estimating structural net lending in the public sector should be reviewed. A disaggregated approach is more relevant, particularly in the event of large shocks to the economy. The aggregated method used by the Government has obvious weaknesses. Simple estimates based on NIER's disaggregated method indicate that the difference in individual years may exceed 1 per cent of GDP – a difference that may be of considerable significance when assessing fiscal policy.
14. The Council recommends that the description of the expenditures subject to the ceiling be supplemented with an assessment of expenditure risks. The budget bills for the most part completely lack assessments of this kind. The Government should also report the forecasting methods for the rules-based transfer expenditures, preferably in a special appendix, and more clearly describe changes in appropriations in terms of volume and average cost where relevant.
15. The Council notes that in the 2013 Budget Bill, the reduction of the corporate income tax is the single most costly measure in nominal terms. The Council does not have any decisive objections to this measure. The Government chose not to wait for the Corporate Tax Committee, but the reduction should be seen against the backdrop of declining corporate tax rates in many countries. Therefore, it would have been difficult for

Sweden to postpone a tax cut. Along with the corporate tax cut, the rules limiting corporate interest deductibility were tightened. The estimates of the revenue due to this tightening must be considered very uncertain.

16. The Council notes that the current best estimates of the economic consequences of climate change for Sweden at this point in time do not call for any changes in the fiscal framework. As in the case of the storm Gudrun, costs may occur that are quite considerable for private and municipal actors, but they are not so high that they risk threatening public sector financial stability or the sustainability of public finances in the long run.
17. The Council has reviewed the FASIT model used by the Government to analyse income distribution policy, including the effects of the earned income tax credit on the distribution of income. The Council notes that the model is based on sound scholarly research, but that the results need to be interpreted with considerably more caution than the Government has shown when evaluating its policy. The Council supports further development of the model.
18. The Council has conducted a number of simulations to study the income distribution effects of the indexing technique in the budget process, i.e. the fact that a number of allowances do not automatically keep up with income growth over time. These simulations show that this indexing technique has not led to an increase in income dispersion, judging by the Gini coefficients for different scenarios.
19. The simulation results show that the earned income tax credit has a substantial effect on employment at the margin. But we do not find any support for the Government's claim that the earned income tax credit has reduced the spread in disposable income among households.
20. Data available from Statistics Sweden show that the spread in disposable income has increased since the 1990s crisis but that this increase mainly took place in the 1990s. The spread in disposable income measured by the Gini coefficient has largely been constant since 2006.

21. The Council asks for current and reliable statistics on wealth in the private sector. Data of this kind would be a valuable source for both macroeconomic risk assessments and income distribution analysis. The Council recommends that the Government examine the possibilities of producing such data in a cost-effective way.

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 2013 (BP13), presented in September 2012, and the 2013 Spring Fiscal Policy Bill (VP13), from April 2013, were prepared. 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 we make our own assessment, it is indicated in the text.

Section 1.1 provides an international overview; Section 1.2 describes the economy and the labour market in Sweden and puts the Swedish situation into an international perspective; Section 1.3 analyses the Swedish housing market and household debt levels; Section 1.4 summarises the Council's assessments and recommendations.

1.1 International overview

The euro area is in recession. But growth in the United States and in some of the emerging economies has strengthened. A recovery also appears to be under way in Japan. There is considerable uncertainty about future developments. There is a real risk that the global economy will once more enter a weaker – or much weaker – growth phase.¹

The fiscal and monetary policy measures that governments and central banks have taken in the last four to five years have helped limit the acute risks threatening the global economy. The unrest in the financial markets has lessened. It now appears that the worst of the crisis is over. But there is still uncertainty about how well governments and central banks will handle current imbalances. The global effects of the financial crisis will be protracted and will affect the global economy for many years to come.²

The activity level in the United States, Europe and Japan is expected to be relatively low in 2013–2014 (Table 1.1). Growth in the United States is expected to be modest, but higher than in Europe. The situation in Japan is expected to improve slowly over the next

¹ EEAG (2013), European Commission (2013a) and OECD (2013a).

² IMF (2012a) and Reinhart and Rogoff (2009).

few years. In the emerging economies, the recovery has picked up speed, but it is unevenly distributed. Growth in China appears to be relatively favourable, but weak demand from Europe, Japan and the United States is generally restraining economic activity in the emerging economies.

Table 1.1 Global growth 2011-2014

<i>Percentage change</i>	Outcome		Forecast	
	2011	2012	2013	2014
World	4.0	3.2	3.3	4.0
Advanced economies	1.6	1.2	1.2	2.2
Euro area	1.4	-0.6	-0.3	1.1
France	1.7	0.0	-0.1	0.9
Greece	-7.1	-6.4	-4.2	0.6
Italy	0.4	-2.4	-1.5	0.5
Spain	0.4	-1.4	-1.6	0.7
Germany	3.1	0.9	0.6	1.5
United Kingdom	0.9	0.2	0.7	1.5
Sweden	3.7	0.8	1.2	2.2
United States	1.8	2.2	1.9	3.0
Mexico	3.9	3.9	3.4	3.4
Japan	-0.6	2.0	1.6	1.4
China	9.3	7.8	8.0	8.2
India	7.7	4.0	5.7	6.2
Russia	4.3	3.4	3.4	3.8
Brazil	2.7	0.9	3.0	4.0
South Africa	3.5	2.5	2.8	3.3

Note: Refers to annual percentage change in GDP. The figures for Sweden are taken from VP13.
Source: IMF (2013a).

Perhaps the greatest threat to a continuation of the positive trend can be found in the euro area.³ Even though the measures taken thus far seem to have stabilised the situation, there are a number of factors this year that put the results achieved at risk. It is not clear whether the reforms taken will result in higher growth. The political and social unrest following in the wake of budget consolidation programmes in Greece, Spain and Portugal creates uncertainty about whether

³ IMF (2013b), European Commission (2013a) and OECD (2013a).

governments in these countries will be able to implement further reforms and whether these reforms will be sufficient to create sustainable growth. The situation in Italy after the parliamentary elections in February is uncertain. There are still a number of uncertainties about the state of banks in the euro area and thus a new banking crisis cannot be excluded. In Germany, general elections will be held in the autumn. Their outcome is uncertain and thus they may have a negative effect on growth both before and after the elections. Another question is how stable the French economy is. Considerably worse-than-expected economic developments in France cannot be ruled out.⁴

1.1.1 Public finances: an international overview

Public finances have generally improved after the strains of 2008–2009. In about half the countries in the world, the cyclically adjusted budget deficits this year will be smaller than or of the same size as they were before the financial crisis (Table 1.2 shows selected larger countries). According to the IMF, the average debt ratio in the advanced economies will nevertheless not stabilise until 2014–2015 at the earliest.⁵ In these countries, years of budget consolidation and structural reforms remain before public finances become sustainable. Public finances in emerging economies are in better shape, but are adversely affected by weak demand from the advanced economies.⁶

The very considerable downside risks put pressure on decision-makers to exercise caution in their efforts to strengthen public finances. Aggressive consolidation may increase the risk of a new recession. According to the IMF, many emerging and developing economies have enough fiscal space to reduce the pace of consolidation while waiting for stable growth to pick up. However, there is limited fiscal space in most advanced economies, particularly in the euro countries.⁷

⁴ Economist (2012a), OECD (2013b) and the European Commission (2013a).

⁵ IMF (2012a).

⁶ IMF (2012b) and IMF (2013b).

⁷ IMF (2012a).

Table 1.2 General government net lending

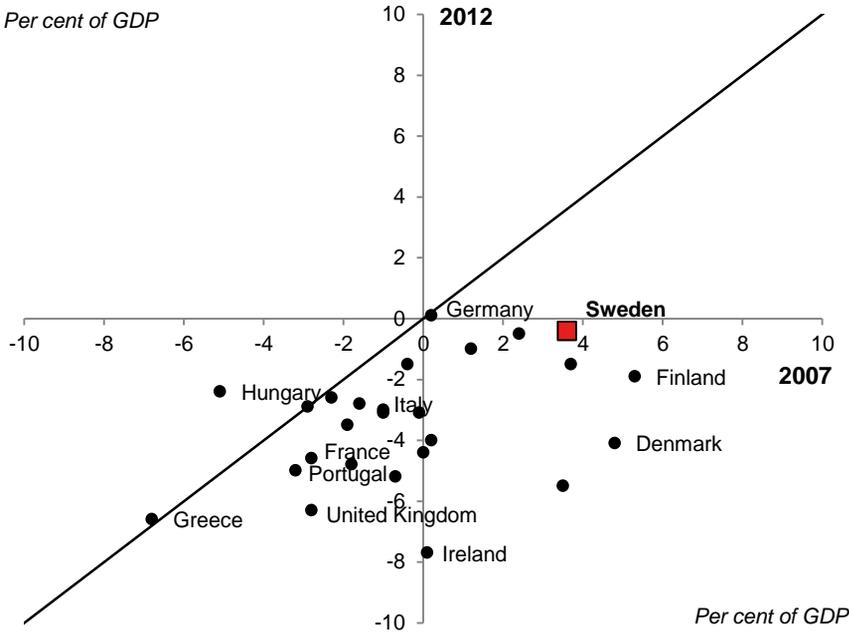
<i>Per cent</i>	Actual net lending			Cyclically adjusted net lending		
	2007	2013	2014	2007	2013	2014
Advanced economies	-1.1	-4.7	-3.8	-2.1	-3.6	-2.9
Euro area	-0.7	-2.9	-2.6	-2.1	-1.3	-1.3
France	-2.8	-3.7	-3.5	-3.1	-1.9	-1.8
Greece	-6.8	-4.6	-3.4	-10.9	0.2	0.8
Italy	-1.6	-2.6	-2.3	-3.3	-0.2	-0.2
Spain	1.9	-6.6	-6.9	0.3	-4.2	-5.1
Germany	0.2	-0.3	-0.1	-1.2	0.0	0.1
United Kingdom	-2.9	-7.0	-6.4	-5.2	-4.3	-3.4
Sweden	3.6	-1.6	-1.0	1.2	0.4	0.9
United States	-2.7	-6.5	-5.4	-2.8	-4.6	-3.9
Mexico	-1.2	-3.1	-3.0	-1.5	-3.1	-3.0
Japan	-2.1	-9.8	-7.0	-2.2	-9.5	-6.9
China	0.9	-2.1	-1.8	1.0	-0.9	-0.7
India	-4.8	-8.3	-8.4	-6.5	-8.8	-8.9
Russia	6.8	-0.3	-1.0	6.1	-0.4	-1.2
Brazil	-2.7	-1.2	-1.7	-3.0	-1.2	-1.7
South Africa	1.4	-4.8	-4.2	-0.2	-4.5	-4.0

Note: Actual net lending refers to the difference between general government revenue and expenditure as a percentage of GDP. Cyclically adjusted net lending is defined as actual net lending, adjusted for automatic stabilisers, as a percentage of potential GDP. It measures what net lending would have been if the output gap was closed, i.e. if the economy was in cyclical balance.

Source: IMF (2013c). Figures for Sweden are from BP13 (2007) and VP13 (2013–2014).

Budget deficits in the euro area have admittedly decreased, but they are larger than before the crisis and levels are not compatible with the rules of the Stability and Growth Pact (Figure 1.1).

Figure 1.1 Government net lending in the EU in 2007 and 2012

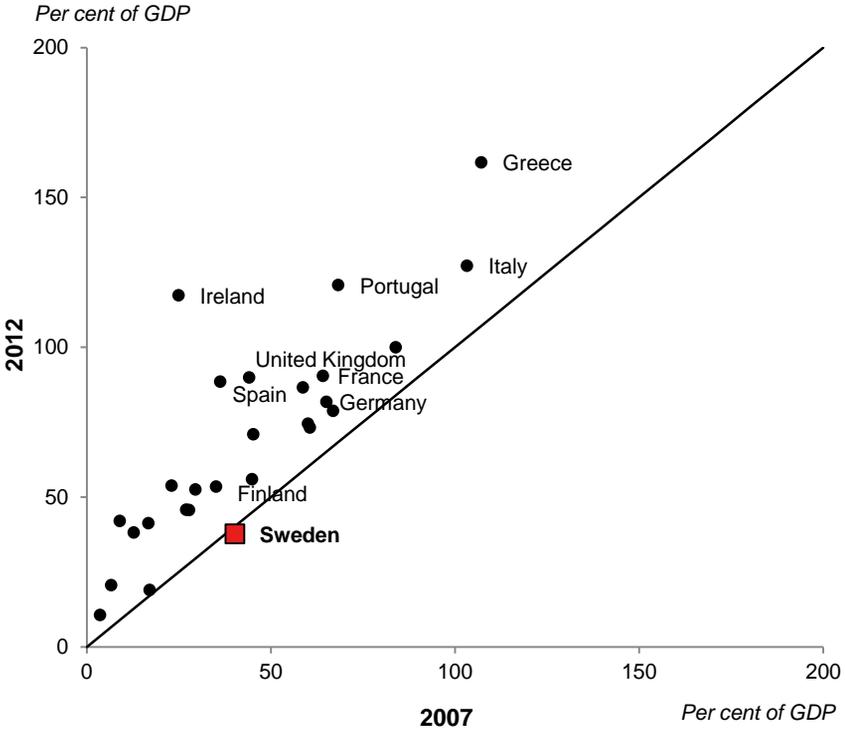


Note: Net lending as a per cent of GDP for 2007 is shown on the horizontal axis and for 2012 on the vertical axis. Net lending in a country on the 45-degree line has not changed in this period. Net lending has increased in countries above the line, but has decreased in those below the line.
 Source: European Commission (2013b).

There has been a substantial build-up of debt levels in the EU from 2007–2012 (Figure 1.2). Against the backdrop of weak real growth, high unemployment, structural imbalances and continued state aid to the financial sector, we can expect a further build-up in government debt in the euro countries in the next few years.⁸ The growing debt ratios reflect the primary balance and the difference between the real interest rate and the growth rate of the economy. Sovereign interest rate trends reflect major differences between countries in terms of international capital market expectations. These differences cannot always be explained by trends in fundamentals; interest rates in Italy and Spain have been higher than expected given their economic outlook, while the United States and Japan, for example, have been able to take advantage of low interest rates to finance increases in public debt.⁹

⁸ European Commission [2013a].
⁹ IMF (2012b) and De Grauwe and Ji (2013).

Figure 1.2 Gross debt in the EU in 2007 and 2012



Note: Gross debt as a per cent of GDP for 2007 is shown on the horizontal axis and for 2012 on the vertical axis. Gross debt in a country on the 45-degree line has not changed in this period. The level of indebtedness has increased in countries above the line, but has decreased in those below the line. Source: European Commission (2013b).

1.2 Developments in Sweden

Even though developments elsewhere in recent years have provided only a weak impetus to demand in the Swedish economy, growth in Sweden has been relatively good (Table 1.1). With an average GDP growth of just over 0.6 per cent per quarter in the first three quarters of 2012, Sweden outperformed the OECD countries.¹⁰ Towards the end of 2012, growth also stagnated in Sweden.

¹⁰ National Institute of Economic Research (2012a).

Table 1.3 Key macroeconomic indicators for the Swedish economy

	BP13 (20 September 2012)			VP13 (15 April 2013)		
	2012	2013	2014	2012	2013	2014
GDP	1.6	2.7	3.7	0.8	1.2	2.2
Business sector productivity	2.4	2.2	2.6	1.2	1.3	2.4
Employed	0.4	0.4	1.3	0.7	0.2	-0.1
Unemployment	7.6	7.5	6.7	8.0	8.3	8.4
CPI	1.0	1.2	1.7	0.9	0.5	1.2
Net lending	-0.3	-0.6	0.3	-0.7	-1.6	-1.0
	National Institute of Economic Research (29 August 2012)			National Institute of Economic Research (27 March 2013)		
	2012	2013	2014	2012	2013	2014
GDP	1.3	1.8	*2.7	0.8	1.3	2.3
Business sector productivity	1.8	1.9	2.1	1.2	1.3	2.3
Employed	0.4	0.0	0.8	0.7	0.5	0.4
Unemployment	7.6	7.9	7.7	8.0	8.2	8.2
CPI	1.1	0.8	1.3	0.9	0.2	1.1
Net lending	-0.3	-0.4	0.2	-0.7	-1.4	-1.1
	the Riksbank (6 September 2012)			the Riksbank (17 April 2013)		
	2012	2013	2014	2012	2013	2014
GDP	1.5	1.9	2.8	0.8	1.4	2.7
Business sector productivity	1.5	1.6	1.8	0.6	1.0	1.9
Employed	0.4	0.4	1.1	0.6	0.4	0.7
Unemployment	7.6	7.6	6.9	8.0	8.2	7.8
CPI	1.2	1.3	2.6	0.9	0.1	1.4
Net lending	-0.2	-0.5	0.5	-0.7	-1.3	-0.6

Note: Unemployment and net lending are displayed as the level in per cent, other variables as the percentage change on an annual basis. Net lending refers to general government net lending. *Own estimate based on National Institute of Economic Research calendar adjusted GDP indicator for 2014, with a deduction for an estimated calendar effect of 0.1.

Sources: BP13 and VP13, National Institute of Economic Research (2012b) and (2013a), and Sveriges Riksbank (2012a) and (2013).

Demand in the Swedish economy in the first half of 2013 continues to grow weakly. Low global growth is the main reason, but domestic demand is also expected to grow slowly. Forecasters believe that demand will recover during the year and growth is expected to rise to over 2 per cent in 2014 (Table 1.3). The Council notes that in BP13, the Government predicted considerably higher growth in 2013 and 2014 than the National Institute of Economic Research and the

Riksbank. Chapter 3 discusses the Government's forecasts in great detail.

The economic downturn is now in its fifth year. After the large drop in demand following the outbreak of the financial crisis in autumn 2008, the Swedish economy is still far from full capacity utilisation. The most important reason for this is the European debt crisis.¹¹

As the global economy is weak, domestic demand is crucial in maintaining Swedish economic growth. The recovery after the 1990s crisis was driven by a weak (depreciated) krona and strong export demand. High global demand also brought to an end the economic downturn after the dotcom crash in the early 2000s. The Swedish krona is currently relatively strong and global economic activity is low.¹² The Council notes that the recovery may therefore take more time now than after past economic downturns.

1.2.1 The labour market

The labour market reflects the current economic situation. Despite a small increase in employment, unemployment continued to rise in 2012 and increased from 7.5 per cent in the first quarter to 8.1 per cent by the end of the year (Figure 1.3). An increase in unemployment despite an increase in the number of people employed is due to an increase in the number of people in the labour force (Figure 1.4).

The employment rate, i.e. the percentage of employed people in the working age population, rose between 2010 and 2011 but since then, it has levelled off at a slightly lower level than before the crisis (Figure 1.5). Thus, the increase in the number of people employed has kept pace with population growth in the last two years. The lower level indicates a long-term downward trend due to the increasing number of older people in the population and higher numbers in education and training.¹³ However, the situation varies between different age groups.

¹¹ National Institute of Economic Research (2013a).

¹² National Institute of Economic Research (2013a).

¹³ Statistics Sweden (2011).

Figure 1.3 Unemployment

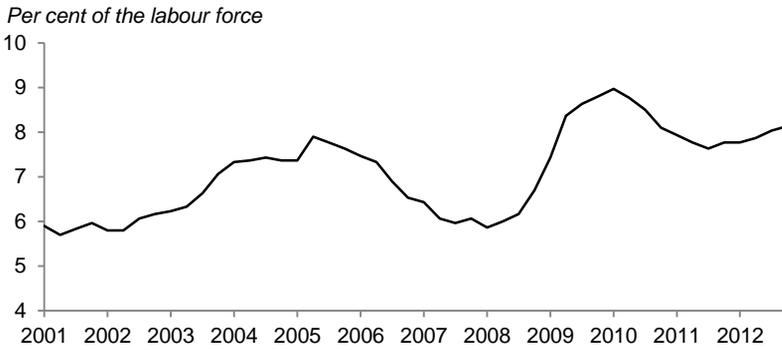


Figure 1.4 Labour force and employment

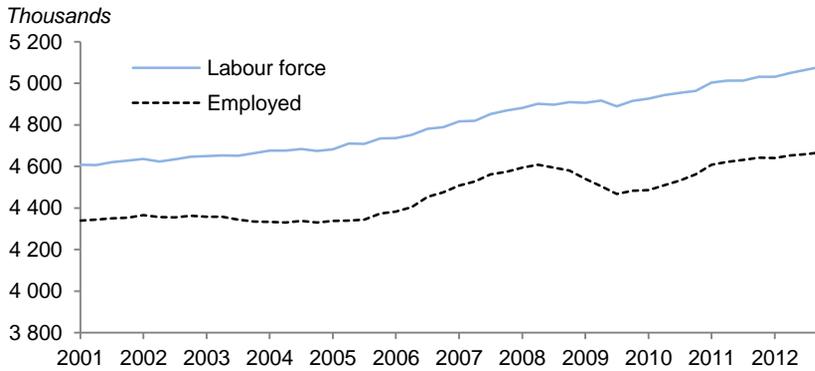
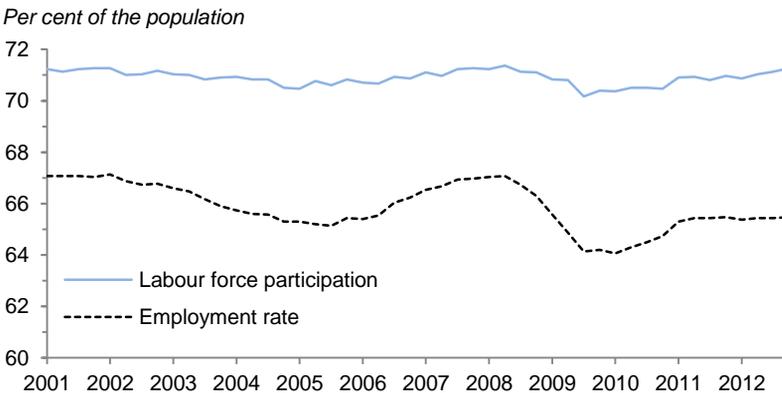


Figure 1.5 Labour force participation and the employment rate



Note: Seasonally adjusted quarterly data for the age group 15–74. Labour force participation and the employment rate refer to the labour force and to the number of people employed as a per cent of the population respectively.
 Source: Statistics Sweden (2013a).

In contrast to the increase in the employment rate in most age groups in 2012, the percentage of people employed in age groups 15–24 and 25–34 fell. This is probably a consequence of cyclical sensitivity in youth employment.¹⁴

There are problems with the current labour market statistics, which have been adjusted to international ILO standards since 2007 and thus include the age group 15–74 (compared with 16–64 in earlier Labour Force Surveys). As the Council has previously pointed out, this change makes comparisons over time more difficult. Furthermore, because of the broader age range, people who should not be counted either as part of the labour force or as unemployed are included in the statistics, for example, full-time students. This may give a misleading picture of the labour market situation.

Statistics Sweden's mapping of international youth unemployment finds that the differences in unemployment rates across countries are largely due to institutional factors.¹⁵ Differently designed education and apprenticeship systems and variations in payment periods for student aid affect both whether a person is classified as unemployed or not and what incentives there are to look for work. In Sweden, apprenticeships are often unpaid and student aid is normally not paid in the summer. This may lead to higher levels of unemployment in the statistics than in other countries. A more balanced approach to the concept of youth unemployment shows that even though the relative youth unemployment rate for Sweden is high from an international perspective, youth unemployment is generally of shorter duration. The alternative measure of youth unemployment, NEET¹⁶, measures "inactivity" in the form of the percentage of young people (15–24) who are not in employment, education or training. At 6.8 per cent, Sweden was well below the OECD average of 16.4 per cent in 2011.¹⁷

Labour market conditions deteriorated rapidly in autumn 2012. In the fourth quarter, the number of dismissal notices increased sharply compared with the preceding year and indicators for recruitment and new employment suggested less activity.¹⁸

¹⁴ National Institute of Economic Research (2013a).

¹⁵ Statistics Sweden (2013b).

¹⁶ "Not in Education, Employment or Training".

¹⁷ OECD (2012a). For a more detailed discussion of youth unemployment, see Fiscal Policy Council (2012), Section 5.2.

¹⁸ Statistics Sweden (2013c).

In the spring of 2013, somewhat more stable conditions could be observed. The Economic Tendency Survey indicates that companies' recruitment plans have stabilised slightly after decreasing for several quarters. The number of dismissal notices has dropped compared with the autumn and the number of newly registered job vacancies is at a relatively high level.¹⁹

However, weak GDP growth in 2013 and uncertainty in the labour market lead to weak demand for labour in the immediate future. As companies have low capacity utilisation and endeavour to retain staff during the economic downturn, it will probably not be until 2014 before they begin to take on new employees to any great extent. The connection between the number of vacancies and the unemployment level is a further indication of the less effective matching noted after 2009.²⁰

Unemployment remains high and unemployment spells are becoming longer, leading in the long run to a higher percentage of long-term unemployed. NIER estimates an increase in the number of people in labour market programmes of about 4 per cent annually in 2013 and 2014.²¹ The situation is particularly problematic for groups with a weak foothold in the labour market, such as the long-term unemployed, people born abroad and young people who have not completed upper secondary school.

According to the Riksbank, the number of employed and hours worked will first start to increase again towards 2014. NIER estimates that employment will grow weakly in 2013 and 2014 and that unemployment will remain over 8 per cent until 2014. Thereafter, unemployment is expected to fall, but not reach its estimated equilibrium level of 6.5 per cent of the labour force until 2017.²² In VP13, the Government makes a similar estimate, where unemployment remains high over the next few years and does not begin to fall until 2015. The persistence effects of high unemployment are also expected to affect equilibrium unemployment, which in VP13 was revised upwards from the BP13 forecast for the entire forecast period. Compared with NIER, however, the Government still has a more positive view of the

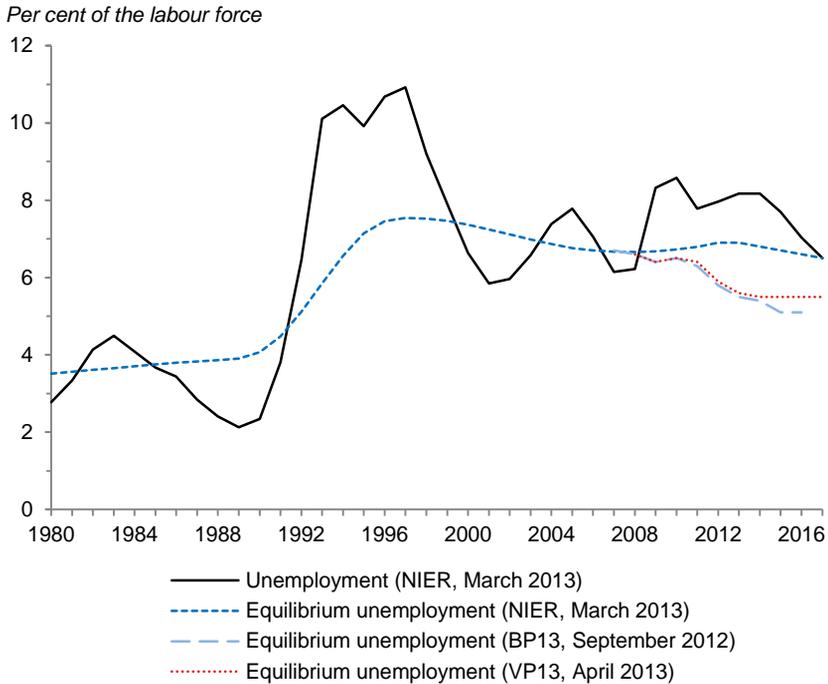
¹⁹ National Institute of Economic Research (2013a).

²⁰ Statistics Sweden (2013c).

²¹ National Institute of Economic Research (2013a).

²² National Institute of Economic Research (2013a) and Sveriges Riksbank (2013).

Figure 1.6 Unemployment and equilibrium unemployment



Note: Actual unemployment refers to the age group 15–74 (data before 2001 have been chained by NIER). Equilibrium unemployment is the unemployment level that actual unemployment can sustainably achieve and that is achieved in a normal cyclical situation (expressed as a per cent of the potential labour supply).

Sources: National Institute of Economic Research (2013a), BP13 and VP13.

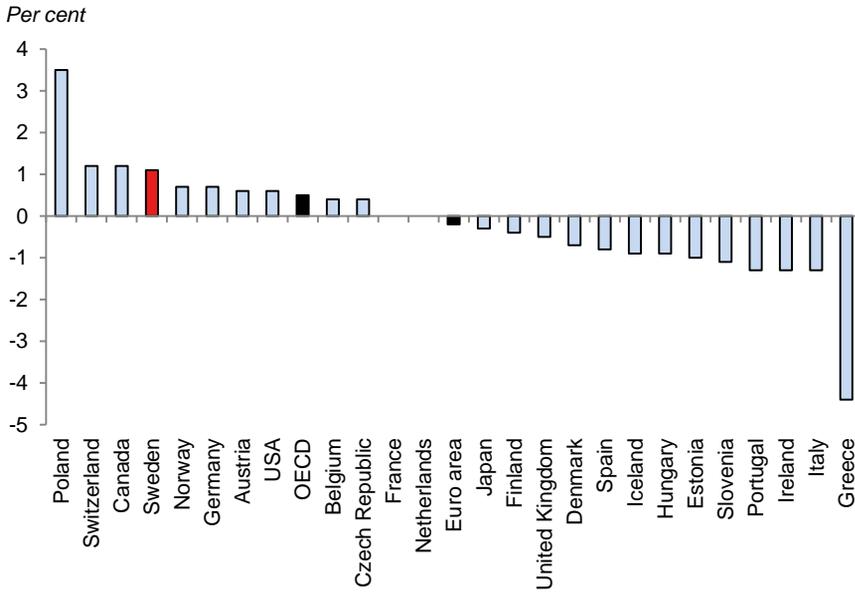
equilibrium unemployment level, which is now expected to be 5.5 per cent in 2017 (Figure 1.6).

1.2.2 Sweden in an international perspective

In its 2012 report, the Council noted that the Swedish economy has fared well during the global crisis that began in 2007.

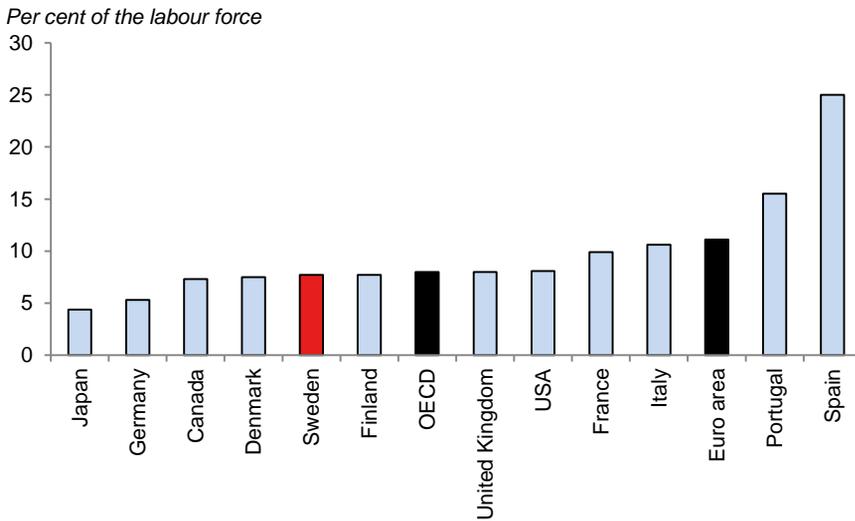
Figure 1.7 shows annual growth from 2007 to 2012 for selected OECD countries. Sweden is one of a group of countries that throughout the crisis have had an average annual growth rate of about 1 per cent. The OECD average for this period is about 0.5 per cent, while the euro area has averaged about -0.25 per cent.

Figure 1.7 Annual GDP growth 2007–2012



Note: Average annual change in GDP, adjusted for inflation, between 2007 and 2012.
 Source: OECD (2012b).

Figure 1.8 Unemployment 2012



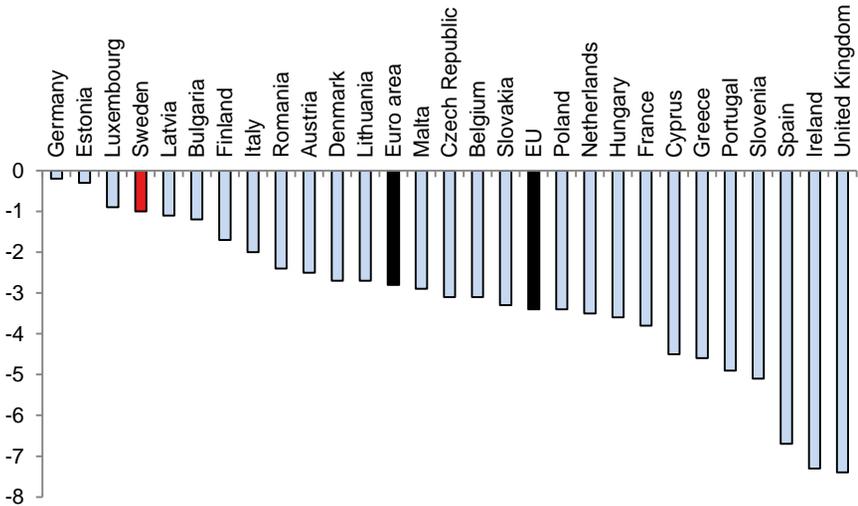
Source: OECD (2012b).

Even though unemployment in Sweden is at historically high levels, it is nonetheless lower than the average for both the OECD and the euro area (Figure 1.8). At the beginning of the year, unemployment in the euro area was 12.2 per cent.²³ But unemployment in Germany and some other countries is considerably lower than in Sweden.

The resiliency shown by the Swedish economy during the crisis has been a significant factor in avoiding large budget deficits like those in several other EU countries. Even though general government net lending is expected to be negative in 2013 (Figure 1.9), Sweden has nevertheless weathered the crisis with an average net lending that has generally been zero (Figure 1.1, Section 1.1). There are few countries – particularly in the EU – who have managed to do that.

Figure 1.9 General government net lending 2013

Per cent of GDP

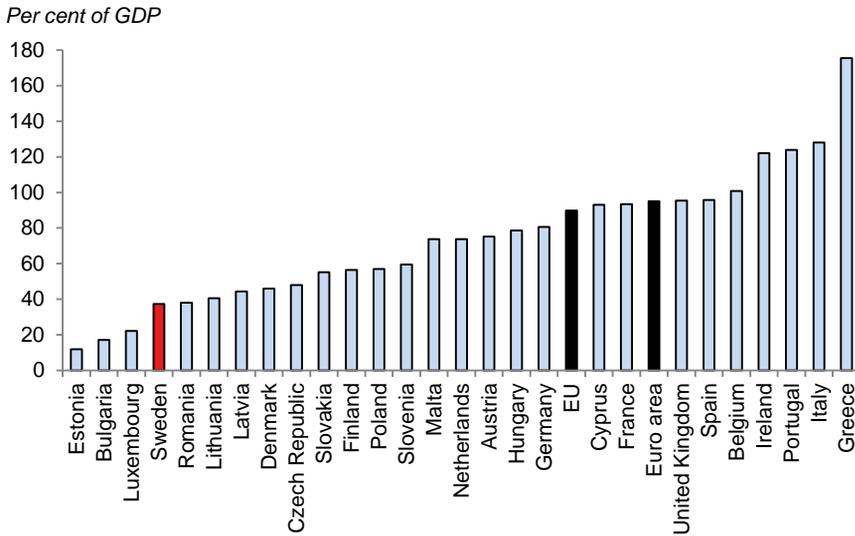


Note: Forecasts. Net lending refers to the difference between public sector revenue and expenditure.
Source: European Commission (2013b).

Net lending has contributed to a stable development of general government gross financial debt in recent years (Figure 1.2, Section 1.1). Sweden's gross debt as a percentage of GDP has remained largely unchanged since the beginning of the crisis.

²³ European Commission (2013a).

Figure 1.10 Consolidated general government gross debt 2013



Note: Forecasts. Refers to consolidated general government gross debt under the EU’s Excessive Deficit Procedure, i.e. total nominal gross debt after deducting for internal changes.
 Source: European Commission (2013b).

This level of over 35 per cent of GDP in 2013 is still well under the Maastricht criteria (60 per cent of GDP), which implies a fiscal space that almost all other EU countries lack (Figure 1.10).

To sum up, the Council notes that Sweden’s economy appears strong from an international perspective.

Box 1.1 Indicators of macroeconomic imbalances

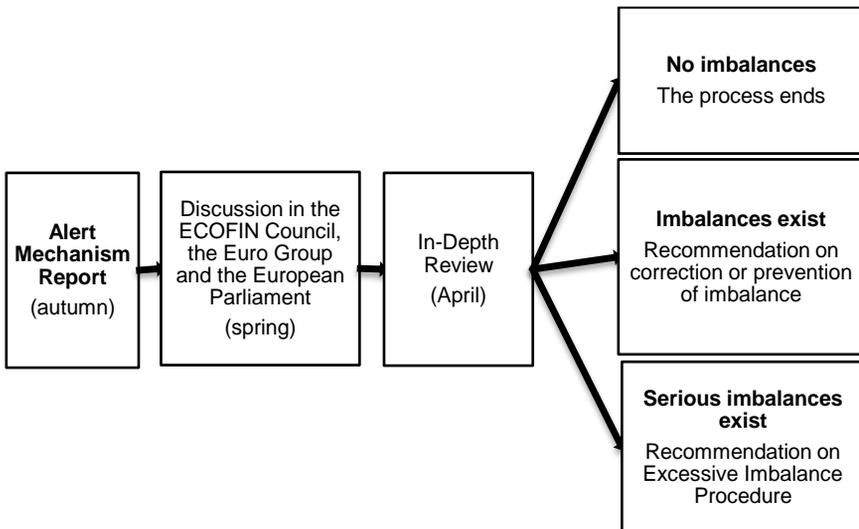
Since 2012, the European Commission has published the *Alert Mechanism Report (AMR)*, as part of the more extensive economic surveillance introduced with the *six-pack-rules*. The Report initiates a process (Figure 1.11) aimed at analysing member states’ macroeconomic imbalances and competitiveness in a manner similar to that used to analyse fiscal policy in the Stability and Growth Pact (SGP).²⁴

²⁴ Countries participating in the EU reform- and financial assistance programme (Greece, Ireland, Portugal and Romania) are not included in the AMR as they are already subject to enhanced economic surveillance. As part of the new regime, the EU Commission now also has a resident representative in each member state.

For each member state, a number of indicators of imbalances are considered together with a qualitative assessment. The Commission then prepares in-depth reviews (IDR) for those countries thought to warrant further analysis. The process includes a preventive part and a corrective part, alongside the stability and convergence programmes and the Excessive Deficit Procedure (EDP) under the SGP.²⁵ Countries with small imbalances receive recommendations on measures, while more serious imbalances result in the initiation of an Excessive Imbalance Procedure (EIP). The country is then expected to present a strategic plan for tackling these imbalances and surveillance is tightened. For euro countries, failure to take policy measures may result in economic sanctions.

In the first AMR report, Sweden was one of twelve countries considered to warrant an in-depth review. The conclusion in the in-depth review was that private indebtedness and the housing market were associated with macroeconomic risk. Otherwise, the Swedish economy was regarded as stable.²⁶

Figure 1.11 Macroeconomic Imbalance Procedure (MIP)



Source: European Commission (2012a).

²⁵ Stability programmes refer to medium-term budgetary strategies that the euro countries submit annually under the SGP, while convergence programmes refer to similar strategies for non-euro countries (in the latter case, these also include a monetary policy strategy).

²⁶ European Commission (2012a).

As part of the European semester, the EU's annual cycle for economic policy coordination, member states send in their national reform and stability or convergence programmes in the spring. Based on its analysis of these programmes and macroeconomic imbalances, the Commission presents country-specific recommendations in April and May. The ECOFIN Council then formally adopts these recommendations in July. National governments then have time to comment on the recommendations and take them into account in the Budget Bill in the autumn.

The 2012 recommendations for Sweden included maintaining sound public finances and improving housing and labour market efficiency. The Government's response in BP13 referred to its expectation that net lending will show a surplus of 2.5 per cent of GDP in 2016 and it also pointed out proposals in the bill to increase efficiency in the housing and labour markets.

In the second AMR Report from November 2012, the Commission calls attention to the same warning indicators for Sweden as before, with the exception of housing price developments, which are now below the Commission's limit (Table 1.4). The Commission's in-depth review of Swedish imbalances was published in April 2013. It concluded that neither the loss of export market shares nor the high value of the current account balance is based on imbalances in the economy. But the high level of private debt and the Swedish housing market are again cited as a threat to stability. The Swedish housing market and the level of household indebtedness are discussed in Section 1.3 below.

In the Council's opinion, the indicators used in the AMR do not make any significant contribution to a thorough analysis of Sweden's macroeconomic situation. The indicators and the threshold values are too arbitrarily chosen for this purpose. No coherent analysis of why these particular indicators and threshold values have been chosen has so far been presented. However, the special requirements imposed on the euro countries create a need for surveillance where the current indicators can signal the need for an in-depth review. For countries outside the euro area with well-functioning fiscal frameworks, this surveillance is of limited value.

Table 1.4 Macroeconomic imbalances 2011

External imbalances and competitiveness						
	3-year average of the current account balance, % of GDP	Net international investment position, % of GDP	3-year change in real effective exchange rate	5-year change in export market share	3-year change in nominal unit labour cost	
<i>Per cent</i>	-4/+6	-35	±5* & ±11**	-6	+9* & +12**	
Sweden	6.6	-8.3	3.9	-11.6	1.2	
Denmark	5.0	24.5	-1.7	-16.9	4.7	
Finland	0.6	13.1	-1.3	-22.9	9.1	
France	-1.6	-15.9	-3.2	-11.2	6.0	
Italy	-2.9	-20.6	-2.1	-18.4	4.4	
Spain	-4.3	-91.7	-1.3	-7.6	-2.1	
United Kingdom	-2.2	-17.3	-7.1	-24.2	8.1	
Germany	5.9	32.6	-3.9	-8.4	5.9	
Internal imbalances						
	Annual change in deflated house prices	Private sector credit flow, % of GDP	Private sector debt, % of GDP	General government debt, % of GDP	3-year average of the unemployment rate	Annual change in total financial sector liabilities ²⁷
<i>Per cent</i>	+6	15	160	60	10	16.5
Sweden	1.0	6.3	232	38	8.1	3.6
Denmark	-4.9	-2.2	238	47	7.0	4.7
Finland	-0.3	4.6	179	49	8.1	30.8
France	3.8	4.0	160	86	9.6	7.3
Italy	-2.0	2.6	129	121	8.2	3.8
Spain	-10.0	-4.1	218	69	19.9	3.7
United Kingdom	-5.4	1.0	205	85	7.8	8.5
Germany	1.4	4.8	128	81	6.9	2.1

Note: Limit for *euro countries and **non-euro countries respectively. The grey fields indicate values outside the maximum limits that the Commission has adopted and thus should be monitored. The cut-off date for the indicators is 1 November 2012. The private sector refers to non-financial institutions, households and households' non-profit organisations.

Source: European Commission (2012b).

²⁷ A new indicator for internal imbalances, change in financial sector debt, has been added in the latest report in order to capture the link between the real and the financial sector.

1.3 The housing market and household indebtedness

External analysts have pointed to the housing market and private indebtedness as risk factors in the Swedish economy.²⁸ On several occasions, the European Commission has pointed to these factors as potential threats to stability in the Swedish economy (see Box 1.1 above). In April 2013, the Commission presented an in-depth review (IDR), advising Sweden to monitor the housing market and consider policy measures to improve its functioning.²⁹

In its 2012 report, the Council raised the issue of possible macroprudential imbalances in Sweden and concluded that the Government has cause to follow developments in the housing market and household debt levels closely – particularly the sustainability of housing prices and the consequences of a sharp fall in housing prices.

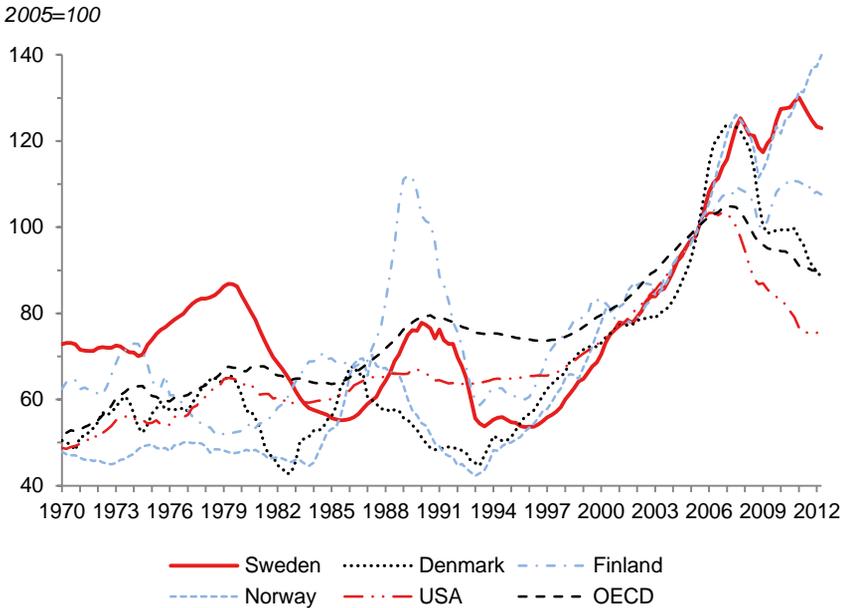
1.3.1 Swedish housing prices

Swedish real housing prices³⁰ fluctuated around a constant long-term level from the 1950s to the mid-1990s. Real prices subsequently rose by an average of almost 6 per cent a year until 2012 (Figure 1.12). In Stockholm and other Swedish metropolitan areas, the trend has been even stronger. Sweden is not alone in having experienced rising housing prices during this period; countries such as Denmark, Ireland, the United Kingdom, Spain and Norway have had at least as rapid price growth. However, in Sweden, and also in Belgium and Norway, housing prices have not fallen after this steep rise in prices. Many observers therefore fear that the Swedish housing market is overvalued and that the Swedish economy may be facing a big drop in housing prices.

²⁸ For example, the IMF (2012c) and OECD (2012c).

²⁹ The European Commission (2012b) and the European Commission (2013c).

³⁰ Housing prices which have been deflated, for example, with the CPI or GDP deflator.

Figure 1.12 Real housing prices

Note: Index of real housing prices with base year 2005.
Source: OECD (2012c).

Before this year's report, the Council commissioned a background report (Sørensen, 2013) on the Swedish housing market.³¹ Sørensen notes that it is difficult to establish with certainty whether or not the Swedish housing market is overvalued, but his analysis indicates that Swedish housing prices may be overvalued by 15 per cent or more. Sørensen notes that there are fundamental factors that may explain the price rise but there are grounds for expecting downward pressure on Swedish real housing prices. His analysis does not foresee any immediate price correction, but rather a slow and gradual adjustment. If the Swedish economy were to be hit by a large shock, there is a risk that the price adjustment might be more abrupt.

Other analyses also indicate that Swedish housing is overvalued.³² These studies compare purchased and rented housing (price-rent ratios) to analyse pricing in the housing market. But this method has been criticised for having limited applicability to Swedish conditions,

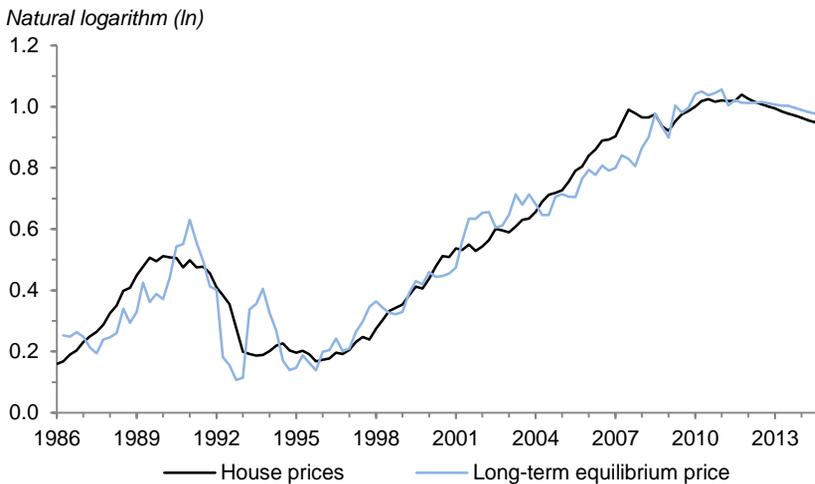
³¹ Sørensen (2013).

³² IMF (2012c) and National Housing Credit Guarantee Board (BKN) (2010). BKN is now part of the Swedish National Board of Housing, Building and Planning.

particularly as Sweden does not have market rents like those in the United States, for example.

In 2011, the Riksbank made a comprehensive analysis of the risks in the Swedish housing market.³³ This analysis indicates that housing prices can largely be explained by fundamental factors such as higher real disposable incomes, a downward trend in real mortgage rates (after tax) and increased preference for housing consumption. According to the analysis, there are no clear signs that Swedish housing is overvalued. Nor does the modelling provide any reason to believe that Swedish housing prices would fall sharply in the coming period.

Figure 1.13 Actual and estimated real house prices in Sweden, incl. forecast 2012–2014



Note: The dynamic simulations are based on a housing price model developed by Claussen and others (2011). The forecast for 2012–2014 is based on forecasts for explanatory variables found in the Riksbank’s Monetary Policy Report, October 2011.
 Source: Claussen (2012).

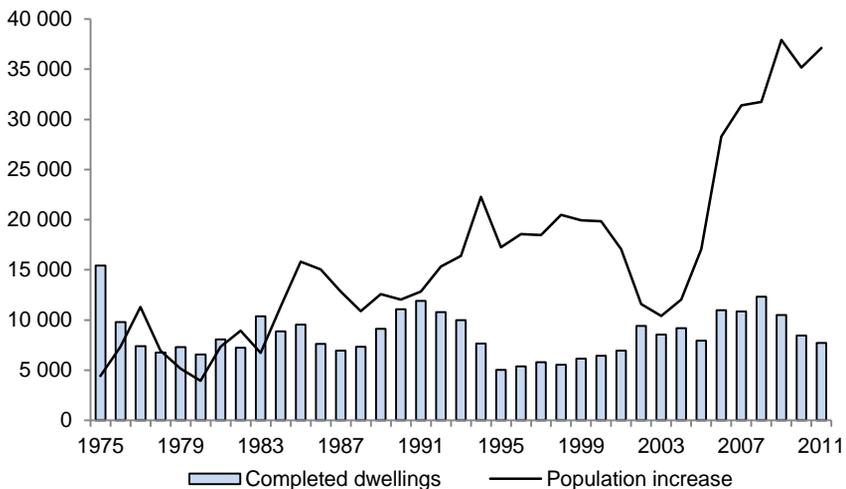
The Council notes that the conclusions on the valuation of Swedish housing differ between analysts. It cannot be ruled out that Swedish housing is overvalued, but at the same time there are a number of fundamental factors that may well explain the high prices. The principal factors usually mentioned are those stated by the Riksbank (see above), but there are also other factors driving demand and

³³ Sveriges Riksbank (2011a) and Claussen and others (2011).

contributing to rising housing prices that deserve to be highlighted. After the last change in the real estate tax in 2006–2008, property investment is taxed at a lower rate than business investment.³⁴ Lower real estate taxes, together with the tax deduction for repairs, maintenance and improvements (RMI) and the earned income tax credit, have strengthened the incentives for debt-financed investment in real estate.³⁵ Financial factors, such as variable interest rates and no amortisation, have contributed to the increase in the demand for housing.³⁶

Even if the housing price increase was not associated with a price bubble, there is reason to believe that the increase in part reflects structural problems on the supply side. The demand for housing and housing prices have risen, but despite this, construction has not increased. Instead, the number of newly constructed homes in Sweden in recent years has been about 20 000 a year, which is a historically low level.³⁷ The imbalance between demand and supply is particularly acute in metropolitan areas (Figure 1.14). It is important

Figure 1.14 Annual addition of housing units and population increase in Stockholm County 1975–2011



Sources: Statistics Sweden, Stockholm County Administrative Board (2012) and Stockholm County Council (2012).

³⁴ Fiscal Policy Council (2008), p. 223.

³⁵ European Commission (2013c), p. 18.

³⁶ Sørensen (2013).

³⁷ Statistics Sweden (2013d).

to note that here Sweden differs from many of the countries where housing prices first rose and then collapsed. The low level of construction is a problem in itself, but it in all likelihood reduces the risk of a collapse in housing prices.

Several factors contribute to the low level of construction such as high construction costs, weak competition in the construction sector, and a complicated and uncertain planning process for new construction.³⁸

Several analysts, including the EU Commission, also call attention to the role of the system of rent control (see Box 1.2) and a poorly functioning rental market. Market conditions giving rise to uncertain and weak profitability have made investing in rented housing in areas with high demand less attractive and alternative investments more attractive. A supply shortage in the rental market thus contributes to rising demand and price increases, particularly for tenant-owned housing. Poor availability of rental apartments exerts upward pressure on housing prices and leads to a higher debt burden for households, as renting is not an available alternative to purchasing.³⁹ These circumstances have also led to major shifts in the housing stock. The number of rental units in Sweden fell by about 4 per cent (to about 1.6 million) between 1998 and 2011 while the number of tenant-owned units rose by about 40 per cent (to over 0.9 million). This change has been propelled by a very rapid conversion of rented to tenant-owned housing. Between 2000 and 2011, about 155 000 rental units were transformed into tenant-owned housing in Sweden.⁴⁰ In Stockholm, the trend has been particularly dramatic.

All in all, the Council's opinion is that Swedish housing prices range from a fair valuation to a slight overvaluation. The Council notes that in 2012, housing prices were at about the same real level as at the end of 2007. Prices have thus remained largely unchanged in real terms in the last five years despite the worst international crisis since the 1930s. This suggests that Swedish housing prices have been supported by fundamental factors both on the demand and the supply side.⁴¹ Many of these factors, such as a growing population and the increased demand for housing, low housing construction,

³⁸ OECD (2012c), the Statskontoret (the Swedish Agency for Public Management) (2012) and Caesar and others (2013).

³⁹ SOU 2012:88.

⁴⁰ Statistics Sweden (2012).

⁴¹ Lind (2013), pp. 3–4.

and an obstructive municipal planning monopoly, can be described as sticky. A rapid and substantial fall in prices due to an overvaluation therefore currently seems less likely.

The problems on the supply side⁴² and with the utility value system (bruksvärdesystemet) are serious obstacles to a well-functioning housing and labour market and thus hamper economic growth. The Government should pursue an integrated approach to housing policy covering all factors crucial to the performance of the housing sector such as the legal rules concerning new construction, real estate and capital gains taxes, interest deductibility in private income taxation and the utility value system. There is now extensive analytical work that could provide a basis for this.

In its in-depth review of macroeconomic imbalances in Sweden (April 2013), the European Commission has made recommendations with a view to reducing the risks identified in the form of high household indebtedness and an inefficient housing market. The proposals concern neutralising the tax incentives for tenant-owned housing as well as reforming the rental market to achieve a better balance between supply and demand.⁴³ The Commission emphasises that the measures proposed are complementary. A better-functioning housing market would probably help reduce debt levels in the household sector and thus strengthen macroprudential stability.

1.3.2 Household indebtedness

Several analysts have pointed out household indebtedness as a risk factor in the Swedish economy.⁴⁴ Household debt in relation to disposable income, i.e. the debt ratio, has increased for several years and now amounts to about 170 per cent of disposable income (Figure 1.15). However, the debt ratio has stabilised in recent years as household credit growth has gradually fallen from over 13 per cent in 2006 to under 5 per cent in early 2013. In the next few years, debt is expected to increase somewhat more rapidly than household income.⁴⁵

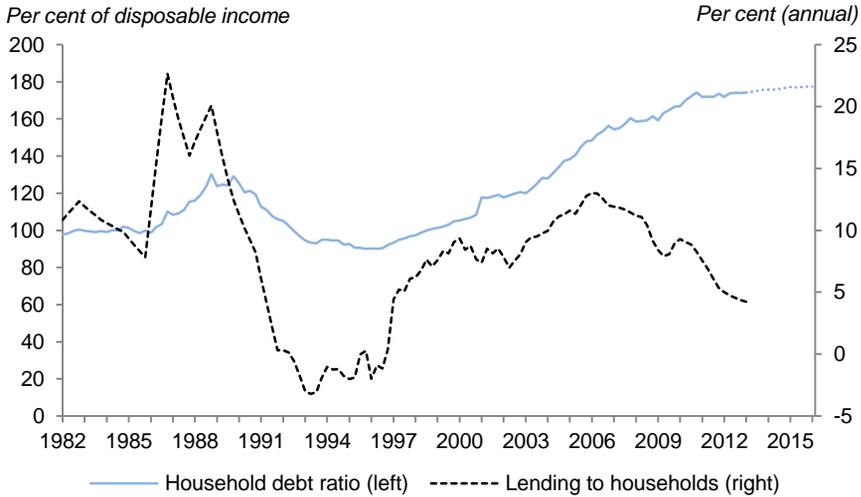
⁴² Includes possible lock-in effects of changes in the taxation of capital gains; see Lind (2013), p. 9.

⁴³ The European Commission suggests phasing out the interest deduction in income taxation combined with a higher recurrent real estate tax; see the European Commission (2013c).

⁴⁴ For example, the IMF, OECD and the European Commission.

⁴⁵ Sveriges Riksbank (2013), p. 5.

Figure 1.15 Average household debt ratio and change in lending to households



Note: The time series for lending to households consists of chained data. Until 1992, it consisted of annual observations, from 1992 to 2001 of quarterly observations, and from 2002 onwards of monthly observations.

Sources: Sveriges Riksbank (2013) and Statistics Sweden.

The Riksbank has also repeatedly warned against the risk associated with the rising household debt burden in Sweden.⁴⁶ Household indebtedness in relation to disposable income is at a historically and internationally high level. The risk is that in the wake of a fall in housing prices, heavily indebted households would rapidly increase their savings and reduce consumption – which in turn could aggravate already weak economic growth. Serious consequences in the form of a deeper economic downturn and growing unemployment could result.

Finansinspektion’s (FI) annual survey (March 2013) of the Swedish mortgage market indicates less risk than a few years ago. FI notes that the mortgage cap (85 per cent of the maximum value) continues to have a normative effect and that the trend in recent years to increasingly higher leverage has stopped. On new loans, few households’ leverage exceeds 85 per cent – the percentage has been halved from 20 per cent in 2009 to 11 per cent today. Of the 10 per cent of households who had taken unsecured mortgages with no amortisation, all now amortise.⁴⁷ Furthermore, nine of ten

⁴⁶ See, for example, the protocol from the monetary policy meeting on 12 February 2013.

⁴⁷ Unsecured loans are loans that are granted without any security or collateral.

households with a leverage over 75 per cent now amortise, implying that banks are following the recommendations of the Swedish Bankers' Association on amortising loans over 75 per cent. Stress tests show that most households that have a new mortgage – and are thus the most vulnerable – are resilient to large interest rate hikes, falling housing prices and increased unemployment. FI concludes that households' capacity to repay and safety margins in the event of falling housing prices are adequate.

In FI's opinion, there is little risk that banks will be hit by large credit losses on mortgage loans, even though credit losses on lending to non-financial corporations cannot be ruled out were Swedish households to suffer a loss of income or a fall in housing prices.⁴⁸ However, the amortisation rate for outstanding mortgages as a whole remains low, and the average amortisation time of 140 years is very long. FI and the Riksbank have therefore decided within the framework for the newly established Council for Cooperation on Macroprudential Policy to set up an analysis group to study the long-term effects of household debt and its inherent risks.⁴⁹

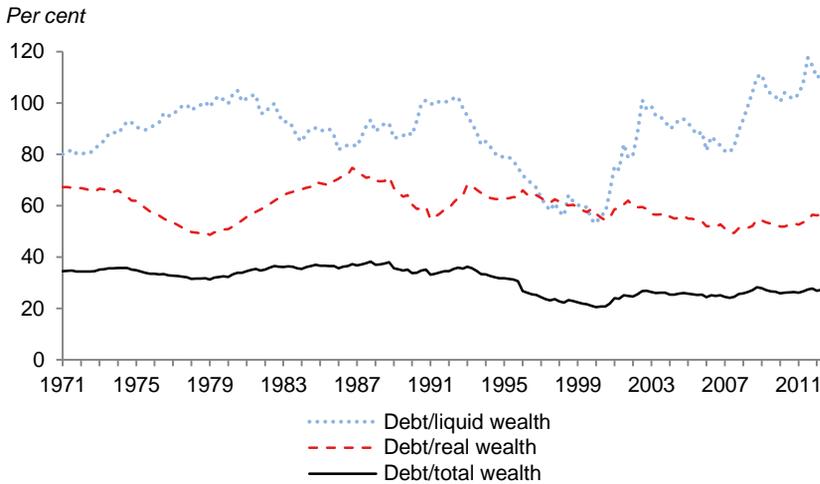
The above studies focus on household debt in relation to income, but household solvency (debts compared to assets) is also of interest to monitor. Total net wealth of Swedish households (including dwellings but excluding insurance) is approximately triple the size of total debt (Figure 1.16). The relationship has remained fairly stable for several decades. Rising household debt in relation to disposable income has thus been followed by a corresponding increase in wealth. This is also to be expected. An increase in wealth in relation to income should also lead to an increase in debt. Moreover, it is largely households with high incomes and lower probability of unemployment that account for the increase in debt.

It should be noted, however, that household liquid assets relative to debt have gradually declined in the past decade. But a large part of household wealth is invested in shares (which may be volatile) and in individual pension savings and housing (which may be less liquid). This tends to increase household vulnerability in the event of adverse economic shocks.

⁴⁸ Finansinspektion (2013), p. 18.

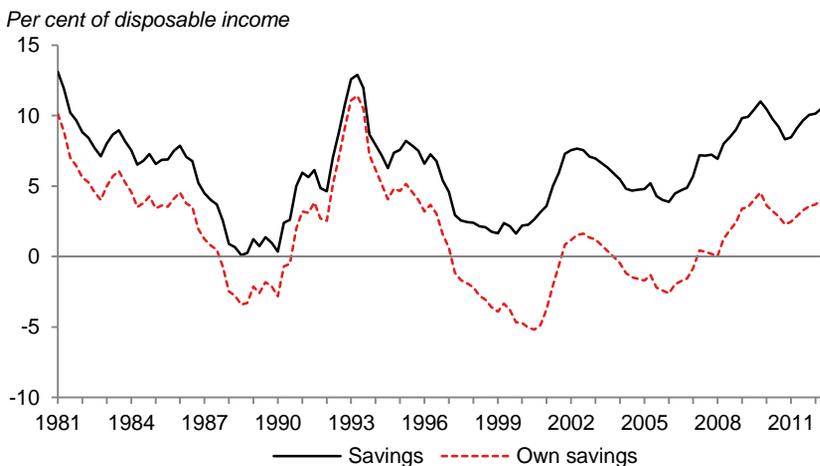
⁴⁹ On 17 January 2012, the Riksbank and Finansinspektion established the Council for Cooperation on Macroprudential Policy with the aim of reducing risks in the financial system.

Figure 1.16 Average household debt



Note: Data on household wealth are based on Riksbank estimates. Real wealth refers to household wealth in home and vacation home ownership and tenant-owned housing. Liquid wealth refers principally to household assets in cash, bank deposits, bonds and shares.
Sources: Sveriges Riksbank (2012b) and own calculations.

Figure 1.17 Household savings



Note: Savings in supplementary pension schemes and premium pensions are not included in own savings.
Source: Sveriges Riksbank (2012b).

Another indicator of sustainability and resilience is the Swedish household savings ratio. It is now relatively high whereas before the crisis in the 1990s, it was very low: -3 per cent at its lowest (Figure

1.17). A growing savings ratio indicates that households are increasing their assets and that their consumption is not financed by borrowing. A high savings ratio also makes it possible to maintain consumption by reducing savings if households suffer negative income shocks.

All in all, it appears that Swedish households are relatively well positioned to withstand any turbulence in the housing market. Historical experience also supports this – in times of economic crisis, Swedish banks' credit losses on mortgages have tended to be small (for example during the crisis in the 1990s).

The Council notes that basic information to facilitate a more qualified analysis of household financial balances is lacking and therefore would like to see regular and reliable statistics about private sector wealth collected. Data of this kind would be a valuable source for both macroeconomic risk assessments and income distribution analysis.

1.3.3 A fall in housing prices and demand

As discussed above, house prices could possibly fall over the next few years. Empirical studies of conditions in the United States indicate that the reduction in demand from heavily indebted households after a fall in house prices may significantly reduce total demand in the economy.⁵⁰ Experience from the 1990s crisis in Sweden points in the same direction.

However, the Riksbank's analyses of housing market risks indicate that Swedish households are also resilient in this respect. The analyses include estimates of the effects of a 20 per cent drop in housing prices in real terms on the Swedish economy and financial stability.⁵¹ A fall in housing prices primarily affects those households that have their home as collateral. When the collateral declines in value, a household is forced to save or increase the amortisation of its mortgage. They then reduce other consumption and thus demand declines in the economy, adversely affecting GDP. The Riksbank's analyses show that a price fall as large as 20 per cent has a relatively small effect on Swedish GDP. A more expansive monetary policy can mitigate the effects.

⁵⁰ Dynan (2012).

⁵¹ Claussen and others (2011) and Janzén and others (2011).

Investment in housing is also adversely affected when there is a fall in housing prices. Modelling results also indicate here that there is relatively little effect on GDP – possibly because the Swedish construction industry in relation to GDP is relatively small compared to other countries.⁵² The Riksbank's general conclusion was that a substantial drop in house prices would have relatively little effect on demand, particularly if they were offset by a more expansive monetary policy.

The Council would like to stress that the econometric modelling underlying the Riksbank's analysis is based on simplified assumptions and historical links. There is a risk that the adverse effects and consequences for the Swedish economy of a sharp fall in housing prices will be greater than the modelling results indicate. Moreover, international experience from the financial crisis of 2008–2010 shows that in times of great uncertainty, for example, about the banks' financial position or in connection with a large drop in housing prices, there is a risk of negative feedback between financial and real markets. A course of events like this is difficult to predict.

Box 1.2 Housing market regulation

The Swedish housing stock consists of 4.5 million homes. Of these, 2 million are single-family homes and 2.5 million are multiple dwellings. The latter consist of 1.6 million rental apartments and 0.9 million tenant-owned housing units.⁵³

Rent control was introduced during World War II. At the end of the 1960s, the current utility value system was introduced. In this system, the regional rental tribunal compares the rent in equivalent apartments (based on their utility value). The property owner must reduce the rent if it is higher than the rent in these comparable apartments. The law previously stated that the tribunal should chiefly take into consideration the rent in the municipal housing stock. Beginning in January 2011, after the Swedish Property Federation had filed a complaint about Swedish housing policy with the EU in 2005, the law refers to rent that is collectively set – regardless of whether the agreements are set by private or municipal corporations.

⁵² Sørensen (2013).

⁵³ Statistics Sweden (2012).

The non-profit housing companies' leading role has thus been replaced by collectively negotiated rents.

Various measures have recently been taken to facilitate new home construction and a more efficient use of the existing housing stock. The Riksdag has decided to reduce the real estate charge on rental housing units beginning in January 2013 with a view to stimulating new production of rental apartments. The proposal applies to multiple dwellings, both rental apartments and tenant-owned housing. From January 2013, the standard deduction for rental housing was also raised from SEK 21 000 to SEK 40 000 a year. The aim is to stimulate the secondary market for housing in order to promote labour market mobility. From February 2013, the law on letting private dwellings gives the property owner and the tenant greater freedom in agreeing on rental terms – on the condition that the rental is not in the form of a commercial activity.

Plangenomförandeutredningen (the Planning Process Inquiry, dir. 2012:114) has been instructed to review the requirements for detailed development plans and building permits in order to facilitate a more efficient planning and building process.⁵⁴ The inquiry is to present its final report in May 2013. The Government has also appointed an inquiry on reforming the taxation of rented housing. The Committee is expected to complete its work in autumn 2013. The Government also plans to appoint a parliamentary committee to review the regional planning system in Chapter 7 of the Plan and Building Act. The Government has announced a bill in spring of 2013 to amend the law on municipalities' responsibility for providing housing.⁵⁵

1.4 Assessments and recommendations

There is a recession in the euro area while growth in the United States and the large emerging economies has strengthened. A recovery also appears to be under way in Japan. But there continues to be considerable uncertainty about future developments and there is an obvious risk that the global economy will again experience slower growth. The financial crisis is expected to affect the global economy for many years to come.

⁵⁴ The Ministry of Health and Social Affairs (2012).

⁵⁵ Swedish Code of Statutes SFS 2000:1383.

The economic downturn in Sweden is now in its fifth year. After the large drop in demand in connection with the eruption of the financial crisis in autumn 2008, the economy is still far from reaching full capacity. The Council notes that the recovery after the 1990s crisis and the dotcom crash in the early 2000s were largely due to a weak krona and strong export demand. The Swedish krona is currently relatively strong and export demand is weak. There is thus a risk that the recovery will take a longer time now than after previous economic downturns. At the same time, the Council notes that the Swedish economy appears strong in international comparisons.

In the Council's opinion, Swedish housing prices probably lie within the interval from being in line with fundamental factors to some overvaluation. The risk of a major and abrupt price correction is currently considered limited. But there are strong arguments for the Government to monitor house price developments and Swedish household debt levels closely and review what can be done to tackle unsound developments in these areas.

In the Council's opinion, the Government should act quickly to reduce obstacles to new construction and the efficient use of the existing housing stock. In the short run, a more efficient housing market may contribute to more flexible and stable conditions in the market with less risk of rapid increases in the price of housing and rising debt ratios for Swedish households. In the long run, a better functioning housing market – particularly the rental market – may help increase mobility in the labour market and contribute to higher economic growth. Making better use of the existing housing stock should be an important goal.

In the Council's opinion, the Government should pursue an integrated approach to housing policy covering all factors crucial to the performance of the housing sector such as the legal rules concerning new construction, real estate and capital gains taxes, interest deductibility in private income taxation and the utility value system.

The Council recommends the collection of reliable data on wealth in the private sector. Data of this kind would be a valuable source for both macroeconomic risk assessments and income distribution analyses. The Council suggests that the Government examine the possibilities of producing this statistic in a cost-effective way.

2 Economic policy

Section 2.1 below summarises the policy proposed by the Government in BP13. Also in this section, the Council comments on the transparency in the Government's presentation of its policy; Section 2.2 summarises the proposals that the Government recently presented in VP13; in Section 2.3, the Council examines the fiscal stance in relation to cyclical developments; finally, the Council's assessments and recommendations are summarised in Section 2.4. This chapter also includes a box with a closer look at systemic errors in the Swedish transport sector.

2.1 The Budget Bill for 2013

In BP13, the Government proposed a number of measures described as “measures to improve growth prospects and prevent unemployment from becoming persistent”.¹ In the bill, the Government states that “it gives priority to reforms: to improve growth prospects and competitiveness by increasing investment in infrastructure, research and innovation and lowering corporate tax and introducing an investment tax credit; to get more people into work with the focus on young people and people born abroad; for a stable financial system and enhanced consumer power; for welfare for all and its more equitable distribution; and for a more effective energy, climate- and environmental policy”.² The Government summarises its policy in the following table (Table 2.1):

¹ BP13, p. 26.

² BP13, p. 26.

Table 2.1 Effects of the measures proposed in BP13 on general government net lending

<i>SEK billion</i>	2013	2014	2015	2016
Better growth prospects and competitiveness				
Infrastructure	1.50	5.17	4.75	6.50
Research and innovation	1.74	2.70	3.06	4.00
Enterprise and entrepreneurship	8.33	8.05	8.05	8.05
Housing	0.65	0.64	0.63	0.63
More people in work				
Young people ¹	2.20	2.36	2.08	1.46
Integration	0.88	1.28	0.98	0.77
Long-term unemployed	0.95	0.66	0.33	0.32
People with disabilities	0.10	0.17	0.17	0.14
Strengthened work-first principle and clearer requirements	-0.12	0.05	-0.06	-0.06
Welfare for all and a more equitable distribution				
Health care and social services	0.22	0.73	0.56	0.56
Justice	1.50	1.50	2.00	2.10
Support for the financially vulnerable	0.78	0.78	0.78	0.78
Lower tax for pensioners	1.15	1.15	1.15	1.15
Energy, climate and the environment				
Climate and environment measures ²	0.56	0.55	0.61	0.83
Tax changes in the climate and energy area	-0.26	-0.35	-0.44	-0.53
Other expenditure reforms	6.31	2.82	2.08	1.95
Other revenue reforms	-0.54	-0.43	-0.46	-0.48
Total reforms with no effect on net lending	3.02	0.34	0.34	0.34
Deterioration in net lending from proposals in the Budget Bill for 2013	22.7	27.2	25.6	27.3

Note (BP13): Amounts are rounded. A positive number signifies a deterioration in net lending.

¹ Of which SEK 1.8 billion for 2013 refers to temporary places in adult education, the higher vocational education system, the higher education system and universities/colleges. A substantial number of these places will go to young people, but other groups such as people born abroad and the long-term unemployed can also benefit from the measure.

² Funding for energy research is included in the total (SEK 0.25 billion in 2013, SEK 0.25 billion in 2014, SEK 0.27 billion in 2015 and SEK 0.47 billion in 2016). This is also included in the amount for research and innovation above but is included only once in the total.

Source: BP13, p. 30.

As Table 2.1 shows, the Government's new policies for 2013 onwards include additional resources for several different policy areas. The Council notes that only one of the Government's proposals has a significant budgetary effect in 2013: the reduction in the corporate tax to 22 per cent combined with stricter rules for deducting inter-company interest. According to the Government, the proposal weakens net lending by SEK 8.33 billion in 2013. The corporate tax reduction is discussed in Chapter 5.

Other proposals have only a small effect on net lending in 2013; for some measures, the full effect will only be realised in a couple of years' time. The latter concerns primarily "infrastructure investment measures", which the Government describes at considerable length in BP13. The Council notes that in 2013, no new infrastructure investments are made as a result of the Government's policy proposals in BP13. All the additional funding of SEK 1.5 billion in 2013 goes to road and railway maintenance.³ No new infrastructure investments are made before 2014.⁴ There is a discussion of some aspects of the infrastructure policy in Box 2.1 below.

The Government's policy for 2013 consists mainly of small increases in resources for a large number of budget appropriations. The SEK 22.7 billion total is divided among about 250 appropriations.⁵ The Budget Bill contains proposals for all the revenue and expenditure items in the government budget because of the requirement in the Budget Act for completeness.⁶ All adjustments, no matter how small they may be or whatever the reason, have to be considered in the Budget Bill. In the Council's opinion, this is a good rule. At the same time, it makes heavy demands on the Government's capacity for transparent reporting of its policy.

The Council notes that fewer than 100 appropriations are affected by the changes that have been given a separate heading in Table 2.1 by the Government. The remainder of over 150 appropriation

³ BP13, p. 387.

⁴ BP13 and Govt. Bill 2012/13:25 "Infrastructure Bill: Investing for a strong and sustainable transport system". Govt. Bill 2012/13:25 was approved by the Riksdag on 18 December 2012 and covers the period 2014–2025. In Spring 2014, the Government will decide the definitive economic parameters for the period 2014–2025.

⁵ Discussions with Ministry of Finance officials in the Budget Department.

⁶ SFS 2011:203, Chapter 3, Section 3.

adjustments are captured by the items “Other expenditure reforms” and “Other revenue reforms” in Table 2.1.

The Council notes that in BP13, the Government has chosen to focus its new policy for 2013 – about SEK 14 billion of SEK 23 billion – on adding marginal amounts to a large number of budget appropriations that in the majority of cases concern strengthening existing public administrative systems.

The way in which the Government chose to present its policy makes it difficult immediately to grasp what the measures and amounts reported by the Government in Table 2.1 above actually consist of. The interested reader has to make a considerable effort to follow the presentation – in different parts of the several thousand page thick BP13 – of measures that total the amount specified in Table 2.1.

The Council notes that only in two cases has the Government chosen to specify the appropriations included under the different headings. These are the items “Young people” and “Climate and environmental measures” in Table 2.1 for which explanatory footnotes are provided. In the Council’s opinion, most of the headings chosen by the Government to present its policy need at least as detailed footnotes as those the Government now provides for its table.

Box 2.1 Systemic errors in the Swedish transport sector

A background report by Jan-Eric Nilsson addresses three fundamental systemic errors in the Swedish transport sector.⁷ The errors are in the institutional structure for decision-making. According to Nilsson, the three systemic errors are as follows:

1. Below-cost pricing for the use of existing infrastructure.
2. Economically unprofitable investments in new transport infrastructure.
3. Inadequate cost monitoring of investments and of operation and maintenance.

The first error is that the cost of using infrastructure, particularly roads and railways, is too low. The consequences are seen in the

⁷ The Swedish National Road and Transport Research Institute (VTI) (2013).

form of excessive demand and congestion, an artificially high need for investment in bottlenecks and suboptimal business localisation.

The second error is that a substantial number of large infrastructure investments are being made that in normal circumstances would be seen as economically unprofitable. The Bothnia line and the Göteborg package are examples. Consequently, more profitable projects end up outside the planning framework and therefore are not implemented.

The third error is that the large resources invested in road and railway operation and maintenance are not followed up at the project level. Because of inadequate cost follow-up, it is not currently possible to judge whether the resources allocated are used effectively.

All the systemic errors are in the grey area between politics and administration and undermine the overall objectives established by the Riksdag for traffic policy. In the background report, four measures are proposed:

- The responsibility for drawing up instructions for social cost benefit analyses should be moved to a central agency or to the Ministry of Finance.
- All projects costing more than SEK 1 billion should undergo an external quality control before they are given the go-ahead. The above proposal is based on Norwegian experience.
- The results of the cost benefit analyses conducted and the estimates made of the social costs of using the infrastructure should be made public as far as possible. This increases the transparency of policy decisions.
- Each purchasing agency in the transport area should be instructed to show in its annual report how many public procurement contracts have been signed in the past year, how many contracts have been completed, and the extent to which costs have exceeded the costs specified in the original agreement with the service provider.

2.2 The 2013 Spring Fiscal Policy Bill

Referring to a weak global economy and its continuing instability, the Government proposes in VP13 “a targeted package that further dampens the effects of the crisis”. The proposal includes an education initiative, measures for the operation and maintenance of railways and more measures for regional growth. Table 2.2 summarises the measures.

Table 2.2 The Government’s measures for 2013

<i>SEK million</i>	2013
Higher education incl. student aid	170
Adult vocational training incl. student aid	700
Work experience places	160
Labour market training	140
Regional growth	40
Infrastructure	700
Total	1 910

Source: VP13, p. 35.

The Council has no objections to these measures, but notes that the Government takes an unusual step when it introduces a stabilisation policy measure in connection with the Spring Fiscal Policy Bill.

2.3 The fiscal stance

General government net lending is a summary indicator of the fiscal stance. Table 2.3 shows how net lending develops over time according to VP13. From 2012 through 2014, there is a budget deficit. The Government expects this to change into a growing surplus in 2015–2017, provided that there are no unfinanced measures.

To judge the effects of active fiscal policy measures, the revenue and expenditure changes that occur automatically because of cyclical fluctuations have to be excluded. These changes are due primarily to the design of the tax system and the unemployment insurance. Hence, government net lending automatically tends to decline in economic downturns and increase in upturns. These automatic stabilisers moderate cyclical swings without any need for decisions on

measures. When we adjust actual net lending for the automatic effects of the cyclical situation, we get structural net lending, which is a measure of what net lending would be if the economy was in equilibrium.

Table 2.3 General government net lending 2008–2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
SEK billion	69	-30	0	1	-25	-59	-39	2	47	88
Per cent of GDP	2.2	-1.0	0.0	0.0	-0.7	-1.6	-1.0	0.0	1.1	2.0
Cyclical adjustment	-0.1	4.0	1.7	0.7	1.2	2.0	1.9	1.3	0.6	0.2
Adjustment for one-off effects ¹	-0.2	-0.1	0.0	0.0	-0.3	0.0	0.0	0.0	0.0	0.0
Adjustment for extraordinary capital gains	0.0	0.0	-0.1	-0.1	0.1	0.0	0.0	0.0	0.0	0.0
Structural net lending	1.8	3.0	1.6	0.7	0.3	0.4	0.9	1.3	1.7	2.3
Output gap	0.1	-7.2	-3.2	-1.3	-2.2	-3.5	-3.3	-2.3	-1.1	-0.4

Note: Percentage of GDP unless otherwise stated. Outcome for 2007-2012, forecast for 2013-2017.

¹ 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.

Source: VP13.

Under the surplus target decided by the Riksdag, actual net lending is to average 1 per cent of GDP over a business cycle. NIER estimates that cyclical adjustment on average increases net lending by 0.2 per cent of GDP.⁸ Thus, 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 and thus to counter harmful cyclical swings. If structural net lending is less than 1.2 per cent, we can hence conclude that fiscal policy has actively been made more

⁸ See Section 4.2.1.

expansive than the cyclical situation would automatically have given rise to. These deviations are an indication of the fiscal stance.

To follow year by year how the Government's measures affect the fiscal stance, we can use the *change* in general government structural net lending.⁹ If the change in structural net lending is zero, it indicates that the Government does not take any additional active measures that affect net lending. If structural net lending declines from one year to the next, it indicates that the Government takes measures that reduce net lending and that may stimulate demand and thus the economy. However, if structural net lending increases, this shows that the measures increase net lending and have a cooling effect on demand in the economy.

The effects that active measures, which change structural net lending, actually have on total demand in the economy, depend not only on the size of the measures but also on their composition. The effect may also vary over time, depending on the economic situation. The effect on total demand of an increase in transfer payments, for example, depends on whether households choose to save or consume the increase in disposable income.

Total demand is a multidimensional concept. Its different components are not direct substitutes. For example, a fall in export demand may not be neutralised simply by an increase in household demand as households demand products other than those that the export industry produces. The complications we have mentioned make it much more difficult to make an exact estimate of the level of net lending that is consistent with a well-calibrated fiscal policy.

As Table 2.4 shows, the change in structural net lending between 2012 and 2013 is 0.1 per cent of GDP. Hence, the total effect of the Government's measures on net lending is about zero. This means that the measures proposed by the Government in BP13 and VP13 are offset by other changes. In Table 2.4, the effect of the Government's policy for 2013 on structural net lending is segregated in the row "Discretionary fiscal policy"; the effect amounts to -0.5 per cent of GDP and the negative sign indicates that it involves a weakening of structural net lending. This stimulus is completely offset by the item "Other".

⁹ The Ministry of Finance describes this as an "indicator of demand stimulus", BP13, p. 132.

Table 2.4 Change in structural net lending 2013–2017

<i>Annual change as a percentage of GDP</i>	2013	2014	2015	2016	2017
Change in net lending	-0.9	0.6	1.1	1.1	0.9
of which					
Automatic stabilisers	-0.7	0.1	0.6	0.7	0.4
One-off effects	-0.3	0.0	0.0	0.0	0.0
Extraordinary capital gains	0.1	0.0	0.0	0.0	0.0
Change in structural net lending	0.1	0.5	0.5	0.4	0.5
of which					
Discretionary fiscal policy ¹	-0.5	0.1	0.2	-0.1	-0.1
Capital costs, net	-0.2	-0.1	0.0	0.0	0.0
Local government finances	0.3	-0.1	0.0	0.1	0.2
Other	0.5	0.6	0.3	0.3	0.3
Output gap, change in percentage points	-1.3	0.1	1.0	1.2	0.6

Note (VP13):¹ Refers to expenditure and revenue changes in 2013–2017 compared with previous years of adopted, proposed and announced reforms.

Source: VP13.

As seen in Table 2.4, the item “Other” provides a substantial contribution to the improvement in the public finances following from 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.¹⁰ This creates a trend for an automatic improvement in net lending that is not a cyclical effect and thus is included in the estimate of structural net lending. The distinction between automatic and active measures thus becomes somewhat unclear.

The active measures that altogether charge the public finances about SEK 25 billion in 2013 reduce net lending by 0.7 per cent of GDP. How large the expansive stimulus from a deterioration in general government net lending of 0.7 per cent of GDP will be depends on the above-mentioned factors such as the combination of measures introduced. The corporate tax cut, for example, has a limited effect on total demand – at least in 2013.

As structural net lending is unchanged and at the same time, parts of the expenditure increase probably have little effect on demand, the

¹⁰ For a discussion of this, see Fiscal Policy Council (2011), pp. 71–79 and BP12, p. 194.

Council's overall assessment is that fiscal policy in BP13 and VP13 does not stimulate total demand in the economy – if anything, it has a contractionary effect.

In its 2012 report, the Council was of the opinion that there were no stabilisation policy reasons to justify holding back a further reduction in the income tax, as the Government maintained in BP12. In the Council's opinion, the economic situation argued in favour of a more expansive fiscal policy than the Government proposed in BP12.¹¹

The Council's opinion now is that the fiscal policy in BP13 and VP13 does not provide any further stimulus to total demand. From a purely stabilisation policy perspective, further measures would have been justified in 2013. The Council endorses the Government's preparedness to take temporary measures in the event that an acute need for an economic stimulus emerges in 2013 and 2014. But the scope for more expansive measures in the current economic situation is limited. Further expansive measures in the current economic environment need to be supplemented with budget improvements when the economic upturn has begun in order not to jeopardise the surplus target.

The Council's overall assessment is that fiscal policy is generally well balanced. In the Council's opinion, however, the trade-off between the short-term stabilisation policy perspective and a surplus target formulated over a business cycle should be given more attention in the Government's bills.

2.4 Assessments and recommendations

The Council notes that the Government's new policy for 2013 consists mainly of small additional resources to a large number of budget appropriations. In total, the Government allocates about SEK 23 billion to about 250 appropriations. The Budget Bill contains proposals for all the revenue and expenditure items in the government budget because of the requirement in the Budget Act for completeness. In the Council's opinion, this is a good rule. But the Government should make its fiscal policy reporting more transparent.

¹¹ Fiscal Policy Council (2012), p. 11.

The Council notes that the Government takes an unusual step when it introduces stabilisation policy measures in connection with the Spring Fiscal Policy Bill.

The Council concludes that the fiscal policy in BP 2013 and VP 2013 does not provide any further stimulus to total demand. From a purely stabilisation policy perspective, a more expansive policy would have been justified in 2013. But the scope for such a policy is limited.

The Council endorses the Government's preparedness to take temporary measures in the event that an acute need for an economic stimulus emerges in 2013 and 2014. Further expansive measures in the current economic environment need to be supplemented with budget improvements when the economic upturn has begun in order not to jeopardise the surplus target.

The Council's overall assessment is that fiscal policy is generally well balanced. In the Council's opinion, however, the trade-off between the short-term stabilisation policy perspective and a surplus target formulated over the business cycle should be given more attention in the Government's bills.

3 The Government's forecasts

Forecasts of economic developments provide an important basis for formulating fiscal policy both in the short and medium term. The quantitative targets and restrictions in the fiscal framework require forecasts of high quality. This applies to both the macroeconomic forecasts and the forecasts for the public finances, not least to expenditures in the central government budget. Rapid economic growth strengthens public finances. If the economy's potential production capacity is expected to expand, the growing public surpluses are considered permanent rather than cyclical. The possibility of meeting the surplus target for the public finances thus increases. The macroeconomic forecasts and analyses are therefore of key importance in the Government's fiscal policy reporting in relation to the budgetary targets.¹

Questions about the quality of macroeconomic forecasts have been discussed in the EU and other forums. There is a considerable risk that in their budget forecasts, countries overestimate growth in both the short and the long run in order to follow the rules of the Stability and Growth Pact.² Failure to realise the optimistic forecast can then be attributed to factors outside the Government's control. This raises the question of whether macroeconomic forecasts should be drawn up by independent bodies as done by the Office for Budget Responsibility (OBR) in the United Kingdom.³ The European Commission has made such a proposal in connection with tightening surveillance of euro countries' budget processes.⁴

The following sections consider the Government's forecasts in BP13 from a few different perspectives. Section 3.1 compares the Government's macro forecasts with those of other forecast institutes. One issue is the extent to which the forecasts that form the basis for the 2013 Budget Bill differ from other forecasts.⁵ Section 3.2 considers the Government's estimates of potential GDP in its recent

¹ Ministry of Finance (2011a), Section 3.3.3.

² Frankel (2011) finds that budget targets like those in the SGP tend to increase optimism in the macro forecasts.

³ Jonung and Larch (2006). According to Frankel and Schreger (2012), the "optimism factor" decreases if the budget is based on macro forecasts by independent institutions.

⁴ See, for example, Ministry of Finance (2011b) where the Government's objections to the proposal are discussed.

⁵ The background material is based on the National Institute of Economic Research's forecast database (2013b).

budget bills. Potential GDP plays an important role in following up the surplus target and assessing the economic situation. But at the same time, the official statistics do not report any outcome for potential GDP against which the forecasts can be evaluated. The Government's forecasts for general government net lending are discussed in Section 3.3. Section 3.4 takes a schematic approach in discussing the volume forecasts forming the basis for projections of some transfer payment expenditures such as the sickness benefit and early retirement benefit. The Council's assessments and recommendations are summarised in Section 3.5.

3.1 GDP forecasts

In its 2010 report, the Council considered the Government's macro forecasts in connection with the financial crisis of 2008–2010. It concluded that for obvious reasons, the forecasts in these years were highly uncertain and that there were significant forecast errors. However, no evidence of any systematic differences compared with NIER's forecasts for the same period could be found.⁶

The Council also noted that there is considerable uncertainty in the Government's forecasts viewed from a long-term perspective but that forecasting errors do not differ significantly from errors in NIER forecasts. This applies to both absolute errors and mean errors. Both the Government and NIER overestimated (on average) growth and underestimated open unemployment in 2001–2008.

The Council concluded that the Government should explain more clearly how it takes into account the uncertainty in the macroeconomic forecasts when formulating policy. The information in the budget bills was considered so vague that it is difficult for the reader to get a good picture of what the forecasts mean.

The fact that the Government's forecasts on average over the long term are not worse than NIER's, for example, does not rule out significant deviations in individual years. In this section, the focus of our evaluation is the growth forecast that forms the basis for BP13. The Government's GDP forecast is compared with those of a number of other forecasting institutions in order to examine the extent to which the Government's forecasts deviate from the average

⁶ Fiscal Policy Council (2010a).

estimate and the extent to which the forecasts have been revised since BP13 was published.

A large number of national and international institutions regularly publish forecasts of macroeconomic developments in Sweden. Many forecasting institutions also publish several forecasts each year. The forecasting horizons differ and only a handful of forecasts cover the whole period of three to four years presented in the Government's budget bills. Only the Government, NIER and ESV publish detailed projections of the public finances in a multi-year perspective.

Accurate comparisons of different forecasts assume that the forecasting institutions have access to the same information. The Government has no particular information advantage with respect to open information in the form of statistics, published analyses by international organisations, and so forth. The amount of information available is largely determined by the point in time when the forecast is prepared. However, the Government has an obvious advantage with respect to information about the measures that will be proposed in its respective bills. The importance of differences in information is difficult to assess but it must be taken into account when comparing different forecasts.⁷

Even though the forecasts are published at about the same time, and therefore are based on the same information, the principles for the projections may differ. This applies, for example, to how fiscal policy is handled in the forecast. In their estimates of developments in the public finances, both the Government and ESV consider only those measures that are proposed or announced in the current bill. This normally means that the public finances automatically improve over the forecast period.⁸ Other forecasting institutions such as NIER assume in their forecasts that unfinanced reforms or budget consolidation measures are implemented in their entirety within the framework for the budgetary targets.⁹

⁷ In March each year, NIER presents both an evaluation of its own forecasts and a comparison with those of other domestic forecasting institutions. The evaluation in March 2013 refers to forecasts for 2012 that were published in 2011 and 2012. The analysis also involves an adjustment for different amounts of information, taking into account the publishing date for respective forecasts; see National Institute of Economic Research (2013c).

⁸ Fiscal Policy Council (2011), Chapter 2.

⁹ NIER also publishes an alternative forecast with no policy changes, i.e. following the same principles that the Government uses in the budget bills.

3.1.1 Forecasts for 2012 and 2013

Figures 3.1 and 3.2 show growth forecasts for 2012 and 2013, which have been published since early 2012. The horizontal axis shows the week of publication.¹⁰ The figures also include forecasts published in spring 2013, including the Spring Fiscal Policy Bill. Red bars indicate the Government's forecasts and black indicate NIER's. Light blue bars indicate other forecasting institutions.

As can be seen in Figure 3.1, forecasters during 2012 were increasingly optimistic about growth in 2012, but this optimism faded in the autumn. The Government's forecast in BP13 is one of the highest even though it was published as late as week 38 (20 September). In practice, however, the forecast was decided already before government discussions at Harpsund in mid-August. After the Budget Bill, all the published forecasts are 0.5–1.0 percentage points lower than the Government's forecast.

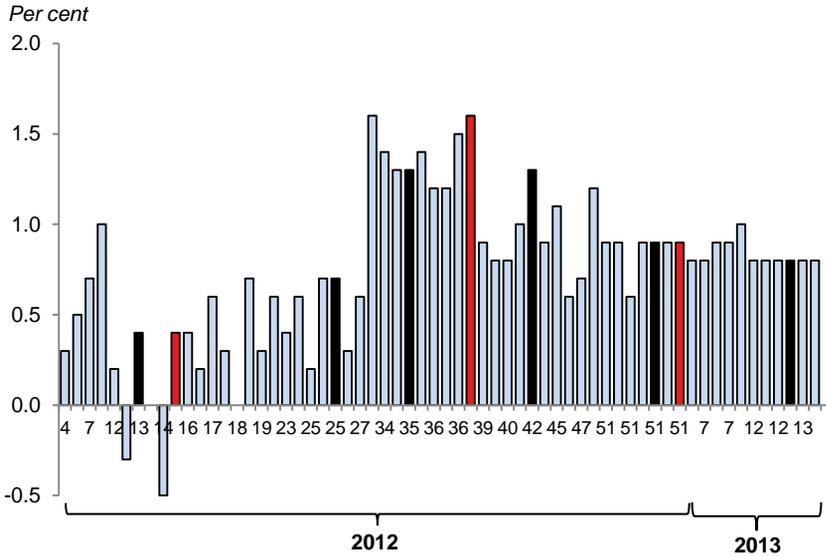
One explanation for the Government's optimism may be that the preliminary statistics from Statistics Sweden indicated relatively strong growth in the second quarter. Statistics Sweden revised the outcome downwards from 1.8 to 0.9 per cent in its regular quarterly accounts publication in September the 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 further to only 0.3 per cent annually according to the outcome from Statistics Sweden.

In the revised forecast presented by the Government on 21 December 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 preliminary outcome from Statistics Sweden for growth in 2012 was 0.8 per cent.

The growth forecast for 2013 is of key importance in preparing the central government budget for 2013. Revenue in the form of taxes and charges is affected most as the tax bases tend to grow at the same pace as GDP. Expenditures are more stable whatever the cyclical situation, but expenditures for unemployment benefits and labour market policy usually increase when growth slows down. The macroeconomic forecast forms the basis for the Government's

¹⁰ The appendix at the end of the report lists the week of publication in 2012 and early 2013 for different forecasting institutions.

Figure 3.1 Growth forecasts for 2012 published since the beginning of 2012



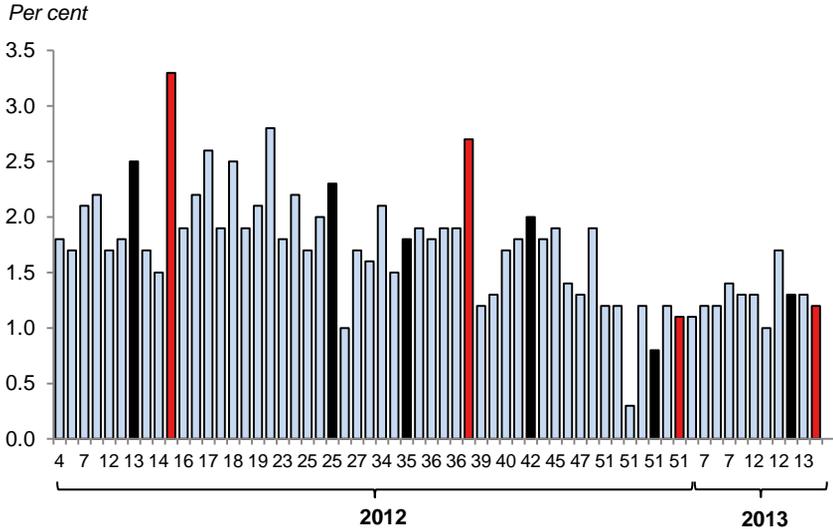
Note: The figures on the horizontal axis show the week of publication in 2012 and early 2013. Red bars show the Government's forecasts and black bars show NIER forecasts. Sources: NIER and own calculations.

assessments of the fiscal stance vis-à-vis both the economic situation and the surplus target.

Figure 3.2 shows growth forecasts for 2013. 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 some cases, the difference is considerable. 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.

The Government's forecast revision in December 2012 was obviously considerable and the forecast is in line with other forecasts published at the end of 2012. Hence, the central government budget for 2013 was based on a more optimistic view of macroeconomic developments than that later envisaged by all the forecasting

Figure 3.2 Growth forecasts for 2013 published since the beginning of 2012



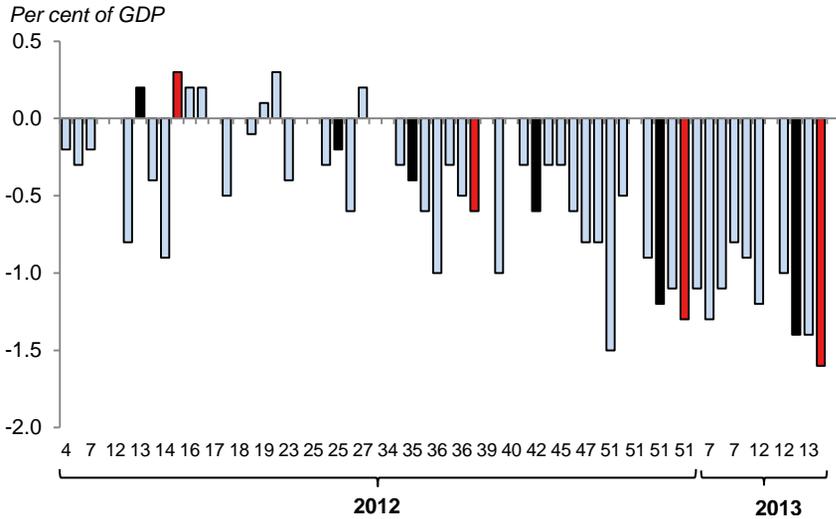
Note: The figures on the horizontal axis show the week of publication in 2012 and early 2013. Red bars show the Government’s forecasts and black bars show NIER’s forecasts. Sources: NIER and own calculations.

institutions (including the Government). The basis for the estimates of the fiscal stance for 2013 was thus inadequate.

It should be noted that many analysts regarded the preliminary outcome for GDP in the fourth quarter of 2012, published at the end of February, as somewhat stronger than expected. This has contributed to a slight upward revision in the growth forecasts for 2013 once more, compared with the forecasts published at the end of 2012. This applies to both the NIER forecast in March 2013 and the Government’s revised forecast in VP13.

Figure 3.3 shows forecasting institutions’ estimates of general government net lending for 2013. As previously mentioned, some forecasting institutions such as NIER routinely include forecasts of budget policy in their forecasts. Others such as ESV only put in already adopted or announced measures. Thus, the fiscal assumptions in the forecasts published before BP13 differ between different forecasting institutions. The forecasts published after BP13 include budget weakening measures equivalent to 0.7 per cent of GDP, as proposed in the bill.

Figure 3.3 Government net lending forecasts for 2013 published since the beginning of 2012



Note: The figures on the horizontal axis show the week of publication in 2012 and early 2013. Red bars show the Government's forecasts and black bars show NIER's forecasts. Sources: NIER and own calculations.

The budget deficit in the revised forecasts increases in line with the deteriorating growth forecast. In December, the Government estimated that the deficit in 2013 would be about SEK 50 billion instead of just over the SEK 20 billion estimate in BP13. The outcome for net lending in 2012 was published at the end of February 2013 and was about SEK 12 billion worse than that assumed in BP13. The budget deficit for 2013 was estimated at about SEK 60 billion in VP13, i.e. a deterioration of close to SEK 40 billion compared with the estimate in BP13.

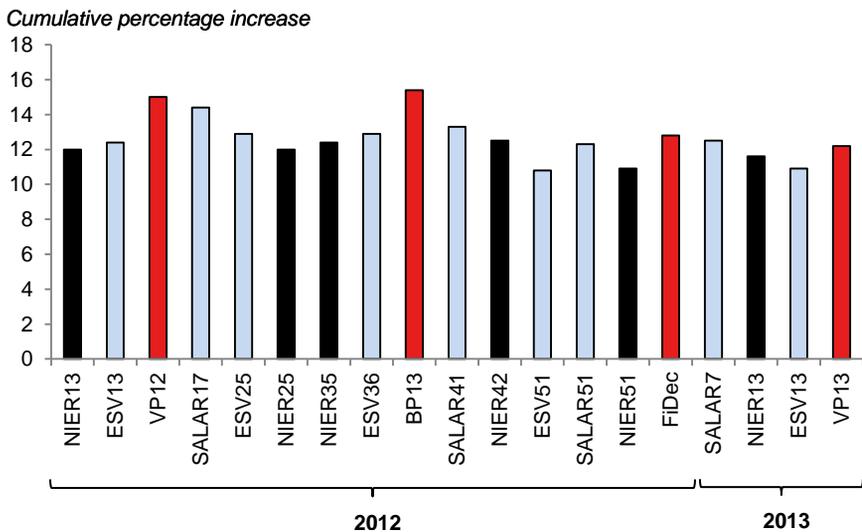
3.1.2 Forecasts to 2016

Most of the institutions included in NIER's forecast database 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 BP13, the forecast horizon is 2016. Whether the medium-term forecasts should be seen as pure forecasts or as conditional projections is often unclear, but in general the revision of economic growth is based on the economy achieving

macroeconomic balance at the end of the forecasting horizon with the closure of the output gap and unemployment close to the long-term equilibrium.

In 2012, NIER, ESV and SALAR also published estimates with 2016 as the final year.¹¹ Figure 3.4 compares the cumulative increase in GDP from 2012 to 2016.¹²

Figure 3.4 GDP for 2011–2016 in forecasts published since the beginning of 2012



Note: The labels on the horizontal axis show the forecasting institution and week of publication since the beginning of 2012. The National Institute of Economic Research (NIER), the Swedish National Financial Management Authority (ESV) and the Swedish Association of Local Authorities and Regions (SALAR). Government forecasts cited are VP12, BP13, the December 2012 update (FiDec) and VP13. Sources: NIER and own calculations.

As Figure 3.4 shows, the medium-term growth forecast in BP13 exceeded other estimates reported in 2012 and early 2013, in some cases with good measure. In NIER's August forecast (NIER42), the cumulative increase in GDP in 2016 was 2.5 percentage points lower than in BP13. This is equivalent to about one year's growth. In NIER's December forecast (NIER51), the cumulative increase was adjusted downwards by over 1 percentage point more.

¹¹ In their forecasts published in 2013, the Government as well as ESV and NIER have extended the horizon to 2017.

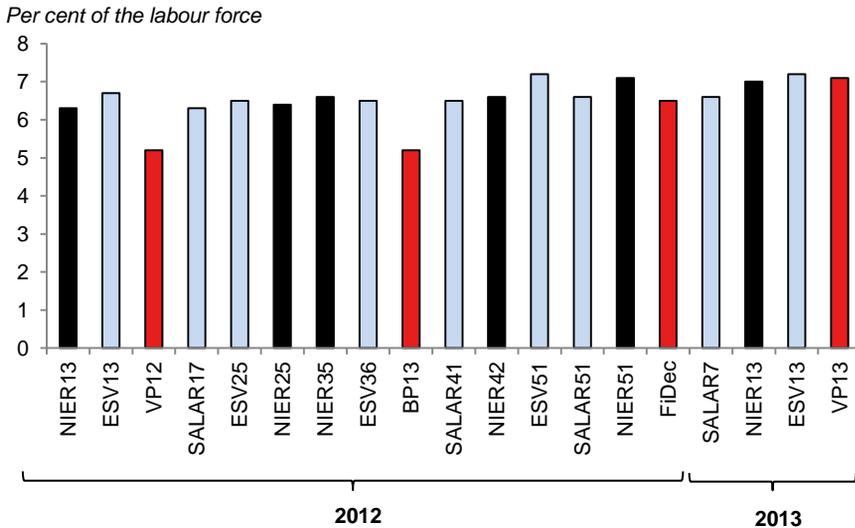
¹² As the 2011 GDP level was revised in the course of 2012, the cumulative growth differential is not necessarily the same as the difference in the GDP level in 2016.

The downward adjustment of GDP in the Government’s December forecast (FiDec) amounts to more than 2 percentage points until 2016 compared with BP13. Despite the downward adjustment, the Government’s forecast still appears optimistic in a medium-term perspective compared with NIER’s December forecast.

NIER’s March forecast (NIER13) showed a slightly more positive picture of cumulative growth, primarily because of some upward adjustment of GDP in 2013. The difference compared with the Government’s forecast in VP13 now comes to just over 0.5 percentage points up to 2016.

The differences in the unemployment estimate for 2016 are shown in Figure 3.5. In BP13, the Government’s view of unemployment over the next few years appeared optimistic compared with other analysts. With the revised forecast in VP13, the Government’s growth estimate has been adjusted to that of other forecasting institutions.

Figure 3.5 Open unemployment 2016 in forecasts published since the beginning of 2012



Note: The labels on the horizontal axis show the forecasting institution and week of publication since the beginning of 2012. The National Institute of Economic Research (NIER), the Swedish National Financial Management Authority (ESV) and the Swedish Association of Local Authorities and Regions (SALAR). The government forecasts cited are VP12, BP13, the December 2012 update (FiDec) and VP13.

Sources: NIER and own calculations.

The estimate of potential GDP in 2016 has been revised downwards by about 1.5 per cent and equilibrium unemployment is estimated at about 5.5 per cent of the labour force compared with 5.1 per cent in BP13. Despite the downward adjustment of potential GDP and the relatively high growth rate from 2015 to 2017, the output gap is not expected to have closed at the end of 2017.

3.2 Potential GDP and the output gap

Potential GDP can be defined as the level of output that can be maintained in a “normal” cyclical situation.¹³ Actual GDP is assumed to fluctuate around potential GDP. The difference between actual GDP and potential GDP, the output gap, is a broad measure of capacity utilisation in the economy. The output gap plays an important role in the Government’s reporting of both the economic situation and the fiscal space. In a downturn, i.e. when the output gap is negative, public finances deteriorate. By adjusting actual net lending for the output gap, we get a better estimate of the underlying balance.¹⁴

A forecast of the output gap depends on forecasts of both actual GDP and potential GDP. An optimistic estimate of the level of potential GDP gives rise to a larger negative output gap for a given forecast of actual GDP; see Box 3.1.

With a larger negative output gap, the underlying strength of the public finances may be considered satisfactory even though the actual balance is weak. This is true particularly when the output gap is primarily due to a large employment gap.¹⁵ In an economic upturn, with strong public finances, a larger part of the surplus will conversely be seen as more permanent if a high level of potential GDP is expected and the output gap is thus relatively small. If the surplus target is threatened, there is a risk that too optimistic an

¹³ See, for example, the Ministry of Finance (2012a). Potential GDP is sometimes defined as the level of output that is compatible with constant inflation; see Fiscal Policy Council (2011).

¹⁴ Included among the different indicators used by the Government to follow up the surplus target are both the annual structural balance and average structural balances over different periods; see Ministry of Finance (2011a).

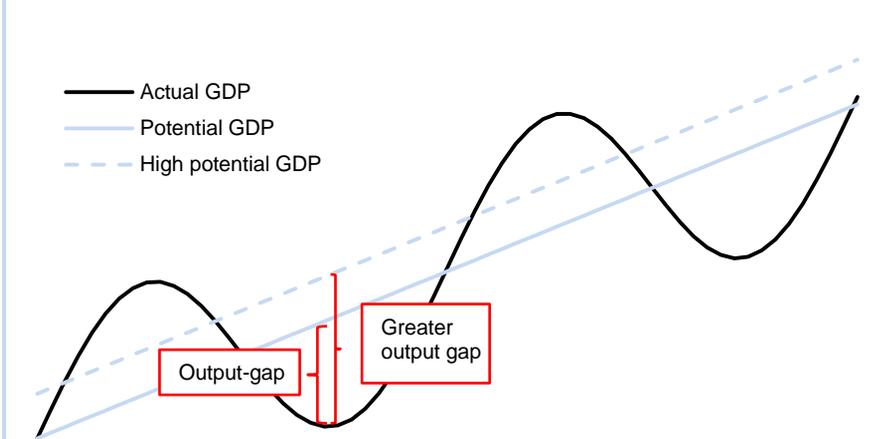
¹⁵ Higher productivity has a weaker impact on the public finances than higher employment. In the long run, higher productivity and real wages will increase public expenditures for wages and transfer payments at about the same pace as tax bases increase. Higher employment strengthens tax bases without any direct effects on public expenditure.

Box 3.1 Potential GDP and the structural balance

- Output-gap = $\frac{(Actual\ GDP - Potential\ GDP)}{Potential\ GDP} \times 100$
- “Potential GDP is defined as the level of output that can be maintained in a normal cyclical situation.” (BP13)
- The structural balance in the public finances under the Government’s calculation method: Net lending - 0.55 × output gap - other adjustments (one-off effects, extraordinary capital revenues).

Figure 3.6 shows that too optimistic an estimate of potential GDP leads to an underestimation of the size of a positive output gap and an overestimation of a negative output gap. In an economic downturn with a negative output gap, the estimated cyclical adjustment of net lending is greater, and this in turn results in an overestimation of the cyclically adjusted net lending.

Figure 3.6 Potential GDP and the output gap



assessment of potential GDP will result in a failure to take the measures necessary to ensure that the surplus target is met.

The forecast for potential GDP is thus of considerable importance in the assessment of the fiscal stance and the follow-up of the surplus target. However, 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 outcome. Different forecasting institutions also use different methods to estimate potential GDP. Thus, not only are there different estimates of the future growth of potential GDP (and the output gap), but also the estimates for historical years may differ. The calculation methods often result in an output gap that is on average negative in the long term, thus making the follow-up of the surplus target with the help of structural net lending more difficult. This is true of both the Government's and NIER's estimates of the output gap. To sum up, potential GDP is a variable that is difficult to estimate, but it is an essential part of the fiscal policy assessment.

In the budget bills, the forecasts for actual GDP are reported and justified in relative detail. At the same time, the description of potential GDP is rather sparse despite its importance in the reporting of the fiscal stance and the position in relation to the surplus target.

In VP13, the Government for the first time presents a detailed report of the changes in the estimate of potential GDP compared with BP13. The Council welcomes this reporting. But there are still no comparisons with other forecasting institutions, particularly NIER and the Riksbank. Reporting these comparisons and commenting on them is all the more important because the forecasts in this case cannot be evaluated against outcome.¹⁶

3.2.1 Comparisons with NIER

Figure 3.7 shows the output gap for 1980–2016 according to the Budget Bill and NIER's forecast report in March 2013. The cyclical patterns estimated are similar, but the size of the output gap may differ in some years by up to two percentage points.

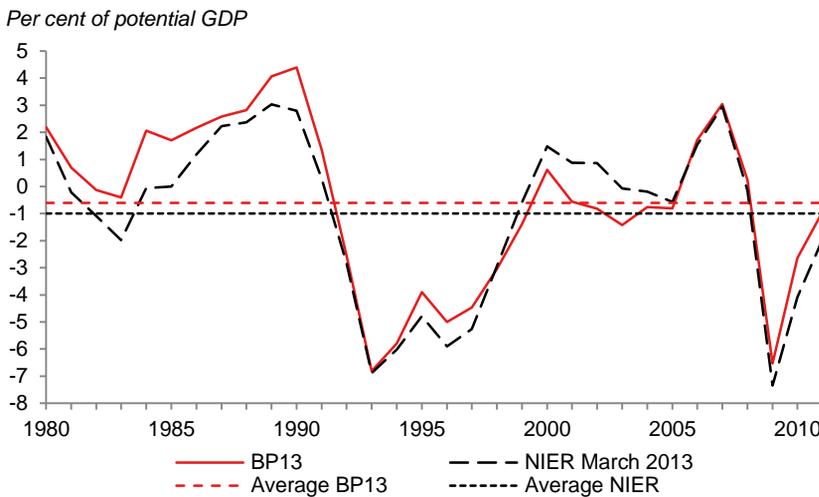
In several of its reports, the Council has discussed the Government's use of the output gap in assessing the fiscal stance and estimating the fiscal space.¹⁷ One observation is that the Government's estimate of potential GDP results in an average negative output gap. In the actual estimate, the average output gap

¹⁶ By way of comparison, the forecast reports published by the Office for Budget Responsibility in the United Kingdom begin the chapter on the economic outlook with a relatively detailed analysis of the forecast for potential GDP; see Office for Budget Responsibility (2013).

¹⁷ See, for example, Fiscal Policy Council (2009, 2011).

is -0.6 per cent for the period covered by the estimates, 1980–2011. When there is a negative output gap, general government structural net lending exceeds actual government net lending (see Box 3.1). Over the long term, the average value of structural net lending will thus exceed the average value of actual net lending if the average output gap is negative. Consequently, an average for structural net lending provides too positive a picture of the strength of the public finances in relation to the surplus target, as the target is formulated as an average of actual net lending (see Chapter 4).¹⁸

Figure 3.7 Output gap



Sources: Ministry of Finance, NIER and own calculations.

The method NIER uses to estimate potential GDP is similar to the Government’s. In NIER’s calculations, the average output gap is also negative: -1 per cent from 1980 to 2012 in its March forecast. In its follow-up of the surplus target, NIER makes an explicit adjustment for the asymmetry in the output gap. To meet the surplus target of an average of 1 per cent of GDP over a business cycle, NIER estimates that a structural net lending of 1.2 per cent is required.¹⁹ The

¹⁸ The Fiscal Policy Council (2012) also criticised the aggregated method used by the Government to estimate net lending. A particular change in GDP may affect different tax bases in different ways and therefore give rise to different cyclical adjustments of the public finances. The method of calculation that the Government uses may yield misleading results and thus provide poor guidance for the fiscal stance.

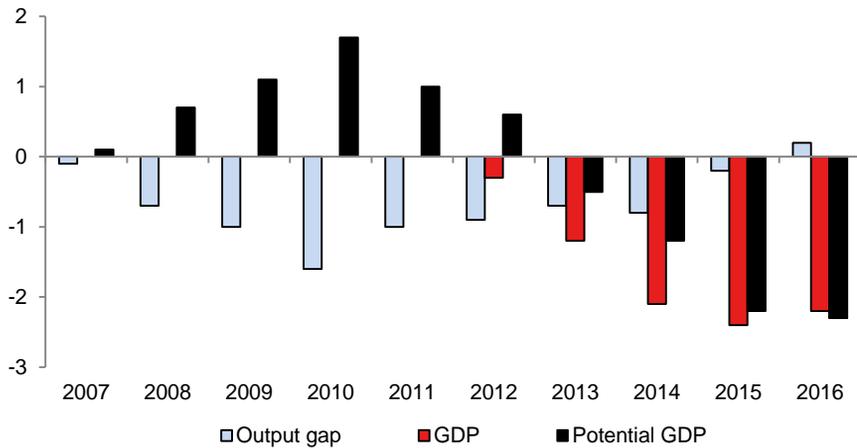
¹⁹ National Institute of Economic Research (2013a), p. 50.

Government does not make any such adjustment in its target indicators.

For the years covered by the forecast, differences in the output gap between different analysts are due either to different forecasts of actual GDP or different estimates of potential GDP. Figure 3.8 shows the difference in potential GDP and actual GDP between NIER's August report and BP13, i.e. between forecasts made at approximately the same time. NIER's view was that (the negative) average output gap was about 1 percentage point higher than the Government's estimate for 2008–2011. All of this difference is due to NIER's more positive estimate of potential GDP.²⁰

Figure 3.8 NIER's forecast in August 2012 compared with BP13

Difference in percentage points and per cent



Sources: Ministry of Finance, NIER and own calculations.

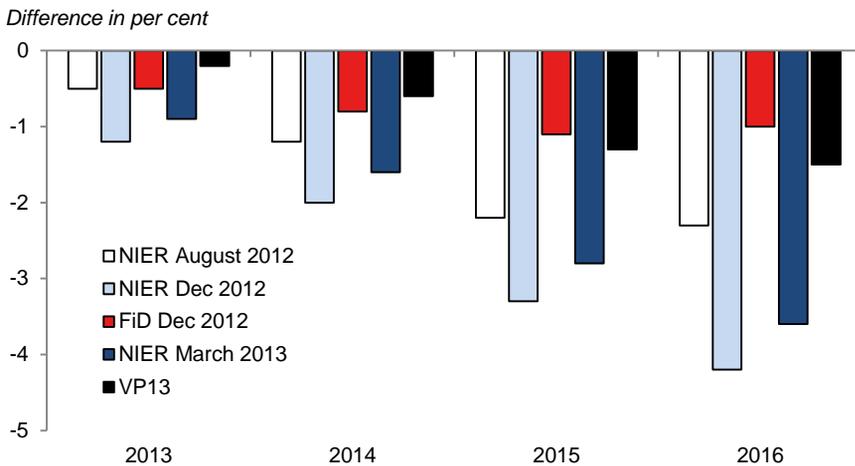
For the period 2012–2016, NIER had a substantially more pessimistic view of *the growth* of potential GDP. Whereas the Government in BP13 expected that potential GDP would grow an average of 2.7 per cent a year, NIER predicted an increase of only 2.0 per cent. Therefore, *the level* of potential GDP is more than 2 per cent lower in 2016 than in the Government's forecast. In both forecasts, actual GDP is assumed to grow slightly faster than potential GDP so that the output gap closes about 2016. However,

²⁰ Forecasting institutions very seldom publish potential GDP levels. Potential GDP has therefore been estimated based on actual GDP.

as a result of the lower potential GDP in NIER’s estimate, the level of actual GDP in 2016 is correspondingly lower than in the Government’s forecast.

Figure 3.9 shows NIER’s and the Government’s most recent estimates of potential GDP in relation to the forecast in BP13. Even though the Government has revised potential GDP downwards by about 1 per cent in its most recent forecasts (December 2012 and VP13) compared with BP13, the systematic optimism compared with NIER’s estimates persists. In NIER’s March forecast, potential GDP was estimated at about SEK 150 billion lower in 2016 than in BP13. Compared with VP13, the difference is about SEK 80 billion. This is equivalent to a fiscal space of several tens of billions of kronor.

Figure 3.9 Potential GDP compared with BP13



Note: Red bars show the Ministry of Finance forecast in December 2012 and VP13. Blue bars show NIER forecasts in August and December 2012 and March 2013.

Sources: Ministry of Finance, NIER and own calculations.

3.2.2 Revisions of potential GDP

Since 2007, the Government has taken a number of measures to boost production capacity in the economy. The Government’s assessment of their effects is reflected in the gradual increase in potential GDP.²¹ At the same time, the Swedish economy has been subject to shocks that have reduced demand and lowered capacity

²¹ See Ministry of Finance (2011c), Chapter 3.

utilisation. Even though short-term fluctuations in demand should have limited effects on the production potential of the economy, a deep and protracted economic downturn can have permanent effects owing to the exclusion of both the physical capital stock and human capital.

A combination of measures to improve labour market functioning and boost weak demand makes estimating the economy's potential production capacity more complicated. As noted in the preceding section, the Government makes a more positive estimate of potential GDP than NIER. At the same time, the Government's own estimates are revised in every budget bill. In some cases, there have been major revisions. As Table 3.1 shows, potential GDP for a particular year has been revised both upwards and downwards. In BP10, potential GDP was revised sharply downwards under the impact of the current financial crisis. In BP11, the estimate was again revised upwards but output potential in the economy was still deemed to be substantially lower than before the crisis. The revisions of actual GDP in these bills followed the same pattern, but were about twice the size. In BP12, potential GDP was once more adjusted upwards, only to be then adjusted downwards again in BP13. A further downward adjustment was made in VP13. However, Figure 3.9 shows that the Government's estimate is still considerably more optimistic than NIER's estimate.

Table 3.1 Revision of potential GDP

Percentage change compared with the preceding bill

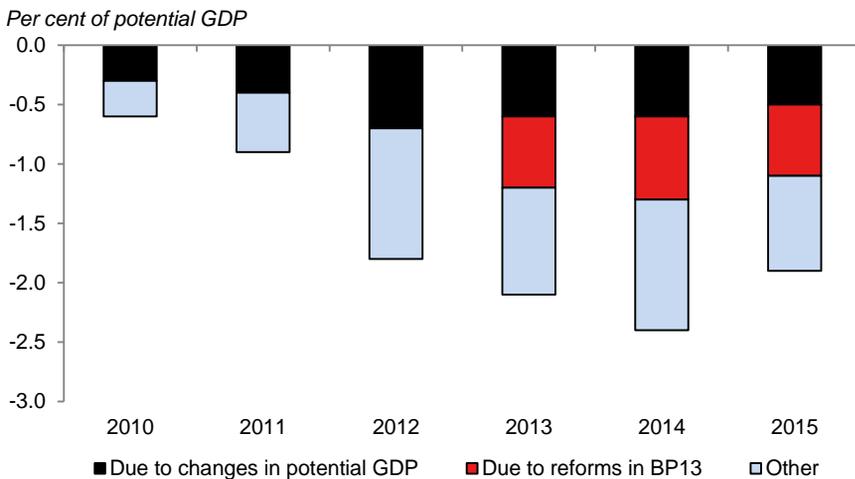
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
VP13			0.0	0.1	0.7	1.0	0.5	0.2	-0.2	-0.6	-1.3	-1.6
BP13	-0.1	0.0	0.1	-0.1	0.1	-0.5	-0.7	-1.2	-1.1	-1.2	-0.9	
BP12	0.5	-0.3	-0.4	0.4	0.9	1.2	0.7	0.9	0.9			
BP11	1.7	1.1	-0.2	-0.6	-0.6	0.8	2.2	3.0				
BP10	-0.9	-0.8	-0.7	-2.1	-3.2	-5.0	-6.1					
BP09	-0.6	-0.7	-1.1	-0.5	-0.9	-1.0						
BP08	-0.9	-0.9	-0.6	-1.0	-0.8							
BP07	0.9	1.6	2.5	3.3								
BP06	0.5	0.7	1.0									
BP05	2.3	2.3										

Sources: Ministry of Finance and own calculations.

Changes in the estimates of the economic situation in the form of the output gap are often interpreted as a change in the growth prospects over the next few years. However, the relatively major revisions of potential GDP show that a change in the output gap also largely depends on a change concerning the size of potential GDP.

Figure 3.10 illustrates the importance of the revisions of potential GDP for follow-up of the surplus target. According to the Government’s estimate, structural net lending deteriorated between BP12 and BP13. Average structural net lending as a percentage of GDP was about 2 per cent lower in the forecast period 2012–2015. A quarter of the decrease can be attributed to a lower forecast of potential GDP.²² Of the rest, about 0.7 percentage points can be attributed to the reforms proposed in the Budget Bill for 2013. A substantial part of the decrease in the fiscal space in relation to the surplus target is thus due to a more pessimistic estimate of potential GDP. But as the preceding section made clear, the Government, despite the downward adjustments in BP13 and VP13, has a considerably more positive view of potential GDP in the coming period than NIER.

Figure 3.10 Change in structural net lending between BP12 and BP13



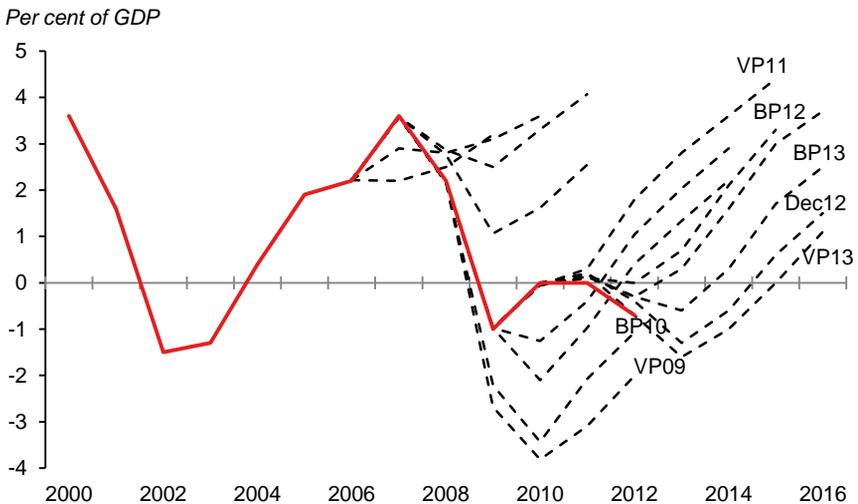
Sources: Ministry of Finance and own calculations.

²² The estimate is based on the Government’s standard budget elasticity of 0.55. The item “other” is not zero in 2010 and 2011 because the outcomes have been revised for both GDP and net lending between the publication of BP12 and BP13.

3.3 Public finances

Budgetary projections three to four years ahead form the basis of the Government's estimate of the fiscal space for permanent reforms or the need for savings in relation to the surplus target. The projections, almost without exception, show a strong improvement in net lending after the budget year; see Figure 3.11. The improvement frequently amounts to almost 1 per cent of GDP a year.

Figure 3.11 Budgetary projections



Note: The solid red line represents the outcome for general government net lending. The dashed black lines represent forecasts in all the Budget Bills and Spring Fiscal Policy Bills from VP07 through VP13. Sources: Ministry of Finance and own calculations.

Two factors are mostly responsible for the projected improvement in net lending:

1. The output gap is closed (or at least substantially reduced) over the forecast period, signifying that actual GDP grows more rapidly than potential GDP if there is a negative output gap to begin with. The greater the (negative) output gap at the start, the more rapidly GDP, and hence tax bases and public revenue, are expected to grow.
2. No new measures with budgetary implications are taken in the forecast period beyond what has been decided previously or proposed in the actual bill (“unchanged rules”). Expenditures thus increase more slowly than potential GDP because some

transfers are not indexed or temporary programmes come to an end if no decision has been taken on an extension.²³

Figure 3.11 also shows the gloomy picture of the public finances painted in VP09 and BP10 in 2009. The forecasts changed to growing optimism in the bills presented in 2010 and 2011. This culminated in VP11 in spring 2011, when the surplus for 2015 was estimated at more than 4 per cent of GDP. But beginning with BP12 in September 2011, the surplus falls in the forecasts, due in part to measures on both the revenue and the expenditure sides. However, the profile with an automatic improvement in the forecast period remains.

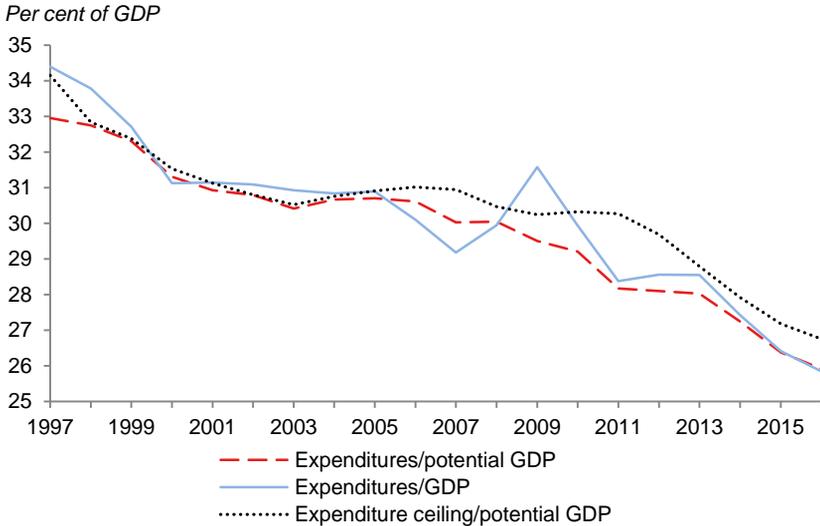
3.4 Expenditure volumes and expenditure risks

The central government expenditure ceiling includes budget expenditures excluding interest expenditure, but including expenditures for the statutory earnings-related old-age pension system. The expenditure ceiling system was first used in BP97. As shown in Figure 3.12, the expenditure ceiling declines from 34 per cent of potential GDP in 1997 to just under 27 per cent in 2016 in the estimates reported in BP13. The figure also shows that the expenditure ceiling declined relatively sharply in the first four to five years after it was introduced and thereafter hovered between 30 and 31 per cent of GDP until 2011. In BP13, the Government reported a further rapid decline in the ceiling in relation to potential GDP.

The expenditures subject to the ceiling have also been on a downward trend as a percentage of GDP, from 33 per cent in 1997 to 28 per cent in 2012. The forecast in BP13 implies a further reduction of 2 percentage points in the expenditure ratio. Compared to actual GDP, the reduction has been slightly larger. In the crisis years 2008–2009, expenditures as a percentage of actual GDP did increase a couple of percentage points, but the increase was primarily due to very slow GDP growth rather than a sharp increase in expenditures.

²³ See ESV (2013), Fiscal Policy Council (2011) and National Institute of Economic Research (2013a).

Figure 3.12 Expenditure ceilings and expenditures subject to the ceiling in BP13



Note: Both the expenditure ceiling and the expenditures subject to the ceiling have been adjusted for technical changes in the reporting so that they are comparable over time.
 Sources: Ministry of Finance and own calculations.

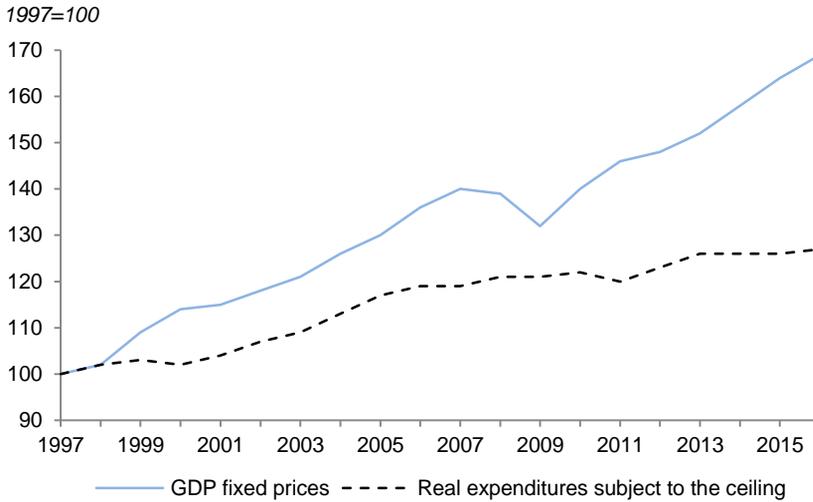
GDP in real terms is expected to increase by about 70 per cent from 1997 to 2016 according to the forecast in BP13. At the same time, real expenditures subject to the ceiling are expected to increase by only a little over 25 per cent; see Figure 3.13.²⁴

One factor contributing to the falling expenditure ratio is the decrease in sickness absence. Another factor is the sharp decline in the percentage of people in open unemployment eligible for unemployment insurance benefits. These two factors, along with an unchanged income ceiling in the insurance, cause expenditures to decline in relation to GDP despite persistent high unemployment.

In BP13, the Government predicted that the expenditure ratio would continue to fall rapidly. However, there is a risk that expenditure pressures will build in the above named areas, making it all the more difficult to keep on reducing the expenditure ratio without measures to curb expenditures. There is also a significant expenditure risk in the migration area. Compared with VP12,

²⁴ Expenditures subject to the ceiling have been deflated by the implicit price for GDP. As the increase in prices for the expenditures subject to the ceiling have probably been slightly higher than for GDP, the expenditures subject to the ceiling in real terms have increased slightly less than shown in the figure.

Figure 3.13 GDP and expenditures subject to the ceiling in BP13



Note: Real growth, index 1997=100. Expenditures subject to the ceiling have been deflated by the implicit price for GDP.

Sources: Ministry of Finance and own calculations.

expenditures subject to the ceiling in BP13 were estimated to increase by about SEK 30 billion up to 2016.

Of these, close to a third consist of higher forecasts for the volumes in the transfer systems.²⁵ In VP13, further expenditure increases of about SEK 6 billion are expected on account of higher volumes.²⁶ The following section highlights developments in the sickness benefit and early retirement (sickness and activity compensation) and the Government’s forecasts in the budget bills since BP07.

3.4.1 Sickness benefit

Seen over the long term, sickness absence has fluctuated sharply. Figure 3.14 shows its development over the last 40 years expressed in full-year equivalents. Sickness absence peaked in the mid-1970s, in the late 1980s and in the early 2000s. The fluctuations are noteworthy, particularly those in the last wave. In only six years, between 1996 and 2002, sickness absence more than doubled. The drop in the number of sickness absences thereafter was equally

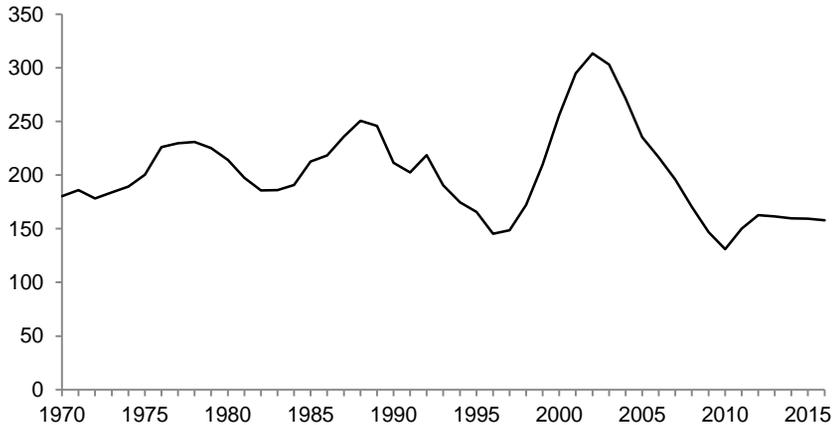
²⁵ See BP13, Table 8.8.

²⁶ See VP13, Table 9.8.

dramatic. By 2010, sickness absence had fallen by 60 per cent from its peak in 2002. This development is all the more remarkable as employment has grown relatively strongly since 2000. However, some increase in sickness absence can be discerned in outcomes for 2011 and 2012.

Figure 3.14 Sickness benefit and sick pay 1970–2016

Full-year equivalents, thousand



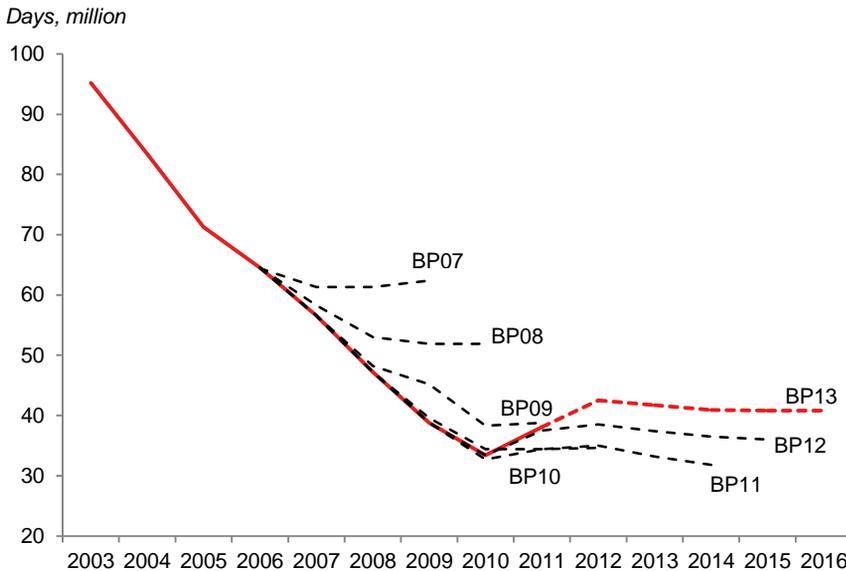
Sources: Ministry of Finance and own calculations.

Figure 3.15 shows changes in the number of sickness benefit days since 2003. This volume variable is used in the budget bills, along with an average cost, for sickness insurance expenditure projections. The figure shows the volume forecasts in the Budget Bills since BP07. In BP07, BP08 and BP09, the Government was surprised by the rapid decline in the number of sickness benefit days. The forecasts were consistently higher than outcomes. Beginning with BP10, the situation has changed and the forecasts have gradually been revised upwards as the decline in sickness benefit days came to an end and even began to increase. Expenditure projections since BP11 are no longer based on a further decline but on the general expectation that number of sickness days is levelling out. The threshold at which the volumes level out has, however, been adjusted upwards in line with outcomes.

As seen in Figure 3.14, sickness absence over the long term is currently at a very low level. Against the backdrop of a substantial rise in employment in this period, it is questionable whether the level in recent outcomes is sustainable in the long run or if there is a risk

of expenditure increases in the Government’s assumption that sickness absence is levelling out. There is no discussion of this in BP13. The Government notes only that the volumes in the sickness benefit are also expected to increase in 2012 on account of more and longer sickness cases, but that this development is expected to level out in the next few years.²⁷

Figure 3.15 Number of days with sickness benefit



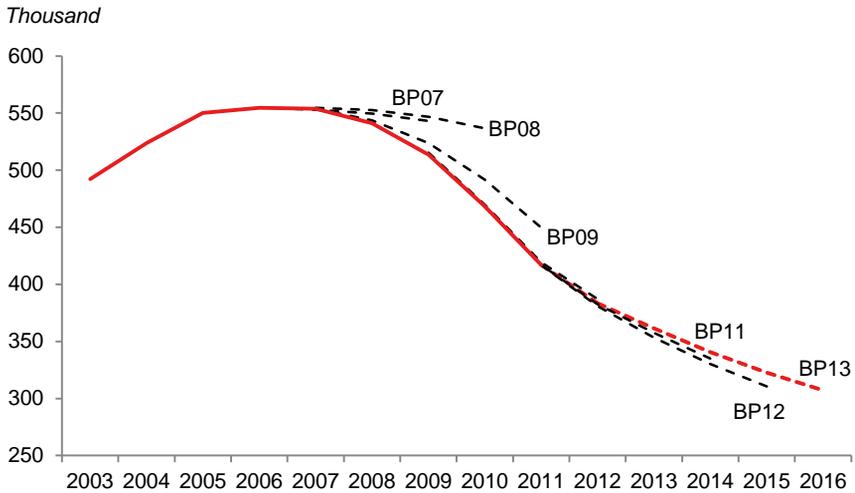
Note: The figure also covers the number of days with rehabilitation compensation.
Sources: Ministry of Finance and own calculations.

3.4.2 Early retirement (sickness and activity compensation)

The drop in early retirement volumes has also been unexpectedly sharp in recent years. The Government’s forecasts have gradually been revised to reflect this change. According to the forecast in BP13, volumes will continue to fall, although at a slower pace. In recent years the forecasts have been revised upwards in this area as well (Figure 3.16).

²⁷ BP13, p. 373.

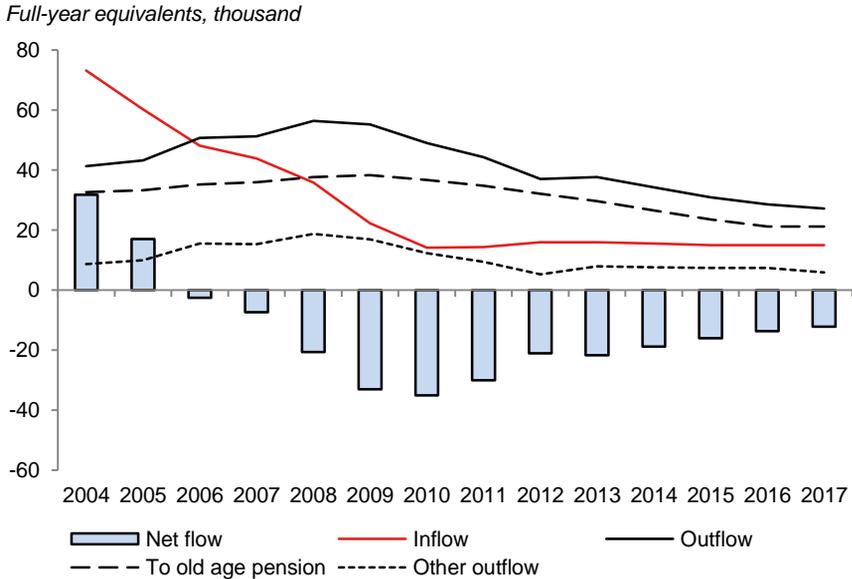
Figure 3.16 Sickness and activity compensation



Sources: Ministry of Finance and own calculations.

Figure 3.17 shows the flow to and from early retirement according to ESV estimates. As shown, the inflow into early retirement declined substantially until 2010. The outcome for 2011 indicates that the subsequent inflow stabilises at about 15 000–16 000 people, which is the same as ESV’s forecast. That part of the outflow referring to the inflow into the old age pension affects the expenditures subject to the ceiling only to a limited extent, as old age pension expenditures also come under the expenditure ceiling. The remaining outflow from early retirement has declined in recent years. The effect on the expenditures subject to the ceiling of this part of the outflow depends on whether people in the outflow stay in some other support system.

Figure 3.17 Inflow and outflow in sickness and activity compensation



Sources: ESV and own estimates.

3.5 Assessments and recommendations

In the Council’s opinion, significant deviations between the Government’s forecasts and the estimates from other forecasters should be reported and justified in detail in the budget bills. The reason for this recommendation is that BP13 is based on a macro forecast for 2013 that deviates sharply from other institutions’ forecasts.

Potential GDP plays a key role in the Government’s assessment of the cyclical situation and the fiscal stance in relation to the surplus target. There is no generally accepted method of estimating potential GDP and revisions are frequently also made for earlier years. It is therefore difficult to evaluate estimates of potential GDP.

The Council recommends that the Government clearly reports the basis for its estimate of potential GDP and the revisions that have been made since the last bill. In VP13, the Government has substantially improved this reporting, and we welcome this improvement. The Government should go further and also report

and comment on deviations from other analysts such as NIER, the Riksbank, the European Commission, the OECD and the IMF.

As the Council has previously pointed out, the methods used to estimate structural net lending in the public sector should be reviewed. A disaggregated approach is more relevant, particularly in the event of large shocks to the economy. It is difficult to understand why the Government uses an aggregated method with such obvious weaknesses in estimating a key variable for the fiscal framework and fiscal policy.

Due to the asymmetry in the output gap, average structural net lending must exceed 1 per cent of GDP in order to meet the surplus target, which refers to actual net lending. The Government does not take this into account when it reports the cyclically adjusted target indicators, which thus tend to be systematically misleading.

In the Council's opinion, the description of the development of the expenditures subject to the ceiling should be supplemented by an assessment of expenditure risks. The budget bills for the most part completely lack assessments of this kind. The Government should also report its forecasting methods for the rules-based transfer expenditures, preferably in a special appendix, and more clearly describe developments in appropriations in terms of volume and average cost where relevant.

4 The fiscal framework

In this chapter, we examine how well the Government complies with the fiscal framework. This examination is the main task of the Fiscal Policy Council.

Section 4.1 begins with a review of the Government's indicators for monitoring the surplus target and handling deviations from the target. BP10 and BP13 are then compared with respect to the surplus target. Section 4.2 follows with a brief review of the estimates of the public finances made by KI, ESV and the Government. The Council's assessment is presented in Section 4.2.4. In Section 4.3, the Council presents its view of the space for new expenditures under the expenditure ceiling for the next few years. Then in Section 4.4, the Council comments on the Government's discussion in BP13 about making the expenditure ceiling system more flexible. Section 4.5 briefly considers the public finances' long-term sustainability. The chapter also includes a box about Hungary's fiscal policy council. In conclusion, the Council summarises its assessments and recommendations.

4.1 The surplus target

4.1.1 Surplus target indicators

The surplus target is designed so that public finances are to show a surplus of 1 per cent of GDP on average over a business cycle. Thus, normal cyclical variations in public sector finances are allowed as long as government net lending fluctuates around an average of 1 per cent of GDP. As stated in Section 2.3, it is desirable that the public finances vary with the business cycle, weakening in a downturn and strengthening in an upturn. Such variations contribute to stabilising the economy and moderating swings in demand, output and employment. Net lending may also deviate from 1 per cent within the framework of the target if it is the result of an active stabilisation policy, provided that such deviations offset each other over the business cycle.

As the surplus target is defined “over the business cycle”, this makes the monitoring of the target complicated. The Government

has discussed this issue extensively: the length of a business cycle, measuring and methodological problems associated with estimating structural net lending, the weights of different indicators, etc. In order to best capture the cyclical situation when assessing whether the target has been met, the Government uses five indicators:

- 1a. Average actual net lending for the last ten years.
- 1b. Average actual net lending for the last ten years, cyclically adjusted.
- 2a. A seven-year moving average that includes the current year, the three previous years and the three coming years.
- 2b. A seven-year moving average that includes the current year, the three previous years and the three coming years, cyclically adjusted.
3. Structural net lending.

The Government primarily uses indicators 1a and 1b to determine whether fiscal policy has deviated systematically from the surplus target during the last ten years and the other three indicators to determine whether the current policy is compatible with the target using a forward-looking perspective. According to the Government, the indicators must be interpreted by making an overall assessment that also takes uncertainties and risks into account. Both the Swedish National Audit Office and the Council have pointed out that the follow-up is not transparent and there is a risk that the different indicators may give conflicting results. Both bodies have called for a simpler follow-up with fewer indicators. The Government, however, has rejected these views and maintained that an overall assessment is important.

In BP13, the indicators show that general government net lending does not meet the target. All indicators except the cyclically adjusted seven-year indicator indicate that the target is not currently being met, and the Government's view expressed in BP13 is that net lending is somewhat below the target in 2012–2014 (Table 4.1).

Table 4.1 Indicators for follow-up of the surplus target BP13

	2011	2012	2013	2014	2015	2016
Net lending	0.1	-0.3	-0.6	0.3	1.7	2.5
Backward-looking ten-year average (1a)	0.7					
Cyclically adjusted (1b)	1.2					
Seven-year indicator (2a)	0.0	0.0	0.5			
Cyclically adjusted (2b)	1.1	1.1	1.1			
Structural net lending (3)	0.6	0.2	0.3	0.6	1.8	2.5
Output gap	-0.9	-1.4	-1.7	-0.4	-0.1	0.0
Seven-year average for output gap	-1.9	-2.0	-1.0			
Backward-looking ten-year average for output gap	-0.9	-1.0	-1.0	-0.9	-0.9	-1.0

Note: Net lending and structural net lending as a percentage of GDP. Output gap as a percentage of potential GDP.

In its Communication, the Swedish Fiscal Framework (Ramverk för finanspolitiken, skr. 2010/11:79), the Government discusses principles for evaluating deviations from the surplus target.¹ The Government writes:

As measuring the cyclical situation unambiguously is not possible, the surplus target must be checked against a comprehensive assessment of the different indicators. In this assessment, the Government also takes several other factors into account, particularly the uncertainty in the assessment and the risk situation.²

With respect to uncertainty, the Government points out that the estimates of GDP, structural net lending and the seven-year indicator are highly uncertain. With respect to the risk situation, the Government points chiefly to the asymmetry of the business cycle. But the wording in the Government Communication is open to the possibility of taking additional factors into account in determining whether the target has been met. The Government's own guidelines for establishing whether there is a deviation from the target thus leave ample room for interpretation regardless of what the indicators show.

¹ Ministry of Finance (2011a), Section 3.3.2.

² Ministry of Finance (2011a), p. 22.

Box 4.1. Estimating structural net lending

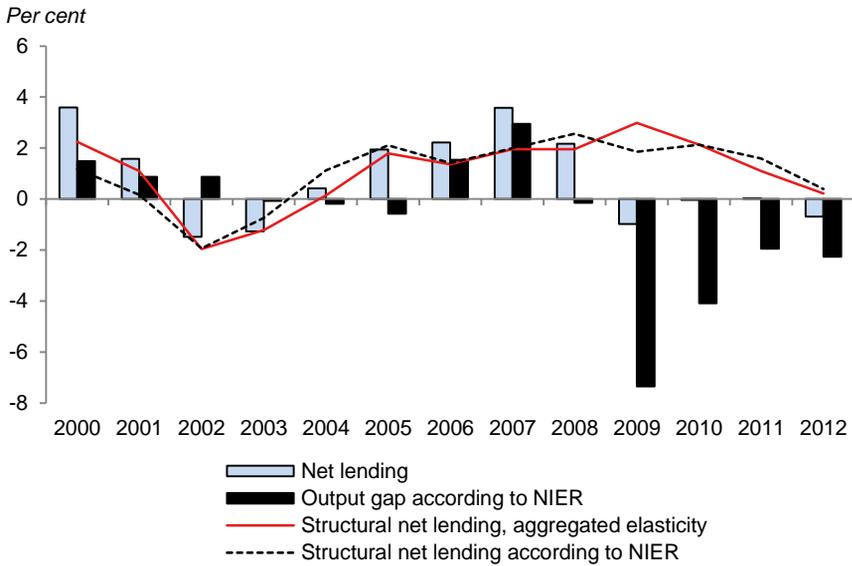
General government structural net lending is an important indicator for assessing deviations from the surplus target in individual years. Structural net lending is also used as an indicator of the fiscal stance in view of the economic situation. The variable is thus an important component of fiscal governance.

Broadly, actual net lending can be cyclically adjusted using either an aggregated elasticity applied directly to the output gap or a more disaggregated approach. In the latter case, the aim is to capture differences in the composition of GDP that may be associated with output gaps of the same size. The Ministry of Finance uses an aggregated approach for the cyclical adjustment with an elasticity of 0.55. As a result, actual net lending as a percentage of GDP is reduced by 0.55 multiplied by the output gap when cyclically adjusted net lending is estimated. ESV and NIER use more disaggregated methods that are designed in different ways.

The significance of a disaggregated method can be illustrated by the difference between NIER's structural net lending estimate in the March 2013 forecast on the one hand and an aggregated estimate using the Ministry of Finance's method applied to NIER's output gap estimate on the other hand. It is not obvious that a disaggregated estimate based on the BP13 forecasts would result in a similar difference, but the illustration nevertheless gives an indication of the effects of the two methods.

Figure 4.1 shows the development of structural net lending according to both NIER's estimate and to an estimate based on an aggregated budget elasticity of -0.55 using the Ministry of Finance method applied to NIER estimates of the output gap from 1993 through 2012.

Figure 4.1 General government structural net lending

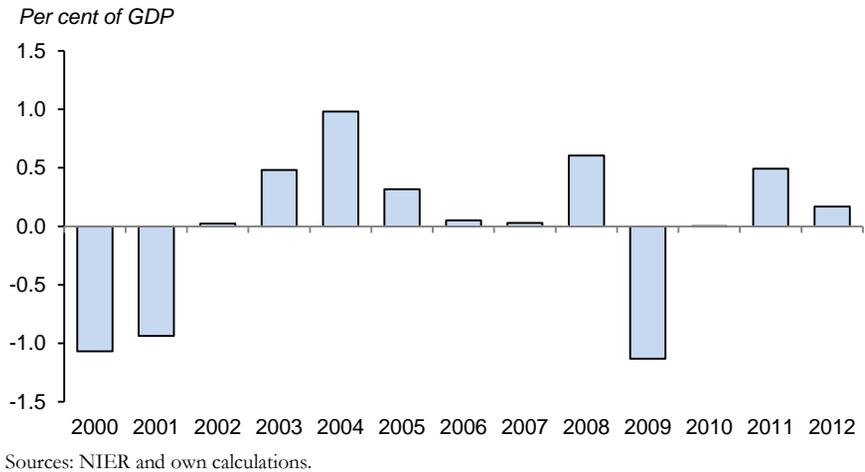


Note: Net lending (actual and structural) is stated as a percentage of GDP. Output gap as a percentage of potential GDP.

Sources: NIER and own calculations.

Figure 4.2 shows the difference between the two estimates. The difference may amount to more than 1 per cent in some years. One per cent of GDP is equal to about SEK 35 billion. With the structural balance as a target indicator and basis for estimating the fiscal space, this is not a negligible difference. The aggregated method overestimates the cyclical impact on the public finances in the deep trough during the financial crisis and thus gives a more positive picture of structural net lending compared with the NIER estimate. The implicit budget elasticity in the NIER method is low – about 0.40. The reason for the lower elasticity is that the large negative output gap in 2009 was largely due to weak exports, which had relatively limited impact on employment and tax bases.

Figure 4.2 Difference between NIER and Ministry of Finance methods of estimating structural net lending



4.1.2 Managing deviations from the target

The Government has described in detail its view of how the surplus target should be interpreted and managed and has developed principles for how this should be done.³ It is important to correct deviations, writes the Government. Small deviations are not a big problem, however, as long as they do not have a systematic tendency in one direction. Other deviations should be corrected, but how and at what speed depends both on the size of the deviation and the economic situation. The Government emphasises that when estimating *when* and *how* a deviation should be corrected, an overall assessment must also be made based on distributional and structural policy considerations.⁴

First, a possible deviation from the target thus has to be identified. Here, the Government also takes into account other factors, primarily uncertainties and risks. The ministry memorandum about the fiscal framework (Ds 2010:4) emphasises that deviations from the target do not necessarily need to be quantified but there is a

³ Ministry of Finance (2010), pp. 214–220, and Ministry of Finance (2011a), pp. 23–25.

⁴ Ministry of Finance (2011a), p. 23.

minimum requirement to make a qualitative assessment of whether the deviation is insignificant or not.⁵

The Ministry of Finance thought it reasonable that a deviation from the surplus target must be at least 0.5 per cent of GDP in a fiscal year before fiscal measures are justified.⁶ A marked increase in the projected deviation after the year in question could lead to measures even if the deviation in that year was less than 0.5 per cent of GDP.⁷ But the memorandum does not specify what is meant by small deviations or contain any requirement to make a qualitative estimate of the deviation.

Both the National Audit Office and the Fiscal Policy Council have repeatedly criticised the way in which the Government follows up the surplus target. The gist of the criticism has been that the follow-up is not transparent and that the number of indicators provides too much room for different interpretations. The Government has rejected this criticism and argued that assessing whether the target has been met is complex and thus cannot be reduced to a mechanical formula and that too rigid a method for assessing whether the target has been met risks leading to fiscal policy mistakes.

However, the criticism of the Government's follow-up of the surplus target has never implied that fiscal policy should follow a mechanical rule based on a few indicators. Instead, the follow-up of the surplus target and the identification of deviations from it should be transparent and quantified. When designing fiscal policy, the Government must of course take into account more factors than the deviation from the surplus target.

Already in its 2009 report, the Council stated that the criticism of the lack of transparency in the follow-up of the surplus target should not be interpreted as a recommendation by the Council that fiscal policy be reduced to mechanics. The Council wrote:

It is, of course, not wrong to take the cyclical situation into consideration when deciding an appropriate fiscal policy – on

⁵ Ministry of Finance (2010), p. 213.

⁶ The Council criticised this in its comments on the Government's Ds 2010:4 (Fiscal Policy Council, 2010b, p. 23). If the Government is going to use a quantitative limit for a deviation from the target that has to be corrected by active policy measures, the deviation must be quantified. Furthermore, it is not clear what the Government means by a deviation of 0.5 per cent of GDP in a fiscal year and how it should be measured. A deviation of 0.5 per cent measured as structural net lending for a particular year is something completely different from the same deviation as a seven-year average.

⁷ Ministry of Finance (2010), p. 217.

the contrary ... Our argumentation is that the fiscal balance target should be clearly formulated. Then a position can be taken on whether and to what extent the economic situation or other circumstances justify deviations from the target. This assessment should, however, be made in a transparent manner and not hidden because a vague formulation of the target makes it possible to hop from one measure to another.⁸

4.1.3 Deviations from the target in BP10 and BP13

In BP10, net lending was estimated at between -3.4 and -1.1 per cent of GDP in the years 2010–2012. The output gaps were estimated at between -6.5 and -3.0 per cent of GDP for the same period. When following up the surplus target, the Government expected that the large negative output gaps for the next couple of years would most likely not be offset by equally large positive gaps as the economic situation improved after 2012.⁹ Structural net lending was expected to reach its lowest point at 0.2 per cent in 2010. For the two subsequent years, it was estimated at 0.7 and 0.6 per cent respectively.

The Government observed that this was a deviation from the target. The Government's overall assessment was that the downturn was not likely to be followed by years with correspondingly higher capacity utilisation and thus net lending could not be expected to return automatically to the targeted level with a stronger economy.

There was thus an observed – although not quantified – deviation from the surplus target. However, the Government was of the opinion that a temporary and limited deviation from the target was justified in view of the severe economic slowdown. At the same time, the Government emphasised that the policy was aimed at returning to a surplus in line with the target within a few years.

As these indicators currently indicate that net lending is running slightly below the target, there is in principle no scope for unfinanced structural increases of expenditures subject to the ceiling in light of the surplus target. The Government therefore intends to conduct a tight expenditure policy for the next few

⁸ Fiscal Policy Council (2009), p. 101.

⁹ BP10, pp. 91-93.

years so that the budget deficits remain temporary and manageable. Expenditure reductions may also be required.¹⁰

The Government therefore proposed an expenditure ceiling for 2012, referring to the need for a tight fiscal policy in order to return to the surplus target:

... there are strong reasons for the proposal presented in this bill which sets a lower expenditure ceiling for 2012 than the level established in the 2009 Spring Fiscal Policy Bill. This would safeguard the long-term sustainability of public finances and support a return to a surplus in the public finances. A tighter expenditure ceiling would support a tighter fiscal policy and would accelerate the return to positive net lending in line with the surplus target.¹¹

The proposed expenditure ceiling for 2012 was set SEK 10 billion below the level presented in the preceding Spring Fiscal Policy Bill.¹² Six months later in VP10, public finances were viewed more positively, but the Government affirmed its ambition to return to a surplus in public finances by extending the time horizon by one year and by presenting estimates of the expenditure ceiling for both 2013 and 2014. These two expenditure ceilings were set at levels which implied an annual increase of SEK 10 billion from 2012–2014, which is significantly tighter than the annual increase of SEK 20–30 billion, which had previously been the normal increase in the expenditure ceiling. But the budget margins were still large in each year, despite the expenditure ceilings' restrained growth.

In BP10, the Government noted that there was a deviation from the surplus target and considered the deviation justified in view of the economic situation. The Government subsequently concluded

¹⁰ BP10, p. 96.

¹¹ BP10, p. 100.

¹² It should be noted, however, that in practice, this reduction was an adjustment to a lower expenditure forecast. In its audit of BP10 (2009a), the National Audit Office pointed out that the lower expenditure level was explained by lower pension expenditure, which in turn was due to a correction of an earlier mistake in the calculation of the balance ratio. Lowering the expenditure ceiling thus did not reduce the budget margin in 2012 compared with VP09.

that future fiscal policy had to be tight in order to ensure a return to the surplus target.¹³

In BP13, the follow-up of the surplus target is significantly less transparent. The Government notes that the indicators used for following up the target on balance show that net lending is somewhat below the target in 2012–2014.¹⁴ Instead of discussing how to correct this deviation, the Government refers to various factors and concludes that a fiscal space of SEK 23 billion is appropriate. The Government points to several factors: the low public debt, historically low risk premiums on government securities, a relatively large margin vis-à-vis the deficit limit of 3 per cent of GDP in the Stability and Growth Pact, the ability of the Swedish economy to withstand the global economic downturn and the strong confidence in Sweden's economy and public finances.¹⁵

The Government's basic principle for handling deviations from the surplus target is that any deviation should be corrected.¹⁶ Many factors affect the pace at which this should be done, particularly the size of the deviation and the economic situation. Based on these considerations, the fiscal space or the need for consolidation measures is then established. In BP13, however, the Government does not clearly state whether in its opinion, there is a deviation from the target and if there is, how it should be corrected. There is no clear link between the follow-up of the surplus target and the size of the fiscal space.

This weak link can also be illustrated by a comparison between the Budget Bills for 2012 and 2013. In BP12, the Government concluded that the two forward-looking indicators showed that net lending was sustainably higher than the surplus target required, taking the economic situation into account.¹⁷ In the Government's opinion, the economic situation might justify a somewhat more expansive fiscal policy but uncertainty about the economic outlook suggested that caution was needed. "The advantages of a more expansionary

¹³ Again in BP11, the Government emphasised the importance of returning to a surplus. This was essential in order to face future economic downturns from a position of strength and maintain fiscal policy objectives and confidence in fiscal policy. Still, the indicators for following up the surplus target were clearly better in BP11 than in BP13. The opinion in BP11 was that the return to surplus could be accomplished without major budget consolidation measures.

¹⁴ BP13, p. 129.

¹⁵ BP13, p. 131.

¹⁶ Ministry of Finance (2011a), p. 23.

¹⁷ BP12, p. 188.

fiscal policy in 2012 are not nearly as important as the risks that financial markets could lose confidence in the sustainability of public finances" was the Government's view.¹⁸

The Government's view in BP12 was that the surplus target had been met but that there were still reasons for a relatively tight fiscal policy. It was not clear from BP13 that the target had been met but the Government nevertheless considered a more expansive fiscal policy justified.

4.2 Views on the surplus target

4.2.1 The National Institute of Economic Research

The National Institute of Economic Research (NIER) is of the view that the surplus target should be followed up using a forward looking perspective. It thus uses neither the Government's backward looking ten-year indicator nor the centred seven-year indicator, as the latter is partly backward looking. Instead, NIER focuses on structural net lending. NIER's interpretation of the surplus target is that the target should be met when the economy is in balance, i.e. when the output gap is closed. However, output gaps on average are negative seen over a longer period. To compensate for this, both structural and actual net lending should not be 1 per cent but 1.2 per cent when the output gap is zero, according to NIER.¹⁹

On the presumption that the surplus target should be met when the economy is in balance, NIER estimates a path for general government net lending resulting in a surplus of 1.2 per cent of GDP²⁰ when the economy is in balance. Based on this path, NIER estimates the total space for unfinanced measures for the whole forecast period. The fiscal space can be both positive and negative. If the space is negative, the estimate indicates a need for fiscal consolidation.

In August 2012, NIER estimated that the space in relation to the surplus target totalled SEK 21 billion up to 2016 and that SEK 14

¹⁸ BP12, p. 191.

¹⁹ NIER has previously held the view that the surplus should be 1.5 per cent when the economy is in balance in order to compensate for the output gaps being negative on average. In its March 2013 forecast, NIER revised the figure to 1.2 per cent. The Council sees no reason to differ.

²⁰ Before March 2013, the corresponding surplus was estimated at 1.5 per cent.

billion of this space would be used in 2013. The remaining space for the years 2014–2016 was estimated at SEK 7 billion. Just before the August forecast was printed, the Government presented its measures leading up to BP13, totalling SEK 23 billion for 2013. NIER thus amended its forecast. In taking the Government’s proposals into account, NIER estimated that the fiscal space for 2014–2016 would be SEK 9 billion less, amounting to SEK -2 billion, indicating a need for fiscal consolidation. Thus in NIER’s opinion, the Government with its proposals in BP13 had exhausted the space for unfinanced measures up to 2016. But the space for unfinanced measures of SEK -2 billion is measured in relation to the concept “unchanged rules”.²¹ Consequently, NIER’s estimate suggests that the surplus target would be met in 2016, provided that there are no decisions to increase expenditure and that consolidation measures of SEK 2 billion are taken.

In addition to finding that there was a need for fiscal consolidation with unchanged rules, NIER also estimated the cost of an unchanged public sector commitment.²² NIER’s definition of this concept is that

- public consumption is projected using demographic trends and reflects unchanged staffing levels,
- central government grants to local government are projected using demographic trends and thus constitute a fixed percentage of local government consumption,
- public investment grows in line with potential GDP,
- transfers to households are projected using demographic trends and hourly wages so that their relative purchasing power is maintained.

According to the NIER’s August forecast, an expenditure path based on these projections would result in a total expenditure increase of SEK 35 billion up to 2016. Meeting the surplus target and maintaining the public sector commitment would thus require tax increases totalling SEK 37 billion in 2014–2016, according to NIER.

²¹ NIER defines this concept in more detail in its March 2013 forecast.

²² NIER changed its terms and clarified its definitions of the concepts in its March 2013 forecast. In this Report, the Council uses NIER’s new concepts, “unchanged rules” and “unchanged public sector commitment”.

Thus, there is no fiscal space for improvements in real terms or tax reductions. NIER's overall conclusion was that fiscal policy was compatible with the surplus target but stressed that this conclusion was conditional on a restrictive fiscal policy in 2014–2016.

In December 2012, NIER published a new forecast indicating a significant weakening of public finances. The forecasting horizon was moved forward one year to 2017. The estimates indicated that there was no fiscal space up to 2017. Instead, a fiscal consolidation of SEK 27 billion was required to meet the surplus target. According to the December estimate, meeting the surplus target and maintaining the public sector commitment would require tax increases of SEK 68 billion in 2015–2017.

In March 2013, NIER estimated that meeting the surplus target and maintaining the public sector commitment would require tax increases of SEK 74 billion up to 2017. This estimate confirmed the less favourable picture presented in December 2012. With unchanged rules, the March forecast indicated that consolidation measures of SEK 8 billion would be required to meet the surplus target.

4.2.2 The Swedish National Financial Management Authority (ESV)

When assessing whether the surplus target has been met, ESV uses basically the same indicators as the Government. There are differences, however. When estimating the structural balance, ESV uses a different method (the HP filter) than the Government for cyclical adjustment, which means that the sum of output gaps over time is zero. ESV therefore does not make use of any argument comparable to NIER's that structural lending should be 1.2 per cent of GDP when the output gap is closed.

Like the Government, ESV estimated in its August 2012 forecast that the indicators showed that net lending did not meet the surplus target. The ESV stated that neither cyclically adjusted net lending nor the seven-year indicator met the target nor did the backward-looking ten-year average, even with the inclusion of surpluses in 2015 and 2016. From this, ESV concluded that there was no space for unfinanced measures in the near future. ESV noted in its forecast that the surpluses will grow in future and that this is because revenue, but not expenditure, increases in line with GDP.

Like the NIER forecast, ESV's December 2012 forecast showed a much more unfavourable picture than the August forecast. Net lending was adjusted downwards by about 1.2 per cent for 2013–2016. For 2013, a deficit of 1.5 per cent of GDP was forecast, improving gradually to a surplus of 1.2 per cent of GDP in 2016. In its March 2013 forecast, ESV's picture of public finances was similar to its December 2012 forecast. The forecasting horizon was extended to 2017. The overall picture indicating that the surplus target would not be met in the next few years did not change.

ESV thus noted already in August 2012 that the indicators for the surplus target showed that the target would not be met. This conclusion was reinforced in the December 2012 forecast and confirmed again in the March 2013 forecast.

4.2.3 The Government's estimates after BP13

On 21 December 2012, the Government presented an update of the economic situation and the public finances. The GDP forecasts were revised downwards substantially for 2012–2014, but growth was subsequently expected to recover more rapidly and was adjusted upwards for 2015 and 2016. Net lending was significantly weaker than in the Budget Bill, but structural net lending did not weaken to the same extent. The output gaps were expected to be larger, leading to a larger cyclical adjustment of net lending. The deterioration in the public finances was thus considered mainly cyclical. Structural net lending was expected to be somewhat higher in 2012–2014 and somewhat lower in 2015–2016 than in the Budget Bill. Measured by this indicator, weaker public finances did not imply any dramatic change in meeting the surplus target. No surplus target indicators other than structural net lending were reported.

Table 4.2 Public finances

		2011	2012	2013	2014	2015	2016	2017
Net lending	VP13	0.0	-0.7	-1.6	-1.0	0.0	1.1	2.0
	Dec 12	0.2	-0.4	-1.3	-0.6	0.6	1.5	
	BP13	0.1	-0.3	-0.6	0.3	1.7	2.5	
Structural net lending	VP13	0.7	0.3	0.4	0.9	1.3	1.7	2.3
	Dec 12	0.6	0.5	0.6	0.7	1.6	2.1	
	BP13	0.6	0.2	0.3	0.6	1.8	2.5	
Output gap	VP13	-1.3	-2.2	-3.5	-3.3	-2.3	-1.1	-0.4
	Dec 12	-0.9	-2.0	-3.2	-2.4	-1.8	-1.2	
	BP13	-0.9	-1.4	-1.7	-0.4	-0.1	0.0	

Note: Net lending and structural net lending as a percentage of GDP. Output gap as a percentage of potential GDP.

Sources: BP13, Ministry of Finance (2012b) and VP13.

In connection with the presentation of the estimates, the Minister for Finance emphasised that the surplus target of 1 per cent of GDP on average over a business cycle remains firm, that the low public debt and the strong confidence in the public finances provide space to tackle a weaker economy and that Sweden will return to a surplus “as the economic situation permits”.²³

In VP13, public finances are again adjusted downwards (Table 4.2). The outcome in 2012 was weaker than forecast in December and net lending was 0.3–0.6 percentage points of GDP weaker per year. The forecasting horizon was extended to 2017. The negative GDP gaps were larger than estimated in December, which resulted in a larger cyclical adjustment. Structural net lending in VP13 is therefore estimated to be somewhat stronger in 2012–2014 but somewhat weaker in 2015–2016.

4.2.4 The Council’s assessment of the surplus target

As the surplus target refers to actual net lending, it should also be checked against actual net lending. Even though it is not possible to determine the precise length of the business cycle, it is appropriate to measure whether actual net lending has amounted to 1 per cent over some time horizon. The only indicator that measures the outcome of actual net lending is the backward-looking ten-year indicator, which

²³ Ministry of Finance (2012c).

is not cyclically adjusted. It was 0.7 per cent of GDP from 2003–2012. Adjusted for the average output gap in the same period, this indicator was 1.4 per cent. But the output gaps are negative on average, so the cyclical adjustments tend to give too positive a picture of public finances.

In its 2010 report, the Council recommended the use of a ten-year average of actual net lending as the principal indicator for determining whether the target has been met.²⁴ The average would not be cyclically adjusted in view of the methodological difficulties involved. Table 4.3 shows estimates of the ten-year average of net lending, with unchanged rules and without cyclical adjustment.

Table 4.3 Ten-year averages of net lending

<i>Per cent of GDP</i>		2010	2011	2012	2013	2014	2015	2016	2017
Ten-year average	VP13	0.8	0.7	0.7	0.7	0.6	0.4	0.3	0.1
	Dec 12	0.8	0.7	0.8	0.8	0.7	0.5	0.5	
	BP13	0.8	0.7	0.8	0.8	0.8	0.8	0.8	

Note: The values for the ten-year average in 2011 refer to 2002–2011. Values for 2016 refer to 2007–2016.

Table 4.3 shows that the ten-year average according to BP13 does not reach 1 per cent for the coming years including 2016 even though the large surpluses in 2015 and 2016 are included. This indicates that the surplus target is not currently being met and that according to BP13, it will not be met before 2016.

The Government's estimates in December 2012 indicated significantly weaker public finances than in BP13. For the years 2013–2016, net lending was revised downwards by about 1 percentage point each year. As the downward adjustments were made for the whole forecast period, they had a clear impact on the averages. But structural net lending did not show a similar weakening. The explanation for this is that the output gaps were revised, making the weakening of public finances appear primarily cyclical. The cyclically adjusted indicators thus did not deteriorate very much.

In VP13, there was a further downward revision of the public finances and the forecasting horizon was extended to 2017 (Table 4.2). This deterioration, however, has almost no impact on the

²⁴ Fiscal Policy Council (2010a), Section 4.1.4.

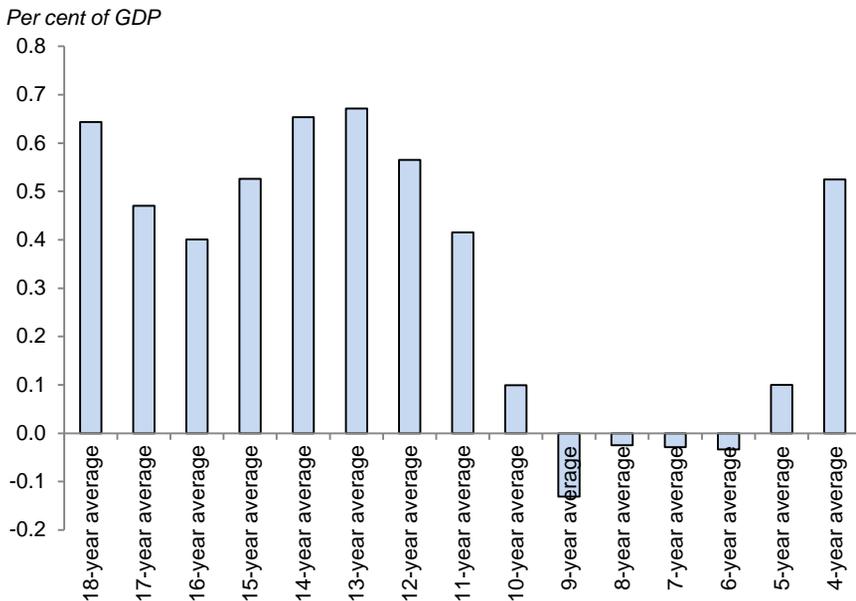
Government's assessment of whether the target has been met. Structural net lending for the final year in VP13 (2017) is 2.3 per cent of GDP, which is more or less unchanged compared with the final year in BP13 (2016). The analysis of the indicators is similar to the one in BP13. In the near future, the space in relation to the surplus target is limited but a growing space emerges after a few years. As in BP13, fiscal policy is expected to be in line with the surplus target but the time when the target is met has been moved forward.

If we instead analyse actual net lending, the deterioration is clearly visible. The ten-year average is 0.1 per cent of GDP in 2017 (Table 4.3). In 2016, the ten-year average has fallen from 0.8 to 0.3 per cent of GDP. Based on the figures in VP13, there is no period²⁵ with 2017 as the end year when actual net lending exceeds 0.7 per cent of GDP (Figure 4.3).

In BP13, structural net lending in 2013 was estimated at 0.3 per cent of GDP. The average structural net lending that is in line with the surplus target is about 1.2 per cent of GDP when the asymmetry of the output gaps is taken into account. This indicates that there is a significant deviation from the targeted surplus that does not automatically follow from the economic situation. The deviation will thus not disappear when the economy is back in balance but must be corrected by active measures or by the erosion of transfer systems and other expenditures that do not increase in line with GDP if rules are unchanged.

Calculations based on actual net lending and the ten-year indicator previously proposed by the Council, structural net lending and the calculations by both NIER and ESV all point in the same direction: a contractive fiscal policy will be required to meet the surplus target. The Government's conclusions are in stark contrast to this conclusion.

²⁵ Except 2015–2017.

Figure 4.3 Average actual net lending with 2017 as the end year

Note: The 18-year average refers to 2000–2017, the 17-year average refers to 2001–2017, etc. The figure is based on net lending reported in VP13.

Sources: Own calculations and the Government's budget bills.

With the Government's estimate for the 2017 expenditure ceiling, the budget margin will be 1.3 per cent of GDP, which, according to the Government, supports the surplus target. In the Government's view, the fiscal space²⁶ up to 2017 is the difference between the estimated structural net lending in 2017, 2.3 per cent of GDP, and a structural net lending of 1 per cent of GDP. This fiscal space corresponds to over SEK 50 billion. NIER on the other hand is of the view that consolidation measures of SEK 8 billion up to 2017 will be required to meet the surplus target. The difference between the Government and NIER is thus about SEK 60 billion. This large difference is mainly due to the Government's more positive view of the economy's potential production capacity. The Government's estimate of GDP in 2017 is about SEK 90 billion higher than the NIER estimate, leading to much stronger public finances.

The estimates of potential GDP are thus of great significance for the assessments of the surplus target and for the fiscal space in the

²⁶ In VP13, the Government has changed its terminology from room for reform to fiscal space. The Council has adopted this terminology.

coming years (the estimates of potential GDP are discussed in detail in Chapter 3).

Unchanged rules result in a gradual strengthening of the public finances.²⁷ The larger the number of future years included in the estimate, the greater this effect will be. By moving the time for meeting the target forward, it is entirely possible always to regard the surplus target as met if it is measured by the seven-year indicator, while it will never be met if it is measured by the actual outcome.

This illustrates a major weakness in the follow-up of the surplus target – whether or not the target is met depends on the length of the forecasting period. If a sufficient number of years are included in the forecast, it is in principle always possible to show that the surplus target is being met. This also applies to structural net lending. The farther into the future the forecast year is, the more years of unchanged rules will be included in the calculations and the stronger the public finances will appear.

Both in BP13 and VP13, the Government expresses the view that even though the indicators show that the surplus target will not be met in the near term, the target will be exceeded towards the end of the forecasting period because of the improvement due to the unchanged rules. The Government has not presented any more transparent strategy than this to resume meeting the surplus target. The Government's strategy thus seems to be to allow the tightening effect of unchanged rules to work until the target has been met. If this is the Government's plan, it should have been stated clearly in the Budget Bill. The Government is of course completely free to present another fiscal policy mix than that which follows from unchanged rules, but there is still a great need for tightness.

In the Council's opinion, there is a clear deviation from the surplus target and the Government should have presented a realistic plan for returning to a surplus. 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. But it is problematic to argue that there is space for more expansionary measures in the future because net lending is strengthened automatically by unchanged rules and at the same time maintain that the surplus target will be met

²⁷ The ESV estimates the annual fiscal balance improvement at about 0.4 per cent of GDP, i.e. about SEK 15 billion (see Fiscal Policy Council, 2011, pp. 78–79).

owing to the automatic strengthening. The Council does not believe that the current deviation from the surplus target threatens the long-term sustainability of public finances. But there is cause for concern about the handling of the surplus target and the absence of a transparent and credible strategy for returning to a surplus.

4.3 The expenditure ceiling

In BP12, the Government expressed the view that the fiscal space under the expenditure ceiling for permanent reforms amounted to about SEK 41 billion up to 2015.²⁸ Based on this statement, the Council in its 2012 report considered the margins large and the risk of exceeding the expenditure ceiling limited.

Table 4.4 Expenditure subject to the ceiling and budget margin

<i>SEK billion</i>	2013	2014	2015	2016	2017
Expenditure ceiling BP13	1 095	1 105	1 125	1 155	
Expenditure ceiling VP13	1 095	1 105	1 125	1 165	1 195
Expenditure subject to the ceiling BP13	1 066	1 079	1 092	1 119	
Expenditure subject to the ceiling VP13	1 068	1 083	1 095	1 108	1 139
Budgeting margin BP13	29	27	33	36	
Budgeting margin VP13	27	22	30	57	56
Guideline for safety margin BP13	16	22	33	34	
Guideline for safety margin VP13		16	22	33	34
Space in excess of the safety margin BP13	13	4	0	2	
Space in excess of the safety margin VP13		6	8	24	22

Note 1: The guideline for the safety margin is 1.5; 2.0; 3.0 and 3.0 per cent of the expenditures subject to the ceiling between t+1 and t+4.

Note 2: The expenditure ceilings have been decided by the Riksdag up to and including 2015. The ceilings thereafter are government estimates.

In BP13, this situation changed (Table 4.4). Provided that the Government followed its guidelines on what percentage of the budget margin had to be reserved for managing uncertainty, there was still a fiscal space of SEK 13 billion in 2013, SEK 5 billion in 2014 and no fiscal space at all in 2015. Nor was there any fiscal space in 2016 in excess of the safety margin.

The space under the ceiling at the end of the period decides the space available in the short run, as it is the Government's view that

²⁸ BP12, p. 200.

the space should be used for permanent measures. There must therefore be space for the accumulated amount of the measures under the expenditure ceiling in the last year. With the estimated level of the expenditure ceiling for 2016 in BP13, there was no fiscal space at all in the 2014 Budget Bill. This changed again in VP13.

The space under the expenditure ceiling, in addition to what is reserved for uncertainty, is significantly larger in VP13 than in BP13. For 2015, the reason for this change is that 2015 is now t+2 instead of t+3 and guidelines for the safety margin are thus lower. For 2016, a large space under the ceiling is now reported. It is mainly due to two things. The contribution to the EU budget after the conclusion of the negotiations on the financial perspective is now estimated to be about SEK 13 billion less than in BP13. In total, expenditure in 2016 is expected to be over SEK 11 billion less than in BP13, creating a corresponding space under the expenditure ceiling. In addition, the Government has raised its estimate of the ceiling for 2016 it intends to propose in BP14 by SEK 10 billion. The Government's justification for this is that it is important to have space for expenditure measures in order to be able to support the economy. According to VP13, the space under the expenditure ceiling, in addition to the safety margins, is over SEK 20 billion for both 2016 and 2017. There is thus some space for expenditure increases without jeopardising the ceiling, unlike what the estimates in BP13 indicated.

4.4 The flexibility of the expenditure ceiling

The balance between strictness and flexibility is a key issue in a fiscal framework. For a fiscal framework to have a restraining effect on the budget deficit and public debt, it must have some degree of strictness. A framework that never acts as a constraint on fiscal policy fills no function. But if a fiscal framework is applied too strictly, it may result in a procyclical policy that may harm economic growth. Too strict rules also risk being perceived as unreasonable, which may undermine their legitimacy and ultimately lead to abandoning the system. A balanced fiscal framework should therefore be strict enough to prevent an unsustainable debt growth and flexible enough to be sustainable and maintain its legitimacy under strain.

The surplus target is formulated as an average over the business cycle. It is both permitted and desirable for cyclical swings to have an impact on net lending in individual years. This construction makes the surplus target quite flexible, as it must be assessed in relation to cyclical developments.

The expenditure ceiling is different in nature from the surplus target. The two targets interact in the sense that the expenditure ceiling should be set in such a way that it supports the surplus target. If the Government meets the expenditure ceiling, it is also more likely to meet the surplus target. The expenditure ceiling is primarily designed to function as a tool in a decision-making process. Simplicity and transparency have thus been given high priority in the design of the surplus target. Simplicity and transparency are great advantages, both in the Government's internal work with the budget and in the Riksdag's budget discussions.

Like the surplus target, the expenditure ceiling also requires some flexibility. The flexibility is primarily provided by two mechanisms: a budget margin, which is a buffer between estimated expenditure and the expenditure ceiling, and the Riksdag's ability to change the ceiling. In BP13, the Government announced that it intended to continue working on developing the fiscal framework further by examining whether it is desirable to increase flexibility in the expenditure ceiling system.

In VP13, the Government returns to this issue and expresses the opinion that the current flexibility is satisfactory, both with respect to the use of the budget margin and the possibilities of changing established expenditure ceilings. The Council concurs with this view.

4.5 The public finances' long-term sustainability

For fiscal policy to be sustainable in the long term, the intertemporal budget constraint for the public sector must be satisfied. This means that public expenditure cannot be underfinanced in the long term. Eventually, revenue and expenditure must be adjusted so that the debt is stabilised. Formally, the intertemporal budget constraint can be expressed as follows: the present value of public revenue excluding capital revenue (current and future) equals the sum of the

public debt and the present value of public expenditure excluding interest expenditure (current and future).

Sustainability is usually measured by the S2 indicator, which indicates how large a permanent improvement in the public finances is required in order for the sustainability condition to be met. A value of 1.0 means that primary net lending must be permanently improved by 1.0 per cent of GDP to be sustainable in the long run. A value of -1.0 means that the public finances can be permanently weakened by 1.0 per cent of GDP without compromising long-term sustainability.²⁹ This type of estimate is obviously associated with a very high degree of uncertainty as it is based on a number of assumptions on future policy and conditions.

At the Government's request, NIER regularly reports estimates of the S2 indicator. The estimate reported in March 2013 indicated that public finances could weaken permanently by 1.1 per cent of GDP without the intertemporal budget constraint being disregarded. But in NIER's opinion, the S2 estimates should be supplemented by more explicit analyses of the public finances and net debt developments. There will be serious demographic strains, particularly up to the 2040s.

A deterioration in the public finances of 1 per cent of GDP from 2015 would result in a reduction of general government net wealth, which would become net debt that stabilises at about 15 per cent of GDP from 2040. Such a development would be risky according to NIER, not least given the considerable uncertainty associated with this kind of very long-term estimates.

In its 2012 Sustainability Report, the EU Commission presented estimates of the sustainability of all member states' public finances. The Commission uses three different indicators, one for the long term, one for the medium term and one for the short term. For the long term, the Commission uses the S2 indicator, which for Sweden is estimated at 1.7 per cent of GDP. Unlike the NIER estimate, the Commission estimate indicates that a permanent improvement in the public finances would be required in order to satisfy the intertemporal budget constraint. This is, however, less than what would be required of other EU countries on average.

²⁹ See also Fiscal Policy Council (2010a, 2011 and 2012).

The Commission also uses two other indicators. The S1 indicator indicates what would be required to return public debt to 60 per cent of GDP by 2030. Sweden would meet this target even with a substantial weakening of its public finances, since the debt is currently substantially below 60 per cent.

The Commission also uses the S0 indicator to identify short-term fiscal risks for the coming year. This indicator is a weighted composite of a number of indicators of short-term fiscal risks. In the Commission's opinion, Sweden does not face any challenges to the sustainability of its public finances in the long, medium or short term.³⁰

For its 2012 report, the Council commissioned a background report on generational accounting in Sweden. This report indicates that Sweden's public finances are sustainable in the long term. This is largely due to the new pension system, which considerably strengthens the long-term sustainability of public finances because it is more robust in the face of demographic and other shocks.³¹ Sustainability therefore depends on the political stability of the current pension system.

On April 9 2013, the Retirement Age Inquiry submitted its final report.³² The Inquiry made a number of proposals aimed at extending working life. The proposals include creating better conditions for older people to work longer, making flexible working hours more possible and adjusting age limits in line with increasing life expectancy. In the Council's opinion, measures that extend working life may in the long run have large positive effects on the sustainability of public finances.

The Council has not made any additional calculations of its own of long-term fiscal sustainability. As in our 2012 report, our conclusion is that public finances should be regarded as sustainable in the long term and that any possible sustainability risks can be managed within the framework of the current fiscal policy.

³⁰ See the European Commission (2012c) for detailed discussions of the various indicators.

³¹ See Fiscal Policy Council (2012), and Hagist and others (2012).

³² SOU 2013:25.

Box 4.2 Hungary's Fiscal Policy Council

As part of the reformed Stability and Growth Pact, member states in the euro area have begun establishing independent fiscal policy institutions in order to monitor and coordinate economic policies conducted at the national level. A fundamental requirement for an institution of this kind is that its independence is maintained and respected. In some EU member states, there are signs that this requirement is not being met; Hungary's Fiscal Policy Council is one example.

Hungary's economy has several weaknesses that have hampered the country's economic growth, such as low productivity growth, high unemployment and a weak fiscal framework. High debt, both private and public, and a large percentage of foreign currency loans have made the economy vulnerable, which was evident not least from the depreciation of the currency, the forint, against the euro by 26 per cent in only a few months during 2008.

Since the early 1990s, budget policy has followed a cyclical pattern correlated with the election campaign. The budget deficit peaked at almost 10 per cent of GDP in the 2006 election year. This cycle, where periods of expansionary fiscal policy are followed by budget consolidation, has been described as “fiscal alcoholism” by George Kopits, former chairman of the Hungarian Fiscal Policy Council.³³ Consequently, Hungary has been subject to the Excessive Deficit Procedure of the Stability and Growth Pact since 2004. In 2008, the country was granted support loans equivalent to EUR 20 billion from the EU and the IMF. In 2012, following consolidation measures, which consisted largely of one-off effects from specific reforms, the budget deficit fell below the Stability and Growth Pact's 3 per cent limit. But the EU Commission warned that the fiscal framework needed to be improved to ensure sustainable public finances in the long run.³⁴

An initiative by the then socialist Government to conduct a more long-term sustainable fiscal policy resulted in the adoption of the Fiscal Responsibility Act in 2008. As part of restoring credibility, an independent Fiscal Policy Council, Költségvetési Tanács, was established the following year.

³³ Wall Street Journal (2010a).

³⁴ European Commission (2012d).

Initially, the Council consisted of three members, assisted by a secretariat of about 30 officials. The members were nominated by the President, the Central Bank Governor and the National Auditor and were chosen by the Parliament for a non-renewable nine-year term of office. One eligibility requirement was that a person must not have been active in a political party for the last four years.

The Council's remit, as an independent authority, was to review legislative proposals and bills involving state finances, analyse the effects of reforms proposed by the Government and make its own macroeconomic forecasts. Independent analysis and dissemination of information would result in increased transparency in fiscal policy.³⁵

In spring 2010, the centre-right coalition, the conservative Fidesz and the Christian Democratic KDNP, received a two-thirds majority in Parliament. The new Government's rule has since been described as increasingly autocratic. The independent status of several institutions, including the National Audit Office, the Central Bank, the Constitutional Court and state media, has been curtailed. Important positions have been filled with people having strong links to the Government, and constitutional amendments strengthening the Government's influence have been adopted by Parliament.³⁶

The fiscal framework has been weakened in several respects: transparency has been reduced and Parliament has taken several decisions that conflict with the framework. The Government has also introduced a number of unconventional reforms that have been criticised for creating distortions in the economy and undermining important institutions such as property rights and private contracts. The Government has imposed crisis taxes on sectors dominated by foreign companies and a flat income tax of 16 per cent. To cover revenue shortfalls associated with the introduction of the flat tax, private pension funds, with assets equivalent to about USD 14 billion at the time, were nationalised in early 2011.³⁷

The Fiscal Policy Council's influence was restricted after the Council criticised the Government's Budget Bill for overly optimistic forecasts and lack of transparency. Despite resistance by the opposition and international criticism, the Council's appropriation was slashed from HUF 836 million to HUF 10 million (equivalent to

³⁵ EEAG (2012), pp. 115–28, European Commission (2012e) and Kopits (2011).

³⁶ See, for example, the Economist (2012b), Economist (2010), the Guardian (2012) and Kopits (2011).

³⁷ Wall Street Journal (2010b) and EEAG (2012).

about SEK 25 million and SEK 300 000, respectively).³⁸ The reasons stated were the need for consolidation and the similarity of the Council's remit to those of the Central Bank and the National Audit Office. The Council's remit was reduced merely to expressing general comments on the Government's Budget Bill. The Council's secretariat was abolished and in its place, the Council was referred to the National Audit Office and the Central Bank for technical support, limiting the Council's ability to make independent forecasts and analyses.

New Council members were appointed: a chairperson was chosen by the President with a mandate of six years (without remuneration and on a part-time basis) and the remaining two positions were filled by the Central Bank Governor and the National Auditor *ex officio*. Two of the new Council members had close links to the Government. Because of potential conflicts of interest, the Council's independent status has been questioned.³⁹

Following much external criticism, some parts of the fiscal framework have been improved. Among the changes, a debt ceiling of 50 per cent of GDP and a debt brake, implying that the public debt as a percentage of GDP has to decrease each year until it is below the debt ceiling, have been introduced. A Council Secretariat of two people was established in early 2012 and the chairperson became entitled to remuneration. The Council has also received a kind of right of veto vis-à-vis the Budget Bill, meaning that the Bill can be rejected if the debt brake is not observed. But it seems unlikely that it will be possible to use the right of veto in any meaningful way. A veto would risk resulting in the dissolution of Parliament, and the Council's resources and analytical capacity are not in proportion to the right of veto.⁴⁰ The Hungarian Fiscal Policy Council's future role is uncertain.

³⁸ See, for example, the letter to the editor of the Financial Times by Calmfors, Chote and Teulings (2010), the chairpersons of the fiscal policy councils in Sweden, the UK and the Netherlands respectively.

³⁹ Bloomberg (2011).

⁴⁰ European Commission (2012e) and OECD (2012d).

4.6 Assessments and recommendations

According to BP13 and VP13, net lending does not meet the surplus target in 2012–2014. NIER and ESV estimates and estimates of the average actual net lending for various periods indicate that a restrictive fiscal policy will be required for the coming years in order to meet the surplus target. The Council notes that the communication on the fiscal framework leaves considerable scope for different interpretations of whether or not the surplus target should be regarded as met. It is difficult to understand from the Budget Bill how the follow-up of the surplus target has influenced the estimate of the fiscal space. The Council notes that if the deviation from the target had been stated more precisely, it would be possible to justify the fiscal stance more clearly.

In the Council's opinion, there is a clear deviation from the surplus target. The Government should have stated this and presented a realistic plan for returning to a surplus. It is not the Council's view, however, that the deviation is large enough to threaten the long-term sustainability of public finances. A deviation from the target need not damage fiscal policy credibility in the short or long run if there are convincing arguments for the deviation and a plan for returning to the target.

The Council finds it unfortunate that the Government does not report what the policy requirements are or what measures are planned to maintain the surplus target over the next few years. In the Council's view, there is cause for concern about the handling of the surplus target and the absence of a transparent and credible strategy for returning to a surplus.

The estimates in the Budget Bill are based on the assumption of unchanged rules after 2013. This automatically results in a tight fiscal policy as revenue broadly follows GDP, while expenditure grows more slowly. If the strategy for meeting the surplus target is to let the automatic tightening work, this should be reported clearly and transparently.

The Council does not see any immediate threats to the expenditure ceiling. As a result of the lower expenditures in 2016 combined with an upward adjustment in the expenditure ceiling estimate for 2016 made in VP13, the expenditure ceiling is no longer binding for the autumn Budget Bill as it was in BP13.

In BP13, the Government raised the issue of increasing flexibility in the use of the budget margin and making it easier to change already established expenditure ceilings. In VP13, however, the Government writes that there is sufficient flexibility with respect to changes in the expenditure ceiling in the existing rules system. The Council shares this view.

In the Council's opinion, based on estimates from NIER, the EU Commission and the Government, public finances are sustainable in the long run and can be managed within the framework of the current fiscal policy.

5 Lower corporate tax and tightened interest deduction for business

5.1 Changes effective 1 January 2013

In the beginning of 2013, the corporate tax was lowered from 26.3 to 22 per cent in order to improve the conditions for investment and jobs and thus stimulate economic growth. The Government expects this measure to reduce tax revenue by about SEK 16 billion. The tax cut is partly financed by tighter rules on interest deductibility making tax planning with the help of intercompany loans not priced in the market more difficult. This is expected to increase corporate tax revenue by about SEK 9 billion. The net cost of the measures is expected to amount to about SEK 8 billion.¹ As the impact of the corporate tax cut on public finances is the largest of all measures in BP13, we include it in our review.

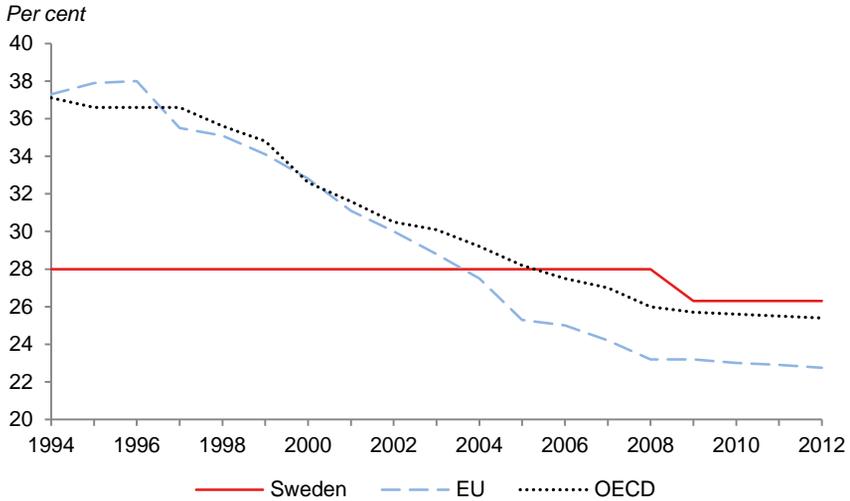
5.2 The corporate tax in perspective

In the 1990s and early 2000s, Sweden had a relatively competitive corporate tax rate compared with other EU and OECD countries. Figure 5.1 shows a clear international trend of declining corporate tax rates since the mid-1990s.² In the mid-2000s, the average tax rate in EU and OECD countries had fallen below the Swedish rate. In 2009, the Swedish corporate tax rate was reduced from 28 to 26.3 per cent, but despite the cut, it was still higher than both the EU and OECD

¹ In connection with BP13, the Government announced that it was considering the introduction of an investment tax credit. On 10 April 2013, the Government presented Govt. Bill 2012/13:134 *Investeraravdrag* (Investment Tax Credit). As the proposed investment tax credit is a state subsidy, the European Commission must be notified and give its approval before it can be implemented. The Government reckons that the proposal will enter into force on 1 September 2013.

² The figure shows the arithmetic average value for the OECD and the EU. If the member states that joined in the 2000s are excluded from the estimate of the EU average value, then the downward trend for the EU 15 (i.e. the 15 member states making up the EU before its eastward expansion) is not as pronounced, but the average value is still declining over time.

Figure 5.1 Corporate tax rates for Sweden, the EU and the OECD 1994–2012



Source: OECD (2012e).

averages. With the reduction that recently came into effect, Sweden falls slightly under the average.³

Since 1981, the formal corporate tax rate has been more or less cut in half in both EU and OECD countries, from an average of 47.5 per cent, to 23.4 and 25.5 per cent respectively in 2012. In Sweden, the reduction has been even larger: from 58 per cent in 1981 to 26.3 per cent in 2012 and now to 22 per cent in 2013. These sharp cuts are usually attributed to tax competition.⁴ Greater integration and the free flow of capital lead countries to compete to attract investment by cutting their corporate taxes. There is strong empirical evidence that countries act strategically and that the corporate tax rate in one country is affected by corporate tax rates in others.⁵ Investment is sensitive to the tax level and lowering the formal corporate tax rate is viewed as an effective way of attracting domestic and foreign investment.

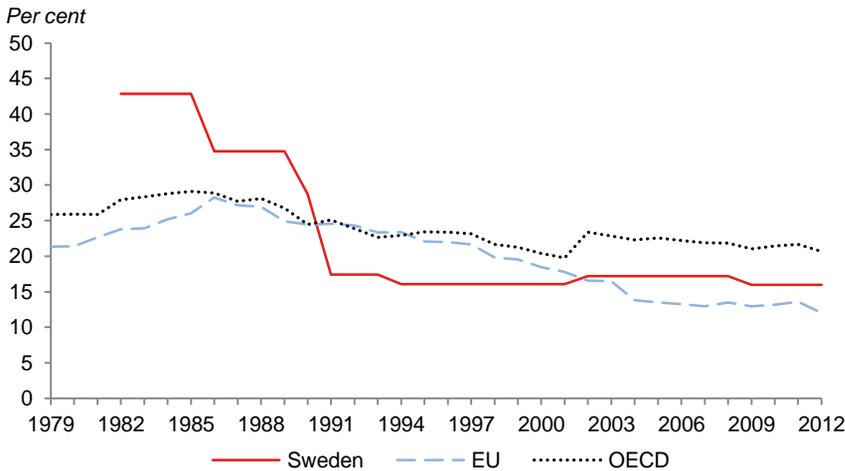
³ But this may change if other countries continue to cut their corporate taxes. The United Kingdom lowered its rate to 23 per cent in 2013 and plans to further reduce it to 21 per cent in April 2014. Australia lowered its rate by 1 percentage point in 2013 while Chile raised its rate to 20 per cent. Denmark plans to lower its corporate tax from 25 to 22 per cent.

⁴ See, for example BP13, p. 205; references to the research literature can also be found there.

⁵ See Devereux and others (2008), Davies and Voget (2008) and Redoano (2007).

But it should be underlined that the effective tax rate may deviate sharply from the formal rate, depending on different rules for deductibles and depreciation. A country with a high formal tax rate but generous deductibles may have a lower effective tax rate than a country with a low formal tax rate but limited deductibles. Figure 5.2 shows the development of effective marginal corporate taxes in Sweden and the EU and OECD countries from 1979 to 2012.⁶ The downward international trend has not been as striking here as in Figure 5.1. This is because corporate tax rate deductions are often financed by broadening the tax base. In Sweden, the effective marginal tax rates were drastically lowered as part of the 1991 tax reform and have remained at a relatively low level ever since.

Figure 5.2 Effective marginal tax rates for Sweden, the EU and the OECD 1979–2012



Sources: Devereux and others (2002) up to 2002, Bilicka and Devereux (2012) after 2002.

Despite several decades of free capital movement, corporate tax rates have not decreased as much as many analysts had previously feared;

⁶ Effective marginal taxes are defined as the change in an investment’s capital cost caused by the tax. The investment is hypothetical, but typical in the estimate that forms the basis for Figure 5.2 as it is based on data for more than 300 000 European companies. These data have the following weights: industry 25.6 per cent; construction 24 per cent; intangible assets 8.7 per cent; inventories 41.7 per cent. It is assumed that the investment is 35 per cent debt financed and the remainder equity financed. Specific assumptions about depreciation rules are made in the calculation. The effective marginal tax is computed by first calculating the *break-even* profit, i.e. the capital cost. The tax is then added and the difference in the capital cost between the untaxed and the taxed situation is the marginal effective tax. Effective marginal taxes are a generally accepted concept among tax researchers and estimates of the effective marginal taxes are made by the European Commission and others.

there are still substantial differences in corporate taxation. One possible explanation is that capital is not as mobile as previously thought. Many investors prefer to invest in their home country, for example, because of the information advantages, even if it means higher taxes. Firms' location decisions are also affected by factors other than taxation such as the business climate in general, infrastructure and the availability of skilled labour. Location decisions also depend on proximity to suppliers and consumers. Conclusions from research on tax competition and economic geography are that large core countries can levy higher taxes than smaller countries on the periphery. Thus for Sweden, which may be regarded as a small country on the periphery, the corporate tax cut seems justified.

In the short run, individual countries may certainly benefit from tax competition, but in the long run, all countries lose. Therefore, EU member states through a "code of conduct" and "good governance in the tax area" have pledged, although not in a legally binding manner, not to conduct harmful tax competition. In the Council's opinion, Sweden should contribute to EU and other international efforts to reduce harmful tax competition.

5.3 Why reduce the corporate tax?

The Government's justification for lowering the corporate tax is that it is the tax that is the most harmful for growth. The Council notes that a number of studies have found that the corporate tax is the tax with the most adverse effect on GDP growth. For example, Arnold (2008) examines how different taxes measured as a percentage of the tax revenue generated affect economic growth in 21 OECD countries. The study shows that countries that rely most on income taxes have lower growth than countries that rely more on consumption and real estate taxes. Arnold (2008) finds that of all taxes on income, the corporate tax is the tax that is associated with the lowest economic growth.⁷ However, not all studies find that the corporate tax is the most harmful tax for economic growth. Results from Easterly and Rebelo (1993), Widmalm (2001) and Angelopoulos and others (2007) show instead that taxation of personal income is the most harmful type of taxation. The most extensive study of the

⁷ Studies by Lee and Gordon (2005) and Gemell and others (2011) also support the argument that the corporate tax has adverse effects on growth.

Swedish tax system in recent times, made by Peter Birch Sørensen, concluded that there are grounds for lowering the corporate tax from 26.3 to 25 per cent.⁸

The Council notes that the Government gave the Corporate Tax Committee a remit to review corporate taxes in 2011.⁹ Its aim is to present proposals of tax design that benefit companies, investment and employment. An important task of the Committee is to propose tax changes that are appropriate in a world with global competition. This includes examining different alternatives for reducing the taxation of risk capital in the corporate sector and levelling the playing field between equity financing and borrowed capital. The Committee will also propose rule changes to protect the Swedish corporate tax base in an increasingly globalised world. The inquiry is to deliver its final report on 31 March 2014.

5.4 Limits on interest deductibility for business

By creating debt obligations between associated enterprises, the deduction for intercompany interest on debt could be used to reduce corporate taxation. In 2009, rules were introduced to prevent tax schemes involving acquisition of shares from associated enterprises. According to a report from the Swedish Tax Agency, the rules from 2009 proved not to have the intended effect and tax planning with the help of interest deductibility has largely continued.¹⁰

The change beginning in 2013 broadens the limits on interest deductions to apply to interest expenditure on all debts among associates. The right to deduct interest on business loans is being tightened and applies only when the recipient of the interest is domiciled in the EEA area or, under certain conditions, in a state with which Sweden has a tax agreement.

The Confederation of Swedish Enterprise and others have criticised the new, more stringent limitations on deducting interest for being difficult to interpret and thus legally uncertain. According to the critics, the new rules may lead to greater uncertainty when companies have difficulty knowing if the deduction will be allowed

⁸ Sørensen (2010).

⁹ Ministry of Finance (2011d).

¹⁰ Skatteverket (2012).

and it is up to Skatteverket to determine if the loan is a justified business loan or if it has been taken out to get a substantial tax benefit.

The Government expects the tighter rules limiting interest deductibility to increase tax revenue by SEK 8.8 billion. Knowledge of what is possible under the new rules, and the changes in behaviour they may result in, are limited. An illustration of the difficulties of accurately estimating the effects of a change in rules is that the Government as early as 18 April this year was compelled to take immediate measures to prevent tax planning, following the reduction in the corporate tax rate.¹¹ In the Council's opinion, the estimates of the effects of the restrictions on interest deductions are highly uncertain.

5.5 Assessments and recommendations

The Council does not have any major objections to the Government's decision to lower corporate tax rates. The Council notes that the Government chose not to wait for the Corporate Tax Committee's final report, but the reduction should be seen in the context of the downward trend in corporate tax rates in many countries. But in our opinion, it would have been better if the Government had stated its reasons for going ahead with the tax cut before the Corporate Tax Committee presented its final report. It is also our opinion that the Government's estimate of how much tax revenue will increase because of the tighter rules limiting corporate interest deductibility is very uncertain. Previous errors of judgement show that corporate creativity in tax planning of profit allocation in associated enterprises should not be underestimated. For example, the Government announced a change in the recently decided rules, following the corporate tax reduction, as early as 18 April 2013.

¹¹ Ministry of Finance (2013). In a Government Communication, the Government justified its initiative in the following way: "If measures are not taken immediately, there is a significant risk of tax planning resulting in an appreciable loss of tax revenue." Therefore, in the Government's opinion, there are special reasons based on the exemption clause in Chapter 2, Section 10, paragraph 2 of the Instrument of Government to apply the forthcoming proposal on group contributions submitted in the tax year that ends after this Government Communication was put before the Riksdag, i.e. on 19 April 2013."

6 Climate change and fiscal policy

The aim of this chapter is briefly to examine whether the knowledge currently available on the economic consequences of climate change necessitates special fiscal policy consideration. In accordance with the Government's remit, the Council is to scrutinise fiscal policy to see whether it is compatible with long-term sustainable public finances. Serious climate damage could have a considerable impact on the public budget and justify increasing net lending to create fiscal buffers. The effect of climate change on the public finances thus falls within the Council's remit.

It is now highly certain that the earth's climate is changing and that this change is mainly due to human activity. Climate change affects all parts of the world, but it affects different regions to a different extent and in different ways. Exactly how the climate is changing is uncertain, partly because we do not know for certain how large future emissions of greenhouse gases will be and partly because the climate models we use are not exact descriptions of reality. Estimates of the economic consequences of climate change are even more uncertain.

Climate change is a complicated global process fuelled by emissions of greenhouse gases, particularly carbon dioxide. The effect of these emissions does not depend on where they occur. A key objective of Swedish climate policy is to exert an influence on global developments. However, in this chapter we confine ourselves to a discussion of whether or not climate change sets particular requirements for fiscal policy, assuming future climate change. Whether or not Swedish climate policy as a whole has met its targets is not discussed.

The consequences of climate change for Sweden have been examined in SOU 2007:60 "Sweden facing climate change - threats and opportunities". The inquiry notes that existing climate models show that Sweden's climate may change substantially in this century. The temperature will most likely increase more in Sweden than the global average; rainfall will increase considerably and the sea level will rise. This has important consequences for Sweden.

The damages identified by the inquiry include:

- increased risks of flooding and coastal erosion,
- increased damage to forests,
- higher costs for cooling commercial premises and homes,
- higher costs for supplying drinking water,
- more heat-related deaths.

The inquiry also mentions several positive effects of climate change on the economy. These include:

- lower heating costs,
- increased production of hydroelectric power,
- increased growth of forests.

Climate change may also possibly have a number of indirect effects on Sweden. Changes in trade patterns, migration and international conflicts are examples of how Sweden may be affected, but are not included in the estimates. In the Council's opinion, a realistic quantification of these effects cannot yet be made.

In SOU 2007:60, expected expenditure and revenue were quantified in a climate scenario described as medium-high.¹ In this scenario, the average global temperature increases by 3.4 degrees by the end of this century, and carbon dioxide emissions from burning fossil fuels continue to increase from the current level of about 10 billion tons of coal to about 30 billion tons at the end of the century.² According to the climate model used, this leads to a gradual rise in the average temperature in Sweden so that by the end of the century, it will be four to seven degrees warmer in winter and two to four degrees higher in summer compared with the average in the period 1961–1990. There is understandably considerable uncertainty about how realistic this scenario is. Emissions may be higher or lower and there is considerable uncertainty about how sensitive the climate is to changes in the amount of carbon dioxide in the atmosphere.

¹ The analysis is based on the International Climate Panel (IPCC) scenario A2.

² When a ton of coal is burned, it combines with oxygen to form 3.67 tons of carbon dioxide.

Therefore, a higher temperature cannot be ruled out but there are also studies pointing in the opposite direction. While waiting for the IPCC's fifth report, expected in autumn 2014, it seems reasonable to continue using "medium-high scenario" when referring to the analyses the inquiry has done.

If no discounting is used, the estimate in SOU 2007:60 of all the costs caused by climate change from 2011 to 2100 will be SEK 1 900 billion, over a third of which are costs for more heat-related deaths.³ These costs refer to the direct effects of climate change in Sweden. The average cost per year thus exceeds SEK 20 billion. Revenues are estimated at SEK 1 745 billion. The costs grow over time, but with an annual GDP growth of 2 per cent, the estimated costs (and revenues) are equivalent to about 0.2 per cent of GDP both in 2050 and 2100, and less than that before this. In all likelihood, both costs and revenues may be different in the event of the assumed climate developments, depending on the effectiveness of measures taken to prevent damage and to realise potential benefits. An analysis of such adjustment measures lies outside the aim of this chapter.

SOU 2007:60 is the most extensive analysis of the direct effects of climate change on Sweden that we know of. The European Commission has also carried out a similar study for the EU. In its PESETA project, the effects of climate change in a number of areas are estimated for different parts of Europe.⁴ Damages estimated are for coastal damages, flooding, agriculture, tourism and health. The EU has been divided into five regions and Sweden, together with Finland and the Baltic States, belongs to the Northern Europe region. A positive effect of climate change corresponding to about 0.5 per cent of total consumption is estimated for this region by 2080 for an increase in the average temperature in the EU of more than five degrees and three degrees globally. For Southern Europe, a negative effect corresponding to 1.5 per cent of annual consumption is expected. The Council notes that the positive effect for Northern Europe occurs even though no effects on forestry, power production or heating are included. Instead, the most important feature for Northern Europe is the substantial positive effect on agriculture. The PESETA report also includes effects on death rates related to cold

³ The number of heat-related deaths is estimated to be about 1 000 people a year higher at the end of this century as a result of climate change. Each death of this kind is valued at SEK 20 million.

⁴ European Commission (2013d).

weather. In this case, the decrease in deaths of this kind in Northern Europe is expected to more than compensate for the increase in heat-related deaths.

In the DARA report, the effects of climate change are analysed for 184 countries from a short-term perspective.⁵ The climate changes that have already occurred are estimated here to cause damages equivalent to about 1 per cent of global GDP. As early as 2030, this figure will have risen to 2.5 per cent. The Nordic countries, except Denmark, stand out as the only countries for which climate change has significant positive economic consequences, corresponding to a gain of 1.4 per cent of GDP for Sweden by 2030.⁶

Sweden's vulnerability to weather conditions was illustrated during the storm Gudrun in 2005 when forest corresponding to one year's cutting in all of Sweden was felled, mainly in Southern Sweden. The economic consequences of this storm have been examined by the Swedish Forestry Agency.⁷ The costs are estimated at about 0.5 per cent of Sweden's GDP (about SEK 15 billion) but with a significant uncertainty interval. A large number of forest owners were uninsured, which could be a factor contributing to the government decision to contribute about SEK 3 billion to the sector in the form of various subsidies and tax cuts.

It is possible, but not at all certain, that this type of weather-related damage may be more common in the future. This may justify a great many measures to reduce the economic impact, including measures that increase the level of insurance. But it is currently difficult to see the need for measures that would have consequences for the fiscal framework. Damages like those from the storm Gudrun cannot be expected to have effects that would threaten fiscal stability within the current framework even if they became more frequent.

Our discussion about how the adverse consequences of climate change directly affect mainly the inhabitants of other countries should not be taken as an argument against Sweden's involvement in the international effort to limit climate change. Apart from direct altruistic motives, Sweden is affected by what happens elsewhere and climate change may very well have substantial adverse indirect effects

⁵ DARA (2012).

⁶ For Finland, Norway and Iceland, the corresponding figures are 1.6 per cent, 1.7 per cent and 2.6 per cent respectively.

⁷ The Swedish Forestry Agency (2011).

on Sweden – effects not taken into account in the above discussion. The fact that the impact of climate change on all the countries in the world is skewed and thus presumably increases global inequality supports the argument for an international redistribution and insurance system. In such a system, one could expect Sweden to be an important net contributor. For the time being, however, the introduction of a system of this kind must be considered too unlikely to justify changes in net lending.

The Council notes that there is considerable uncertainty about the future extent of climate change and its effect on the world and on Sweden. Prudence thus makes a particularly strong argument for taking measures that reduce global emissions of greenhouse gases. Measures to stimulate technological development of alternatives to fossil fuels and energy saving as well as measures to adapt to a change in climate may also be justified. The direct effects on the climate of isolated Swedish measures that concern emissions and technological development are in all likelihood quite limited and should be seen as part of a coordinated global development.

In the Council's opinion, the current best estimates of the consequences of climate change for Sweden at this point in time do not occasion any changes in the fiscal framework. As in the case of the storm Gudrun, costs may occur that are quite considerable for private and municipal actors, but they are not so high that they risk threatening public sector financial stability or fiscal sustainability in the long run. The estimates are highly uncertain, but our conclusions also include a substantial safety margin.

Even if all the estimated gains from climate change for Sweden fail to materialise, and the costs are several times higher than those described in SOU 2007:60 for example and would mainly affect the public budget, in our opinion no convincing argument has been made for immediate changes in the fiscal framework.

The rapid build-up of knowledge about the consequences of the climate change now taking place justifies returning to this question in the future.

7 Fiscal policy and income distribution

7.1 Introduction

The instruction for the Fiscal Policy Council issued by the Government on 28 April 2011 stipulates that “the Council, with the Spring Fiscal Policy Bill and the Budget Bill as its basis is...to analyse the effects of fiscal policy on the distribution of welfare in the short and the long run.” This is a new task for the Council and led the Council to order three background reports about income distribution. They are: 1. *Inkomstfördelningen bland pensionärer* (Income distribution among pensioners, Gabriella Sjögren Lindquist and Eskil Wadensjö), 2. *Varför ska vi bry oss om fördelningsfrågor?* (Why should we care about distribution issues? Jesper Roine), and 3. *Regeringen och ojämlikheten: En granskning av budgetens fördelningspolitiska redogörelser 1992–2011* (The Government and inequality: a review of income distribution discussions in the budget 1992–2011, Daniel Waldenström). They were discussed at a public seminar in June 2012 and were published in the Council’s publication series, *Studier i finanspolitik* (Studies in fiscal policy). But the Council decided not to make any detailed analysis of the income distribution issue in the 2012 Report.

The 2013 Report will thus be the first to analyse income distribution issues in a separate chapter. In Section 7.2, we discuss how the Council interprets its new task. We continue with a discussion of the Swedish infrastructure for income distribution analysis in the form of underlying data and analytical models in Section 7.3. Then in Section 7.4, we present a picture of income distribution developments in recent years as a background to our analysis. In subsequent sections, we raise two key income distribution issues in fiscal policy, namely the distribution effects of the earned income tax credits that have been implemented (Section 7.5) and the distribution effects of the indexation technique, which is an important element in the budget process (Section 7.6). The Council’s concluding assessments are presented in Section 7.7. Chapter 7 also includes a box discussing three quality problems in the income distribution statistics.

7.2 The Fiscal Policy Council's remit

The instruction states that the distribution of welfare should be a focal point. Economists often assume that individual welfare is determined by the consumption of goods and services. In the same analysis, economists also assume that this consumption is limited by income. Basing welfare distribution analysis on consumption and income has advantages and disadvantages. If high consumption is based on large loans that are not sustainable in the long run, then it is of course a disadvantage to use consumption as a basis. But if consumption is based on earlier savings, then the reverse is true.

It is well known that measuring consumption is particularly difficult. Moreover, Statistics Sweden's surveys of household expenditures (HUT) are only conducted every three years, further reducing the possibilities of basing the analysis on expenditure or consumption. There is a much better basis for empirical analyses of income distribution. Even though income is not the same as welfare, it is often fair to assume that fiscal measures in the form of changes in taxes and transfer payments primarily affect welfare distribution via income distribution. If data availability is better for income than for consumption, it seems reasonable to base the analysis on income.

We note that there is also support for this in the Government's formulation of its distribution policy objectives in its Communication entitled the Swedish Fiscal Framework (Ramverk för finanspolitiken): "Distribution policy works via the tax and transfer system, which makes disposable income more evenly distributed than income before tax, and by subsidising publicly procured services, such as health care and childcare".¹ All in all, it is thus our view that there are strong arguments for studying how fiscal policy affects income distribution.

7.2.1 What is disposable income?

Both Swedish and international applied research on income distribution use a measure of disposable income that can be described as having the household as the income unit and the individual as the analysis unit and is adjusted for the household's dependency burden. This means that every individual is identified

¹ Ministry of Finance (2011a).

with a household (which may consist of one or more persons). All the household's income and transfers are counted, after which the taxes paid by the household are deducted. This gives the household's total disposable income. This total is then divided by the household's dependency burden. This dependency burden is usually expressed as "the equivalent number of adults in the household". There is a large body of research about how to calculate equivalence scales. In Sweden, both Statistics Sweden and the Ministry of Finance have used the same scale for several years. We have no reason to question whether this scale is reasonable.² Household disposable income per the equivalent number of adults is then assigned to each person in the household under the assumption that income is evenly distributed within the household. Next, the income differences between individuals are measured using an appropriate distribution measure.

Even though this income measure may not be appropriate in all cases, it has significant advantages. It provides a way to approximate an individual's consumption possibilities over the year and we have reason to think that the welfare of the individual is closely associated with his or her consumption.

The established measure of disposable income per individual we present above is sometimes simply called "economic standard", sometimes more clumsily "adjusted disposable income per consumption unit". In the following text, when we refer to disposable income we mean an income concept calculated as described above.

It is important to emphasise how this measure of disposable income is interpreted and in particular, that it is affected by very divergent factors (or mechanisms). Here, it is important to bear in mind the difference between the wage dispersion on one hand and the dispersion in the above measure of disposable income. Wage dispersion can only be measured for those who *de facto* work. Another problem is that most databases are unable to handle self-employed peoples' earnings, so these earnings are often excluded from analyses of wage dispersion. When we examine the distribution of disposable income, every individual in the population studied will be included with the same weight. When the basis is all households in

² This scale gives the first adult in the family a value of 1.0 person, the second adult 0.51. additional adults 0.60, the first child aged 0–19 years 0.52 and additional children 0.42 persons.

the population, everyone will thus be included in the calculations, and this is ethically appealing. At the same time, it is possible to examine separately the income standard among children or pensioners, for example.

There are many factors underlying the disposable income that is ultimately included in the calculations of income differences in society. This also means that there are many factors that may explain income differences between countries and how they develop over time in a particular country. Again, we may compare with wage dispersion. It of course affects the earned income that is part of disposable income. But earned income is a wider concept than wages. A year's earned income is the product of the average wage during the year and the number of hours worked that year. The number of hours worked is affected by both involuntary unemployment and voluntarily chosen working hours. Furthermore, disposable income includes not only earned income but also capital income. In addition, both spouses' incomes are included. This means that it is important "who is married to (or lives) with whom". In most countries, there is a strong positive correlation between spouses' education levels (and thus income).

Another demographic factor affecting disposable income distribution is which families have (most) children. If low-income earners generally have more children, the income differences that arise from market income are reinforced as these families have a heavier dependency burden. If, on the contrary, high-income earners have more children, the birth rates contribute to a more equal distribution of disposable income.

Finally, from a political perspective, it is essential that taxes and transfer payments affect disposable income. This does not cause any calculation problems as long as taxes and transfer payments are clearly defined. When analysing causes, it is important to remember that taxes and transfer payments may also influence various kinds of behaviour, which may in turn affect disposable income.

With so many factors affecting disposable income, this variable is difficult to analyse. Again, its difference from wages (per hour worked) is striking. If we want to understand wage dispersion, it is natural to keep to the labour market and examine how changes in this market affect wages. But disposable income is affected simultaneously by so many economic, demographic and political

factors that the analysis becomes more difficult to carry out in a systematic way. Many analyses of disposable income are therefore descriptive in nature and often based on rather mechanical decompositions.

7.2.2 What is short and long term?

The Council's remit is to study the effects in both the short and the long term. What is appropriate to call short term and long term will vary between different fiscal measures. A related issue, which is a key issue in the research on income distribution, is how to look at the relevance of annual income and life time income (or in any case “long-term” income in a period clearly longer than one year) for different problems. An incisive example is how to study the distribution effects of higher study grants to university students. If the analysis were based on disposable annual income, a measure of this kind would probably seem a very effective income distribution policy. Both general income distribution measures (such as the Gini coefficient) and the poverty rate would fall. But if the analysis were to be based on life time income, then the result would probably be the opposite as the grants would largely go to those who will earn relatively high incomes for most of their life.

In his report to the Council, Daniel Waldenström emphasised that because of better access to longitudinal data for individual and household income over long periods, there is now scope for considerably more analyses of fiscal policy's effects on long-term incomes than have been done thus far. The Council concurs with this view, but there is no reason to exclude analyses of the effects of annual income on the distribution when the outcome is relevant to the problem.

In this context, there is reason to point out possibly even larger deficiencies in earlier analyses of the policy's effects on income distribution. The basic purpose of many public benefits systems is to protect against adverse shocks to market income, such as unemployment, illness, occupational injuries and inevitable old age. Examining how successful the policy is in this respect requires analyses of income (in)stability over time and fiscal policy's ability to smooth income paths. We have seen few of these analyses in Sweden, even though access to longitudinal data has made such

analyses possible. It is the Council's long-term ambition to develop distribution policy analysis in this direction.

7.2.3 Distribution among whom?

The aim of the traditional and internationally established analysis of income distribution is usually to measure the differences between all individuals in the population. Each individual is given equal weight when income differences are evaluated, even though the income of the individual is determined by the household to which he or she belongs. With this approach, the children in a household are also included in the population whose income differences are being studied. This is often perceived as an advantage from an ethical perspective.

In recent decades, it has also become increasingly common to focus only on the children and to let them constitute a population of their own within which income differences are measured. The concept of child poverty has its origins in analyses of this kind. These analyses study the share of children whose income standard falls below a poverty line defined in some way. Separate analysis of the child population may be of special interest for some fiscal policy measures directed at families with children.

Distribution effects may also be studied in ways other than looking at differences between individuals in the whole population or parts of it. Special efforts aimed at affecting gender equality in the labour market may justify analyses of their effects on the pay gap between men and women. Special regional measures may justify comparisons between cities and rural areas.

7.2.4 What are effects?

The Council's instruction says that the "effects" of fiscal policy are to be studied. This is an important statement that implies that the Council's remit extends beyond monitoring the development of income distribution, for example. But analysing effects are also associated with difficulties, as it usually involves comparing the outcome of a factual alternative (which we can observe) with a counterfactual alternative, which we by definition cannot observe. The challenge is to find information that nevertheless makes it

possible to determine what would have happened in the counterfactual alternative.

There is a need to distinguish between two different types of evaluations. One of them we can call *ex post evaluations*. This alternative involves measuring the outcome for those covered by the policy measure. If one wishes to make a long-term assessment of the measure, one has to accept waiting for a long time before the outcome can be observed, measured and evaluated. Regardless of the time horizon, there is also a need to assess what would have occurred if the fiscal policy measure had not been taken. This outcome cannot be observed but has to be assessed based on the outcome for some control group that can be assumed to reflect the counterfactual outcome. Whether or not the control group provides reliable information will be a matter of judgement.

There are several studies of the distribution aspects of fiscal policy measures where it has been possible to create control groups that appear credible. Liu and Nordström Skans (2010), for example, have studied the distribution effects of extended parental leave by comparing the outcome between families that had their children just before and just after a policy change. Ekberg, Eriksson and Friebel (2013) used the same technique for studying the effects of the introduction of additional months of paternity leave. Carling and Larsson (2005) used variations between regions and age groups to assess the effects of labour market programmes for young people in a credible way. In Section 7.5, we return to the question of whether it has been possible to make credible ex-post evaluations of the earned income tax credit.

The second kind of analysis is usually called *structural modelling*. In this kind of analysis, a model is constructed of how the economy functions in the respects relevant to the issue. It usually involves using a statistical method to estimate behavioural parameters used in a mathematical model of the economy. This model can then be used to simulate several different outcomes and a comparison of the outcomes of two different policy alternatives can be regarded as the effect of the difference in policy. Such an analysis can be made both before the policy is decided and ex post. When it is made ex post, it may be possible to assess the plausibility of the results as some outcomes are known. Obviously, the credibility of such an analysis

depends on the credibility of the underlying model and the estimates of the behavioural parameters involved.

We will return to this kind of evaluation when discussing the earned income tax credit in Section 7.5. It is our view that both kinds of analysis must be included in the toolboxes of evaluation researchers. The challenge is to use ex-post evaluations and structural modelling in the best way in each evaluation situation.

7.3 Income distribution analysis infrastructure

Answering the questions posed by the Council's remit obviously depends on access to good data on income distribution in the population. The main source of this kind of data is the Statistics Sweden survey Household Finances (Hushållens ekonomi, HEK). It is constructed primarily to provide a good measure of disposable annual income with the household as a unit of income and the individual as a unit for analysis. The survey's key sources are a telephone survey, with questions about the household's composition and the number of hours worked, and various public registers providing information about annual income, taxes and transfer payments. HEK is a sampling survey, the size of which has varied somewhat over time. The most recent survey, the survey of 2011 annual income, includes about 17 000 randomly selected individuals aged 18 and older plus the people included in these selected individuals' households. The 2011 survey includes a total of some 40 000 people.

Using HEK data thus makes it possible to estimate disposable income for a representative sample of the population and hence to examine the distribution of disposable income. HEKs from different years make it possible to study how annual income distribution has changed over time. The first HEK was conducted in 1975. Since then, some changes in definitions have resulted in changes that affect comparability over time. In Box 7.1, we briefly discuss three quality problems in these statistics.

An assessment of how fiscal policy affects income distribution requires more than measures of income distribution and its development over time. Typically, taxes and transfer payments used to estimate disposable income are available in the form of annual

amounts, i.e. total taxes and total transfer payments of various kinds during the year. But fiscal policy issues are linked to specific rules in the tax and transfer payment systems, such as the municipal tax rate, rules for tax deductions, minimum and maximum levels in the social insurance systems, etc.

To make estimates before the major tax reform of 1990–1991 more than 20 years ago, the Ministry of Finance, in cooperation with the Statistics Sweden, developed a simulation model linked to HEK data. This model is called FASIT.³ The model uses programmed rules for taxes, social insurance and other transfers, making it possible to estimate what happens if a rule is changed. It is also constructive that the interaction between taxes and transfers and the interaction between different transfer systems have been taken into account in these programmed rules. If, for example, a taxable insurance benefit (such as the compensation under the sickness insurance) is raised, then those benefiting from the raise will have to pay higher income tax. Likewise, the rules for housing allowances and welfare benefits (previously, social assistance) will result in lower levels for these benefits because of the higher sickness insurance compensation.

FASIT is an indispensable tool for the Ministry of Finance in its work preparing distribution policy analyses for the Government. It is important, however, to emphasise that the model is “mechanical” in some key respects. The estimates are based on the assumption that no actors change their behaviour as a result of the changes being analysed. The argument can be made that the estimates still provide some insight as they give some idea of the immediate consequences of policy changes before other changes occur. It can also be argued that the mechanical calculations highlight the size of the incentives created by changes in the rules and thus the forces that could be at play at future stages. But, as was evident from our discussion above of the components of disposable income, it is obvious that many kinds of behaviour may change when important tax rates and benefit levels are changed.

In order to develop the analysis of the effects of various fiscal policy measures, the Ministry of Finance has therefore initiated the development of a more advanced version of FASIT, which also takes into account the possibility that individuals included in the model

³ Distributional Analysis System for Income and Transfers.

change their behaviour in response to policy changes. This model is documented in the Ministry of Finance (2009).

The model is based on the following nine groups according to principal labour status during the year:

1. Children 0-15 years.
2. Pensioners.
3. Students.
4. Persons with sickness or activity compensation (sickness compensation can be payable to people aged 30–64 and replaces the early retirement pension; activity compensation is the corresponding compensation for people aged 19–29).
5. People on parental leave.
6. The unemployed.
7. People on sickness absence.
8. People in work.
9. Others (without earned income or compensation from the social insurance systems).

The first seven groups do not work, i.e. their hours worked are by definition zero. Individuals in group 8 work different numbers of hours, while group 9 has opted not to work. The model's tasks thus are first to distribute all individuals in the sample over the nine groups and then to determine how many hours those belonging to group 8 choose to work. The model should also be able to determine how this distribution and determination of the number of hours worked depend on the design of fiscal policy. The equations generating this behaviour have been estimated using econometric methods. The data base pools HEK data for 2003 and 2004.⁴

The empirical version of the model has been determined in the following way. First, it is assumed that fiscal policy design does not affect “children”, “pensioners”, “students” and “people on parental leave”. Therefore, these individuals retain their observed status.

Then three equations are estimated in succession to determine the probability of belonging to one of the groups “sickness/activity compensation”, “unemployed” and “people on sickness absence”.⁵ For the first of these groups, the probability is estimated based on a

⁴ But we have learned that the probability functions determining the distribution of labour status are re-estimated for each new year of HEK.

⁵ The functional form of the probability follows a logistic model.

population consisting of their own group plus “unemployed”, “people on sickness absence” and “people in work”. The idea is thus that all these people may end up in the group in question. For “the unemployed”, the probability is estimated based on a population consisting of their own group plus “people on sickness absence” and “people in work”. For “people on sickness absence”, the probability is estimated based on a population consisting of their own group plus “people in work”.

The replacement rate is a key variable in these three probability functions. It is defined as disposable income when not in work (sickness/activity compensation, unemployment benefit or sickness benefit) in relation to disposable income when working full time. There is a set of additional variables such as age, gender, civil status, etc. The estimates from these models are not presented by the Ministry of Finance (2009) but the replacement rate coefficient is reported to differ significantly from zero in the three estimated equations.

These equations are used to distribute the individuals over the three groups. The equations assign each individual a probability of belonging to a particular group. Economic incentives will here influence the probability of belonging to a particular group via the replacement rate variable. But it is not sufficient to assign each individual a probability of belonging to a particular group. Therefore, (uniformly distributed) random numbers are also used to determine whether or not an individual will be included in a group. This means that the model has an inherent mobility. An individual, who in the raw data receives sickness/activity compensation and has characteristics implying a high probability of belonging to that group, may have a particular probability of escaping that group and ending up in the group in work. There is also a particular probability that the opposite outcome may occur.

Groups 1–7, which do not work and are assigned zero hours worked in the model’s estimates, are determined in this way. Then the hours worked by groups 8–9 still need to be determined. For this, a discrete model is used that distributes the individuals over 13 possible alternatives for hours worked from 0 to 55 hours per week. Individuals assigned 0 hours worked by the model are group 9.

Unlike the probability models for labour force status, the model for hours worked is a structural model in an economic sense. This

means that there is an underlying utility function that specifies how the individual's utility depends on his or her consumption (i.e. disposable income) and leisure.⁶ The individual is assumed to maximise this utility function within the bounds of his or her financial restrictions and available time. The econometric estimation technique then assigns values to the parameters of consumption and leisure that maximise the probability of observing the actual hours worked found in the data. These parameters can then be used to assign each individual one of the 13 alternatives for the number of hours worked. The models are estimated separately for four different types of households.⁷ The estimated parameters are presented in Ministry of Finance (2009).

The model for hours worked means that financial incentives influence the choice of the number of hours worked in several ways. Both income and substitution effects are present in the model. Income effects mean that wage and tax changes make the individual richer (or poorer) and thus may result in a different choice of hours worked. Substitution effects mean that higher wages and lower income taxes make work more profitable than leisure and therefore may result in more hours worked, whereas with lower wages and higher income taxes, the opposite is true.

As shown in this presentation, those responsible for the FASTT model have endeavoured to take into account that the labour supply may react to changes in taxes and benefits. This is an important advance in the model and there is no doubt that a considerable amount of work has gone into it. Nevertheless, it is important to point out a number of mechanisms that are not taken into account in the model.

We have mentioned above that demographic factors such as household formation and the number of children affect disposable income. Demographic research indicates that financial incentives in the form of child allowances and childcare fees, etc. affect demographic outcomes like these. But it is difficult, based on current

⁶ The model is richer than this. It also includes a (utility) parameter for receipt of welfare benefits. The idea is that receiving benefits may be stigmatising and thus have a negative utility. Welfare allowances also affect the labour supply via disposable income and thus consumption

⁷ They are single mothers, single women, single men and cohabiting couples. The utility function of the latter group has a number of additional parameters describing how a married person's utility from consumption and leisure depends on the consumption and leisure of the spouse.

research, to determine exactly how models like FASIT should take such effects into account.

It is also possible that fiscal policy changes may affect market prices and market wages in different ways. Financial assistance for households' housing costs may affect market rents. Measures that influence jobseekers' wage demands may affect labour market wages. The latter type of effects has been mentioned earlier in connection with evaluations of the earned income tax credits and unemployment insurance.

Another indirect effect of fiscal policy that the model does not take into account involves the interaction, particularly in the long term, between the compensation systems determined by fiscal policy and those determined by collective agreements. Swedish collective agreements include a number of compensation systems supplementing the politically decided systems. Expanded political systems may thus crowd out the systems decided in agreements and vice versa.

We do not regard this list of mechanisms that the Ministry of Finance's simulation model does not take into account as evidence of serious omissions. But we would like to stress that the quantitative results from different simulations sometimes have to be supplemented by qualitative assessments of various kinds. Econometric models are never perfect; their results must be judged in relation to what is possible to build into the models.

HEK and FASIT can be regarded as the main instruments that the Ministry of Finance, and the Council, have at their disposal for concrete analysis of the income distribution effects of fiscal policy. Just as it is the Council's remit to "review and assess...the models on which the forecasts are based", we also regard it as our task to examine the quality of the databases and the simulation model. Our subsequent discussion about the earned income tax credit and the indexation technique in the budget process is also a discussion about the quality of the databases and the simulation model.⁸

⁸ There are also other databases. For example, individuals' income can be tracked over long periods with the help of Statistics Sweden's LINDA database. But it is entirely based on registers and therefore has a less useful household concept.

7.4 Income distribution 1995–2011

As a background to our subsequent analyses of the earned income tax credit and the indexation technique in the budget process, it is helpful to have a picture of income distribution developments in Sweden in recent years as it appears in public statistics from the Statistics Sweden.⁹ We will keep to the period 1995–2011 in order to avoid problems associated with a change in the definition of household introduced in 1995. Figure 7.1 shows the development of the most widely used measure of overall income differences, the Gini coefficient, which takes the value zero when everyone has the same income and the value one when all the income in society goes to one single person.

In considering Figure 7.1, it is natural to ask how to interpret the size of the Gini coefficient shown in the figure. To do so, it is instructive to know a mathematical property of this coefficient. Multiplying the coefficient by two gives a measure of the expected percentage difference between two people in the population selected at random. Thus, when the Gini coefficient is 0.30 (as at the end of the period), the expected relative income difference between people selected from the population is 60 per cent of the average income. It also means that because of the increase in the Gini coefficient from about 0.23 to about 0.30, this difference has increased from 46 per cent to 60 per cent, a far from trivial increase.

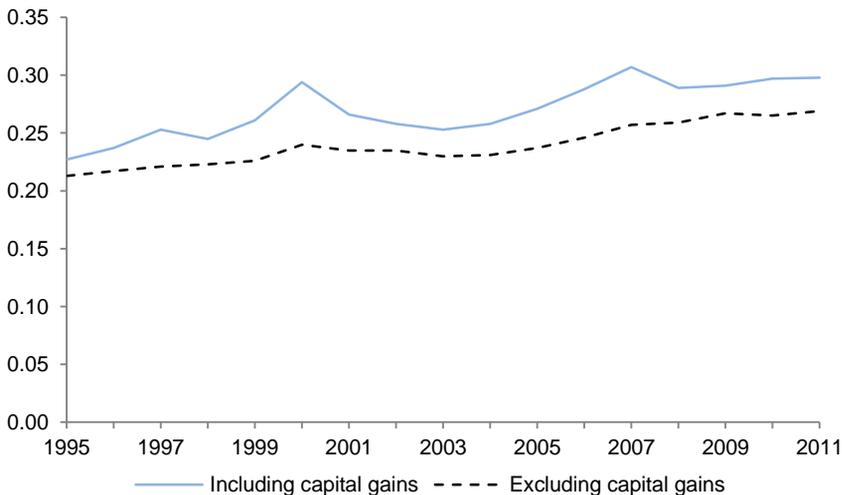
The figure shows the development of two income concepts, namely disposable income with and without realised capital gains. It is evident that the income differences are larger when capital gains are included. Two years when the differences are particularly large stand out, namely 2000 and 2007. These were years when stock market conditions in particular created incentives to realise value increases.¹⁰ Whether it is “better” to include or exclude these gains when analysing income distribution differences is a complicated

⁹ Data for a given year is usually published in February–March in the calendar year two years later. It thus takes only about 14 months from the date that the last income included has been earned to the date when all data has been collected (through tax returns), analysed and published by Statistics Sweden.

¹⁰ Another year with high realised capital gains is 1994, when more stringent tax rules for realised capital gains were expected to be introduced the following year.

matter, and we do not address this issue here.¹¹ The figure shows an upward trend in income differences from 1995 to 2006 and 2007, but the latter year is special because of the realised capital gains that year. The size of the increase ranges from 0.23 to 0.29 up to 2006 if capital gains are included and from 0.21 to 0.25 if they are excluded. It may appear surprising that the Gini coefficient is so stable from 2006 to 2011 (with the exception of 2007 including capital gains). The effects of the economic crisis with a strong increase in unemployment could be expected to show up here. But both historical experience and comparisons between countries show that unemployment does not affect the distribution of disposable income as much as political rhetoric would have one believe.

Figure 7.1 Gini coefficient for disposable income including and excluding realised capital gains 1995–2011



Source: Statistics Sweden’s income distribution survey (HEK).

A recent study of how disposable income was affected during the crisis years 2007–2009 in 21 rich OECD countries came to the following conclusion:

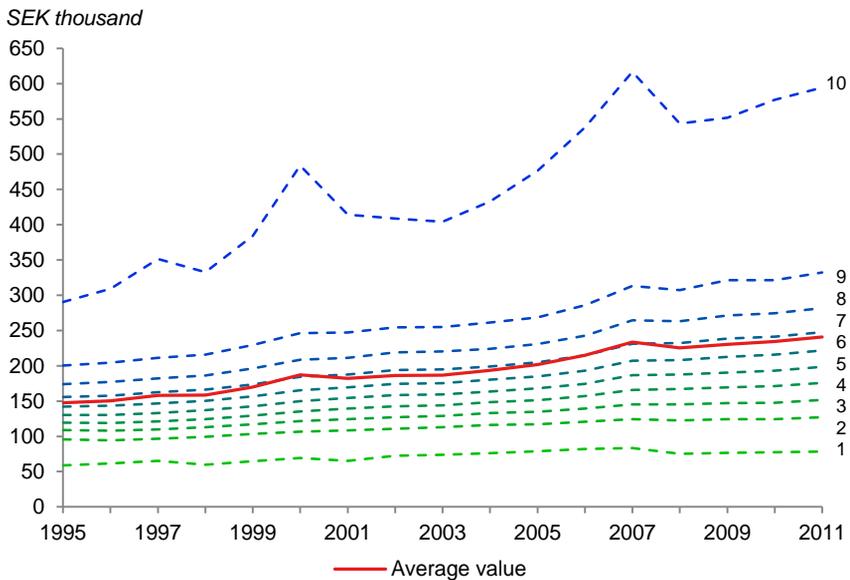
Our overall message is that for most of the countries in the study we found small changes in the distributions of household

¹¹ See Björklund and Jäntti (2011, pp. 29–30) and Roine and Waldenström (2012) for further analyses. It is common to exclude these gains in international comparisons of income distribution. This is mainly because the statistical authorities in countries (such as the United States), where data are collected by telephone interviews, refrain from asking about such gains.

based disposable income in the two years following the downturn, but we are likely to see larger changes in the long term as a consequence of the consolidation measures under way.¹²

It is instructive to supplement statistics on the development of general income differences with data on how income levels have developed during the same time. We present such data in Figure 7.2. The figure shows the average income level in 2011 prices for the ten decile groups and the average for the whole population.¹³ Since HEK covers a cross-section of the population, the decile groups do not necessarily consist of the same people each year.

Figure 7.2 Disposable income per person and year adjusted for dependency burden



Note: Average of the ten decile groups and the average in 2011 prices (SEK thousand) The figures refer to the decile group.

Source: Statistics Sweden’s income distribution survey (HEK).

¹² Jenkins and others (2013).

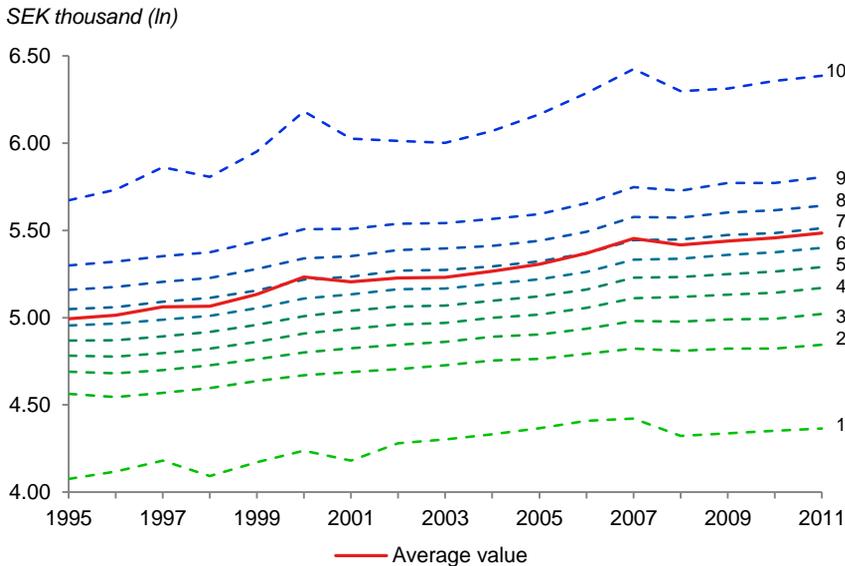
¹³ When studying this figure, it is important to be aware that HEK covers a cross-section of the population for each individual year. This means that the HEK does not provide any information about mobility in the income distribution from one year to the next. When we compare the income levels of a particular decile group in different years, we have to keep in mind that owing to some mobility, we are comparing income levels in a group composed partly of different people. See Björklund and Jäntti (2011, Chapter 3) for analyses of income mobility in Sweden and other countries.

We learn from Figure 7.2 that even though income differences increased from 1995 to 2006, income levels rose in all ten decile groups. But the income increase was unevenly distributed and clearly the highest, both in relative and absolute terms, in the highest decile group. In 2008–2011, when the crisis had hit, the income level of the lowest decile group is lower than in 2006 and 2007.

Figure 7.2 also provides a sense of orders of magnitude. We can see that the income of the highest decile group was SEK 150 000 higher than the average income in 1995, or about double the average income. In 2011, this difference had increased to SEK 350 000 and an income that was about 2.4 (600/250) times higher.

In Figure 7.3, we present the same statistics, now with a focus on relative changes in various parts of the distribution. We have therefore logarithmised income, so that the slope of the lines show relative changes over time. It is obvious that the top decile group has the steepest slope. Then the slope gradually decreases at least down to and including the third decile group.

Figure 7.3 Disposable income per person and year adjusted for dependency burden

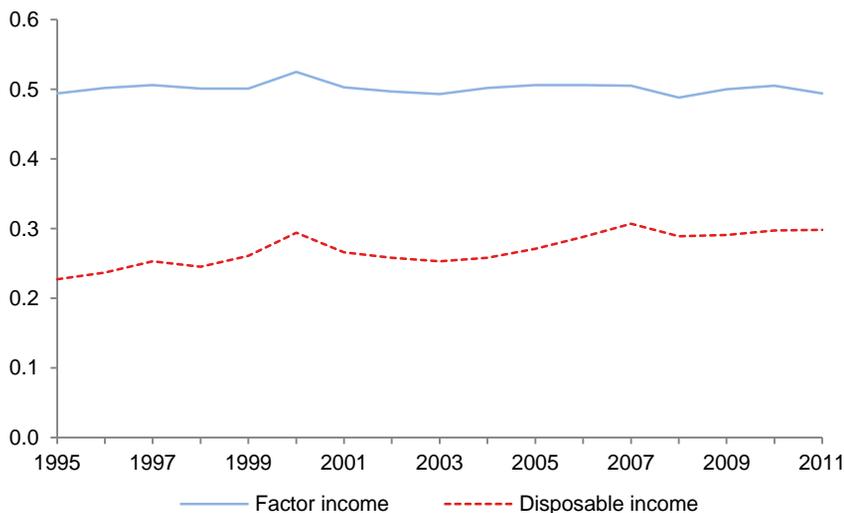


Note: Average of the ten decile groups and the average in 2011 prices (the natural logarithm of SEK thousand). The figures refer to the decile group.
 Source: Statistics Sweden’s income distribution survey (HEK).

It is not entirely clear that the second decile group has a distinctly higher relative increase over the whole period than the first decile group. With this last reservation, we can say that the increase in the general income differences shown by the Gini coefficient in Figure 7.1 can be found in most of the income distribution and that it is not concentrated in the upper part of the distribution, for example.

In Figure 7.4, we show the development of factor income distribution where the household is also the income unit and the differences are measured between individuals. The difference between factor income and disposable income is taxes and transfers, which are subtracted or added respectively when moving from factor income to disposable income. The difference in income dispersion measured by the Gini coefficient, for example, can be seen as a rough measure of the overall equalising effect of taxes and transfers.

Figure 7.4 Gini coefficient for factor income and disposable income 1995–2011



Note: Both factor income and disposable income are calculated with the household as the income unit and adjusted for the household dependency burden.
Source: Statistics Sweden's income distribution survey (HEK).

It should be noted here that the differences in factor incomes are more or less stable over the period with the exception of 2000, when the differences were larger because of the realised capital gains that

year.¹⁴ This means that the increased differences in disposable income up to 2006 and 2007 cannot be explained by increased differences in factor income. Instead, the figure indicates that the combined equalising effect of taxes and transfers weakened during this period. From 2006 to 2011, both curves are basically stable, implying that the total equalising effect was constant over the period.

7.5 Income distribution effects of the earned income tax credit

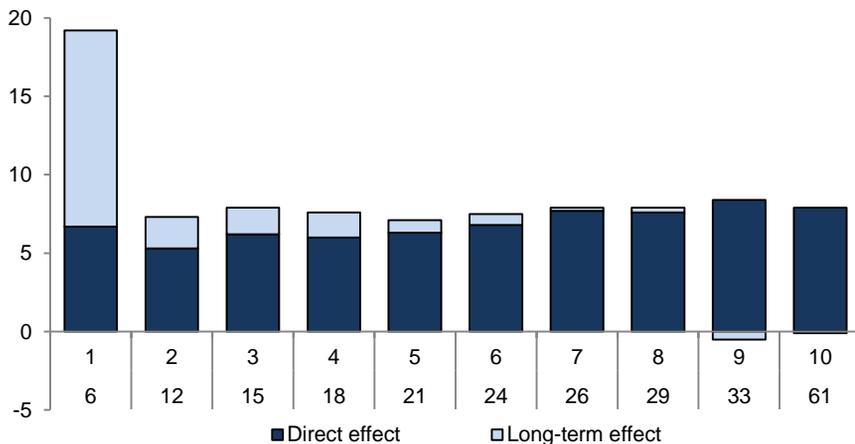
In recent years, many changes have been made to fiscal policy that are of interest from a distribution policy perspective. Among them are the real estate tax, the inheritance tax and the wealth tax, which affect not only income distribution but also the distribution of wealth. But when we study the actual fiscal policy conducted in recent years and follow the political debate on the design of fiscal policy, it is difficult to find a policy measure more important to examine from a distribution perspective than the earned income tax credit. The issues associated with the four earned income tax credits introduced are well known and have been discussed both by the Government in earlier contexts and in previous Fiscal Policy Council reports.

The Government has on the whole painted a positive picture of the income distribution effects of the earned income tax credits. Figure 7.5 from BP13 shows the percentage change in disposable income adjusted for the household dependency burden by decile group in the income distribution. The figure describes the total effects of the Government's policy. The earned income tax credits play a major role here and this important result is also found when the earned income tax credits' effects are separated from other measures; see, for example, Ministry of Finance (2009).

¹⁴ Even though we earlier emphasised that factor income at the household level and adjusted for the dependency burden captures much more than is captured by wage dispersion among the employed, it may be of interest to compare the stable curve for factor incomes with the development of wage dispersion. The latter is usually measured by the ratio between the 90th and the 10th percentiles of the wage distribution. According to Statistics Sweden's structural wage statistics, this ratio increased from 1.80 to 1.96 between 1995 and 2000. Subsequently, the ratio has been stable at very close to 2.0. It would be useful to examine what lies behind the difference between wage dispersion and factor income dispersion. The Council is not aware of any such study at present.

Figure 7.5 Income distribution effects of the Government's policy 2006–2012 according to BP13

Percentage change in adjusted disposable income



Note (BP13): Row one below the horizontal axis corresponds to income groups (adjusted disposable income) and row two corresponds to individual gross monthly income per adult (SEK thousand). Adjusted disposable income is the household's total income adjusted for the dependency burden. Gross income refers to income in 2012 prices.

Source: BP13.

The key result is that the lowest decile group clearly receives the highest increase in income when long-term effects are included. Long-term effects in this sense mean that the effects of changes in the labour supply are included.¹⁵ The figure shows that the lowest decile group then gets a relative income increase about three times higher than what other groups get. Thus, the policy has a remarkable precision in terms of distribution policy when the behavioural effects via the increased labour supply are taken into account; the largest income increases go to those with the very lowest income. Other direct effects are evenly distributed over the decile groups. These results are considerably more positive from an income distribution perspective than those reported below.

To illustrate the issues surrounding the earned income tax credits' income distribution effects, we asked the National Institute of Economic Research to conduct simulations using the FASIT model; see National Institute of Economic Research (2013d). Instead of

¹⁵ 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.

focusing on the effects of the policy in its entirety, we have highlighted what would happen according to the model in the event of two *changes* in the earned income tax credit compared with the current situation. The first change is a reduction in the earned income tax credit by about SEK 10 billion. The reduction is made proportionally so that the value of the tax credit over the whole income interval concerned is multiplied by 0.87, which is equal to about SEK 10 billion. The second change is the introduction of a fifth earned income tax credit in accordance with the Ministry of Finance's (2011) proposal. The fiscal cost of this proposal is just over SEK 11 billion according to the FASIT model.

In Table 7.1, we show the effects of these changes on the labour supply. The results are in line with earlier analyses as a reduction in the earned income tax credit leads to fewer hours worked and an increase to more hours worked. The number of hours worked (column 1) is about the same but obviously with opposite signs. But the composition of these effects differs. For a reduction in the tax credit, the effects at the extensive margin (number of people in work, column 3) dominate. For an increase in the tax credit, the effects at the intensive margin (number of hours worked by people already in work, column 2) dominate.

Table 7.1 Effects of changes in the earned income tax credit on the labour supply

	Hours worked, percentage change	Intensive margin (annual work units for those who work)	Extensive margin (the number of people in work)
Reduction in the earned income tax credit	-0.33	-4 756	-10 235
Increase in the earned income tax credit	+0.32	+8 071	+6 797

Source: National Institute of Economic Research (2013d).

This appears plausible in view of the incentives associated with these changes in the tax credit. A fifth earned income tax credit increases the incentives to work at the margin more for those who already work, whereas the value of the first earned income tax credits particularly affects the propensity to enter the labour market.

In Table 7.2, we show the effects on disposable income per decile group in the income distribution, i.e. the same reporting technique used in the figure above. For these marginal changes in the earned

income tax credit, we get different results than those reported by the Government from its overall policy. In the case of reduced tax credits, it is the two lowest decile groups without exception that lose the least from the tax credit reduction. This is true for both the direct effect (without changes in behaviour) and the long-term effect (with changes in behaviour).

Table 7.2 Effects of changes in the earned income tax credit on disposable income distributed over decile groups in the income distribution

Per cent Decile group	Reduction in the earned income tax credit			Increase in the earned income tax credit		
	Direct effect	Long-term effect	Income level in decile group, long term	Direct effect	Long-term effect	Income level in decile group, long term
1	-0.20	-0.25	-0.48	+0.18	+0.84	+0.44
2	-0.29	-0.33	-0.51	+0.30	+0.51	+0.44
3	-0.50	-0.59	-0.76	+0.54	+0.89	+0.65
4	-0.61	-0.87	-0.87	+0.69	+1.00	+0.93
5	-0.73	-0.80	-0.94	+0.84	+0.94	+1.02
6	-0.75	-0.92	-0.92	+0.89	+1.11	+1.07
7	-0.77	-0.98	-0.92	+0.98	+1.08	+1.19
8	-0.75	-1.03	-0.85	+1.00	+1.15	+1.15
9	-0.73	-0.81	-0.80	+0.99	+1.09	+1.14
10	-0.45	-0.56	-0.49	+0.65	+0.73	+0.77

Note: Direct effect and long-term effect show the change in average income for those belonging to the decile group before the change in the earned income tax credit. The income in the decile group long term instead describes the change in average income, taking into account that individuals change decile group.

Source: National Institute of Economic Research (2013d).

In analyses of this kind, it is important to distinguish between the groups compared before and after a policy measure. We have therefore also reported the result for “the income level in the decile group, long term” (column 3 for the respective measure). Here we compare the income level for those who were in a particular decile group before the measure with those in the same decile group after the measure. The income mobility implied by the model may here make some difference. We observe that income mobility may have some significance but even here the income decrease is smallest in the two lowest decile groups (together with the highest decile group, however).

With the higher earned income tax credit, the long-term income changes are generally evenly distributed over the decile groups except for the second decile group, which has the smallest increase in income. Some individuals change decile groups as a result of the policy change; for example, some individuals who move from not working to working will change from decile group 1 to a higher group. This effect is likely to be substantial for decile group 1 in particular. Thus, after an increase in the earned income tax credit, income increases more for those who belonged to decile group 1 before the change (+0.84 per cent) than when we include mobility in the income distribution (+0.44 per cent).

All in all, our analysis of *changes* in the earned income tax credit shows that the labour supply effects are the same as those in the Government's analyses of the total effects of the four earned income tax credits that have been implemented. But our analysis indicates unfavourable outcomes from a distribution policy perspective; it is income earners higher up in the distribution who gain the most from an increase in the earned income tax credit and lose the most from a reduction. These are key differences from the Government's analysis and it is important to know the cause.¹⁶ One possibility is that the first earned income tax credits had favourable income distribution effects and that these effects have become unfavourable at the current levels. The difference in results may also reflect a lack of robustness in the underlying model.¹⁷

Another important question is what the significance is of using data from 2003 and 2004 in the model for estimating hours worked whereas the estimates of the models for labour status are updated each year. An argument for keeping the model's parameters stable over time is that they are meant to reflect basic preferences showing how individuals value various combinations of leisure and consumption. Economists usually assume that such preferences are stable over time. It is not clear, however, whether there are strong empirical arguments in this matter. Changes in these basic

¹⁶ In background material for BP12, the Ministry of Finance (2011e), however, describes effects of a contemplated fifth earned income tax credit which are reminiscent of the effects of an increase in the earned income tax credit found in Table 7.2, column 3.

¹⁷ The National Audit Office (2009b, pp. 49–50) also reports that the model shows some sensitivity depending on the year from which the information about hours worked is taken. It is not quite clear whether the report refers to the model for hours worked or to the models for labour force status.

preferences thus argue for using more up-to-date data for estimating the model.

Another reason for the difference in results is that some changes have occurred in the population to which the estimates refer. This population essentially consists of the category “people in work” in the Labour Force Surveys (LFS), i.e. people who worked at least one hour during the week measured.¹⁸ According to the LFS, the number of people in work as a percentage of the population (aged 16–64) increased from an average of 61.1 per cent in 2003–2004 to 63.6 per cent in 2012. The average number of hours worked for these people has increased from 36.1 to 36.5 hours.

It is not possible to determine the extent to which these changes affect the model’s usefulness for the fiscal policy issues concerned. This uncertainty, however, argues for re-estimating the model using current data and thus also examining its stability over time. Results based on the FASIT model would be much more credible if models for hours worked of the kind concerned are very stable over time.

The analyses made using the FASIT model are examples of evaluation using a structural model. It is reasonable to ask if it would have been possible to make an evaluation *ex post*, i.e. by comparing actual outcomes with the outcomes for an appropriate control group. Edmark and others (2012) discuss this question. But their analysis refers to the effect on employment, not on income distribution. First, they note that there is no natural control group for comparison purposes, because the reforms included the whole population. They therefore make an attempt to use the fact that the value of the earned income tax credit depends on the municipal tax rate. They look at whether those individuals whose average tax has decreased substantially have increased their employment more than those whose average tax has decreased less. But when basing their statistical analysis on this idea, they find that the underlying variation in tax changes is very small. The estimates also vary significantly when various subgroups are compared and when employment is measured using two alternative, but very similar, methods. They therefore conclude that the results lack credibility and the heading of their article is “Why the earned income tax credit cannot be evaluated”.

¹⁸ The reason for the reservation here is that the model for hours worked also explains which individuals choose to work zero hours. This group cannot be identified in the Labour Force Surveys.

This somewhat drastic conclusion seems to be reasonable with respect to ex-post evaluations of the earned income tax credit. It is thus impossible to eliminate the uncertainty surrounding the earned income tax credits' income distribution effects, which has become evident by our and others' simulations using the FASIT model, with the help of credible ex-post evaluations.

Edmark and others 2012, like other analysts, have pointed out that the basis for a good evaluation would have been better if the earned income tax credit had been introduced gradually region by region or initially only for families with children, for example. The examples of successful evaluations given in Section 7.2.4 were made under such conditions.

The Council has earlier emphasised the importance of designing economic policy in a way that makes it possible to evaluate it. The usefulness of this must of course be balanced against other values, such as fairness and predictability. As there is often inadequate knowledge about the effects of economic policy, the Council would once more like to emphasise the importance of evaluation.

7.6 Indexation techniques in the budget process

A key element in the fiscal framework is to formulate expenditure ceilings in nominal terms for the next three years. With this budgeting technique, the rules in the transfer systems are kept unchanged for the two years following the first year. For some transfer payments, there is still an upward adjustment in line with the consumer price index, and some are kept unchanged in nominal terms. In this section, we offer an analysis of the income distribution effects of this system.

To shed light on this problem, the Council asked NIER to do a number of simulations using the FASIT model.¹⁹ The purpose of these simulations was to compare two alternatives: on the one hand, the actual policy conducted and on the other hand, a counterfactual alternative, where instead the levels in the four main benefits systems were adjusted upwards with the income index, the purpose being to reflect how the income standard for people aged 16–64 develops.

¹⁹ See the National Institute of Economic Research (2013d).

The calculations were made for 2012. The age group is 0–64, which means that children are included in the population studied. We can thus report income distribution effects for the group children separately. By setting the upper age limit at 64, we avoid a number of issues associated with pension benefits. In this way, we instead single out the effects of the four benefits systems studied: unemployment insurance, sickness insurance, parental insurance and the child allowance.

Below, we report the results for the following 13 policy options. The National Institute of Economic Research report contains a few additional alternatives, more outcomes than reported below and a more in-depth discussion.

1. An increased minimum daily allowance in the unemployment insurance from SEK 320 to SEK 427. The latter level would have been in force in 2012 if the allowance, which has been unchanged since 2003, had been adjusted upwards in line with the income index.
2. An increased maximum daily allowance in the unemployment insurance from SEK 680 to SEK 908. The latter level would have been in force in 2012 if the allowance, which has been unchanged since 2003, had been adjusted upwards in line with the income index.
3. An increased maximum daily allowance in the unemployment insurance from SEK 680 to SEK 1 500. The latter level was chosen to illustrate the effects of a major increase in the maximum level in this insurance.
4. An increased ceiling for the sickness benefit, up from 7.5 to 8.17 price base amounts. The latter level would have been in force in 2012 if the allowance had been adjusted upwards in line with the income index from 2007.
5. An increased ceiling for the sickness benefit, up from 7.5 to 10 price base amounts. The latter level was in force in the latter half of 2006 and we choose to illustrate the consequences of this alternative.
6. An increased minimum level in the parental insurance system from SEK 180 to SEK 214 per day. The minimum level is valid

for 90 days, regardless of earlier income. The level SEK 214 would have been in force in 2012 if the allowance, which has been unchanged since 2007, had been adjusted upwards in line with the income index.

7. Increased basic level in the parental insurance from SEK 180 to SEK 232. The latter level would have been in force in 2012 if the allowance, which has been unchanged since 2004, had been adjusted upwards in line with the income index (it should be noted that the Government raised this basic level to SEK 225 per day as of 1 January 2013, so this simulation can be regarded as an analysis of this actual increase).
8. Increased ceiling in the parental insurance from 10 to 10.89 price base amounts. The latter level would have been in force in 2012 if the allowance had been adjusted upwards in line with the income index from 2007.
9. Simultaneous increase under 1+2+4+6+7+8.
10. Large-family supplement adjusted in line with the income index. In 2010, the large-family supplement was raised to a level making the 2012 level higher than it would have been if it had been raised in line with the income index since 2006. This means that we are comparing an actual large-family supplement (for example, SEK 150 for the second child) with a lower supplement which would have been applied had the supplement been adjusted in line with the income index (SEK 122 for the second child).
11. Increased child allowance from SEK 1 050 to SEK 1 288 per month. The latter level would have been in force in 2012 if the allowance, which has been unchanged since 2006, had been adjusted upwards in line with the income index.
12. Increased child allowance from SEK 1 050 to SEK 1 550 per month. The latter level was chosen arbitrarily to illustrate the income distribution effects of an increased child allowance.
13. Increased child allowance from SEK 1 050 to SEK 2 100 per month. The latter level was chosen arbitrarily to illustrate the income distribution effects of an increased child allowance.

We start by showing how these 13 hypothetical alternatives would have affected income distribution and public finances in 2012. We show the effects on the Gini coefficient in Table 7.3 and on the gross cost to the central government and the net cost to the public sector in Table 7.4.

Table 7.3 Gini coefficient for disposable income 2012, without increase due to indexation or other reason and with increase

	20-64 years		0-19 years	
	Without	With	Without	With
Unemployment insurance				
1. Increased minimum daily allowance to SEK 427	0.2918	0.2917	0.2751	0.2750
2. Increased maximum daily allowance to SEK 908	0.2918	0.2916	0.2751	0.2750
3. Increased maximum daily allowance to SEK 1 500	0.2918	0.2914	0.2751	0.2747
Sickness insurance				
4. Increased ceiling up to 8.17 price base amounts	0.2918	0.2918	0.2751	0.2751
5. Increased ceiling up to 10 price base amounts	0.2918	0.2918	0.2751	0.2751
Parental insurance				
6. Increased minimum level to SEK 214	0.2918	0.2917	0.2751	0.2750
7. Increased basic level to SEK 232	0.2918	0.2916	0.2751	0.2747
8. Increased ceiling up to 10.89 price base amounts	0.2918	0.2918	0.2751	0.2752
All three insurances				
9. 1+2+4+6+7+8	0.2918	0.2912	0.2751	0.2743
Child allowance				
10. Income indexed large-family supplement	0.2918	0.2918	0.2751	0.2752
11. Increased child allowance to SEK 1 288	0.2918	0.2906	0.2751	0.2725
12. Increased child allowance to SEK 1 550	0.2918	0.2894	0.2751	0.2697
13. Increased child allowance to SEK 2 100	0.2918	0.2869	0.2751	0.2641

With the exception of the case with the large-family supplement, the alternatives result in higher costs to the central government. Obviously, these costs must be financed in some way. In line with microsimulation approaches like the FASIT model, this financing is assumed to be neutral from a distribution policy perspective. But it is possible to think of forms of financing that strengthen the income distribution effects of the expenditure change and forms that weaken it. The results in Tables 7.3 and 7.4 were generated by the mechanical version of the FASIT model without changes in supply behaviour. We will return to the results with supply behaviour.

Starting with the three systems called insurance – unemployment insurance, sickness insurance and parental insurance – we see that the effects are very small.²⁰ This applies to both adults (aged 20–64) and children (aged 0–19). With the increase in the minimum levels in the unemployment insurance and the parental insurance, the largest decrease in the Gini coefficient is 0.0004 for the higher basic level and for the group children. We may then recall our interpretation of the coefficient in Section 7.2 above. The meaning of the decrease of 0.0004 is that the expected percentage difference between people selected at random decreases by 0.08 per cent or from 55.02 to 54.94 in the case of a higher basic level in the parental insurance.

The effects of increasing the maximum levels in the three insurances are also small. The quite substantial increase in the daily allowance to SEK 1 500 reduces the Gini coefficient by 0.0004 (row 3), but such a substantial increase is likely to have various behavioural effects that have not been taken into account in this context. The results also show that an increase in the maximum levels in the sickness insurance and the parental insurance is basically neutral from a distribution policy perspective in the sense discussed here.²¹

It could be argued that these results are not surprising as the amounts involved are quite small. Table 7.4 shows that fiscal gross cost for these hypothetical changes is only a few hundred million kronor. We have therefore also made estimates for several simultaneous changes; see row 9 of the tables.

²⁰ Here it is not relevant to ask if the differences are statistically significant. The reason is that we here compare two distributions that are constructed differently as one of the populations has received more money in the form of benefits.

²¹ Whether or not higher ceilings in these insurances would help broaden political support for the entire social insurance system is a completely different matter. It is not the issue we discuss here.

Table 7.4 Fiscal effects in SEK million

	Change in gross cost	Change in net cost (≈change in disposable income)
Unemployment insurance		
1. Increased minimum daily allowance to SEK 427	227	128
2. Increased maximum daily allowance to SEK 908	2 704	1 550
3. Increased maximum daily allowance to SEK 1 500	3 952	2 221
Sickness insurance		
4. Increased ceiling up to 8.17 price base amounts	529	156
5. Increased ceiling up to 10 price base amounts	1 243	332
Parental insurance		
6. Increased minimum level to SEK 214	207	127
7. Increased basic level to SEK 232	400	221
8. Increased ceiling up to 10.89 price base amounts	383	188
All three insurances		
9. 1+2+4+6+7+8	4 452	2 367
Child allowance		
10. Income indexed large-family supplement	-254	-250
11. Increased child allowance to SEK 1 288	4 800	4 674
12. Increased child allowance to SEK 1 550	10 085	9 820
13. Increased child allowance to SEK 2 100	21 179	20 623

We then get changes of 0.0006 (ages 20–64) and 0.0008 (ages 0–19), which also are not particularly large changes.

With regard to the child allowance, the interpretation of the large family supplement is that the actual change implemented is very close to the change that would result from income indexing. Consequently, the differences in the Gini coefficient and the differences in gross and net costs to the public sector are not large.

For the higher child allowance, we get slightly larger effects from an increase that matches income indexing (row 11). For children, the coefficient decreases by 0.0026, but the fiscal cost is higher than the

cost of increasing the three insurances. For a very large increase in the child allowance, the decrease in the Gini coefficient is 0.0110 for children and 0.0049 for adults, but the cost will exceed SEK 20 billion. Despite its cost, the child allowance appears to be a relatively well-targeted distribution policy instrument.²² This probably explains the changes made by the Government during the period studied.

Our general conclusion thus far is that the lack of income indexing in these core benefits systems has not been an important driver of income differences during the period in question. This conclusion, however, is based on the mechanical version of the FASIT model, so we now consider whether or not the conclusion is also valid when behavioural effects are taken into account.

The FASIT model allows corresponding analyses to be made, taking changes in labour supply into account. The background report from the National Institute of Economic Research (2013d) contains results of this kind. The results show that the various measures had very different effects on the number of hours worked, with higher allowances in the unemployment insurance having the comparatively largest negative effects (i.e. reduced number of hours worked). Focusing instead on income distribution effects, we find that they are not substantially different when compared with or without their effects on hours worked.

But this analysis does not take into account another problem associated with the FASIT model, namely that changes in government benefits in the event of unemployment, illness and childbirth may in the long run affect the design and extent of various benefits under private insurances or insurances included in collective agreements in the Swedish labour market. In the long run, higher government benefits would likely crowd out these kinds of benefits, particularly the various forms of outplacement agreements that cover different parts of the labour market and have emerged to supplement state benefits in the event of unemployment.²³ To assess the long-term effects of higher compensation, particularly in event of

²² We have made a rough calculation to illustrate the above claim. If 1 per cent of the total income (about SEK 20 billion) can be redistributed with perfect accuracy to the decile group with the lowest income, then the Gini coefficient decreases by 0.01 units for adults. In our calculations, an increase in the child allowance by an equivalent amount results in a decrease of about 0.005. We would call this a well-targeted measure as it is a realistic policy. In practice, a perfectly targeted redistribution is impossible to make. It is intended here only as a benchmark.

²³ See Sjögren Lindquist and Wadensjö (2011), particularly Chapter. 3.

unemployment, the consequences of these supplementary systems also need to be considered. The uncertainty surrounding the effects of these systems is in some respects even greater because it is unclear if and how the benefits under these systems are included in the register-based income statistics.

The problems associated with the supplementary benefits systems are not present when the FASIT model is used to analyse the child allowance and the earned income tax credit. For these measures, it is difficult to imagine supplementary insurance benefits of the kind that exist in the event of unemployment, illness and childbirth.

Box 7.1 Three quality issues in income distribution statistics

There are problems of various kinds associated with most key variables in economic statistics. This is also true of the key variables in income distribution statistics. Over time, institutional changes in the economy also often lead to different quality problems. We raise three different quality issues in Swedish income distribution statistics.

Wealth data and actual and realised capital income

As this chapter shows, realised capital gains are particularly problematic. In some years, these gains tend to be particularly large, in which case they result in greater differences in disposable income. As a result, Swedish income distribution statistics are sometimes erratic, complicating the assessment of long-term trends.

The Council considers actual capital gains – i.e. changes in an individual's investments – to be income. This approach goes back to a classic concept of income whereby the income in a period is defined as the consumption a household can have in that period without future consumption possibilities worsening. This income concept includes not only current income but also changes in the value of all assets. The problem with this statistic is that it only includes the valuation changes realised that year. It is possible, but not entirely certain, that the measure of disposable income would be better if it included rather than excluded this incomplete measure of changes in value. But as income statistics in many other countries do not even include realised capital gains, comparisons with other countries will sometimes be more reliable if this statistics is excluded from income in all the countries compared.

Changing to a more complete concept of income, which includes actual capital gains regardless of whether or not they have been realised, requires information about the value of household asset wealth at the beginning and end of the year. This means that wealth statistics are valuable not only in themselves, but also to improve income measurement for that year.

Income from other countries

Another deficiency in income statistics is that income taxed in other countries is not completely captured in the Swedish statistic. The income earned by those who live near the borders of neighbouring Nordic countries and work in these countries is not included in the statistics. This also means that special analyses of income levels in many municipalities in southern Skåne with a high immigrant population may be misleading. Cooperation between Nordic countries' tax authorities is essential for improvement on this point.

Children's economic welfare in families that have split up

Children's economic welfare and the extent of child poverty have attracted more attention in recent years. This is easy to understand as children's economic welfare is not in any way self-chosen. Income differences between children can therefore be viewed as differences not only in the outcomes but also in opportunities in life.

Children whose parents have separated are particularly likely to have a low income standard and often fall below the poverty line. In recent years, the most common arrangement after a separation is that children live an equal amount of time alternately with both parents. This means that children's standard of living should reflect both parents' (household) incomes. However, this is not taken into consideration in Statistic Sweden's HEK data. Rather, children are considered part of that parent's home where they are registered, which is generally with their mother. It is uncertain how much this affects statistics about children's incomes and child poverty. Examining this and possibly remedying the problems require further development of the concept of households in Statistics Sweden's HEK data.

7.7 Assessments and recommendations

In this chapter, we have followed the tradition of studying income distribution developments and fiscal policy effects on income distribution by using annual household disposable income adjusted for the household dependency burden. We have focused on two key issues for fiscal policy, namely the earned income tax credits and the indexing technique used in the budget process. In the latter, tax revenue follows general income developments but this is not true of core benefits in the social insurance and transfer systems. Our review of both these policy issues has also led us to discuss one of the most important elements in the distribution policy analysis arsenal, namely the FASIT model.

The starting point for our discussion is that the Government and the Ministry of Finance on several occasions reported particularly favourable distribution policy effects due to the earned income tax credits. These have been generated by behavioural effects simulated with FASIT's supply model. Such reporting risks creating a false sense of security about the reliability of the results. It is the same basic model that has generated all results.

The earned income tax credit has considerably smaller positive effects on income distribution in our analysis than in the Government's. This is partly, but not entirely due to the Government's focus on how income changes for those with the lowest incomes before the earned income tax credit was changed. There is a fair degree of uncertainty about the model. A major part of the calculations is also based on relatively old data. A more cautious approach to the results on the part of the Government is therefore warranted.

We have also examined our other policy question, the indexing technique in the budget process, with simulations using the FASIT model. Our general conclusion thus far is that the lack of income indexing in the core benefits systems has *not* been an important driver of greater income differences during the period in question. The main benefits in the benefits systems have followed the price index or have been nominally unchanged over periods of five to eight years. This appears not to have contributed to substantially higher income differences. It is obviously likely that lengthy periods of unchanged rules for the benefits systems have greater distribution

policy consequences. But in the Council's opinion, a budget process like the current one functions well and distribution policy can be considered in a more comprehensive and targeted way with a thorough comparison of a number of distribution policy instruments.

Our discussion of the distribution effects of the earned income tax credit and the indexing technique in the budget process has led us to review the suitability of the FASIT model. In the Council's opinion, a microsimulation model of this kind, which shows how the amount of taxes and benefits in annual disposable income is linked to fiscal policy's tax and transfer rules, is very useful. It is also important to supplement a mechanical simulation model with a model taking behaviour and adjustments of various kinds into account. The latter, however, is easier said than done. The Ministry of Finance's experts cannot be expected to be ahead of the entire academic community on this issue.

It should be possible to improve the model or at least review its ability to illustrate counterfactual events. The most obvious improvement would be to that part of the model explaining hours worked. It is not satisfactory in its current form, which is estimated on data from 2003 and 2004. Since that time, the composition of the model's nine population groups has changed considerably. Thus, when new earned income tax credits or changes in their construction are analysed using the model, these estimates may give misleading results. It would seem urgent to re-estimate the model with more current data.

It should also be possible to examine the models predictive capacity more closely by simulating actual future developments from 2003–2004 onwards with the model's help and then comparing the results with actual developments.

There also needs to be better documentation of the model on important points. In the Swedish social security system, for example, it is obvious that the supplementary benefits offered in collective agreements and by labour unions fill an important function. It is unclear how the model handles these supplementary benefits as there is no documentation. An interested person has to figure this out based on his or her own knowledge of these supplementary systems and compare this with the model's programme code (in the SAS programme). This is unsatisfactory and makes the much needed open review and discussion of the FASIT model more difficult.

Appendix: NIER forecast database

NIER regularly scans other forecasting institutes and enters about 20 forecast variables in a database on its home page. Below are the forecasting institutes and publication week in 2012 for the forecasts reported in Chapter 3 (publication week in 2013 is shown in italics).

Forecast institute	Publication week	Forecast institute	Publication week
Danske Bank	2, 14, 26, 40, 51, 12	Government	16, 38, 51, 16
ESV	13, 25, 36, 51, 13	the Riksbank	7, 16, 27, 36, 43, 51, 7
EU	19, 45, 8	SBAB	11, 24, 34
Handelsbanken	17, 35	SEB	7, 19, 35, 47, 7
NIER	13, 25, 35, 42, 51, 13	SALAR	7, 17, 33, 41, 51, 7
LO	18, 46	Confederation of Swedish Enterprise	12, 25, 39, 51, 12
Nordea	13, 23, 36, 12	Swedbank	4, 17, 34, 40, 3
OECD	21, 48		

Forecast variables

GDP by expenditure

GDP

Household consumption

General government consumption

Gross fixed capital formation

Stockbuilding

Exports

Imports

Selected indicators

Current account balance, per cent of GDP

Number employed, aged 16–64 (LFS)

Number employed, aged 15–74 (LFS)

Unemployment, per cent of the labour force, aged 16–64 (LFS)

Unemployment, per cent of the labour force, aged 15–74 (LFS)

Hourly wage, business sector (short-term wage statistics)

Hourly wage, total (short-term wage statistics)

Consumer price index (CPI), annual average

CPI with fixed mortgage rate (CPIF), annual average

Real disposable income (national accounts)

Repo rate at year-end, per cent

General government net lending, per cent of GDP

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