

Ministry of Finance

Updating of Sweden's convergence programme

2009

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Introduction

In accordance with the Council's regulation (EC) 1466/97, Sweden submitted its convergence programme in December 1998.¹ The programme was evaluated and approved by the Council during the spring of 1999. Per the Council's regulation, an update of the convergence programme is to be submitted annually. This was carried out during the period 1999–2008. The Council's statement regarding the 2008 programme update was considered by the EU committee of the Riksdag (Swedish Parliament) on 27 February 2009. Based on the Government Budget Bill for 2010, the update was presented to the Riksdag on 21 September 2009. The Riksdag's Standing Committee on Finance was informed about the programme on 15 December 2009.

1 Economic policy framework and targets

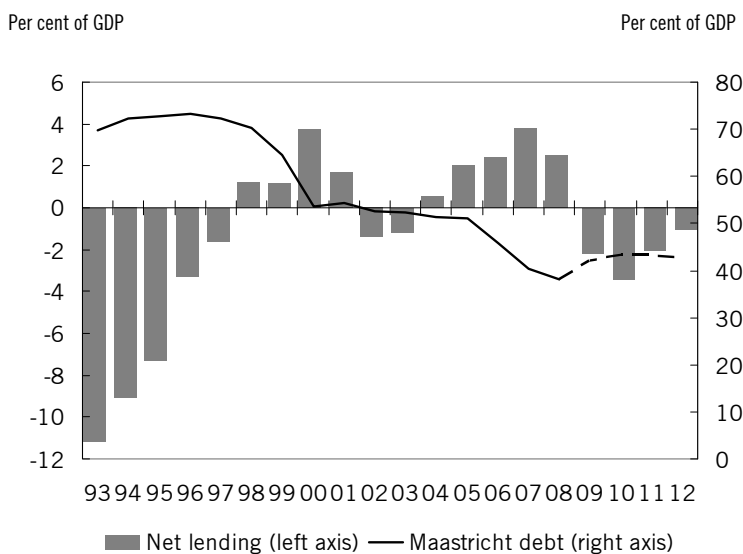
1.1 Fiscal policy framework and targets

Experience shows that a credible framework with clear targets and restrictions contributes strongly to a well-designed fiscal policy. Tighter budget processes, including the introduction of a general government surplus-target, a central government expenditure ceiling and a balanced budget requirement for local governments, have been decisive in enhancing the credibility of fiscal policy in Sweden. The fiscal policy framework aims at both long-term sustainability and the avoidance of a fiscal policy which results in short-term destabilising effects. The framework also strives to ensure that Sweden, as a member of the EU, complies with the regulations of the Stability and Growth Pact.

Public finances have strengthened considerably over the years that the framework has been in force. Diagram 1 shows general government net lending during the period 1993–2012 (2009–2012 are forecasts). The deficits in fiscal savings between 1993 and 1999 which average 4.3 per cent of GDP have been replaced by an average surplus of 1.6 per cent of GDP during 2000–2008. Together with strong economic growth, the surplus has contributed to a reduction in central government debt, measured as a proportion of GDP. Overall, the introduction of budget policy targets and a budget process with a clear top-down perspective have contributed to good budget discipline. This has strengthened the control of the public finances and improved the conditions for economic stability and growth.

¹ The Council's regulation (EC) 1466/97 of 7 July 1997 regarding the reinforced monitoring of public finances and the monitoring of fiscal policy.

Diagram 1 General government net lending and consolidated gross debt



Source: Statistics Sweden and Ministry of Finance.

When the Government took office in 2006, it announced that a review of the fiscal policy framework would take place. The Government also stated that although the experiences of the framework were favourable, there was cause for strengthening certain aspects in order to safeguard the long-term sustainability of the public finances. The Government thought it was necessary to clarify the motives behind the surplus target and how it would be followed up. It also felt that the durability and credibility of the expenditure ceiling should be strengthened by setting it for each third additional budget year. The principles for how the ceiling is set were also seen to require clarification. An internal working group has been appointed by the Ministry of Finance to review the surplus target and the expenditure ceiling, and a report on the review will be presented before the end of the Government's term in office.

The Riksdag resolved to amend the Budget Act (1996:1059), making it compulsory for the Government's Budget Bill to include an expenditure ceiling with a set three-year period. This amendment will take effect on 1 January 2010 and help strengthen the durability and credibility of the central government expenditure ceiling.

The review of the fiscal policy framework focuses on increased transparency and improved opportunities for the external review and assessment of fiscal policy. The findings show that the Government has worked to gradually improve its reporting of fiscal policy and has also presented new indicators to increase the evaluation of proposed and announced fiscal policy. In addition, there has been an improvement in the reporting of how the new reform effects have been calculated and in the assessment of the long-term sustainability of fiscal policy. These efforts are ongoing.

The government has also established a Fiscal Policy Council with the task of assessing whether fiscal policy targets are achieved and then submitting its observations in an annual report.

Surplus target for a more even burden of support between generations

In 2000, following the three-year phase-in, a savings target was introduced for the general government sector. The target includes fiscal saving by the general government sector amounting to 1 per cent of GDP over a business cycle. The surplus target represents Sweden's *Medium-Term Objective* (MTO) as stated in the Stability and Growth Pact's revised *Code of Conduct*. A surplus target helps ensure that a certain buffer is in place to counter major economic declines and makes it possible to pursue an expansive financial policy without causing major, sustained deficits in the public finances. As is currently the case, small countries with their own currencies are often particularly exposed during major global recessions and unease in the international financial markets. In such situations, having room to manoeuvre in terms of fiscal policy is a strength. During the recession of the early 1990s, a rapid and unexpected increase in the borrowing needs of the central government caused a sharp increase in risk premiums which considerably worsened the terms on which the government could obtain credit. The fact that this has not occurred during the current recession is partly attributable to the fiscal policy framework (including a surplus target) now in place that has considerably enhanced confidence in the long-term focus of fiscal policy.

The surplus target is also motivated by demographic trends. In Sweden, as in many other countries, the older segment of the population will tangibly increase over the next few decades. This trend will cause considerable strain on the public finances due to higher age-related costs and an increased burden of support for those who are employed. During demographically favourable years, relatively high middle-term general government savings translates to markedly reduced national debt. Such savings mean that larger generation groups can contribute to the financing of their future medical and care services while also adding to fairness between generations. By enhancing conditions that make it unnecessary to raise the tax ratio (as a consequence of demographic trends), they are also conducive to financial efficiency.

The central government expenditure ceiling as an instrument for establishing priorities

Central government expenditure ceilings comprising several years were introduced in 1997. These ceilings cover central government expenditure with the exception of the interest on central government debt and expenditure in the old-age pension system. Following a proposal in the Government Budget Bill, the ceiling for a particular budget year is determined by the Riksdag three years in advance.

The reformed central government budget process is characterised by a clear top-down perspective. The expenditure ceiling is the early, overarching restriction that limits the budget process in terms of total expenditure. Throughout the process, from the setting of the ceiling to

the completion of the budget year, the need for priorities between different areas of expenditure is apparent. In addition, the middle-term perspective creates conditions that prevent temporarily high revenues (for example, due to a strong economic trend) being used to finance permanently higher expenditure. This also limits the risk of pursuing a destabilising (pro-cyclical) fiscal policy on the expenditure side of the central government budget.

Consequently, the central government expenditure ceiling constitutes an important policy commitment which promotes budget discipline and strengthens the credibility of economic policy. The expenditure ceiling system improves the conditions for achieving the surplus target and promotes long-term sustainable finances. The level of the expenditure ceiling should also promote a desirable long-term development of central government expenditure. Alongside the surplus target, the expenditure ceiling directs the overall level of the tax levy and helps to prevent a development whereby it must be raised as a result of inadequate expenditure control.

The Government feels the following considerations should form the basis for decisions on the expenditure ceiling:

- The point of departure should be an overall assessment of the fiscal policy regulations and the forecast for the public finances.
- The expenditure ceiling should be determined at a level that is consistent with the surplus target and a long-term sustainable fiscal policy. The Government's view is that central government expenditure should decline weakly as a proportion of GDP.
- The budgeting margin, i.e. the difference between ceiling-restricted expenditure and the expenditure ceiling, should be large enough to manage forecast uncertainty and temporary variations in expenditure development in a three-year perspective.

Local government balanced budget requirement supports the surplus target

In order to strengthen the budget process at the local level, a separate statutory balanced budget requirement for the local government sector was introduced in 2000. The stipulation requires each individual municipality and county council to budget for a balanced outcome. If a municipality or county council reports a deficit after the event, it must correct the deviation within three years. The local government balanced budget requirement is a minimum requirement. According to the Swedish Local Government Act (1991:900), municipalities and county councils shall also follow principles of good financial management. This means that their budgets shall also take into account future costs such as major pension undertakings.

1.2 Monetary policy target

In Sweden, the Riksbank (the Swedish central bank) is responsible for monetary policy. In accordance with the Sveriges Riksbank Act (1988:1385), the objective of monetary policy is to maintain a price stability. Changes to the Act in 1999 gave the Riksbank greater autonomy, and the constitution states that no other authority may determine the Riksbank's decisions on matters of monetary policy. The independence of the decision-making Executive Board is guaranteed by the Sveriges Riksbank Act, which states that the members of the Board must not seek or receive instructions when performing their monetary policy tasks.

The Riksbank has defined this statutory objective in an explicit inflation target, stipulating that the annual change in the consumer price index (CPI) should be 2 per cent. The Riksbank has also formulated a tolerance interval of ± 1 percentage point.

If deviations from the inflation target arise, inflation should normally be returned to the target within two years. Apart from the fact that monetary policy takes effect with a time lag, the two-year horizon helps moderate fluctuations in the real economy while maintaining the credibility of the inflation target. In exceptional cases, the Riksbank may allow the adjustment to the inflation target to take longer than two years. When the Riksbank considers this necessary, it should be clearly explained in connection with the monetary policy decisions.

Since the beginning of 2007, the Riksbank has published forecasts for Swedish economic trends based on the repo rate trend currently considered most appropriate by the Executive Board. The principal reason for this is that it helps the Riksbank explain its view of interest rates and the reasoning behind monetary policy decisions to the public and the financial market.

In September 2003, Sweden held a referendum on the introduction of the euro. The result of this referendum was that no changes were made to monetary and exchange rate policies. While the Government is responsible for overall exchange rate policy matters and decides on the exchange rate system, the Riksbank is responsible for the application of the exchange rate system. The current monetary and exchange rate policy remains in effect. Sweden's experience of an inflation target and a floating exchange rate is very favourable. Pegging the Swedish krona at ERM2 is not under consideration.

2 Economic policy

2.1 Fiscal policy

Government proposals in the Budget Bill for 2010

The world currently finds itself in a deep and widespread recession. As a small, open and trade-dependent country, Sweden has been hit hard, with effects that include rising unemployment. Economic policy has been adjusted to counter the crisis and alleviate the decline in employment. The recession amplifies the importance of the Government's continued efforts to increase the number of people in employment and decrease the number of people outside the labour market. The low level of resource utilisation, the strong and continued decline in employment and the decreased risk for public finances prompt further crisis measures.

In its Budget Bill for 2010, the Government proposed measures focused on:

- *moderating the fall in employment,*
- *preventing unemployment from becoming persistent*
- *defending core welfare activities.*

In addition, the Government proposed measures for:

- *encouraging more business starts and business growth,*
- *protecting the climate.*

Measures to moderate the fall in employment

Slowing down job cut backs in the general government sector is one of the most cost-effective measures for moderating the fall in employment in a deep recession. To alleviate the decline in municipally-financed employment and to soften the effects of the economic crisis, the Government proposed a temporary increase in support of SEK 10 billion for municipalities and county councils in 2010.² Increased government grants to municipalities and county councils counteract job cuts and prevent the local government sector from being forced to implement pro-cyclical policies. By temporarily increasing its support to municipalities and county councils, the Government also safeguards the core of the welfare system.

The low level of resource utilisation in the Swedish economy provides opportunities to benefit from resources currently available in the building sector. For this reason, the Government proposed an increase in

² Including the additional resources allocated in the 2009 supplementary budget, the additional resources for municipalities and county councils totals SEK 17 billion for 2010.

the central government's infrastructure investment and maintenance. The added resources will be used for road and rail ventures with the purpose of alleviating unemployment.

Measures aiming at lessening the negative effects of the crisis on disposable household income also stimulate demand in the economy and demand for labour. The Government proposed the following measures to raise real household disposable income, increase purchasing power and generate scope for an increase in private consumption: a new, fourth stage in the in-work tax credit; tax cuts for pensioners; lowered social security contributions for the self-employed; raised housing allowances for those receiving sickness and activity compensation; and raised study allowances.

Measures to prevent unemployment from becoming persistent

While demand-stimulating measures can alleviate some of the decline in employment, they are not sufficient to prevent unemployment from becoming persistent. Policies need to be used alongside of efforts to prevent established, high-level unemployment and promote a strong and sustained increase in employment. The Government therefore proposed measures to increase the employability of nonworking people so that it is more profitable to remain in work and to accept a job. Such efforts improve the enterprise climate.

The in-work tax credit forms a central element in the Government's policy for a sustained increase in employment. The Government proposed that the tax credit be extended by SEK 10 billion effective from 2010. The reinforced in-work tax credit is not merely a means by which to increase household disposable income and alleviate the decline in employment to bring forward a recovery. It also gives a more rapid and extensive rise to employment, making it more profitable to work as the labour market improves.

The measures previously proposed and implemented by the Government, combined with the proposed fourth stage of the in-work tax credit, are expected to contribute to a further 150 000 people being permanently employed. The four stages of the in-work tax credit are projected to account for slightly more than half of the increase in employment.

To enhance individual employability and promote a stronger, more rapid rise in employment as the economy improves, temporary training ventures were proposed in professional and municipal adult education schemes and professional schools and universities. The reinforcement of active labour market policies was also pursued through an increased focus on work placements, practical competence development, vocational training courses and intensified mediation efforts (coaching). In addition, a new activation measure is being introduced in municipal operations and non-profit organisations with certain kinds of operations (Lyft), while efforts to help unemployed young people are being considerably strengthened.

Measures to defend core welfare activities

The temporary increase of resources for municipalities and county councils totalling SEK 17 billion for 2010 and the previously announced permanent increase in government grants of SEK 5 billion, effective from 2011, will help the local government sector retain personnel despite strained economic conditions. This allows key welfare services such as schools, health care and care of the elderly to be maintained during the recession. The Government also proposed increased allocations to the legal system – including the police, the courts and correctional care – which helps to make everyday life more secure. Tax cuts for pensioners and raised housing allowances for those receiving sickness and activity compensation were also proposed in order to alleviate the effects of the economic crisis and contribute to greater economic security.

Measures to encourage more business starts and business growth

The Government proposed a number of measures strengthening the incentives to start, run and develop companies in Sweden. These measures increase security for self-employed people, decrease the risk involved in starting a company and lower costs for many entrepreneurs.

To enhance the development and growth conditions of small companies, it was proposed that social security contributions for one-person businesses and partnerships be reduced by 5 percentage points. A number of changes to the security systems were proposed to enhance security for self-employed people. The effort to boost entrepreneurship and business ventures by women is to be extended, and a programme to promote innovation among young people is to be introduced. In addition, changes were proposed in insolvency procedures with the purpose of reducing entrepreneurial risk.

Measures to protect the climate

For Sweden to reach its energy and climate targets, further energy efficiency enhancement measures and international climate investments were proposed. The proposed energy efficiency enhancement programme amounts to SEK 300 million per year for the period 2010 to 2014.

Effects on the public finances

In its Budget Bill for 2010, the Government seeks to invest a total of SEK 32 billion, or approximately 1 per cent of GDP, in new measures for 2010. These are beyond those already approved or announced. The effect of these measures on general government net lending in relation to the 2009 Spring Fiscal Policy Bill is detailed in Table 1.

Table 1 Reforms proposed and announced in relation to the 2009 Spring Fiscal Policy Bill Effect on general government net lending

SEK billion. Change in relation to the 2009 Spring Fiscal Policy Bill.

	2009	2010	2011	2012
<i>Expenditure changes</i>				
Change in ceiling-restricted expenditure ¹	12.0	14.5	9.2	6.9
Adjustment for differences between the accounting principles in the central government budget and the National Accounts	-7.0	2.7	-0.2	-0.2
of which, support to municipalities and county councils ²	-6.0	4.0	0.0	0.0
Total expenditure changes	5.0	17.3	9.0	6.7
<i>Revenue changes</i>				
Reduced taxes	0.3	-14.0	-14.1	-14.2
Other revenue reforms	0.0	-0.1	-0.1	-0.1
Total revenue changes	0.3	-14.0	-14.2	-14.2
Expenditure and revenue reforms	-4.7	-31.3	-23.1	-20.9
Indirect effects of expenditure reforms	0.0	0.3	0.3	0.3
Indirect effects of revenue reforms	0.0	0.8	0.8	0.8
Change in general government net lending	-4.7	-31.9	-23.6	-22.2

¹ Does not include appropriation changes motivating a technical adjustment of the central government expenditure ceiling.

² Temporary cyclical support was disbursed from the central government budget in December 2009 but is intended for use during 2010. Consequently, in the National Accounts, this support is allocated to 2010. It is further assumed that 20 per cent of this support will be used to strengthen municipalities and county councils' outcomes and do not therefore affect general government net lending.

Table 1 illustrates the changes in net lending compared with the 2009 Spring Fiscal Policy Bill. Table 2 illustrates the total effects on general government net lending of previously decided and announced reforms and the reforms proposed and announced in the Budget Bill for 2010 as compared with the previous years.

Table 2 Currently proposed and announced expenditure and revenue reforms in relation to expenditure and revenue reforms decided and announced in previous years. Effect on general government net lending.

SEK billion. Change in relation to previous year.

	2009	2010	2011	2012
<i>Expenditure changes¹</i>				
Change in ceiling-restricted expenditure ²	-1.5	-9.2	-5.1	-3.2
Adjustment for differences between the accounting principles in the central government budget and the National Accounts	20.8	23.8	-10.0	-3.3
of which, support to municipalities and county councils ³	-13.0	-22.6	-10.6	0.0
of which, loan-funded infrastructure investments ⁴	26.4	0.2	-2.2	-1.5
Total expenditure changes⁵	19.3	14.7	-15.1	-6.5
<i>Revenue changes</i>				
Tax on labour	-42.3	-14.7	0.0	0.1
Tax on capital	1.1	1.3	0.1	0.1
Tax on consumption and input goods	-0.3	-0.2	0.0	-0.1
Total tax changes	-41.5	-13.7	0.1	0.1
Indirect effects of tax changes	7.4	0.6	0.1	0.1
Other revenue changes	-0.9	-0.6	0.0	0.0
Total revenue changes, net	-35.0	-13.6	0.2	0.2
Change in general government net lending	-54.3	-28.3	15.3	6.7

¹ Under expenditure changes, a minus sign reflects a decrease in an appropriation or the cessation or reduction in scope of a temporary programme. Under revenue changes, a minus sign reflects a decrease in tax revenues. For the combined budget effects of expenditure and revenue changes, a minus sign indicates a weakening in general government net lending as compared to the preceding year.

² Appropriation changes motivating a technical adjustment of the central government expenditure ceiling are not included. Appropriation changes as a result of the macroeconomic development, volume changes in transfer payment systems, etc. are not included.

³ Temporary support (totalling SEK 13 billion) to maintain the level of economic activity was disbursed from the central government budget in December 2009 but is intended for use during 2010. Consequently, in the National Accounts, this support is allocated to 2010, which also better reflects the focus of fiscal policy. It is further assumed that 20 per cent of this support will be used to strengthen municipalities and county councils' outcomes and do not therefore affect general government net lending. This also applies to the temporary increase in central government grants of SEK 4 billion for 2010.

⁴ This item shows the change in net borrowing for road and rail needs. Net borrowing comprises the difference between new borrowing and amortisations.

⁵ Excluding indirect effects of expenditure changes on the revenue side of the central government budget.

Source: Ministry of Finance.

Measures previously implemented

The financial crisis and the subsequent recession have caused Sweden and other countries to implement a number of measures. The crisis has been mitigated through these measures in order to stabilise the financial markets and counter the decline in resource utilisation and employment. At the same time, the measures helped increase the labour supply and enhance the employability of the labour force when economic conditions improve.

Stabilisation of the financial markets

During the autumn of 2008, and to deal with the most urgent effects of the financial crisis, the Government prioritised the rapid implementation of measures to improve the functioning of the financial markets. The first measure to alleviate unease and safeguard financial stability was to raise the deposit guarantee from SEK 250 000 to SEK 500 000. In addition, a new act on government support was introduced that allows the Government to decide on vigorous measures to stabilise the financial market. On the back of this legislation, the Government introduced a

voluntary guarantee programme to secure the borrowing needs of system-critical banks and financial institutions. At the same time, a voluntary capital injection programme for banks and other institutes aimed at lessening the risk of a major credit squeeze. The legislation also allows the possibility of compulsory redemption of financial institutions in acute crisis. To finance these measures, a special stability fund has been set up and furnished with SEK 15 billion.

Fiscal legislation measures were preceded by measures from the National Debt Office in order to increase liquidity in the government securities market. These steps helped limit the effects of the crisis on the Swedish economy.

The Riksbank has implemented a number of measures to safeguard the liquidity of the financial markets besides lowering its key rate. By providing loans with extended maturities (six months) and lower than normal collateral requirements, the Riksbank has increased access to stable financing. To facilitate the bank's borrowing in foreign currencies, it has also begun to offer loans in these foreign currencies while reinforcing its currency reserves.

Stabilisation measures

Even in its Budget Bill for 2009 the Government presented a number of fiscal policy measures totalling SEK 32 billion for 2009. These included tax cuts focused on low- and middle-income earners and pensioners, lower social security contributions and major investments in infrastructure, health care, research and education.

Due to the weakened economy in late autumn 2008, the Government presented additional measures for 2009 totalling SEK 8 billion in Government Bill 2008/09:97 Measures for jobs and adjustment. Among other things, these measures included further infrastructure investments, a tax reduction in connection with the renovation, conversion and building maintenance and strengthened resources for those in both short- and long-term unemployment.

To further mitigate the effects of the economic crisis, the 2009 Government supplementary budget bill proposed a temporary cyclical support increase of SEK 7 billion in resources for municipalities and county councils in 2010. This amount was intended to further alleviate the effects of the recession. A permanent increase of SEK 5 billion in general central government grants was also announced to be effective from 2011. Support for those in short-term unemployment was strengthened through increased resources to assist in job seeking efforts, additional trainee positions and additional places in educational programmes. An increase was also made in the number of places in the job and development guarantee programme as well as the job guarantee programme for young people.

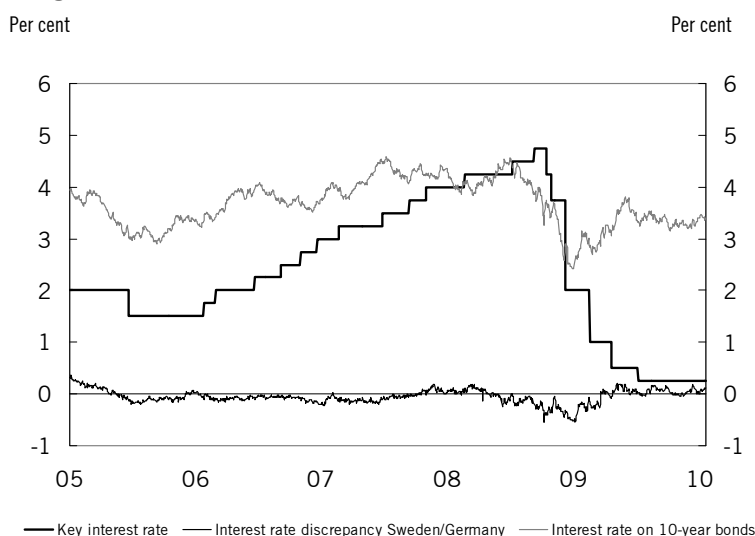
To counter the crisis the Government will, alongside the measures proposed and announced in the Budget Bill for 2010, have invested a total of approximately SEK 48 billion for 2009, (equivalent to

1.6 per cent of GDP) and a further SEK 35 billion for 2010, (equivalent to 1.1 per cent of GDP). Consequently, since the summer of 2008, the Government will have undertaken measures totalling SEK 83 billion, or 2.7 per cent of GDP. This clearly exceeds the European Commission's recommendation of 1.2 per cent.

2.2 Monetary policy

Diagram 2 shows the interest rate trend in Sweden between 2005 and 2009. Over a short period of time, monetary policy has switched over to a highly expansive course. Since 2008, the Riksbank has cut its repo rate from 4.75 per cent to 0.25 per cent in order to mitigate the effects of the financial crisis and soften the decline in the real economy. Bond yields fell back during the summer and autumn of 2008 in pace with growing financial unease and weakening growth prospects.

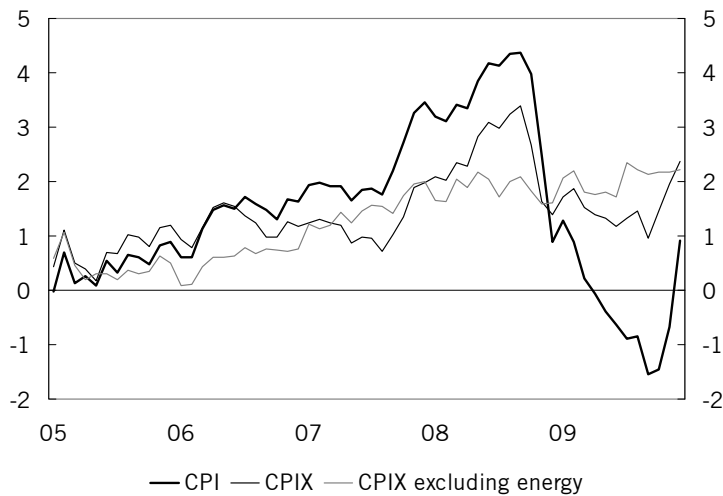
Diagram 2 Interest rates in Sweden



Inflation, measured as the percentage change in the consumer price index (CPI) over a 12-month period, has fallen rapidly since the autumn of 2008. The dramatic decline is primarily attributable to lower energy costs and interest expenses for owner-occupied dwellings. At the same time, various measures of underlying inflation show that there is still inflationary pressure in the economy. Since the end of 2007, CPIX excluding energy expenses has fluctuated around 2 per cent.

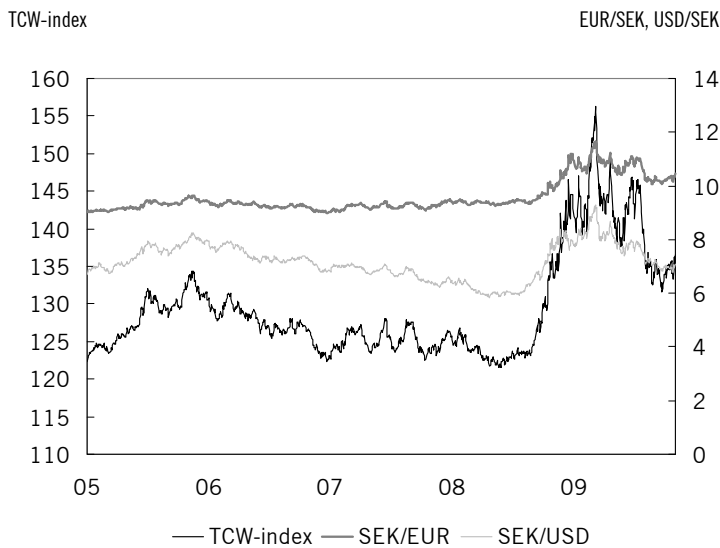
Diagram 3 Inflation measured as CPI, CPIX and CPIX excluding energy

Percentage change



Since November 1992, Sweden has had a floating exchange rate. Diagram 4 shows the development of the Swedish krona against the TCW index, the euro and the US dollar 2005–2009.³ As with many other small currencies, the turbulent situation in the financial markets has led to the weakening of the krona since the summer of 2008.

Diagram 4 Development of the Swedish krona against the TCW index, the euro and the US dollar



³ The TCW index (Total Competitiveness Weights) measures the value of the Swedish krona against a basket of other currencies.

3 Macroeconomic trend

3.1 International and financial economy

The financial crisis has been subdued and there are signs of stabilisation in the global economy.

The global economy is in deep recession, and the GDP of many countries has declined considerably since the autumn of 2008. However, in the second quarter of 2009, the GDP trend stabilised in the world's leading industrial nations and also in the global economy as a whole. This stabilisation can be explained by the improved situation in the financial markets, continued expansive monetary and fiscal policies, generally improved prospects and decreased anxiety among companies and households. Global trade also began to show signs of stabilisation in the spring of 2009 following a considerable decline.

Through active fiscal and monetary policies, governments and central banks in many countries have helped lessen the effects of the financial crisis and decrease the risk of a global depression. Since the start of 2008, the European Central Bank has cut its key interest rate from 4.25 per cent to 1 per cent, while the US Federal Reserve has cut its key rate from 2 per cent to an interval of 0–0.25 per cent. As part of their efforts to combat the financial crisis, the central banks of certain countries have also purchased various instruments on the bond markets to improve the supply of credit and the general condition of the financial markets. On the whole, the situation in the financial markets has improved considerably since the autumn of 2008.

Global growth is expected to strengthen in 2010 as uncertainty among companies and households abates, labour market prospects improve and expansive monetary and fiscal policies gain full effect. The recovery in the US is expected to be slow compared with previous cycles. In the short term, private consumption will be held back by weak trends in the labour market and disposable income. In addition, household saving is expected to continue rising over the next few years. This is attributable to the extensive decline in private wealth and a decreased underlying need for credit-financed consumption as compared to the preceding boom years. Furthermore, capacity utilisation is very low, hampering investment.

In the eurozone, GDP is expected to have fallen in 2009 as a consequence of lower investment and consumption. GDP is then expected to rise slowly across the period up to and including 2012. There are several factors contributing to the lower-than-expected growth, as compared to previous upswings: a drawn-out labour recovery, considerable declines in household wealth and a low level of outset resource utilisation.

In the medium term, growth in both the eurozone and the US will be held back by austere fiscal policies that result from the need to consolidate the public finances.

3.2 Swedish economy

Swedish GDP is in the process of stabilising

The strong decline in the global economic trend has had a severe impact on the Swedish economy. During the spring and summer of 2009, however, there were increasing and clearer signs that the functioning of the financial markets had begun to improve and that the decline is slowing both abroad and within Sweden. Confidence indicators for companies and households show that the mood in the Swedish economy remains weaker than normal but that the level of pessimism has decreased. The Purchasing Managers Index has strengthened and companies expect order bookings to gather pace. On the whole, the assessment is that Swedish GDP is in the process of stabilising.

For the whole of 2009, Swedish GDP is expected to have fallen by 5.2 per cent (see Table 3),⁴ reaching its lowest level in the first quarter of 2010 and beginning to rise. This improvement will be based on stabilised demand for exports and expansive fiscal and monetary policies. However, the recovery is expected to progress slowly, the principal reason being that because the recession is global, it is more difficult for export industries to act as a locomotive for the Swedish economy. Furthermore, the low level of resource utilisation abroad is hampering Swedish exports, which largely consist of investment and input goods.

The domestic demand trend is also weak. So far, the decline in the labour market and the weak trend in disposable income are limiting private consumption. The automatic stabilisers and active measures taken by the Government to stimulate demand do seem to be mitigating the impact of the crisis on domestic demand. The recession has also led to a very low level of resource utilisation, which, combined with continued weak demand from both Swedish and foreign consumers, has resulted in limited investment needs among companies.

⁴ Tables C.1–C.7 in Appendix C provide further information on the forecast in the Budget Bill for 2010.

Table 3 Demand and output

Annual percentage change in volume

	SEKbn 2008	2008	2009	2010	2011	2012
Household consumption expenditure	1 467	-0.2	-1.8	1.2	3.0	3.4
General government consumption expenditure	834	1.5	1.2	1.1	-0.3	-0.5
Gross fixed capital formation	615	2.7	-16.6	-6.6	4.0	8.4
Change in stocks ¹	5	-0.6	-0.7	0.4	0.4	0.2
Exports	1 711	1.8	-15.3	2.2	6.7	7.9
Imports	1 477	3.0	-16.1	1.3	6.2	7.8
GDP	3 157	-0.2	-5.2	0.6	3.1	3.8
GDP, calendar adjusted	3 154	-0.4	-5.1	0.3	3.1	4.2

¹ Changes in stocks are expressed in terms of their contribution to GDP growth (percentage points) and not as percentage change in volume.

Note: In fixed prices.

Sources: Statistics Sweden and Ministry of Finance.

Labour market situation deteriorating rapidly

The weakened economic situation is becoming increasingly apparent in the labour market. The number of people in employment has decreased by approximately 100 000 over the past year, and labour market indicators suggest that the decline in employment will have continued for the remainder of 2009. The strong decline in demand since the autumn of 2008 has meant that companies have not yet managed to adjust staffing to low levels of production. Continued adjustments in staffing, combined with a weak recovery in production, mean that the trend in demand for labour will be very weak over the next few years. On the whole, employment is expected to fall considerably in 2009 and 2010 and to then stabilise at the end of 2010/start of 2011. Beginning at the second half of 2011, employment will then rise as companies increase staffing to meet increasing demand in the economy.

The substantial decline in the number of people in employment, combined with relatively high labour force participation, will lead to rising unemployment over the next few years. Though unemployment is expected to peak at 11.6 per cent in 2011, as employment gradually improves during the second half of 2011, overall unemployment will fall.

Table 4 Selected statistics

Annual percentage change

	2008	2009	2010	2011	2012
Number of employed aged 16–64	0.9	-2.6	-3.4	-0.6	0.8
Unemployment, 16–64 age group ¹	6.1	8.9	11.4	11.6	11.0
Number of hours worked ²	1.0	-3.7	-2.1	0.4	1.0
GDP gap ³	0.0	-6.4	-6.5	-5.0	-3.0
Increase in hourly wages ⁴	4.3	3.1	2.0	1.9	2.3
CPI, annual average	3.4	-0.4	0.4	0.8	1.8

¹ Per cent of the labour force² Calendar-adjusted³ Per cent of potential level⁴ Measured according to short-term statistics

Sources: Statistics Sweden and Ministry of Finance.

Very low resource utilisation during 2009-2012

The strong decline in demand has meant that resource utilisation in the labour market has fallen quickly since 2008. This can be illustrated by the rapid decrease in vacancies and the shortage of labour noted by the National Institute of Economic Research barometer. Resource utilisation in the labour market is expected to remain very low throughout the period 2009–2012.

Since the autumn of 2008, the strong decline in production has meant that companies have not yet managed to adjust staffing to very low levels of production. The resource utilisation within companies for 2009 has therefore been very low. As companies continue to adjust staffing to lower production levels in 2010, their remaining staff will be used with increasingly efficiency. More efficient use of equipment and increased production will mean a gradual increase in productivity from 2010 and onwards.

All in all, resource utilisation in the economy as a whole will be strongly negative for 2009 and 2010. Despite a strong recovery in 2011 and 2012 – when actual GDP will increase considerably faster than potential GDP – resource utilisation in the economy will remain low in 2012 (see table 4).

Slow wage increases and low inflationary pressure

The 2010 round of wage negotiations are expected to result in historically low wage increases due to a continuing weak labour market. Despite the downward shift in the nominal rate of wage increases, real wages will continue to rise by an average of 1 per cent annually over the next agreement period since inflation is expected to remain low.

Inflation, calculated as an annual percentage change in the consumer price index (CPI), has fallen rapidly since the autumn of 2008 and is expected to fall to historically low figures in the autumn of 2009, before turning upwards. The decline is primarily attributable to lower interest expenses for owner-occupied dwellings and lower energy costs. Underlying domestic inflation pressure is expected to be very low over

the next few years. Subdued cost pressure and weak demand will mean very weak price increases in 2010 and 2011. Not until 2012, when demand gathers pace, are prices for goods and services expected to rise somewhat faster.

4 Public finances

4.1 Accounting principles

This chapter describes the forecast for public finances in the Budget Bill for 2010. The reporting of general government net lending, as in the Budget Bill, complies with EU regulations for the National Accounts (ESA 95). Revenue and expenditure are consequently reported in the established formats used by both the Ministry of Finance and the National Institute of Economic Research (NIER). This accounting principle is slightly different from the principle used by the EU for the surveillance of public finances in connection with the Excessive Deficit Procedure (EDP) and the Stability and Growth Pact (SGP).⁵ Table 5 shows public finances according to ESA 95 and EDP. A more detailed account of public finances according to EDP is provided in Table C.8 in Appendix C.

Table 5 Public finances according to ESA 95 and EDP

Per cent of GDP

	2008	2009	2010	2011	2012
ESA 95 and BB10					
Revenue	52.7	51.9	51.7	51.6	51.4
Expenditure	50.2	54.1	55.1	53.6	52.4
Net lending	2.5	-2.2	-3.4	-2.1	-1.1
EDP and SGP					
Revenue	55.6	54.9	54.6	54.3	53.9
Expenditure	53.1	57.1	58.0	56.3	54.9
Net lending	2.5	-2.2	-3.4	-2.1	-1.1

Note: BB10 = Budget Bill for 2010.

Sources: Statistics Sweden and Ministry of Finance.

4.2 The development of public finances

Continued weak tax revenue trend

The strong and rapid weakening of the economy means that the tax revenue trend will be weak for the near future. The weakening of the labour market also means that the revenue trend for tax on labour will be

⁵ Compared with ESA 95, the effect of swaps on interest flows in net lending and revenues are defined somewhat differently in these contexts.

particularly weak. Revenues have declined in 2009 as a consequence of the decline in wages paid (the key tax base for tax on labour) due to the sizeable drop in the number of hours worked. The trend in total wages will also be very weak in 2010.

Uncertainty in the labour market is contributing to increased saving by households, leading to a decline in private consumption in 2009 and only a weak projected increase in 2010. Combined with the financial crisis, the recession will also lead to a considerable decline in revenues from taxes on corporate profits and household capital gains.

Expenses are rising but are less affected by revenues.

General government expenses are affected considerably less by the recession than its revenues. Central government expenses are rising as both an effect of automatic stabilisers (primarily in the form of increased labour market expenses) and as a consequence of ventures undertaken by the Government to mitigate the effects of the crisis since summer 2008. However, limited price and wage increases, combined with balancing in the pension system, mean that expenses in the old age pension system are rising slowly. This also applies to several other areas of expenditure that follow the general price and wage increases in the economy.

The recession has meant very weak development of the tax base and consequently of tax revenue for the local government sector. In its Budget Bill for 2010, the Government proposed additional resources of SEK 10 billion for the local government sector. Combined with the additional resources allocated in the 2009 Spring Fiscal Policy Bill, central government grants for 2010 have been increased by SEK 17 billion.⁶ These additional resources include both a nominal and real increase in the local government sector's expenditure for 2010.

Deficits gradually decreasing

As a whole, the general government sector is expected to show a deficit in its net lending for each year from 2009 to 2012. Net financial lending is expected to amount to -2.2 per cent of GDP for 2009 and -3.4 per cent of GDP for 2010. The deficit will gradually decrease in 2011 and 2012 (see Table 6).

⁶ In the 2009 Spring Fiscal Policy Bill, it was proposed that the SEK 7 billion in increased central government grants to municipalities and county councils for 2010 be paid out in December 2009. The Budget Bill for 2010 proposed that SEK 6 billion of the proposed SEK 10 billion in increased central government grants should be paid out in December 2009.

Table 6 Public finances

Per cent of GDP, unless otherwise stated.

	SEKbn 2008	2008	2009	2010	2011	2012
Revenue	1 664	52.7	51.9	51.7	51.6	51.4
Taxes and charges	1 479	46.8	46.2	46.0	45.9	45.5
of which tax on labour	910	28.8	28.4	27.9	27.5	27.2
of which tax on capital	174	5.5	4.8	5.1	5.3	5.5
of which tax on consumption	396	12.5	13.0	13.1	13.0	12.9
Capital income	77	2.4	2.2	2.0	2.0	2.1
Other revenues	108	3.4	3.5	3.7	3.7	3.7
Expenditure	1 585	50.2	54.1	55.1	53.6	52.4
Transfer payments	602	19.1	21.2	21.8	21.3	20.7
Consumption	834	26.4	28.2	28.6	27.7	27.0
Investment	95	3.0	3.5	3.5	3.4	3.3
Interest expenditure	53	1.7	1.3	1.2	1.2	1.5
Net lending	79	2.5	-2.2	-3.4	-2.1	-1.1
<i>Primary net lending</i>	55	1.7	-3.1	-4.2	-2.8	-1.6
Consolidated gross debt	1 200	38.0	42.8	45.5	45.6	45.2
Net debt	-437	-13.8	-15.2	-11.9	-9.9	-8.4

Sources: Statistics Sweden and Ministry of Finance.

The deficit in net lending lies almost entirely with the central government (see Table 7). This is primarily attributable to the weak trend in tax revenues and increased expenditure related to the labour market. The relatively weak trend in pension payments results in a small surplus in the old-age pension system for 2009–2011. For 2012, the old-age pension system shows negative net lending. The local government sector reports both negative net lending and a negative outcome for 2009. In 2010, increased central government grants will contribute to a balance in net lending while the outcome for the sector as a whole is expected to be positive.

Table 7 Net lending and the central government budget balance

Per cent of GDP

	2008	2009	2010	2011	2012
General government sector	2.5	-2.2	-3.4	-2.1	-1.1
Central government	1.4	-2.1	-3.5	-2.1	-0.9
Old-age pension system	1.0	0.2	0.1	0.0	-0.1
Local government sector	0.1	-0.3	0.0	0.0	-0.1
Central government budget balance	4.3	-6.4	-3.4	-2.2	-1.5
Central government debt	33.6	37.8	40.4	40.6	40.3

Sources: Statistics Sweden and Ministry of Finance.

Decreased risk for public finances

Since the autumn of 2008, there has been considerable uncertainty surrounding the development of the public finances in the wake of the strong recession and financial crisis. Indicators and outcomes now signal

stabilisation and a certain improvement in the macroeconomic trend. This also has a bearing on public finances.

Despite the decreased risk that the trend will be worse than anticipated, it is necessary to be prepared for a weaker trend in the public finances in the event that the expected economic recovery fails to materialise. Risks that can affect the public finances include a weak increase in private consumption, an even weaker trend in the labour market, a sustained decline in employment or major problems in the financial and a banking sector where the Baltic States play a key role.

It is possible, though, that the development of the public finances could also be stronger than expected. Both the rapidity and strength of downturns and upswings are frequently underestimated. On the revenue side, such underestimation is most evident in relation to revenues with very volatile tax bases — generally, taxes on household capital gains and corporate income taxes. However, revenues from taxes on labour have also often been underestimated.

4.3 Net financial wealth and consolidated gross debt

Increasing debt and worsening net financial position

Following an extended period during which the general government sector's consolidated gross debt decreased in relation to GDP, the debt ratio for 2009 increased. Debt is expected to rise by SEK 113 billion to approximately 43 per cent of GDP. The level of debt is mainly attributable to the deficit in net lending although other factors, such as the periods to which interest is allocated, taxes and central government grants and lending play a role in increasing the debt. During the period 2010–2012, the debt is expected to amount to slightly more than 45 per cent of GDP, which is considerably below the EMU reference value of 60 per cent.

As the debt increases, so the net financial position (the net value of general government assets and liabilities) worsens. However, net financial wealth is expected to remain positive, as it has been since 2005. For 2009, the net financial position is expected to amount to approximately 15 per cent of GDP. Despite the deficit in net lending, the net position will improve compared with 2008 due to the considerable strengthening of the stock market over the year. Between 2010 and 2012, the net position will worsen, amounting to slightly more than 8 per cent of GDP in 2012.

4.4 Monitoring of the surplus target

Net lending is expected to fall short of the surplus target over the next few years.

The surplus target is defined in such a way that general government net lending will be an average of 1 per cent of GDP over a business cycle. Defining the average target in terms of a business cycle (instead of an annual requirement of 1 per cent of GDP) is justified for stabilising policy. With an annual net lending target of 1 per cent of GDP, fiscal policy would need to contract in a recession with a fall in net lending in order to ensure fulfilment of the annual target. The policy would thus be pro-cyclical, contributing to strengthening the economic downturn while the automatic stabilisers could not act freely.

At the same time, the average formulation makes it difficult to evaluate, on an annual basis, whether the fiscal policy is in line with the target. Since neither the length of a business cycle nor the resource utilisation (measured as the GDP gap) can be determined with any certainty, the surplus target is monitored using three mutually complementary indicators:

- Average net lending since 2000.
- A seven-year moving average of net lending.
- The structural balance.

Average net lending since 2000 represents the average from and including 2000 up to and including the year for which the indicator is calculated. The seven-year moving average for a given year includes the net lending (adjusted for major one-off effects) for that year, the three immediately preceding years and the three immediately following years.

An advantage of the seven-year indicator and average net lending from 2000 is that they are more transparent and simple to calculate. To a certain extent, they also take the economic situation into account since they are calculated on the basis of net lending over several years. Regarding the seven-year indicator in particular, however, there is a risk that its calculation includes more boom years than recession years (or vice versa), causing the indicator to inaccurately assess the scope for reform or the need for saving. To correctly assess the average indicators, the economic situation must therefore be taken into account. If the seven-year moving average for net lending is near one while the seven-year moving average for the GDP gap nears zero, this would generally mean that fiscal policy is in line with the surplus target.

The Government also calculates the structural balance, which more directly adjusts actual net lending for the economic situation. Adjustments are also made for major one-off effects and extraordinary levels in household capital gains. The structural balance aims to show how large net lending should be in a normal economic situation.

There are several methods for calculating the structural balance. The government's method is based on an estimate of resource utilisation (the GDP gap) used to adjust net lending, which is in turn based on an assessment of how sensitive public finances are to changes in resource utilisation. Currently, the Government applies an elasticity of 0.55 that is in line with the latest calculations by the OECD. The calculation of the structural balance is associated with a high level of uncertainty in addition to the uncertainty related to the net lending forecast. For example, the view of the GDP gap is frequently revised both retroactively and proactively, due not only to a changed view of the economic situation but also to revisions of outcome statistics. The assessment of the economic sensitivity of net lending and is generally based on an empirical appraisal of the average situation over an extended period of time, which makes it quite uncertain.

Table 8 Net lending in the general government sector and indicators for checking the surplus target

Per cent of GDP, unless otherwise stated.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Net lending	3.7	1.7	-1.4	-1.2	0.6	2.0	2.4	3.8	2.5	-2.2	-3.4	-2.1	-1.1
Net lending, average from 2000	3.7	2.7	1.3	0.7	0.7	0.9	1.1	1.5	1.6	1.2	0.8	0.5	0.4
Cyclically adjusted ¹	3.6	2.9	1.5	0.9	0.8	0.8	0.9	1.1	1.2	1.2	1.1	1.1	1.0
Seven-year indicator				0.9	1.0	1.1	1.0	0.6	0.3	-0.1			
Cyclically adjusted ¹				0.7	0.6	0.6	0.9	1.1	1.2	1.2			
Structural balance	2.1	2.1	-1.0	-0.5	-0.3	0.6	0.5	1.6	2.3	1.4	0.2	0.7	0.6
GDP gap	0.4	-0.9	-0.4	-0.7	1.0	1.3	2.5	2.6	0.0	-6.4	-6.5	-5.0	-3,
GDP gap, average from 2000	0.4	-0.3	-0.3	-0.4	-0.1	0.1	0.5	0.7	0.6	-0.1	-0.6	-1.0	-1.2
GDP gap, seven-year average				0.5	0.8	0.9	0.1	-0.8	-1.6	-2.2			

¹ The adjustment for the economic situation is achieved by multiplying the GDP gap by the elasticity (-0.55) which is added to the indicator value. Sources: Statistics Sweden and Ministry of Finance.

Average net lending since 2000

Average net lending during the period 2000–2008 was 1.6 per cent of GDP (see Table 8). During the same period, resource utilisation was on average somewhat stronger than normal. Taking into account the economic situation, average net lending was 1.2 per cent of GDP –0.2 percentage points above the surplus target.

The public finance deficits from 2009 on will cause average net lending to fall rapidly. For 2009, average net lending from 2000 is expected to amount to 1.2 per cent of GDP and then drop to 0.4 per cent of GDP.

The decline in net lending in 2009 and 2010 and the subsequent gradual improvement expected in 2011 and 2012 are largely attributable to general economic trend. If the change in the GDP gap is taken into consideration in the analysis of average net lending from 2000, underlying net lending will weaken over the forecast years and average

net lending (from 2000) for the next few years will be somewhat above, or in line with, the surplus target.

Seven-year indicator

Table 8 shows the development of net lending and the GDP gap, both measured as a seven-year moving average. The seven-year indicator was in line with the surplus target in 2006 – a year in which the seven-year average for resource utilisation was judged to have been only marginally stronger than normal. After 2006, the indicator declines rapidly. For 2009, the indicator corresponds to -0.1 per cent of GDP. This can be interpreted as meaning that fiscal policy will give rise to net lending that is too low in relation to the target. However, if resource utilisation over the same seven-year period is taken into account, the indicator reflects net lending above the target because the seven-year moving average for the GDP gap was strongly negative.

Structural balance

The structural balance is calculated to have amounted to 2.3 per cent of GDP for 2008. As the deficits in net lending increase for 2009 and 2010, the structural balance will decline, reaching its lowest level in 2010, when it is estimated to amount to 0.2 per cent of GDP. The structural balance will subsequently improve (see Table 8), reflecting net lending clearly below 1 per cent of GDP, (primarily in 2010) but rising somewhat in subsequent years.

Overall assessment

An overall assessment of the indicators used by the Government to evaluate the surplus target shows net lending to have been in line with, or somewhat above, the target during the period 2000–2008. After that, average net lending from 2000 and the seven-year indicator decline rapidly while the negative GDP gap widens in absolute terms. By the end of the forecast period, both of these indicators are clearly below the target level. The structural balance is also below the target.

When the large negative GDP gap is taken into account in the assessment of both average indicators, they reflect a level of net lending more in line with the target. There is a danger though in taking the low level of resource utilisation fully into account when interpreting the indicators. Since the current recession is unlikely to be followed by years of correspondingly higher resource utilisation, one cannot expect net lending to automatically return to the target level when the economy improves.

On the whole, it is the Government's assessment that the surplus target will not be met over the next few years. This by itself speaks in favour of switching fiscal policy over to a more restraining course. At the same time, resource utilisation is also expected to be very low over the next few years. Against the background of the deep recession, it is important that fiscal policy, beyond the automatic stabilisers, also

actively helps to mitigate the decline in employment and prevent unemployment from gaining a lasting foothold. It is therefore justifiable to accept a temporary and limited shortfall in relation to the surplus target.

4.5 Fiscal policy stance

Compared with last spring, there are now increasing signs that both the global and Swedish economies are in the process of stabilising. The risk of further negative adjustments in forecasts for tax revenues is thought to have declined tangibly, and the situation in the financial markets has improved rapidly. This trend, combined with the expectation of a worse-than-predicted employment trend for 2010, caused the Government to include in its Budget Bill for 2010 further fiscal policy measures to counter the crisis.

Table 9 Indicators for stimulating demand

Annual change, per cent of GDP

	2008	2009	2010	2011	2012
Net lending	-1.3	-4.7	-1.2	1.4	1.0
of which					
Automatic stabilisers	-1.4	-3.5	-0.1	0.8	1.1
One-off effects	0.3	-0.2	-0.1	0.0	0.0
Extraordinary capital gains	-0.9	-0.1	0.1	0.1	0.0
Structural balance	0.7	-0.9	-1.2	0.5	-0.1
of which					
Discretionary fiscal policy ¹	0.0	-1.8	-1.0	0.6	0.2
Capital income, net	0.2	0.2	-0.1	0.0	-0.2
Local government finances	-0.2	-0.4	0.3	0.0	-0.1
Other	0.7	1.1	-0.4	-0.1	-0.1
GDP gap, change in percentage points	-2.6	-6.4	-0.1	1.5	2.0

¹ Refers to expenditure and revenue changes for 2008-2012 in relation to previous years.

Sources: Statistics Sweden and Ministry of Finance.

The change in structural balance is generally used as an indicator of fiscal policy stance. This indicator comprises not only discretionary policies, but also factors affecting the balance, such as changes in net lending by the local government sector or changes in central government net lending which are attributable to structural changes in the economy. Table 9 shows the change in net lending broken down by various factors. Also included is the fiscal policy stance measured in terms of the change in a structural balance. The proposed measures in the Budget Bill for 2010 contribute to the structural balance decline of around 1.2 per cent of GDP. This counteracts a sustained decline in employment while demand is kept up amidst the deep recession. The reforms now proposed are therefore consistent with a responsible fiscal policy.

4.6 Monitoring of the expenditure ceiling

The budgeting margin is deemed to be sufficiently large given the uncertainty in the expenditure trend

In 2008, the budgeting margin, that is, the difference between the established expenditure ceiling and ceiling-restricted expenditure, was SEK 14 billion (see Table 10). For 2009–2012, the budgeting margin is deemed to be sufficiently large given the margin of uncertainty considered necessary in a three-year perspective. According to the current forecast, the margin for 2009 amounts to SEK 14 billion and SEK 17 billion for 2010. The government considers the budgeting margin (which is already below the established expenditure ceiling for 2009–2011) to be at an adequate level given the uncertainty in the expenditure trend.

Table 10 Expenditure ceiling 2007–2011

SEK billion, unless otherwise stated.

	2007	2008	2009	2010	2011	2012
Expenditure ceiling	938	957	989	1 024	1 054	1 074
<i>Per cent of GDP</i>	<i>30.6</i>	<i>30.3</i>	<i>32.2</i>	<i>33.0</i>	<i>32.8</i>	<i>31.9</i>
Ceiling-restricted expenditure	910	943	975	1 007	1 017	1 025
<i>Per cent of GDP</i>	<i>29.7</i>	<i>29.9</i>	<i>31.8</i>	<i>32.4</i>	<i>31.6</i>	<i>30.5</i>
Budgeting margin	28	14	14	17	37	49

Note: The budgeting margin is the difference between a determined or proposed expenditure ceiling and the ceiling-restricted expenditure.

Sources: Statistics Sweden and Ministry of Finance

4.7 Monitoring of the local government balanced budget requirement

Municipalities not expected to meet requirement for good financial management

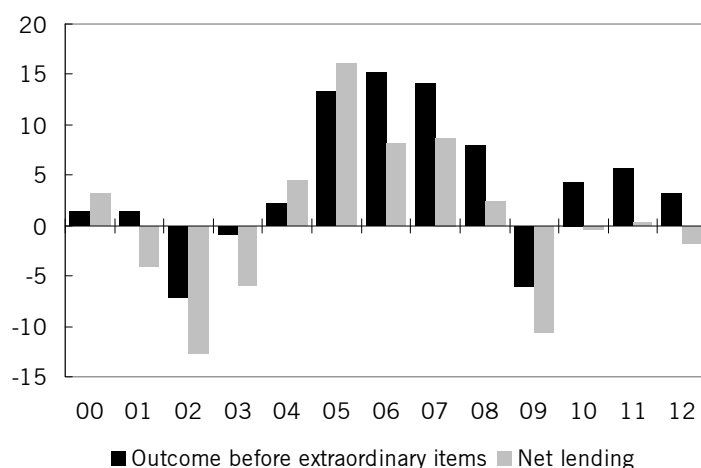
The surplus target for the public finances, which also includes the local government sector, is expressed in terms of net lending (as defined in the National Accounts). Local government accounting is based on the same theoretical starting points as those that apply to accounting in the business sector. The outcome, not net lending, is what determines whether municipalities and county councils comply with the requirements of the Swedish Local Government Act (1991:900) for a balanced budget. This requirement is a restriction stating the lowest acceptable short-term outcome. According to the Swedish Local Government Act, municipalities and County Councils shall maintain good financial management in their operations. Effective from 2005, municipalities and county councils shall determine the financial targets that are of importance for good financial management. A negative outcome is to be reversed within three years unless exceptional reasons exist. Municipalities and county councils' annual reports should state

whether the balanced budget requirement has been met. Their annual reports should also include an assessment of the degree to which the requirement for good financial management has been achieved.

The improvement in outcomes for the local government sectors up to and including 2007 is mainly attributable to the increase in the number of hours worked in the Swedish economy. This improvement has strengthened the municipal tax base while at the same time increased the scope of municipal consumption. In 2008, the outcome before extraordinary items amounted to approximately SEK 8 billion for the local government sector as a whole (see Diagram 5). Compared with 2007, the outcome weakened by approximately SEK 6 billion. The outcome for the local government sector as a share of tax revenue and general central government grants amounted to 1.3 per cent. The outcome falls short of the 2 per cent target normally stated as a guideline for good economic management.

Diagram 5 Local government sector outcome before extraordinary items and net lending

SEK billion



Note: Outcome for 2000–2008, forecast for 2009–2012.

Sources: Statistics Sweden and Swedish Association of Local Authorities and Regions

The outcome for 2009 is expected to worsen as a result of the weakened development of the tax base. It is furthermore assumed that municipalities and county councils are adjusting their 2009 staffing levels to the new conditions required by increased central government grants in 2010. The local government sector is expected to report an outcome for 2009 considerably below the balanced budget requirement and the requirement for good economic management. As a consequence of increased central government grants, municipalities and county councils are expected to report surpluses for 2010 despite increased consumption expenditure.

4.8 The Fiscal Policy Council's first review

In 2007, the Government established a Fiscal Policy Council to increase transparency and insight into fiscal policy. The Fiscal Policy Council is charged with assessing target fulfilment and the focus of fiscal policy. It also examines whether the grounds on which economic policies are based are clearly detailed in Spring Fiscal Policy Bills and Budget Bills. In addition, the Council also evaluates the quality of the Government's forecasts, data and calculation models, as well as works to promote social debate on economic policy.

In the spring of 2009, the Fiscal Policy Council submitted its second evaluation of target fulfilment in the Government's economic policy. The report addresses two principal issues, the first of which deals with how well the Government has succeeded in adapting its policies to the dramatically weakened economy. The second deals with the further development of fiscal policy framework.

The assessment of how well the Government has succeeded in adapting its fiscal policies to the changed economic situation involves the measures undertaken by the Government. Such measures are a consequence of the acute financial crisis and were undertaken to mitigate the effects of the recession. While the Fiscal Policy Council's view is that the Government's measures to manage the financial crisis have been adequate, it considers more rigorous fiscal policy stimuli desirable in mitigating the effects of the recession. According to the Council, this would be motivated by, among other things, the major downward revision of economic forecasts since the Budget Bill for 2009.

The Fiscal Policy Council considers it important that further fiscal policy measures be cost effective and include, an additional temporary increase in central government grants to municipalities and a temporary increase in unemployment benefits. The Council is critical of certain features of the Government's labour market policy, and it questions the feasibility of filling the job and development guarantee with meaningful job-seeking activities. It also feels that the Government is excessively confident that the changes to labour market policy will make it more effective. In addition to its observations regarding the Government's measures, the Fiscal Policy Council also addresses inadequacies in various regulatory systems that it sees have come to light in connection with the deep recession. The Council takes the view that the expenditure ceiling should not limit public expenditure where there are strong economic arguments in favour of allowing it to rise. Furthermore, it not only feels that central government grants to municipalities and county councils should be adjusted to the economic situation, but that unemployment insurance should be made compulsory and dependent on the economic situation.

Concerning whether the fiscal policy framework should be further developed, the Council feels that the review of the current framework must clarify the overarching objectives behind the surplus target. The

framework should provide a clearer picture of the balance between advance saving and a gradual increase in working lifetime as methods for addressing future demographic pressure on expenditure.

In October, the Fiscal Policy Council submitted its comments on the Budget Bill for 2010. It is the Council's assessment that the scope of the additional fiscal policy stimuli announced in the Budget Bill is reasonable. However, the Council feels that the proportion of permanent reforms represents a risk since the current level of uncertainty in the public finances is much greater than normal. The Council feels that reinforced central government grants to the municipalities for 2010 will probably be an effective measure, although it is critical of allocating expenses for 2010 to 2009. From the Council's viewpoint, this undermines the credibility of the expenditure ceiling.

5 Comparison with the updated programme for 2008

In Table 11, the forecast in this year's updated convergence programme is compared with the forecast in the updated programme for 2008.

The GDP growth forecast has been revised strongly downwards compared with last year's update of the convergence programme. GDP growth has been revised down by 1.7 percentage points for 2008, 6.5 percentage points for 2009 and 2.5 percentage points for 2010. The revisions are mainly due to the international financial crisis's severe impact in September 2008 and were not foreseen in the forecast intended for that autumn.

The recession has also caused major consequences for the forecasting of general government net lending. Like the 2009–2001 GDP growth forecast, the net lending forecast (primarily tax revenue) has been revised strongly downwards compared with last year's update. The weakened labour market means lower revenues from tax on labour, since the number of hours worked is expected to fall. The trend in household consumption has also been revised down, and assuming home investments will decline, this will lower VAT revenue. The combination of the recession and the financial crisis will lead to a considerable decline in revenues from taxes on capital.

Forecast consolidated gross debt has been revised upwards for all years as a consequence of the drastic weakening of the public finances.

Table 11 Comparison with the updated convergence programme for 2008

	2008	2009	2010	2011	2012
GDP, percentage change in volume					
Updated convergence programme for 2008	1.5	1.3	3.1	3.5	–
Updated convergence programme for 2009	-0.2	-5.2	0.6	3.1	3.8
Difference, percentage points	-1.7	-6.5	-2.5	-0.4	–
General government net lending, per cent of GDP					
Updated convergence programme for 2008	2.8	1.1	1.6	2.5	–
Updated convergence programme for 2009	2.5	-2.2	-3.4	-2.1	-1.1
Difference, percentage points	-0.3	-3.3	-5.0	-4.6	–
of which reforms in the Budget Bill for 2010			-1.0	-0.8	
Consolidated gross debt, per cent of GDP					
Updated convergence programme for 2008	35.5	32.2	28.3	23.8	–
Updated convergence programme for 2009	38.0	42.8	45.5	45.6	45.2
Difference, percentage points	2.5	10.6	17.2	21.8	–

Sources: Statistics Sweden and Ministry of Finance.

6 Forecast review and alternative scenarios

6.1 Forecast review

The Budget Bill for 2010 drew a picture of a gradually strengthening business cycle as Sweden's economy, and that of the rest of the world, recovers from the most intensive phase of the financial crisis. This scenario strengthened during the autumn and was reflected in the forecast review conducted in November 2009. In particular, extensive fiscal and monetary policy stimuli, and increasing confidence among households and companies have given the economic recovery an increasing foothold. This can now be observed in both economic statistics and barometer surveys.

Trends in the eurozone and the US suggest that the international economy is improving more rapidly and rigorously than forecast in the Budget Bill for 2010. Conditions in the credit markets in both the eurozone and the US continue to improve because of lower interest rates for households and companies. The stock markets have also had a largely positive trend, which has helped contribute to a stronger increase in household consumption.

The scenario for the domestic economic trend is one of clear recovery (see Table 12). The sharp decline in economic activity in 2009 – the greatest since the Second World War – is followed by clear growth over the final years of the forecast period. GDP is expected to grow by 2.0 per cent in 2010, 3.4 per cent in 2011 and 3.3 per cent in 2012. At the same time, it should be emphasised that this growth will take place from a relatively low level, meaning that although the current GDP gap will narrow, it is still expected to be negative in 2012. The fact that the

scenario is now somewhat brighter than projected in the Budget Bill for 2010 is attributable in part to domestic factors like the actual trend in household consumption, a more positive trend among various economic indicators (household and company expectations) and a somewhat strong international recovery.

As a whole, the scenario regarding opportunities for Swedish household consumption is mixed. Rising unemployment and moderate wage development contrasts with tax cuts in the form of the in-work tax credit, low interest rates and a stock market recovery. Following a clear setback in 2009, households are expected to increase their consumption primarily in 2011 and 2012. At that time, the saving ratio is also expected to decline from its relatively high level in 2009 and 2010. Many industrial companies have been quick to adjust their production to the low level of demand, which has resulted in very low levels of capacity utilisation. Against this background and the negative view given by Statistics Sweden's investment survey, a relatively weak investment trend is expected for 2010 following the large-scale decline in 2009. In 2011 and 2012, clear growth in investment is once again expected. In line with the very weak international trend, foreign trade decreased dramatically in 2009. In pace with the international recovery, exports are expected to regain impetus in 2010. Imports are expected to grow more slowly, however, during the initial forecast years. This is partly due to lower activity among export companies which affects the need to import input and investment goods.

The deep decline in economic activity is having a very clear, significant impact on the labour market. During the initial stages of the economic recovery, that is, part way into 2010, the greatest increase in production will be achieved through higher productivity instead of an increase in the number of hours worked. Companies will make use of their current excess production capacity, and as the economy strengthens and demand for goods and services continues to rise, companies will need to recruit again. However, this process will take time and employment is expected to fall by 2.5 per cent in 2009 and slightly less than 3 per cent in 2010. Not until 2012 is employment expected to rise across the full year. When demand for labour declines, a certain number of people normally leave the labour force because gaining employment becomes less likely. This is known as the *discouraged worker* effect. However, the measures implemented by the Government are expected to help prevent the labour force from decreasing to the normal extent. Unemployment will then be higher than usual, but employment will be able to accelerate more rapidly when the trend turns. Unemployment is then expected to peak in 2010 at an average annual level of 10.7 per cent, after which it will fall to a level below 10 per cent in 2012. The fact that the current scenario for the labour market is more optimistic than in the Budget Bill for 2010 is due to a higher than expected demand in Sweden and abroad. This has caused a positive effect on the labour market.

Resource utilisation is currently very low. Despite the fact that demand is expected to increase rapidly in 2011 and 2012, there will still be negative gaps at the end of the forecast period. Compared with the forecast in the Budget Bill for 2010, these gaps are less negative because growth is expected to recover and help to close the gaps more quickly. The wide availability of resources makes increasing production relatively inexpensive, meaning that cost pressure will remain very moderate over the next few years. Consequently, it will not push up inflation over the forecast period. On the other hand, gradually increasing demand translates to more rapid pricing increases, albeit not for several years. On the whole, the next few years will be a period of very moderate inflation pressure. The economic situation in general and the labour market in particular will have an impact on wage increases over the next few years. From an historical perspective, these changes are expected to be moderate.

The forecast review has led general government net lending to be revised upwards compared with the forecast in the Budget Bill. Net lending is expected to amount to -1.7 per cent of GDP for 2009 and -2.8 per cent of GDP for 2010. The forecast review entails considerably higher tax revenues, mainly explained by an increasingly positive trend in the labour market compared to the Budget Bill. The new macro scenario, with higher hourly wages and more hours worked, means higher total wages and thus higher revenue from taxes on labour. A stronger consumption trend also entails higher revenues from taxes on consumption.

Table 12 Key data in BB10, the forecast review and alternative scenarios

Percentage change, unless otherwise stated

	2009				2010				2011				2012			
	BB10	Nov.	Alt. 1	Alt. 2	BB10	Nov.	Alt. 1	Alt. 2	BB10	Nov.	Alt. 1	Alt. 2	BB10	Nov.	Alt. 1	Alt. 2
GDP fixed prices	-5.2	-4.9	-4.1	-5.0	0.6	2.0	3.6	0.5	3.1	3.4	4.1	3.1	3.8	3.3	2.9	3.4
GDP gap ¹	-6.4	-6.1	-5.7	-6.1	-6.5	-4.8	-3.3	-5.9	-5.0	-3.1	-1.3	-4.2	-3.0	-1.6	-0.6	-2.2
Productivity	-1.4	-1.7	-1.1	-1.8	2.4	3.7	3.3	2.4	2.7	2.4	2.8	2.5	3.2	2.4	2.6	2.3
Hours worked	-3.7	-3.1	-3.0	-3.1	-2.1	-2.0	0.3	-2.2	0.4	1.0	1.2	0.6	1.0	1.3	0.3	1.5
Employment ²	-2.6	-2.5	-2.3	-2.5	-3.4	-2.9	-1.3	-3.1	-0.6	0.0	0.3	-0.2	0.8	1.1	0.9	1.2
Unemployment ³	8.9	8.5	8.3	8.5	11.4	10.7	9.5	10.9	11.6	10.5	9.1	10.9	11.0	9.8	8.7	10.0
Hourly wages ⁴	3.1	3.1	3.1	3.0	2.0	2.2	2.4	1.8	1.9	2.2	2.6	1.7	2.3	3.0	3.4	2.5
CPI inflation ⁵	-0.4	-0.4	-0.4	-0.3	0.4	0.5	0.8	0.5	0.8	1.4	2.1	1.2	1.8	2.4	3.1	2.2
Repo rate ⁶	0.25	0.25	0.25	0.25	0.50	0.75	1.25	0.46	1.25	2.00	2.75	1.68	2.50	3.50	4.25	3.25
Net lending, general government sector ⁷	-2.2	-1.7	-1.5	-1.7	-3.4	-2.8	-2.0	-3.2	-2.1	-1.7	-0.6	-2.4	-1.1	-0.5	0.4	-1.2

Note: The revised National Account outcome, published the 27th of November 2009, has not been considered in the forecast.

¹ Percentage difference between actual and potential production

² In age group 16–64 years

³ Per cent of the labour force

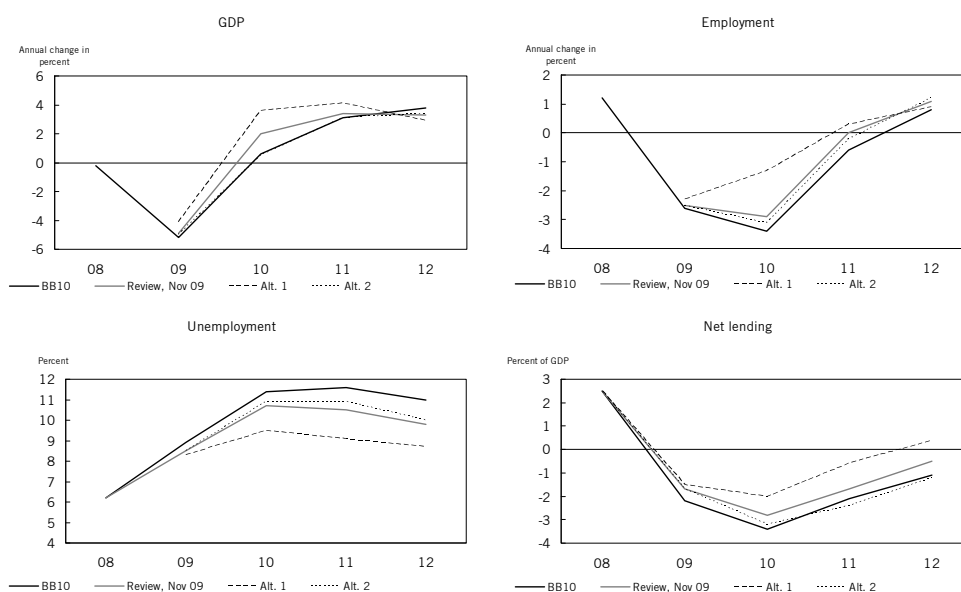
⁴ According to short-term wage statistics

⁵ Annual average

⁶ Closing rate

⁷ Per cent of GDP

Diagram 6 Development of GDP growth, employment, unemployment and net lending in BB10, the forecast review and alternative scenarios



6.2 Alternative scenarios

There is a substantial degree of uncertainty surrounding future economic trends and long-term sustainable economic growth. A continued positive spiral involving increased confidence may result in a stronger recovery. At the same time, there are considerable downside risks because the upward revision of the forecast is partly based on the positive spiral mentioned above, and this has not yet had any clear impact on economic fundamentals. In the event that the improved indicators fail to translate into stronger, hard data in the near future, the recovery will be weaker than predicted in the November forecast review.

Alternative scenario 1 – Faster recovery

Recently, there have been signs that the recovery in Sweden and abroad may be growing faster and more vigorously than projected in the forecast review. For example, indicators of future household and company expectations have had a very strong development. In addition, prices of shares and other assets continued to rise during the autumn. Such factors could lead to faster than expected recovery for Sweden and the international community. This is illustrated in the *first alternative scenario – Faster recovery*. (The alternative scenarios are presented in Diagram 6 and Table 12.)

This alternative scenario, which imagines a continued positive spiral with increased confidence, results in a stronger recovery because of a more rapid rise in household consumption. With its high level of private savings, Sweden is well equipped to achieve a balanced and sustainable upswing in such a scenario. Compared with the assessment in the

forecast review, household consumption accelerates substantially in the fourth quarter of 2009 as a consequence of this increased optimism and a strong, continued development of wealth. Foreign demand is also expected to be stronger, resulting in demand for Swedish exports rising more than expected. As a result, GDP would decline substantially for 2009 and grow faster in 2010 and 2011 than the forecast review suggests (see Table 12).

Stronger domestic demand will lead to an increased demand for labour primarily in labour intensive service industries. Furthermore, stronger demand in Sweden and abroad softens unemployment in the goods-producing industries. This stronger trend, with more favourable prospects, also leads to an increased level of *labour hoarding* and further softens the decline in employment. On the whole, increased demand leads to a smaller decline in employment compared with the review's assessment and a rise in employment beginning at the end of 2010 (see Table 12 and Diagram 6). The increased demand for labour leads to increased incentives to participate in the labour force and actively seek employment. Consequently, as a result of increased intensity in employment seeking efforts, the labour trend is stronger while the equilibrium unemployment level is lower. A stronger employment trend and an increased labour supply will cause unemployment to continue to rise to a little above 9 per cent in 2010.

A higher long-term production level resulting from increased labour supply and lower equilibrium unemployment means that combined with higher demand, resource utilisation will only be marginally higher than the forecast review assessment. In turn, inflationary pressure will only increase marginally and the Riksbank will continue to conduct an expansive monetary policy throughout the forecast period.

Alternative scenario 2 – Greater permanent effects of the financial crisis

As a consequence of the financial crisis, opportunities for companies to invest and their willingness to do so have decreased substantially. Declining investment has meant smaller than normal capital stock and has contributed to weaker amounts of capital per employed individual. More specifically, there is a risk that parts of the capital stock have been permanently knocked out and long-term productivity level will decrease.⁷ A lower long-term sustainable level of productivity means that less goods and services can be produced by a given labour force. In other words, companies have less resources available compared with a situation where a larger portion capital stock has temporarily declined. The effects of such a trend on the economy are illustrated in the *second alternative scenario – Greater permanent effects of the financial crisis*.

⁷ Potential productivity is dependent on the level and composition of the capital stock, as well as on the education and experience of the population.

This alternative scenario analyses how the economy would develop if there were to be a greater permanent impact on capital stock than envisioned in the forecast review. In the long term, the potential productivity level is assumed to be 1.5 per cent lower than in the forecast review.

A lower potential production level means companies will adjust their production capacity to the new, lower level as early as in 2010. Investments would thus increase more slowly than in the principal scenario. As a result of lower productivity, household consumption would also develop more slowly in 2009–2012 due to lower real wages and expected future revenues. On the whole, GDP growth would be 1.8 percentage points lower in 2009–2010 compared with the scenario in the forecast review.

The weaker GDP trend leads to declining demand for labour. Employment is thus somewhat lower and unemployment somewhat higher, particularly for 2010 and 2011. In the long run, however, a level of employment is achieved that is largely the same as in the forecast review.

Consequently, an alternative assumption regarding the effects of investment decline on capital stock has a major impact on the forecast of economic trends in Sweden. Employment is somewhat lower and unemployment somewhat higher for the next few years, while GDP growth is lower (see Table 12). In the longer terms, this results in a GDP level approximately 1.5 per cent lower than in the principal scenario.

6.3 Withdrawal of support measures and the expansive economic policies implemented during the crisis

Recently, the economic situation both internationally and within Sweden has stabilised, and signs of an economic recovery have grown more evident. However, it is the Government's view that it is far too soon to begin withdrawing the measures meant to re-establish confidence in the financial markets and mitigate the decline in demand. It is necessary for economic policies to remain expansive for some time to come.

Nonetheless, it is important to present an exit strategy detailing how the implemented support measures will be withdrawn and how the public finances weakened during the crisis will be consolidated. Returning to a surplus in the public finances is necessary to create long-term sustainability and to be prepared for the next recession. An exit strategy not only helps to reduce economic uncertainty by firmly establishing expectations and strengthening confidence in economic policies. It also reinforces the obligation to maintain sound public finances.

During the Swedish presidency of the EU (the second half of 2009), exit strategies were a prioritised issue. Member states agreed on principles that were meant to guide these strategies in both the financial and fiscal policy arenas. At the informal Ecofin meeting in Göteborg on

1–2 October, a number of principles for the fiscal policy exit strategy were agreed upon and later gained the support of the Ecofin Council and the European Council:

- The fiscal policy stimulus measures must cease at the correct time. Given that the Commission's forecasts continue to indicate a sustained recovery, budgetary consolidation in member states should commence during 2011.
- The planned budgetary consolidation should be ambitious – in most countries considerably higher than the guideline target of 0.5 per cent of GDP (in structural terms).
- Important measures complementing a fiscal policy exit strategy include reinforcements of national budgetary frameworks (to enhance the credibility of the consolidation process) as well as efforts to bolster the long-term sustainability of fiscal policy. In addition, the level of ambition in implementing structural reforms to increase productivity, for example, should be raised.

It was also agreed that a basic precondition for these principles involves designing member states' exit strategies within the framework of the Stability and Growth Pact.

Relatively strong public finances despite weakening

According to the stipulations of Stability and Growth Pact, a country's central government debt should not exceed 60 per cent of GDP. Neither should its net lending exceed 3 per cent of GDP. In the event that European Commission forecasts suggest the deficit may rise above 3 per cent, an Excessive Deficit Procedure (EDP) is initiated to ensure that the member state undertakes measures to rectify the deficit.

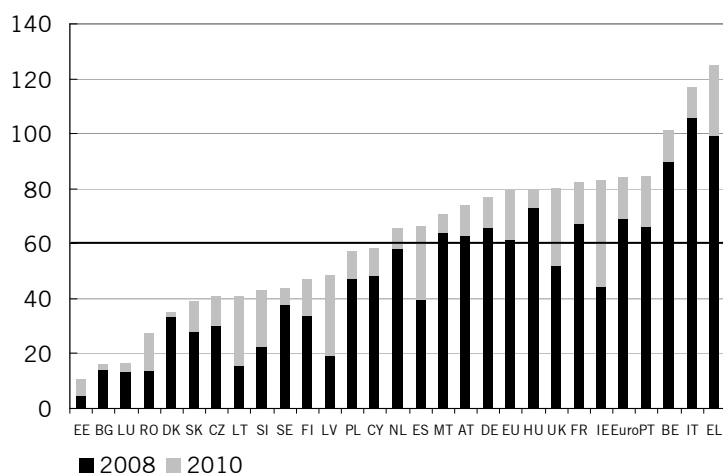
Initially, the European Commission investigates whether the degree to which the limit has been exceeded is exceptional and temporary and whether the deficit is close to 3 per cent of GDP. To avoid undergoing an EDP, countries must meet all three conditions. The degree to which the limit has been exceeded is considered exceptional if it is the result of an unusual event beyond the country's control (having a major effect on its public finances), or if it is the result of a strong recession with negative annual GDP (or very low-GDP growth) as compared to potential growth over an extended period. "Temporary" means that European Commission forecasts shall indicate a budget deficit of less than 3 per cent once the unusual event or strong recession has passed.

In Sweden, automatic stabilisers have played a key role in maintaining demand during the deep recession. At the same time, this has had an impact on the public finances which have been weakened considerably. Following several years of strong public finances, Sweden had a favourable position at the outset and, although its public finances have

been weakened, they nonetheless remain relatively strong in an international perspective (see Diagrams 7 and 8).

Diagram 7 General government consolidated gross debt

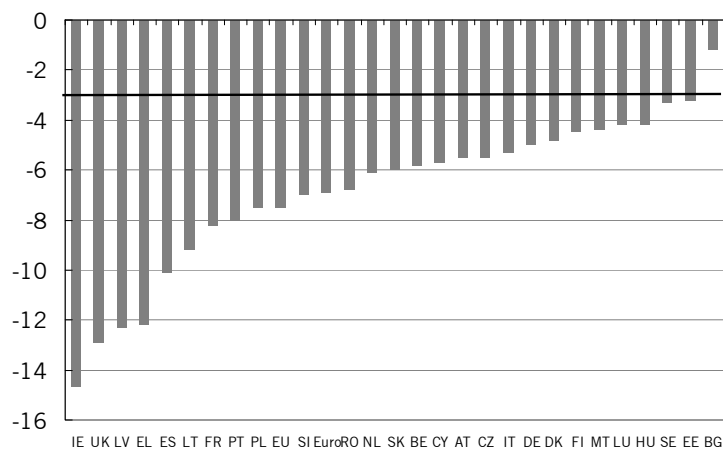
Per cent of GDP



Source: European Commission's autumn forecast, 2009

Diagram: 8 General government net lending 2010

Per cent of GDP



Source: European Commission's autumn forecast, 2009

According to the forecast in the Budget Bill for 2010, the general government consolidated gross debt (according to the definition given in the Stability and Growth Pact) will grow by approximately 45 per cent of GDP during the period 2010–2012. The deficit in net lending is forecast to amount to 2.2 per cent of GDP for 2009, growing to 3.4 per cent of GDP in 2010 and subsequently decreasing (see the solid black line in Diagram 9). If the EDP report of April 2010 confirms this forecast, Sweden will most likely not be subject to an EDP procedure since the conditions for avoiding this would thus be considered to have been met.

Diagram 9 Net lending

Per cent of GDP



Note: BB10 is the forecast according to the Budget Bill for 2010. Review autumn 09 refers to the forecast review conducted in November. The forecasts according to alternative scenarios 1 and 2 have been taken from Section 6.2.

Need for budget strengthening unlikely

The Government's current assessment is that the consolidation of Sweden's public finances will occur automatically as the recovery gains a foothold. This presupposes relatively austere fiscal policies over the next few years and that the measures implemented to counteract the effects of the crisis will be phased out as the economic situation improves.⁸

Table 13 Temporary stimulus measures

SEK billion

	2009	2010	2011	2012
Grants to local government	0.0	12.0	0.0	0.0
Infrastructure	0.9	1.4	0.3	-0.4
Education	0.6	2.7	2.0	0.0
Labour market	2.8	3.6	0.5	0.0
Total	4.3	19.7	2.8	-0.4

Sources: Statistics Sweden and Ministry of Finance.

As the economy improves, the situation for the public finances will gradually strengthen. During the crisis, the automatic stabilisers have been able to act with full force, but as the economic situation improves, revenues will start to strengthen again. Consequently, there should be good prospects for regaining the balance in public finances and achieving a surplus within a reasonable period without tax increases or expenditure cutbacks for budget reinforcement.

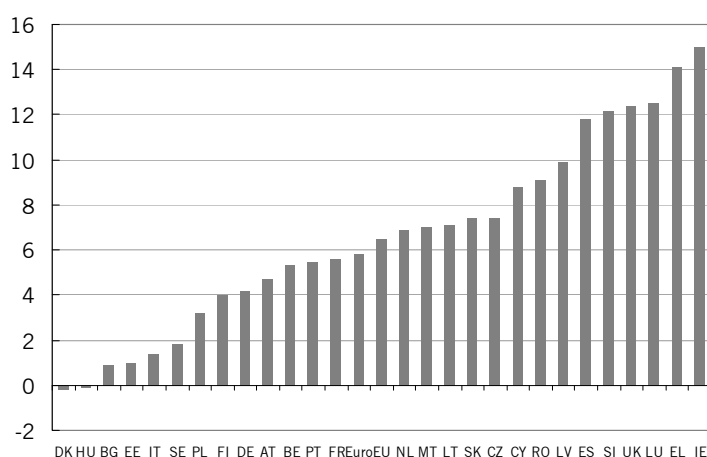
This assessment is based on the forecasts in the Budget Bill for 2010 and the information received since then. According to the forecast review conducted in November, the economic trend in Sweden and

⁸ Table D.1 in Appendix D reports on the public finance effects of the combined support measures aimed at the financial sector.

abroad has been a positive surprise compared with the forecast in the Budget Bill for 2010. According to the review, it appears that growth will be higher, resulting in stronger public finances and a smaller deficit in general government net lending (see the solid grey line in Diagram 9). This strengthens the Government's assessment that net lending will likely achieve a balance and show, within a reasonable period, a surplus without requiring budgetary strengthening measures.

Diagram 10 Sustainability indicators (S2)

Per cent of GDP



Source: European Commission's Sustainability Report, October 2009

Judging by the Government's calculations, the longer-term sustainability of Sweden's public finances is also relatively strong. According to the calculations in the basic scenario presented in the Budget Bill for 2010, some budgetary strengthening measures may be needed to safeguard the long-term sustainability of the fiscal policies. This need is largely due to the deficits that are expected to arise in the very long term (see further Section 8.3). Naturally, calculations of deficits so far into the future are highly uncertain. Calculations by the European Commission, whose methods differ somewhat, show Sweden to have a favourable position compared with other countries (see Diagram 10).

From an international perspective, Sweden's demographic trend is relatively favourable. Furthermore, many of the measures stressed by the EU as important complements to a fiscal policy exit strategy have already been implemented or are in progress. The pension system, for example, has been reformed, and structural reforms to raise the permanent employment level have been implemented. The Government is also considering further reforms which will prevent unemployment in connection with the crisis from leading to permanently lower levels. A national fiscal policy framework has been in place for some time and has been of major importance for the relatively favourable development of fiscal policy in Sweden. An overhaul is also underway to further strengthen the framework, including the introduction of a statutory

three-year expenditure ceiling. Since 2007, a Fiscal Policy Council has also been in place, tasked with monitoring the achievement of the fiscal policy targets given in the framework.

Contingencies if development is worse than expected

It is important to underscore the uncertainty associated with the above forecasts and assessment. There are risks that could mean better or worse development of public finances as illustrated by the various alternative scenarios in Section 6.2 (see the dashed lines in Diagram 9).

If the public finances were to develop worse than expected during the recovery, added budgetary strengthening measures will be necessary. It is also important to establish guidelines for how these should be designed. The Government considers it crucial that any budgetary strengthening measures have a socioeconomically efficient design to safeguard the core of welfare. If budgetary strengthening measures do become necessary, they should focus on tax adjustments that contribute to improved environment and health without reducing incentives to work. Smaller-scale expenditure cuts could also be necessary.

7 The government's reform policy and quality in public finances

The most central task for the Government is getting more people into work while reducing exclusion. Permanent, high employment is a prerequisite for the long-term financing of a public welfare system that is fair and of high quality. An important focus of the Government's policy has been to take specific measures to increase the labour supply, since experience shows that the labour supply is what determines the size of employment in the long run. These measures include the in-work tax credit and changes in health insurance and unemployment insurance. Such supply reforms have been combined with measures to stimulate demand, such as new start jobs, so-called newly recovered jobs (nyfriskjobb) and reduced employer contributions.

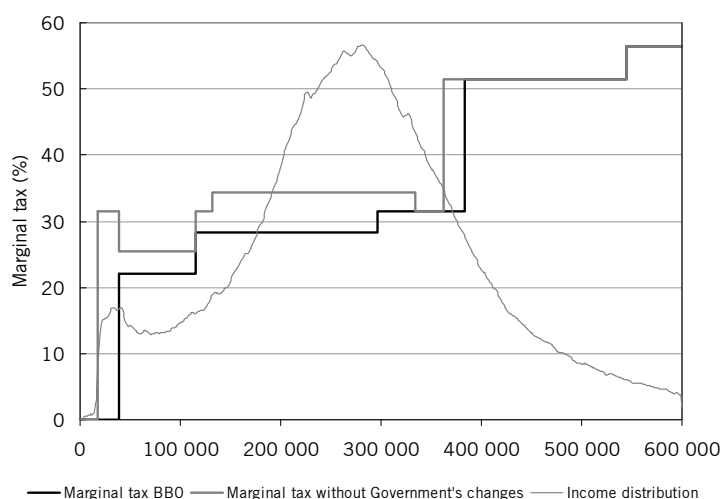
7.1 Revenue reforms

To make it more profitable to work, the Government implemented a major income tax reform in 2007 – the in-work tax credit. Both in Sweden and abroad, policies like this have been found to make it more profitable to work and at the same time, to be decisive in permanently increasing employment and decreasing absence from the labour market. The in-work tax credit not only makes it more profitable for those currently outside the labour market to take employment, but because of

reduced marginal taxes, it enhances job opportunities for those already in employment. The in-work tax credit has been designed so that the larger part of the tax relief goes to low- and middle-income earners. In order to motivate older people to work longer, an increased in-work tax credit is introduced for people over 65.

The first stage of the in-work tax credit involved tax relief of SEK 40 billion in 2007. In a second stage, the reform was increased by SEK 11 billion in 2008 and by a further SEK 11 billion in 2009. The third stage was combined with an increase in the threshold for levying central government income tax. In its Budget Bill for 2010, the Government announced a strengthening of the in-work tax credit through a fourth stage amounting to SEK 10 billion. In this stage, the in-work tax credit reduced the tax levy on earned income by approximately SEK 71 billion since the Government took office. This amount is equivalent to 2.3 per cent of GDP and approximately 8 per cent of total taxes on labour. Diagram 11 shows the effects of the four stages of the in-work tax credit on various income categories.

Diagram 11 Marginal tax and income distribution



Measures to strengthen the demand for labour are also required to stimulate the labour supply and achieve a rapid result in increased employment. In order to facilitate the entry of young people into the labour market, the Government has implemented reductions in social security contributions targeted at people under 26. This reduction – estimated to amount to SEK 16 billion in 2010 – has meant that employers only pay the old-age pension contribution and a quarter of other fees. The Government has also implemented targeted reductions in social security contributions for older people. The employer only pays the old-age pension contribution for people aged between 65 and 67, while no contribution is paid for those over 67. Overall, this has resulted in a 17 per cent reduction in labour costs for young people and a 20 per cent reduction in labour costs for older people.

In order to increase the opportunities for returning to work after more than a year of unemployment, the Government introduced new start jobs in 2007. Effective from 2009, these new start jobs are reinforced by a subsidy to the employer which is equivalent to the whole, half or double the employer contribution depending on the person hired. Although it carries with it certain special rules for young people and older people, in general, the subsidy can be applied for the amount of time the employee has been absent from working life, with a maximum of five years.

The Government has also announced and implemented tax relief which aims at strengthening the incentives for enterprise and investment in Sweden. Starting in 2009, corporation tax has been lowered from 28 per cent to 26.3 per cent, and the levy of social security fees was lowered by 1 percentage point. The wealth tax was abolished in 2007. Moreover, the Government has reformed the taxation of active partners in small companies (the so-called 3:12 rules) so that the scope of capital-taxed income (based on total wages) is expanded and the standard amount raised. The overall goal is to simplify the rules and regulations, while also stimulating entrepreneurship and growth. Aiming to lessen the administrative burden on businesses, the Government has implemented a number of measures which includes the introduction of quarterly VAT reporting for small firms. To further enhance the development and growth conditions of these companies, the Government announced in its Budget Bill for 2010 that social security contributions for one-person businesses and partnerships be reduced by 5 percentage points, or a maximum of SEK 10 000 per year.

Table 14 Tax revenue

Per cent of GDP

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Diff 2000-2012
Tax on labour	31.5	31.9	30.8	31.1	30.7	30.3	29.5	28.5	28.8	28.4	27.9	27.5	27.2	-4.3
Taxes	18.4	18.2	17.4	17.9	17.7	17.4	16.9	15.8	15.8	15.8	15.4	15.2	15.0	-3.4
Indirect taxes	13.1	13.7	13.5	13.3	13.0	12.9	12.7	12.7	13.0	12.7	12.5	12.4	12.2	-0.9
Tax on capital	7.2	5.1	4.2	4.3	5.2	6.1	6.6	6.8	5.5	4.8	5.1	5.3	5.5	-1.7
Tax on capital, households	1.5	0.6	0.3	0.3	0.5	0.8	1.3	1.6	0.8	0.7	0.8	0.9	0.9	-0.6
Tax on corporate profits	3.2	2.2	1.8	1.9	2.7	3.4	3.4	3.4	2.9	2.4	2.6	2.7	2.9	-0.3
Tax on consumption	12.9	12.9	13.0	13.0	12.9	13.1	12.9	13.0	13.3	13.5	13.5	13.3	13.2	0.3
VAT	8.8	8.9	9.0	9.0	9.0	9.1	9.1	9.3	9.5	9.6	9.5	9.5	9.4	0.6
Tax arrears and other taxes	0.2	-0.1	-0.1	-0.1	-0.1	0.0	-0.1	0.0	-0.1	-0.3	-0.2	-0.1	-0.1	-0.3
Total tax revenue	51.8	49.8	47.9	48.3	48.7	49.5	49.1	48.3	47.5	46.4	46.2	46.1	45.8	-6.0

Sources: Statistics Sweden and Ministry of Finance.

Table 14 shows the development of tax revenue between 2000 and 2012. During this period, the tax ratio, i.e. total tax revenue as a percentage of GDP, is estimated to decline by slightly more than 5 percentage points,

an effect of both a reduced tax levy and higher growth. Tax cuts totalling SEK 158 billion, or just over 5 per cent of GDP, have been implemented or announced for the period of 2000–2010. Tax on labour in particular has declined. The in-work tax credit and lowered social security fees account for most of these tax cuts. The table also shows that tax on capital has declined during the period. However, this can be explained by very large capital gains in 2000 and temporary tax revenue from firms during that same year. Major changes in capital taxation include the lowering of corporation tax, the abolition of wealth tax and the reduction in tax on housing. Higher growth has resulted in an increase in VAT revenue as a percentage of GDP, mainly due to higher consumption and investment. Revenue from excise duties, including tax on energy and carbon dioxide, declines despite increased taxes. This decline is explained by more efficient residential heating, the switch from electricity and oil to geothermal heat and district heating and a newer vehicle stock with more energy-efficient engines.

7.2 Expenditure reforms

A functioning labour market depends largely on the design of unemployment and health insurance systems. Since it took office, the Government has implemented changes in these areas that have been necessary for the insurance systems in order to regain their original function. While these systems were originally intended as temporary transitional insurances with generous but limited benefits, they have become a long-term or lifelong maintenance system for many people. The longer people receive funding from these systems, the more difficult it is for them to return work and the easier it is for them to be excluded from the labour market. During the period 1995 to 2005, more than 20 per cent of people aged 20 to 65, calculated as full-year equivalents, received maintenance from these insurance systems. In order to break this pattern, the Government has implemented changes in both health and unemployment insurance.

In unemployment insurance, the availability for work conditions have been tightened, and the number of days an unemployed person is entitled to benefits has been restricted. The increased insurance ceiling for the first 100 benefit days has been abolished, and the role of unemployment insurance as a transitional insurance has been made clearer by reducing benefit levels over the unemployment period. By introducing a link between the membership charges and the unemployment level in each insurance fund, the Government has also increased self-financing in unemployment insurance. In order to increase the insurance nature of unemployment insurance, the Government has also restricted entitlement to benefits in the case of part-time work. These insurance reforms have resulted in many people choosing to leave the unemployment fund. The statistics on who has left the fund are deficient, but indicators point primarily to those who have been out of

the labour market for a considerable amount time, those approaching retirement and those with a relatively low risk of unemployment. In 2009, to minimise the number of people without insurance, the Government implemented reforms to facilitate admittance and re-admittance to the unemployment insurance funds. Membership fees were cut, membership conditions were temporarily shortened and entry conditions were simplified.

In addition to the reform of unemployment insurance, the Government has implemented other changes in labour market policy. These include more efficient ways of matching job seekers to job vacancies and an increased focus on people who are out of the labour market. Special measures have been undertaken to help people immigrants, the disabled and young people. The serious situation in the labour market as a consequence of the deep recession caused the Government to strengthen support for job seekers in 2009. In the Budget Bill for 2010, the Government proposed the further strengthening and complementing of measures to keep job seeking activities at a reasonable level and to broaden labour market policy programmes.

In order to increase employment and reduce the high ill-health figures (ohälsotal), the Government has also made extensive reforms in health insurance. One of the central reforms is the introduction of fixed time limits for the receipt of sickness benefit and a review of rehabilitation entitlement. The fixed time limits are expected to lead to shorter sickness cases and reduced the total of sickness absence, as many players in the sickness certification process are now expected to act earlier. The health insurance package also includes other reforms, like a more consistent review of the entitlement to both sickness benefits and sickness and activity compensation. Expanded occupational health services, a rehabilitation guarantee and measures to stimulate a return to work for sickness and activity compensation recipients have also been added.

7.3 Effects of economic policy

The main purpose of the majority of the Government's reforms is to increase permanent employment, but it is very difficult to assess their long-term effects. Current Government assessments are based on the empirical or theoretical research of similar reforms.

The assessment of the long-term effects created by the Government's structural reforms shows employment to increase by 2.8 per cent, or 125 000 people. The number of hours worked is estimated to increase by 4.8 per cent and GDP by 3.7 per cent (see Table 15).

Table 15 Long-term effects of the Government's policy

Change in per cent

	Number of employed ¹	Employment	Hours worked	GDP
In-work tax credit and increased lower threshold for central government tax	80 000	1.8	2.7	2.2
Unemployment insurance	10 000	0.3	0.4	0.2
Labour market policy	20 000	0.4	0.7	0.5
Health insurance	5 000	0.1	0.8	0.7
Other ²	10 000	0.2	0.2	0.1
Total structural reforms	125 000	2.8	4.8	3.7
Crisis measures	25 000	0.6	0.6	0.5
Total	150 000	3.4	5.4	4.2

¹ The number of employed people is calculated on the potential employment level in 2006, which is estimated at 4 364 000 people.

² Includes the effects of the child care allowance, the tax cut for household services, the reduction in employer contributions for young people and a general reduction in social security contributions.

Sources: Statistics Sweden and Ministry of Finance.

The sizeable decline in actual employment as a consequence of the recession is expected to lead to a sustained, lower level of employment. The Government announced in its Budget Bill for 2010 that it would strengthen and complement the measures it had previously implemented to prevent labour market exclusion. This will involve measures to keep job seeking activities at a reasonable level and to broaden the labour market policy programmes. The lasting effects of the crisis are thus expected to be less extensive than would otherwise have been the case. In the long run, these “crisis measures” will raise employment by 0.6 per cent, or approximately 25 000 people (see Table 15).

7.4 Quality in public finances

The EU is currently in the process of compiling uniform statistics on the allocation of public finances from each member state. Uniform statistics enable cross-country and inter-temporal comparisons of general government expenditure. In order to evaluate whether a change in the composition of general government expenditure has affected long-term growth, ongoing, more detailed information is required. However, the difference in allocation of general government expenditure and the change in allocation over time provide an indication of how different types of expenditure and all location are prioritised. It also gives an indication of policy stance. Tables 16 and 17 provide details of expenditure by purpose in accordance with the COFOG classification.

Table 16 General government expenditure by purpose, per cent of GDP

Per cent of GDP

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Change 1998-2008
General public administration	10.9	10.1	10.1	8.6	8.9	8.0	7.4	7.6	7.7	7.5	7.6	-3.4
interest	5.3	4.6	4.0	3.0	3.2	2.3	1.9	1.9	1.8	1.8	1.7	-3.6
Other	5.6	5.5	6.1	5.6	5.7	5.7	5.5	5.7	6.0	5.7	5.9	0.3
Defence	2.4	2.4	2.3	2.2	2.1	2.0	1.9	1.7	1.7	1.6	1.5	-0.9
Social responsibility and judicial system	1.4	1.4	1.3	1.3	1.4	1.4	1.3	1.3	1.3	1.3	1.4	0.0
Economic issues and economic policy	4.5	4.8	4.0	4.3	4.7	4.8	4.7	5.0	4.7	4.7	5.0	0.5
Environmental protection	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.2
Provision of housing and social planning	1.7	1.3	0.9	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.7	-1.0
Health care	6.2	6.3	6.2	6.6	6.9	7.0	6.9	6.8	6.8	6.8	7.0	0.8
Leisure, culture and religion	1.8	1.8	1.1	1.1	1.1	1.1	1.0	1.0	1.1	1.0	1.0	-0.7
Education	7.4	7.4	6.7	7.1	7.2	7.2	7.3	7.1	7.0	6.8	6.9	-0.4
Social security	23.2	23.4	23.1	23.1	23.3	24.1	23.9	23.4	22.7	21.6	21.5	-1.7
Total expenditure	59.5	59.0	56.0	55.6	56.7	56.9	55.6	55.2	54.1	52.5	53.0	-6.6
excluding interest	54.2	54.4	52.0	52.6	53.6	54.6	53.7	53.3	52.4	50.7	51.3	-3.0

Sources: Statistics Sweden and Ministry of Finance.

Expenditure, as a percentage of GDP, has fallen over the period 1998-2008 partly as a consequence of high GDP growth. Such growth means that expenditure following the general price trend has gradually fallen as a percentage of GDP. Only three expenditure categories increased as a percentage of GDP during the period: economic issues and economic policy, environmental protection and health care and education.

Table 17 General government expenditure by purpose, per cent of total expenditure

Per cent of total expenditure

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Change 1998-2008
General public administration	18.3	17.1	18.0	15.5	15.7	14.1	13.4	13.8	14.3	14.3	14.3	-4.1
interest	8.9	7.8	7.1	5.4	5.6	4.0	3.4	3.4	3.2	3.4	3.2	-5.7
Other	9.4	9.3	10.9	10.1	10.1	10.1	10.0	10.4	11.0	10.9	11.1	1.7
Defence	4.0	4.1	4.2	3.9	3.7	3.6	3.4	3.1	3.2	3.0	2.8	-1.2
Social responsibility and judicial system	2.3	2.3	2.3	2.4	2.5	2.5	2.4	2.4	2.5	2.6	2.6	0.3
Economic issues and economic policy	7.6	8.1	7.2	7.8	8.3	8.5	8.5	9.1	8.7	8.9	9.4	1.8
Environmental protection	0.3	0.3	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.4
Provision of housing and social planning	2.9	2.2	1.6	1.7	1.5	1.5	1.5	1.5	1.4	1.4	1.4	-1.5
Health care	10.4	10.6	11.0	11.9	12.1	12.4	12.4	12.4	12.5	13.0	13.2	2.8
Leisure, culture and religion	3.0	3.0	1.9	2.0	1.9	1.9	1.8	1.9	2.0	2.0	2.0	-1.0
Education	12.4	12.5	12.0	12.7	12.8	12.6	13.1	12.8	12.9	12.9	13.1	0.7
Social security	38.9	39.7	41.3	41.6	41.0	42.4	43.0	42.3	41.9	41.2	40.6	1.7
Total expenses	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0
excluding interest	91.1	92.2	92.9	94.6	94.4	96.0	96.6	96.6	96.8	96.6	96.8	5.7

Sources: Statistics Sweden and Ministry of Finance.

Expenditure on social security in Sweden accounts for approximately 20 per cent of GDP and just over 40 per cent of total general government expenditure. This share has decreased in recent years. Expenditure on health care is the category that increased the most compared with 1998. Expenditure on education also increased as a percentage of total expenditure during the period 1998–2008. Interest expenditure has fallen considerably mainly as a result of the sharp fall in general government consolidated gross debt as a percentage of GDP.

8 Long-term sustainability of fiscal policy

This section analyses the extent to which fiscal policy, including the measures proposed and announced in the Budget Bill for 2010, are sustainable in the long run. The basic question is whether extensive changes to the fiscal policies will be necessary. It is a key question for two reasons.

Firstly, for fiscal policies to be sustainable in the future, it is important that the Government and the Riksdag be able to propose or decide on possible measures from an early stage, if necessary. In particular, if extensive changes to fiscal policies prove necessary, households and companies may need ample time to plan for changed conditions. The pension reform is an example of an extensive reform

that was implemented gradually, in order to give households the opportunity to adapt to the new conditions. Furthermore, adjustments to fiscal policy implemented at an early stage seldom need to be as extensive as they would if they were delayed. Delaying necessary budget strengthening can result in a build-up of general government debt that can force the Government to implement long-term, large-scale increases in taxation or substantial savings on welfare.

Secondly, it has been shown that expectations regarding future fiscal policies play an important role. Studies show that households and companies begin to react to fiscal policy decisions as soon as they are announced. There is extensive support in economic theory to view future changes in taxation or public expenditure as affecting the behaviour of households and companies. For example, expansive fiscal policies that increase the current deficit can yield expectations of equivalent or even greater tightening at a later date. This can also mean expansive fiscal policies intended to boost demand fail to achieve their purpose. For such policies to be effective short term, they must be credible and sustainable long term.

Fiscal policies are not sustainable in the long run if the tax revenues and other revenues generated under current regulations are insufficient to finance the necessary expenditures in the current welfare system. Future demographic changes are expected to exert pressure on the public finances. General government expenditure for people aged 65 or older averages SEK 225 000 per year, while general government revenues from people in that age group average SEK 60 000.⁹ At the same time, the elderly ratio, i.e. the number of people aged 65 or above in relation to the number of people aged between 20 and 64, is expected to rise from 30 per cent in 2008 to 47 per cent in 2060 and 50 per cent in 2090. The question is then whether the design of fiscal policies is sustainable given these changes.

To provide a basis for assessing the long-term sustainability of public finances, this chapter provides calculations of the results for the Swedish economy. A key assumption in the calculations is that the current design of the taxation and welfare system will be retained in the future. This provides a solid basis on which to assess the extent to which the current welfare undertaking can still be maintained given the demographic stresses that the Swedish economy faces.

The challenges of an ageing population could potentially be exacerbated by at least three factors other than demography. Firstly, there is a tendency for welfare service demand to increase more rapidly than demographic conditions would imply. This can raise general government consumption and lead to weakening sustainability. Secondly, increased welfare could lead to many people wanting to work less. This would decrease the tax base and lead to weakened sustainability. Thirdly, Sweden currently finds itself in a deep recession.

⁹ Statistics Sweden, Household Finances, 2004.

There is a risk that this could have lasting effects on the Swedish economy and, in turn, lead to sustainability problems.

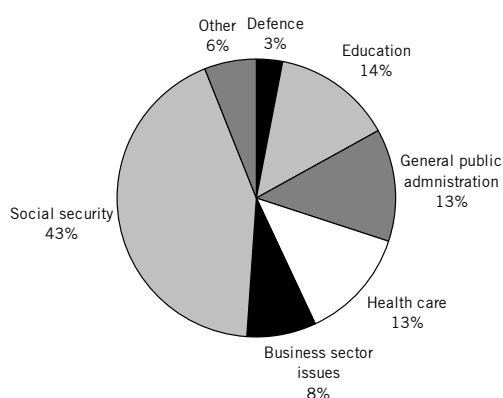
The following section begins with a brief description of Sweden's welfare undertaking. This is followed by a description of what sustainability is and how it is measured. There is then a discussion of the challenges faced by fiscal policies. In conclusion, a few examples of how sustainability can be improved are discussed.

8.1 Sweden's welfare commitment

A basic trait of the Swedish welfare model is an extensive welfare system whereby individual rights, like education, health care and pensions are financed collectively through taxes and fees.

Diagram 12 General government expenditure by purpose, 2006

Per cent



Source: Statistics Sweden.

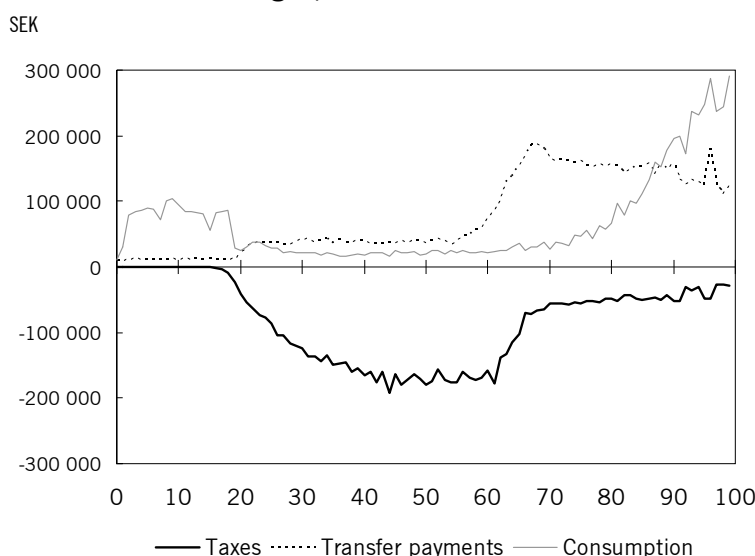
General government expenditure is expected to amount to 55.1 per cent of GDP for 2010. Diagram 12 shows how general government expenditure was distributed in 2006 in terms of various purposes. The largest share of expenditure was used for social security, including unemployment benefits, old-age pension and sickness and activity compensation. A considerable share was also used for education, health care and general public administration, which accounted for approximately 13 per cent of general government expenditure.

The public commitment requires a large proportion of income in Sweden to be redistributed among households. This redistribution occurs between groups with varying income, health status and work capacity. A considerable part – almost three quarters – of this redistribution takes place over the life-cycle of the individual, i.e.

between different age groups.¹⁰ Children, young people and, above all, the elderly are net recipients of public services and transfer payments, while those in paid employment are net contributors to the general government sector.

Diagram 13 shows how taxes paid (negative values) transfer payments received and consumption of public services (positive values) vary over the life-cycle of the individual. Diagram 14 shows the net of these receipts and payments at various ages.

Diagram 13 Average taxes paid and transfer payments and public services received at various ages, 2004



Note: Taxes paid to the general government sector are stated as negative values, while transfer payments and public services received are indicated as positive values.

Sources: Statistics Sweden and own calculations.

During the first 20 years of life, the average individual is a net recipient from the general government sector, particularly in terms of consumption of childcare and education (see Diagram 14). From the age of 20, tax payments rise and the average individual becomes a net contributor to the general government sector. Tax payments also increase with age and peak at about age 50. Between the ages of 55 and 65, transfer payments increase as a consequence of increased sickness and activity compensation payments and old-age pension. From age 75, general government consumption increases substantially as a consequence of higher costs for health care and the care of the elderly. The average individual becomes a net recipient from around the age of 63.

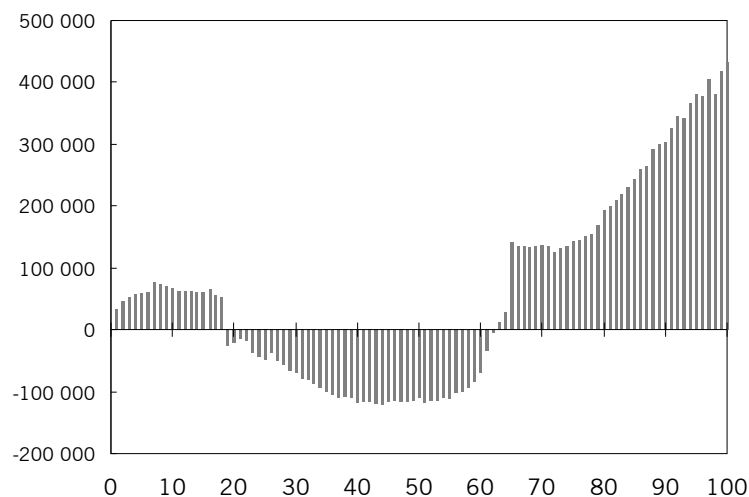
Combined with an increasing proportion of older people, it is this distribution of general government expenditure and revenue in terms of age that is expected to bring the public finances under pressure. The decisive issue is then whether the strain on the public finances will be so

¹⁰ Pettersson and Pettersson, *Income Distribution from a Life-Cycle Perspective*, Appendix 9 of the 2003 Long-Term Survey (SOU 2003:110).

extensive that taxation and/or expenditure policies will have to be adapted in a more substantial way.

Diagram 14 Net general government expenditure by age, 2004

SEK



Sources: Statistics Sweden and own calculations.

8.2 What is sustainability, and how can it be measured?

Fiscal policies can be considered sustainable if the tax revenues and other revenues generated under current taxation and expenditure regulations are sufficient to finance necessary expenditures in the current welfare system.¹¹ To gain an understanding of the long-term sustainability of fiscal policy, projections of general government revenue and expenditure are made for a very long period. Based on these projections and current general government debt, various measures of the long-term sustainability of fiscal policy can be calculated. Naturally, the degree of uncertainty in long-term projections of this kind is very large, and the results should therefore only be viewed as illustrative.

A commonly used measure of sustainability is the S2 indicator.¹² It states the permanent budget strengthening (positive values) or budget weakening (negative values) required to achieve long-term fiscal policy sustainability in a strict sense. An S2 value of 1 per cent of GDP means that a permanent increase in taxation or decrease in expenditure equivalent to 1 per cent of GDP must be implemented in order for fiscal policy to be sustainable long term.

¹¹ According to the theoretical definition of long-term sustainable fiscal policy, the current value of future primary budget balances should be equal to current outstanding net debt.

¹²The S2 indicator is outlined in Long-term Sustainability of Public Finances in the European Union, *European Economy* no. 4/2006, published by the European Commission.

The S2 indicator can be translated into a required primary balance (RPB) for a given year or period. This measure indicates the average primary balance, i.e. primary revenue minus primary expenditure,¹³ that must be realised during a certain period if fiscal policy is to achieve long-term sustainability. In this section, the measure for the period 2013–2019 is given as an example.¹⁴ A required primary balance of 1 per cent of GDP means that an average primary balance of the same amount (between the years 2013 and 2019) would be consistent with long-term sustainable fiscal policy.

8.3 Challenges for fiscal policy in the long run

Increasing life expectancy and relatively large net payments to the elderly raise the question of whether current fiscal policy can be maintained given Sweden's unchanged tax rates and demographic changes. If it cannot, either taxation or welfare commitments must be adjusted. Section 8.3.1 addresses this question by means of a basic calculation (*the base scenario*).

The level of demographic pressure is affected by a number of conditions in the economy. Section 8.3.2 describes how certain basic economic relations can lead to a higher demand for leisure time or increased service requirements in the general government sector. These relations can impose further stress on the public finances beyond the pressure coming from demographic changes. Section 8.3.3 analyses the extent to which the current economic crisis could lead to sustainability problems.

8.3.1 The ageing population

8.3.1.1 The demographic trend

Base scenario

Two major changes in the composition of the Swedish population will take place over the next few years, and two circumstances will dominate. One is that the large group of people born in the 1940s will reach pensionable age and leave the labour force. All else being equal, this will lead to a larger number of pensioners and fewer people in paid employment. Another is that the large group of people born around 1990 will reach the age at which they leave upper-secondary schools and begin working life or higher education. This calls for a decreased demand for upper-secondary education, an increased demand for higher education and an increased supply of younger people in the labour force.

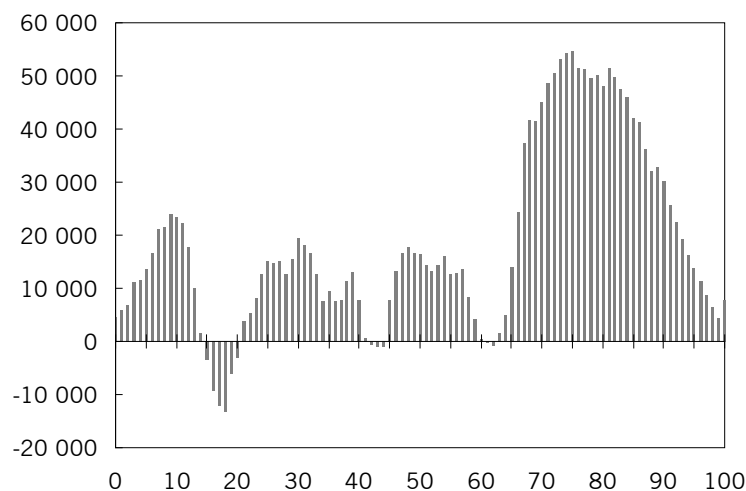
¹³ Primary expenditure refers to all expenditure except interest on debt, while primary revenue refers to all revenue except return on capital.

¹⁴ The measure is calculated from 2013, the first year for which the long-term projections have been calculated, and for the rest of the decade.

In the future, mortality among the elderly will be a dominant trend in the composition of the population and have a considerable effect on the Swedish economy.¹⁵ For many years now, mortality has declined considerably, leading to increased average life expectancy and older age groups representing a growing share of the population. According to Statistics Sweden's population forecast from May 2009, this trend is expected to continue, albeit at a somewhat slower pace.

Diagram 15 Change in population by age, 2008–2090

Number of people



Sources: Statistics Sweden and own calculations.

The population is expected to increase from the current 9.3 million to 10.7 million in 2060 and 11.1 million in 2090. Diagram 15 shows how the composition of the population is expected to change between 2008 and 2090. The greatest part of the growth in population occurs in older age groups.

Population changes are reflected in the youth and elderly dependency ratios (see Diagram 16). The youth ratio, i.e. the number of people aged 0–19 in relation to the number of people aged 20–64, was 40 per cent in 2008 and has decreased over time due to declining fertility. The youth ratio is expected to remain largely constant in the near future (see Diagram 16).

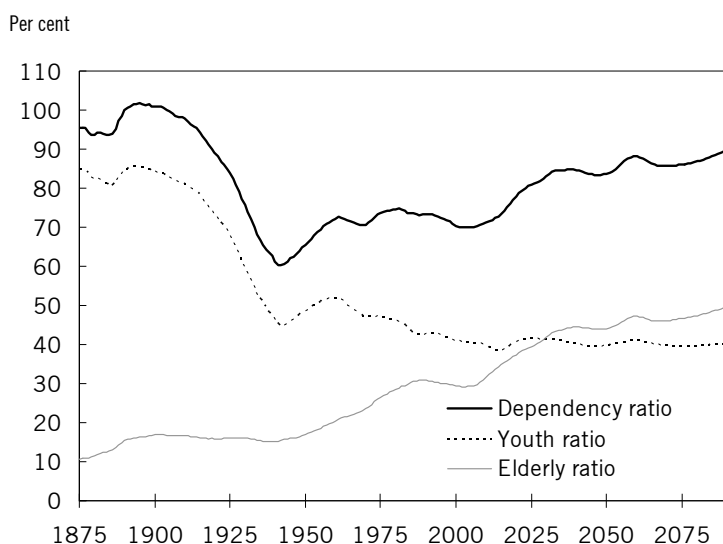
The elderly ratio, i.e. the number of people aged 65 or above in relation to the number of people aged 20–64 has risen over time and was 30 per cent in 2008. This trend is expected to continue as a consequence of decreasing mortality. In 2030, the elderly ratio is expected to have risen to 42 per cent, to 47 per cent in 2060 and to nearly 50 per cent in 2090.

The sum of the youth and elderly ratios produces the so-called dependency ratio, which measures the number of people of non-working

¹⁵ In this context, mortality is measured as the number of deaths in a certain age group in relation to the total number of people in that age group.

age (0–19 and 65 and older) in relation to the number of people of working age (20–64 years). As a consequence of the rising elderly ratio, the dependency ratio rose from the early 1940s to 71 per cent in 2008. The dependency ratio is expected to rise to 83 per cent in 2030, to 88 per cent in 2060 and to 90 per cent in 2090.

Diagram 16 Dependency ratios, 1875–2090



Note: Youth ratio: Population aged 0–19 as a share of the population aged 20–64. Elderly ratio: Population aged 65 or older as a share of the population aged 20–64. Dependency ratio: The sum of the youth and elderly ratios.
Sources: Statistics Sweden and own calculations.

Alternative demographic scenarios

The long projection period means considerable uncertainty in making calculations. Table 18 shows the elderly ratios for six alternative demographic scenarios developed by Statistics Sweden.¹⁶

The increased dependency and elderly ratios in the base scenario are primarily due to the expectation that mortality will continue to fall. In one alternative scenario (*high mortality*), mortality is assumed to remain at the current level. In this same scenario, the dependency and elderly ratios rise markedly in the future, amounting to 78 per cent and 40 per cent respectively in 2090 (see Table 18 and Diagram 17).

¹⁶ The *base scenario* assumes a total fertility rate (TFR), i.e. the average number of children born per woman, of 1.83 over the long term. The *low fertility* alternative assumes a TFR of 1.66 and the *High Fertility* alternative assumes a TFR of 2.05. The *base scenario* assumes that mortality will decrease such that average life expectancy increases from 79 years to 85 years for men and from 83 years to 87 years for women between 2008 and 2060. In the *low mortality* alternative, average life expectancy increases to 86 years for men and 91 years for women by 2060. The *high mortality* alternative assumes no change in mortality in the future and that average life expectancy will remain constant. The *base scenario* assumes that the immigration surplus, i.e. the number of immigrants minus the number emigrants, will average 19 000 per year over time. The *high migration* alternative assumes an immigration surplus of 28 000 per year. The *low migration* alternative assumes an immigration surplus of 12 000 per year. (Statistics Sweden, The future population of Sweden 2009–2060, *Demographic reports* 2009:1).

Table 18 Elderly ratio in different scenarios

Per cent

	2008	2030	2060	2090
<i>Base scenario</i>	30.3	41.9	47.2	49.6
Low mortality	30.3	43.1	53.3	54.9
High mortality	30.3	39.3	40.4	40.1
Low fertility	30.3	41.9	49.1	52.7
High fertility	30.3	41.8	44.6	45.6
Low immigration	30.3	43.1	49.9	52.8
High immigration	30.3	40.7	45.6	48.6

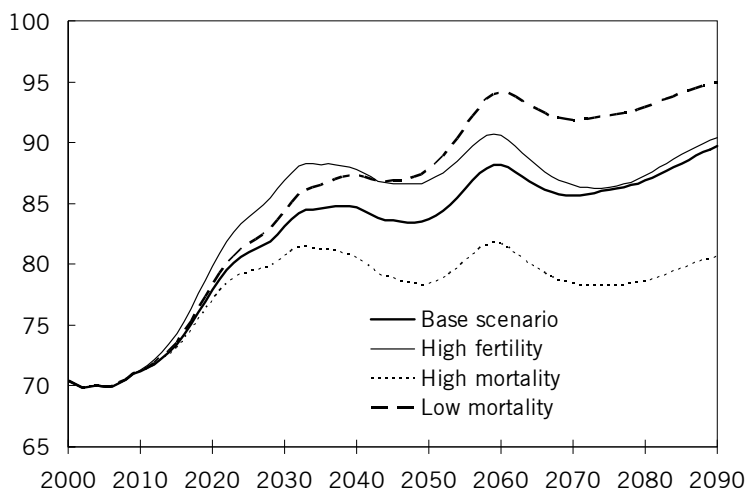
Sources: Statistics Sweden and own calculations.

The *high fertility* scenario assumes a fertility rate of 2.05 children per woman, compared with 1.83 children per woman in the base scenario. This is assumed to occur because of decreased childlessness and a return to women bearing their first child at a younger age.¹⁷ Higher fertility leads to a greater number of children. In the slightly longer term, as children reach adulthood, the number of people of working age also increases. In the very long term, the number of elderly does also. The direct consequence of higher fertility is a higher youth ratio, and ultimately, in the long run, the elderly ratio falls as children reach adulthood. The dependency ratio becomes higher over an extended period (see Diagram 17). In all scenarios, the elderly ratio will rise between 10 and 25 percentage points. Consequently, the rise in the elderly ratio is considerable for the demographic trend in all scenarios.

¹⁷ The average age of women when giving birth to their first child rose from 24 years in 1970 to 29 in 2008.

Diagram 17 Dependency ratios in various demographic scenarios, 2000–2090

Per cent



Sources: Statistics Sweden and own calculations.

International comparison

Considered from an international perspective, the demographic trend in Sweden is relatively favourable. The United Nations (UN) estimates that the elderly ratio in Europe as a whole will rise to 52 per cent by 2050 (see Table 19). In Italy, Spain and Germany, the elderly ratio is expected to rise strongly to between 64 per cent and 68 per cent by 2050.

Table 19 Elderly ratio in different countries, 2000 and 2050

Per cent

	2000	2050
North America	20.9	39.7
United Kingdom	26.9	41.5
Sweden	29.3	44.8
France	27.6	52.5
Germany	26.2	64.2
Spain	27.2	65.2
Italy	29.8	68.2
<i>Europe</i>	<i>24.3</i>	<i>52.0</i>
<i>The world</i>	<i>12.7</i>	<i>28.2</i>

Source: United Nations, 2008.

8.3.1.2 The development of public finances

This section describes the projections of the public finances in *the base scenario*. The base scenario should be viewed as a reference against which the other scenarios are compared. This does not mean that the trend in the base scenario is more likely than the trends in the alternative scenarios.

A natural point of departure for the calculations is a scenario whereby the current taxation and welfare systems remain unchanged. Consequently, the calculations should not be perceived as a forecast but

rather as a description of how general government expenditure and revenues will develop *if* the current design of taxation and welfare systems is maintained. This provides a good starting point for analysing the consequences of the demographic changes and the problems that could arise in the long-term sustainability of fiscal policy.

The labour market

Future changes in the public finances depend strongly on the labour market trend.

As a starting point, it is assumed that the labour force and employment will develop in pace with the demographic trend. Another important assumption is that implemented structural reforms, and those proposed in the Budget Bill for 2010, will mean a rise in employment of 125 000 individuals. The trend is also affected by the assumption that the economy will return to a more normal level. On the whole, this means that the number of people in the labour force will increase by nearly 407 000 and that employment will increase by 401 000 by 2090 (see Table 20). Over the same period, the number of the population within working-age range will increase by 402 000.

Table 20 Population, employment and labour force, 2008 and 2090

Thousands and percentage change

	2008	2090	Change in per cent
Labour force, 16–64 years	4 778	5 185	8.5
Number of employed, 16–64 years	4 484	4 885	8.9
Population, 16–64 years	5 946	6 339	6.6

Note: The labour force figures indicated include full-time students who have looked for work, in accordance with the ILO definition.

Sources: Statistics Sweden and own calculations.

The number of people with income consisting of transfer payments – primarily old-age pensioners – will also increase between 2008 and 2090. This increase is a direct result of the population trend, and combined with the assumption that retirement age will remain the same as today,¹⁸ most people will begin to receive old-age pension from age of 65. Other people with transfer-payment income will decrease as a share of the population.

General government revenue

In the calculations, tax and expenditure rates are kept constant after 2012, and general government revenue is therefore subsequently affected by demographic factors and the labour market trend.

Primary general government revenue,¹⁹ which in 2008 amounted to 50.3 per cent of GDP, is expected to decrease to 49.3 per cent of GDP in 2012. Primary general government revenue will then increase somewhat

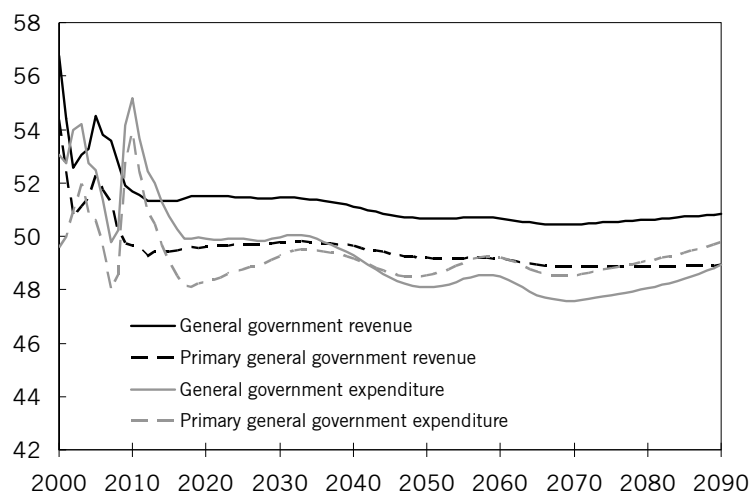
¹⁸ The new pension system includes a mechanism that makes it reasonable to assume that the effective retirement age will rise over time (see further Section 8.4).

¹⁹ Primary revenue refers to all revenue except return on capital.

to 49.8 per cent of GDP in 2030 (see Diagram 18). To a large extent, the increase is attributable to tax revenues from household consumption rising between 2012 and 2030. This is a consequence of saving by the elderly that is lower than average among the population as a whole. Consequently, as the proportion of elderly people in the population increases, consumption can be expected to rise and saving to decrease.²⁰

Diagram 18 Primary and total general government expenditure and revenue, 2000–2090

Per cent of GDP



Source: Own calculations.

General government expenditure

Primary general government expenditure,²¹ which in 2008 amounted to 48.5 per cent of GDP, is expected to increase to 49.8 per cent of GDP in 2090 as a result of changes in the population structure. The increase in the elderly ratio in particular affects expenditure on health care and care of the elderly. Changes in expenditure on old-age pensions are relatively minor.

Pension expenditure is expected to increase from 6.4 per cent of GDP in 2008 to a peak of 6.9 per cent in the early 2030s, falling back to 6.4 per cent by 2090. The pension reform of the 1990s means that the increase in the elderly ratio will have a relatively limited impact on pension expenditure. Assuming that the retirement age remains constant, pensions will decrease as average life expectancy increases (see Diagram 19).²² Furthermore, in the national accounts, the premium

²⁰ Hill, Löf and Pettersson, *Sweden's economy: Long-term scenarios*, Appendix 1 to the Long-term survey 2008 (SOU 2008:108), p80.

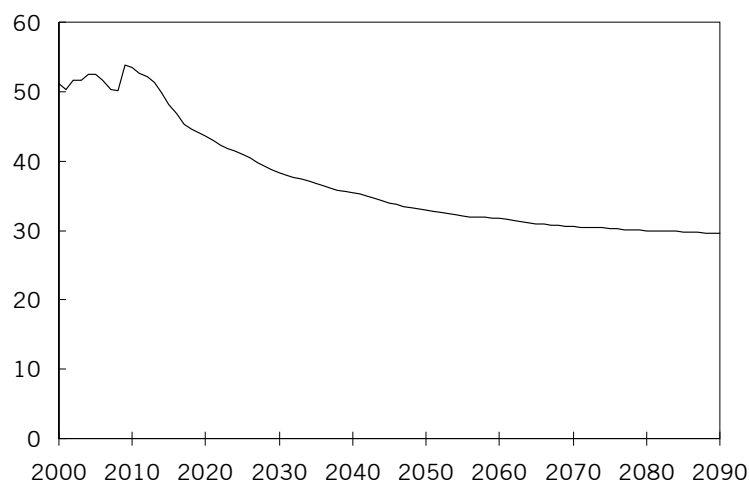
²¹ Primary expenditure refers to all expenditure except interest on debt.

²² The pension system entails annual pension payments decreasing when average life expectancy increases, unless the retirement age changes.

pension system has been moved to the private sector, resulting in the decline of pension payments from the old-age pension system.²³

Diagram 19 Old-age pension per person 65 or older

Per cent of average wage



Source: Own calculations.

Expenditure on health care, care of the disabled and the elderly is expected to rise from 10.5 per cent of GDP in 2008 to slightly more than 13.3 per cent of GDP in 2090. The pattern of utilisation of general government services is assumed to remain constant over time. For example, it is assumed that a woman of 75 will require the same amount of health care and care of the elderly in 2090 as today. Consequently, as the proportion of elderly people in the population increases, costs for health care and care of the elderly will also rise.

Since the youth ratio will decrease somewhat, expenditure on child care and education is expected to also decrease from 6.7 per cent of GDP in 2008 to 6.2 per cent of GDP in 2090. Combined, the consumption of general government services is expected to rise from 26.4 per cent of GDP in 2008 to 28.0 per cent of GDP in 2090.

²³ According to a decision by the EU's statistical agency Eurostat, the premium pension system shall not be attributed to the general government sector in the national accounts.

Table 21 Public finances

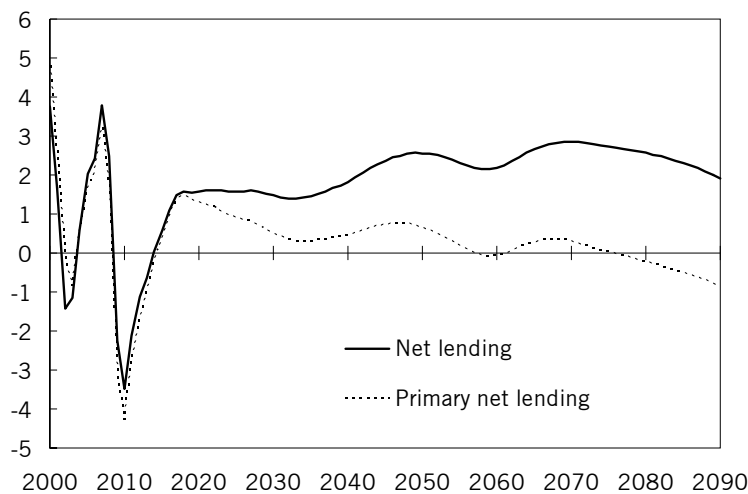
	2000	2010	2020	2030	2040	2050	2060
Primary revenue	54.4	49.7	49.6	49.8	49.6	49.2	49.1
Taxes and charges	51.3	46.0	46.1	46.4	46.5	46.2	46.3
Other revenues	3.1	3.7	3.4	3.3	3.2	3.0	2.9
Primary expenditure	49.5	53.9	48.3	49.2	49.2	48.5	49.2
Transfer payments	21.0	21.8	19.9	19.8	19.6	18.9	19.0
Consumption	26.0	28.6	25.6	26.6	26.7	26.8	27.4
Investments	2.5	3.5	2.8	2.8	2.8	2.9	2.9
Primary net lending	4.8	-4.2	1.3	0.5	0.5	0.7	-0.1
Capital income, net	-1.1	0.8	0.3	1.0	1.4	1.9	2.2
Net lending	3.7	-3.4	1.6	1.5	1.8	2.6	2.2
Financial position							
Consolidated gross debt	56.8	40.4	22.2	4.3	-7.8	-19.3	-25.0
Adjusted gross debt ¹	53.6	45.5	29.4	12.5	0.5	-11.3	-17.3
Net debt	5.7	-11.9	-15.1	-26.7	-33.6	-44.6	-51.4

Net lending and net debt

In 2008, net financial lending amounted to -2.5 per cent of GDP and is expected to fall to -3.4 per cent of GDP in 2010. During the period 2011–2015, it is assumed that the economy will gradually adapt to a more normal level of resource utilisation with higher employment and lower unemployment. This means that revenues will increase and expenditure will decrease considerably for those years. Net financial lending is expected to amount to 0.6 per cent of GDP in 2015 and to 1.9 per cent of GDP in 2090 (see Diagram 20). As a consequence of net lending, net debt will decline from 13.8 per cent of GDP in 2008 to -65 per cent of GDP in 2090.

Diagram 20 Net lending and primary balance in the base scenario

Per cent of GDP



Source: Own calculations.

Assessment of the long-term sustainability of fiscal policy

The base scenario indicates that budget strengthening may be needed to safeguard the long-term sustainability of fiscal policy. The S2 indicator amounts to 0.6 and means that a long-term sustainable fiscal policy can be achieved by means of a permanent increase in taxation or decrease in expenditure equivalent to 0.6 per cent of GDP. It should be noted that the primary balance is positive for most of the period (see Diagram 20). After 2075, however, primary deficits occur as a consequence of the ageing population. Since it is assumed that the deficit for the final year will remain permanent, this has a major impact on the S2 indicator. According to the so-called RPB indicator, the calculations also show that an average primary balance of 1.3 per cent of GDP will be necessary during the period 2013–2019 for fiscal policy to be sustainable ($S2=0$).

Compared with the assessment given in last year's convergence programme update, the S2 indicator has weakened by 0.7 percentage points. This is partly explained by changes in the population forecast.

8.3.2 Increased demand for leisure and welfare

Reasoning in prior sections presumes that the consumption of general government services will develop in pace with demographic trends and that the population will work more than today. However, certain basic conditions exist that could lead to a non-demographically motivated increase in welfare demand that results in the population working less. This section discusses these mechanisms and their consequences for the long-term sustainability of fiscal policy.

8.3.2.1 Increased demand for welfare

There appears to be a stable pattern, both in Sweden and internationally, whereby general government consumption is increasing more than can be motivated solely by demographic factors.²⁴ If general government consumption in Sweden had followed the demographic trend between 1980 and 2007, the increase would have averaged 0.5 per cent per year (in volume). Instead, it rose by an average of 1.2 per cent per year.

There may be several reasons why general government consumption is increasing more than can be explained demographically. One explanation is that increased prosperity brings increased demand for welfare services (this phenomenon is generally called Wagner's Law). Another explanation is that technological development can create new needs that may lead to increased demand. In health care, for example, medical advancements can generate pressure to provide new treatments.²⁵

²⁴ See for example the Long-term survey 2008, SOU 2008:105, p171, the Budget Bill for 2009, p256 and Börjesson, *Välfärdsmysteriet? - Kommunsektorns utveckling 1980–2005 (The welfare mystery? Development of the municipal sector 1980–2005)*, the Swedish Association of Local Authorities and Regions (SALAR), 2008.

²⁵ OECD, *Projecting OECD health and long-term care expenditures: what are the main drivers*, OECD Economics Department Working Paper 477, 2006.

Regardless of the explanation behind increased general government consumption, if this trend continues, it will lead to increased sustainability problems for the public finances. In one alternative scenario (*higher health care costs*), it is assumed that the consumption of health care and care of the elderly will increase by 0.2 percentage points (in volume) per year more than would be demographically motivated. This would lead to a considerable weakening in sustainability (by the equivalent of 8.0 percentage points according to the S2 indicator) compared with the base scenario (i.e. from 0.6 per cent of GDP in the base scenario to 8.6 per cent in the higher health care costs scenario, see Table 22).

The scenario details negative net lending from and including 2030 (see Diagram 21). For 2060, net lending is about -5 per cent of GDP with the deficit subsequently rising at an increasing pace.

Table 22 Sustainability indicators in the various scenarios

Per cent of GDP

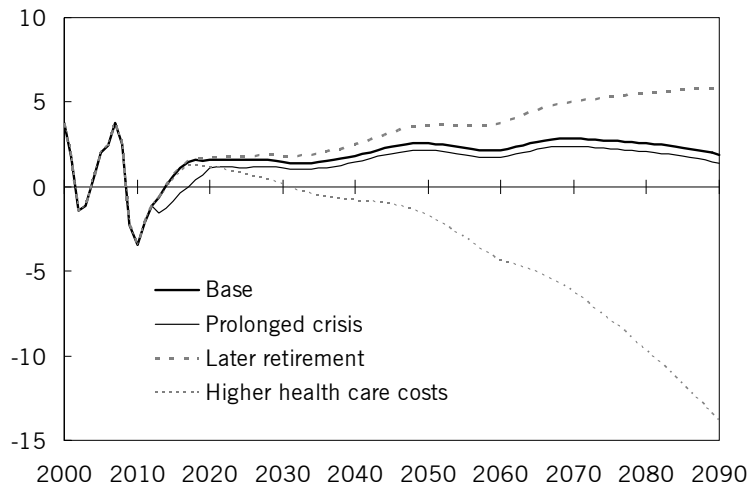
	S2	Difference compared with base scenario	RPB 2013–2019	Net debt 2090
<i>Base scenario</i>	0.6	0.0	1.3	-65
Higher health care costs	8.6	8.0	9.0	154
Increased leisure	0.9	0.3	1.4	-37
Prolonged crisis	0.6	0.0	0.2	-54
Higher unemployment	1.0	0.4	1.5	-28
Lower labour market participation	0.9	0.3	1.4	-32
Un-financed transfer payments	1.5	0.9	0.0	24
Improved integration	0.0	-0.6	0.8	-131
Later retirement	-0.4	-1.0	1.3	-123
Earlier start of working life	-0.2	-0.8	0.8	-143
Improved health	0.0	-0.6	0.6	-95

Note: Negative net debt indicates that assets exceed liabilities.

Source: Own calculations.

Diagram 21 Net lending in various scenarios

Per cent of GDP



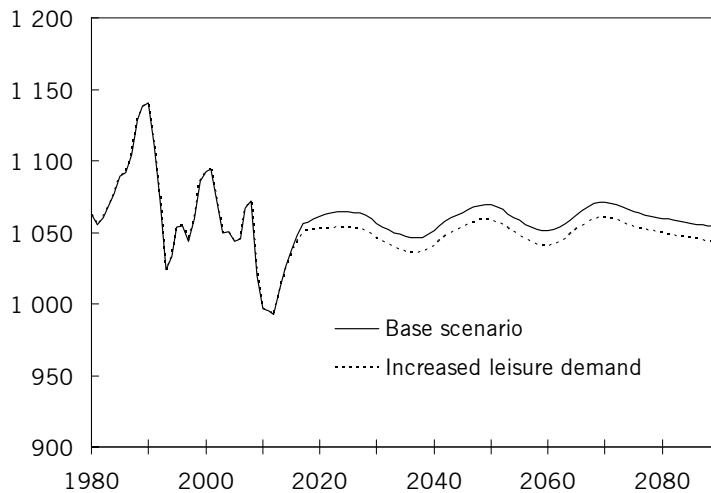
Source: Own calculations.

8.3.2.2 Increased demand for leisure

Increased economic prosperity is widely suggested to lead to an increased demand for leisure through a reduction in working hours and earlier retirement.²⁶ Between the 1980s and the first decade of the new millennium, average working time among the population decreased by 2.5 per cent (see Diagram 22).²⁷ Over the same period and in real terms, average income rose by slightly more than 2 per cent per year.

Diagram 22 Hours worked among the population, 1980–2090

Hours per year and person



Note: Indicates the average number of hours worked among the population aged 15–74.

Source: Statistics Sweden and own calculations.

²⁶ See for example Zilibotti, F “*Economic Possibilities for Our Grandchildren*” 75 Years after: A Global Perspective, Working Paper 344, University of Zurich, 2007.

²⁷ The average number of hours worked per person in the population aged 15–74 was 1 088 hours during the period 1980–1989 and is expected to have declined to 1 061 hours for 2000–2009.

An increased amount of leisure time and a decreased number of hours worked leads to lower tax revenues and a weakening of sustainability. In one alternative scenario (*increased leisure*), it is assumed that the average number of hours worked will be 1 per cent lower than in the base scenario. As a consequence of this assumption, sustainability weakens by 0.3 percentage points compared to the base scenario (see Table 22). Note that the assumed decrease in the average number of hours worked is relatively small compared with the decrease that took place between the 1980s and the first decade of the new millennium. If the historical decline in the average number of hours worked continues, it could lead to a very substantial weakening of the long-term sustainability of fiscal policy.

8.3.3 Effects of the deep recession

Sweden finds itself in the midst of a deep recession. In the base scenario, it has been assumed that the economy will recover and have adjusted to more normal economic conditions by 2017. If the recession were to grow deeper and/or become more drawn out than expected, sustainability would only weaken marginally. This presupposes that the crisis does not give rise to structural changes in the Swedish economy. In one alternative scenario (*prolonged crisis*) it is assumed that the economy will not have adjusted to more normal economic conditions until 2020. Unemployment is an average of 1.5 percentage points higher for the years 2013–2020, and general government expenditure is an average 1.2 percentage points higher (as a share of GDP) for 2013–2020. This results in a very limited weakening of sustainability. According to the S2 indicator, this results in a very limited weakening of sustainability—an equivalent of 0.02 percentage points as compared to the base scenario. However, general government net wealth will stabilise at a somewhat lower level, making interest revenues and net lending lower compared with the base scenario (see Diagram 21).

The base scenario assumes long-term unemployment of 5.8 per cent and a labour market participation of 81.9 per cent.²⁸ There is also a risk that the crisis could lead to a lasting decrease in employment and higher unemployment, which would weaken sustainability. Consequently, one alternative scenario (*higher unemployment*) assumes that unemployment will be one percentage point higher over the longer term, weakening sustainability by the equivalent of 0.4 percentage points as compared to the base scenario, according to the S2 indicator. If labour force participation and the employment ratio were to be one percentage point lower in the longer term, sustainability would instead weaken by roughly 0.3 percentage points compared with the base scenario (*lower labour force participation*). This underscores the importance of not only

²⁸ Unemployment and labour market participation are expressed in accordance with the ILO definitions.

preventing a high level of unemployment from gaining a lasting foothold but maintaining levels of labour force participation and employment.

Prior experience with active fiscal policies during a recession underscore the risk that measures only intended to have a temporary effect on the public finances nonetheless end up becoming permanent. One alternative scenario (*un-financed transfer payments*) assumes that the implementation of an un-financed reform permanently increases transfer payments to households by the equivalent of 1 per cent of GDP. This weakens sustainability, according to the S2 indicator, by about 0.9 percentage points as compared to the base scenario.²⁹

8.4 Opportunities

This section discusses a number of potential courses that could be taken to mitigate possible sustainability problems. Discussed first is the extent to which increased economic growth could be a solution. Following this, there is a description of how various labour market improvements could strengthen sustainability. In conclusion, a discussion is provided on whether improved health among the population could reduce pressure on the public finances.

8.4.1 Economic growth

Increased economic growth is mentioned as a potential solution to possible sustainability problems. Economic growth deriving from increased productivity in the business sector does not generally enhance sustainability. Higher productivity means that income increases in society and therefore tax revenues do also. However, general government expenditure also increases. This is a consequence of the fact that wage trends in the general government sector generally follow those in the private sector. To a larger extent, transfer payments also follow the wage trend. For this reason, productivity growth does not generally help improve sustainability. General government welfare commitment entails increased prosperity resulting from productivity improvements in the business sector as distributed between both the employed and unemployed.

If instead, growth derives to a greater extent from the population working more, sustainability will be improved due to a rise in income and the tax base. In general, transfer payments also decrease. On the whole, this brings an improvement in the public finances.

8.4.2 Labour market improvements

An increase in the number of hours worked is crucial for the long-term sustainability of fiscal policy, and the Government's policies are designed to raise employment and the number of hours worked. Illustrated below

²⁹ Since the transfer payments are subject to taxation, the effect on S2 is less than 1 per cent.

are three aspects of importance for the long-term sustainability of fiscal policy.

8.4.2.1 Later retirement

By 2090, average remaining life expectancy at age 65 is expected to rise by 5.0 years for men and by 3.6 years for women.³⁰ Increasing average life expectancy and improved health among the elderly allows people to continue working to a higher age. For this reason, the retirement age can be expected to rise. At the same time, a higher retirement age can also be encouraged by pension incentives which delay retirement.³¹ This is partly a consequence of pensions automatically being higher the later they are paid out and partly a consequence of more years worked providing greater pension rights. There are therefore strong reasons to believe that both retirement age and pensionable age will rise, enabling the increase in the number of years spent working and resulting in a higher number of hours worked.³² A higher retirement age also translates to savings in various social benefit systems.

The *later retirement* alternative scenario, assumes a gradual rise of two years in the retirement age by 2090. This corresponds to slightly more than half of the increase in average life expectancy. Consequently, the effective elderly ratio would not rise as substantially and would be 43 per cent in 2090 as compared with 50 per cent in the base scenario. This shows an improvement in the S2 indicator by approximately 1.0 percentage points compared with the base scenario.

Net financial lending grows stronger throughout the period and is close to 5 per cent of GDP in 2090 (see Diagram 21).

8.4.2.2 Earlier start of working life

The age at which people enter working life is rising.³³ This is largely because a greater number of people continue their education but also because the transition from completed education to work takes longer. The time spent outside the labour market is a burden on the public finances because of higher transfer payments and expenditure on

³⁰ According to Statistics Sweden's population forecast, the average remaining life expectancy at age 65 was, in 2009, 18.0 years for men and 20.9 years for women.

³¹ According to the Fiscal Policy Council, the retirement age is calculated to rise by 1.59 years for men and 1.39 years for women by 2024 when all generations will be covered by the new pension system (Fiscal Policy Council, *Swedish fiscal policy*, 2009).

³² Retirement age and pensionable age are two different concepts. Retirement age is the age at which the individual leaves the labour force. Pensionable age is the age at which the individual receives his/her national pension. For many people, retirement age and pensionable age coincide.

³³ According to a report by the Institute for Labour Market Policy Evaluation (IFAU), 70 per cent of people born in the late 1960s had their first "real job" before the age of 21 (in the report, a "real job" entails an annual wage of at least half that for a typical 45-year-old). For those born in the early 1980s, the corresponding figure was about 45 per cent. (Erikson, Nordström Skans, Sjögren and Åslund, *Ungdomars och invandrades inträde på arbetsmarknaden 1985–2003 [Young people's and immigrants' entrance into the labour market 1985-2003]*, IFAU Report 2007:18).

education, but also through lower tax revenues. On the other hand, those with a higher education have a higher level of productivity and employability, which results in higher tax revenues and lower future costs for the social protection systems.

A lower entry age can be achieved by accelerating education and shortening the period between completing education and entering work.

In the *lower entry age* scenario, the entry age is lowered by assuming increased labour force participation and higher employment in the 15–29 age group. The proportion of people within this group is assumed to gradually increase until 2023 so that the average entry age³⁴ decreases over the period by a year (from 21.2 years to 20.2). According to the S2 indicator, this means an improvement in sustainability of about 0.8 percentage points as compared with the base scenario.

8.4.2.3 Improved integration

As a group, people born abroad have a lower level of employment and a higher rate of unemployment than those born in Sweden. In 2008, the employment ratio was 64.4 per cent among foreign-born people, while unemployment was 12.1 per cent. The corresponding figures for Swedish-born people were 77.9 per cent and 5.1 per cent respectively. Increased integration could lead to higher employment and lower unemployment in this group. General government revenues would thus rise and certain areas of general government expenditure would decrease.

In the scenario with *improved integration* of foreign-born people in the labour market, it is assumed that labour force participation and the employment ratio among foreign-born people would, over time, approach the same levels as among Swedish-born people. The discrepancies are assumed to decrease by slightly more than one third. In the long term, this would mean 1.7 per cent higher employment than in the base scenario and a 1.6 per cent higher average number of hours worked among the population. The overall effect would be an improvement in sustainability (measured in terms of the S2 indicator) of approximately 0.6 percentage points compared to the base scenario.

8.4.3 Decreased need for health care and care of the elderly

The base scenario assumes that the utilisation of general government services is unchanged over time. The utilisation of health care among groups defined according to age and gender is therefore kept constant. A common objection to the view that an ageing population leads to increased expenditure on health care and care of the elderly is that older people are becoming healthier and health care and care costs tend to increase towards the end of life rather than increase with age. A purely

³⁴ The entry age is calculated as the average age at which a 31-year-old (who is already participating in the labour force) would have first entered the labour market given that working patterns among various age groups are constant for the year concerned. In this context, entry into the labour market refers to participation in the labour force in accordance with Statistics Sweden's labour force surveys.

demographic cost projection can consequently exaggerate the cost pressure.

In the *improved health* scenario, the age-specific costs for health care and care of the elderly are displaced upwards in terms of age, in pace with increasing average life expectancy. The remaining average life expectancy for men, for example, is expected to rise by five years by 2090. Consequently, it is assumed that the needs for health care and care of the elderly for an 80-year-old man in 2090 will be the same as for a 75-year-old man in 2009. This improves sustainability, according to the S2 indicator, by 0.6 per cent of GDP compared with the base scenario.

It should be noted that it is not self-evident that the need for care at various ages decreases as average life expectancy increases. Medical advances mean that more people can now reach a higher age despite poor health, which could lead to increasing average care needs at various ages.³⁵

8.5 Overall assessment

On the whole, the long-term sustainability of fiscal policy appears relatively good. This conclusion is also supported by assessments carried out by several international organisations. According to the calculations in the base scenario, permanent budget strengthening of 0.6 per cent of GDP would be necessary for fiscal policy to be sustainable in a strict sense. Consequently, it is important that deficits over the next few years be temporary in nature and that an austere fiscal policy be maintained when the economy improves. Efforts should be made to ensure that the shortfall in meeting the surplus target for 2009–2012, caused by the deep recession, is only temporary.

However, the future challenges for fiscal policy are potentially greater. It is highly likely that demand for welfare services will increase more than can be motivated by demographic factors alone. It is also likely that many people will elect to work less in the future. Against this background, policies focusing on increasing the labour supply and employment could help to significantly improve sustainability in the public finances. An increased labour supply leads to a much better point of departure for fiscal policy, although risks remain that could jeopardise the sustainability of fiscal policy. It is important to continue to analyse these risks and to discuss them.

The recession is not currently deemed to present any major risk for sustainability. However, a deepened crisis could lead to structural impairment of the labour market (e.g. a lasting decrease in employment and higher unemployment) which would weaken sustainability.

³⁵ See for example Klevmarcken and Lindgren Eds., *Simulating an Ageing Population – A microsimulation approach applied to Sweden*, Contributions to Economic Analysis 285, Emerald Publishing, 2008.

Furthermore, prior experience of active fiscal policy in a recession underscores the risk that measures intended to influence the public finances only temporarily nonetheless end up having a permanent impact on taxation and expenditure. Since this has relatively major negative consequences for sustainability, it is important to stop this from occurring.

Appendix A – Calculation assumptions

The calculation methods used in the estimate of public finances for the period of 2013–2099 are discussed in detail below.

Demographic assumptions

The estimate is based on Statistics Sweden’s May 2009 population forecast shown in Table A.1.

Table A.1 Demographic assumptions

	2000	2010	2020	2030	2040	2050	2060
Birth rate	1.55	1.84	1.85	1.83	1.83	1.83	1.83
Average life expectancy, women	82.0	83.4	84.4	85.3	85.9	86.4	86.8
Average life expectancy, men	77.4	79.5	81.2	82.4	83.4	84.1	84.7
Net migration, thousands	24 600	45 000	22 800	21 700	20 500	19 700	19 000

Sources: Statistics Sweden.

Economic assumptions

Labour market

Projections regarding employment and the number of hours worked are made for various groups within the population divided according to age, gender and country of birth. Over time, the degree of participation in the labour market is assumed to remain constant in each group. This can be interpreted as “unchanged labour market behaviour,” since the employment ratio, average hours worked, and unemployment are constant. In addition to demography and policies to stimulate supply, during the initial years of the long-term projection, the labour market trend is also affected by the economy's return to equilibrium. This means a strong rise in employment.

Employment in the general government sector is assumed to develop in line with demographically-induced general government consumption.

Productivity

The productivity assumption for the business sector is based on an analysis of historical trends. As far as the trend is concerned, underlying development in productivity is assumed to be 2.4 per cent from 2013 to 2020. It subsequently falls to 2.2 per cent in 2030 and then remains steady. Adjustments are made in relation to the underlying trend because the productivity level at the 2012 outset is not in equilibrium. In an international perspective, the Swedish productivity trend has been strong over the past 15 years, with the exception of the past few years. It is reasonable to assume that, in the long run, it will adjust to international

growth rates. The productivity trend in the general government sector is expected to be zero from 2013 on.³⁶

Inflation and wages

The Riksbank is assumed to pursue a monetary policy whereby inflation maintains an annual rate of 2 per cent.

In all calculations, it is expected that the proportion of wage costs and gross profits in the business sector remain constant over time. This is achieved by adjusting hourly wages. Higher productivity generates scope for increased wages.

Wages in the general government sector rise in pace with those in the private sector. The economic calculation assumptions are given in Table A.2.

Assumptions regarding return on capital

In the long term, it is assumed that average interest income and expenses are the same for all sectors in the economy. With an expected nominal interest rate of 5 per cent and a given inflation rate of 2 per cent, the real rate of interest is thus 3 per cent. During the first six years of the long-term calculation, a gradual adaptation to the long-term interest assumption takes place.

In addition to interest-bearing assets, there are also non-interest-bearing assets. The return on these assets consists of share dividends and changes in value. Over time, dividends are assumed to be 3 per cent with the value increasing by 2 per cent. The total return thus amounts to 5 per cent, which is the same as interest-bearing assets.

It is also likely that differences will arise between borrowing and lending rates and that there will be differences between sectors. The return on non-interest-bearing assets will most likely be higher than for interest-bearing assets in the long term. However, the assumption regarding the return on financial capital is used for the purpose of simplification and to avoid the focus of the analysis shifting from central issues to those surrounding debt dynamics.

³⁶ Previously, the productivity trend in the general government sector was by definition zero in the national accounts. These principles have now been revised, allowing productivity levels in certain areas of the general government sector to vary over time. The results reported to date provide only a little guidance and the constant productivity assumption is therefore retained for the time being in long-term calculations.

Table A.2 Macroeconomic assumptions

	2000	2010	2020	2030	2040	2050	2060
Percentage change¹							
Population aged 16-64 ²	0.5	0.3	0.1	-0.1	0.2	0.0	0.1
Labour force participation, 16-64 age group ⁶	1.1	-2.0	0.1	-0.1	0.2	0.0	0.1
Employed aged 16-64	2.2	-3.4	0.2	-0.1	0.3	0.1	0.1
Hours worked	1.1	-1.5	0.1	-0.0	0.2	0.0	0.1
Business sector productivity ³	4.3	3.0	2.4	2.2	2.2	2.2	2.2
GDP, fixed prices	4.4	0.6	2.1	1.8	2.2	1.9	2.2
GDP per capita	4.1	-0.0	1.6	1.6	2.0	1.8	2.0
GDP productivity	3.8	2.2	1.9	1.7	1.9	1.9	2.0
GDP deflator	1.5	0.6	2.4	2.5	2.2	2.2	2.1
CPI, annual average	0.9	0.4	2.0	2.0	2.0	2.0	2.0
Hourly wages ⁴	5.4	2.3	4.5	4.4	4.2	4.2	4.2
Per cent							
Real interest rate ⁵	4.5	3.3	3.0	3.0	3.0	3.0	3.0
Employment ratio, 16-64 age group	74.1	70.2	76.5	76.3	76.3	76.8	76.9
Open unemployment, aged 16-64 ⁶	5.3	8.4	4.6	4.4	4.4	4.3	4.3
ILO unemployment, aged 16-64	6.8	11.4	6.3	5.9	5.9	5.9	5.8

General government revenue

The estimates described here are based on an assumption of constant tax rates relative to different tax bases. Consequently, the aggregate tax ratio will vary if the tax bases develop in a different way than GDP. This method reflects unchanged tax regulations. Stable tax rates over time are advantageous both on grounds of effectiveness and redistribution policy. Table A.2 details general government taxes and charges as a percentage of GDP, as a percentage of the respective tax base (implicit tax rate) and as the tax base as a percentage of GDP.

Table A.3 Taxes and charges

Per cent of GDP

	2000	2010	2020	2030	2040	2050	2060
Taxes and charges	51.3	46.0	46.1	46.4	46.5	46.2	46.3
Household direct taxes and charges							
Proportion of GDP	21.1	16.5	16.3	16.4	16.4	16.3	16.3
Implicit tax rate for direct taxes	29.3	21.6	22.0	22.0	22.0	22.0	22.0
Tax base for direct taxes as percentage of GDP	62.4	63.6	61.7	61.7	61.6	61.1	61.4
Implicit tax rate for charges	5.9	6.0	6.0	6.0	6.0	6.0	6.0
Tax base for charges as percentage of GDP	47.3	47.1	45.9	46.2	46.3	46.6	46.7
Corporate direct taxes							
Proportion of GDP	3.8	2.9	3.1	3.1	3.1	3.1	3.1
Implicit tax rate	13.3	10.7	11.3	11.3	11.3	11.3	11.3
Tax base as percentage of GDP	28.4	27.4	27.7	27.2	27.1	27.2	27.0
Indirect taxes¹							
Proportion of GDP	13.3	14.1	14.3	14.5	14.6	14.3	14.3
Implicit tax rate	27.0	29.1	27.5	27.1	26.8	26.8	26.7
Tax base as percentage of GDP	49.4	48.3	52.1	53.7	54.3	53.4	53.5
Employer contributions and self-employed social security contributions²							
Proportion of GDP	13.1	12.5	12.4	12.4	12.5	12.5	12.6
Implicit tax rate	32.0	29.7	29.6	29.6	29.6	29.6	29.6
Tax base as percentage of GDP	41.0	42.0	41.7	42.0	42.1	42.4	42.5

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

Sources: Statistics Sweden and Ministry of Finance.

General government consumption expenditure

The estimate of general government consumption expenditure is based on age- and gender-distributed unit costs³⁷ for childcare, primary and secondary education (compulsory school and upper secondary school), adult education (municipal adult education and higher education), health care (outpatient and inpatient care), and care of the elderly/disabled (home help service, sheltered accommodation, mobility service and services according to the Act concerning Support and Service for Persons with Certain Functional Impairments). All these expenditure areas are projected in terms of volume by the population change in the relevant age group for women and men. Other consumption expenditures, which mainly consist of general administration, the judicial system and defence, are assumed to follow the change in the total population. Over time, the price of general government consumption rises in line with the wage trend. It is assumed in the estimates that productivity growth in all general government activities is zero. This results in the price of general government consumption growing by more than approximately 2 percentage points each year as compared to CPI.

³⁷ These unit costs are based on 2004/2006 consumption patterns.

Table A.4 General government consumption

Per cent of GDP

	2000	2010	2020	2030	2040	2050	2060
Total consumption	26.3	28.6	25.6	26.6	26.7	26.8	27.4
Childcare	1.6	1.8	1.7	1.7	1.6	1.6	1.6
Primary and secondary education	3.9	4.0	3.6	3.7	3.5	3.5	3.6
Adult education	1.1	1.3	1.1	1.0	1.0	1.0	1.0
Health care	6.6	7.0	6.4	6.6	6.7	6.7	6.8
Care of the elderly	3.9	4.3	4.1	4.9	5.3	5.5	5.7
Other activities	9.1	10.2	8.7	8.7	8.6	8.5	8.5

Sources: Statistics Sweden and Ministry of Finance.

Transfer payments

The estimates assume a certain standard guarantee in the general government transfer payment systems. For a part of transfer payments, there are rules and regulations that automatically raise expenditure in pace with wages. This applies to pensions, which are adjusted upward in line with the earnings index, and also to transfer payments, which compensate for loss of earnings, e.g. health and parental insurance. Transfer payments, which lack an automatic standard guarantee, e.g. child benefit and study allowance, are assumed to increase in line with wages. Such a standard guarantee offsets the erosion of household transfer payments that would take place if the estimate were only based on a price projection.

Table A.5 General government transfer payments

Per cent of GDP

	2000	2010	2020	2030	2040	2050	2060
Total transfer payments	21.0	21.8	19.9	19.8	19.6	18.9	19.0
Transfer payments to households	18.0	17.9	16.2	16.2	16.0	15.3	15.5
Old-age	8.3	9.1	8.5	8.4	8.2	7.6	7.8
Ill health	3.8	3.4	3.0	3.1	3.2	3.2	3.1
Children/studies	2.3	2.4	2.2	2.2	2.2	2.2	2.2
Labour market	1.9	1.7	1.0	1.0	1.0	1.0	1.0
Other	1.7	1.3	1.4	1.4	1.4	1.4	1.4
Transfer payments to firms	1.9	2.2	2.0	2.0	1.9	1.9	1.8
Transfer payments abroad	1.1	1.6	1.7	1.7	1.7	1.7	1.7

Note: "Old age" comprises old-age pension, survivor's pension, central government and municipal pensions as well as supplementary housing benefit to pensioners.

"Ill health" comprises health insurance, occupational injury insurance, disability pension and carer's allowance. "Children/studies" comprises child benefit, parental insurance, maintenance support and study allowance. "Labour market" comprises unemployment benefit, labour market training grants and wage guarantee.

Sources: Statistics Sweden and Ministry of Finance.

Old-age pension system

Table A.6 shows the old-age pension system's revenue, expenditure and its financial position. The calculation of pension expenditure is based on demographic trends, economic conditions and applicable regulations. In

the base scenario, the average pensionable age is assumed to be 65 years and to remain constant.

Table A.6 Old-age pension system

Per cent of GDP

	2000	2010	2020	2030	2040	2050	2060
Revenue	8.0	7.3	7.0	6.9	6.8	6.9	7.0
Charges	6.5	6.5	6.4	6.4	6.4	6.5	6.5
Interest, dividends etc.	1.4	0.8	0.6	0.5	0.4	0.4	0.5
Expenditure	8.3	7.2	6.9	6.8	6.7	6.2	6.5
Pensions	6.2	7.1	6.8	6.7	6.6	6.1	6.4
Other	2.2	0.1	0.1	0.1	0.1	0.1	0.1
Net lending	-0.4	0.1	0.1	0.1	0.1	0.6	0.5
Net financial assets	32.4	25.1	16.6	13.1	10.1	11.5	14.2

Sources: Statistics Sweden and Ministry of Finance.

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

Table A.7 Long-term sustainability of public finances

Per cent of GDP, unless otherwise stated

	2000	2010	2020	2030	2040	2050	2060
Total expenditure	53.0	55.1	49.9	50.0	49.3	48.1	48.5
Age-related ¹	NA	30.2	27.5	28.5	28.6	28.1	28.7
Pensions ²	10.0	10.8	10.0	10.0	9.8	9.2	9.3
Guarantee pensions	0.5	0.6	0.5	0.5	0.5	0.4	0.5
Old-age pensions	6.2	7.1	6.8	6.7	6.6	6.1	6.4
Other pensions (disability and survivor)	2.8	2.5	2.2	2.2	2.2	2.1	2.0
Public pension fund reserves	0.6	0.6	0.6	0.6	0.5	0.5	0.5
Health care	NA	7.0	6.4	6.6	6.7	6.7	6.8
Care of the elderly	NA	4.3	4.1	4.9	5.3	5.5	5.7
Childcare	NA	1.8	1.7	1.7	1.6	1.6	1.6
Education	NA	5.3	4.7	4.7	4.6	4.5	4.6
Unemployment benefit	1.4	1.0	0.6	0.6	0.6	0.6	0.6
Other age-related expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest expenditure	3.5	1.2	1.6	0.7	0.1	-0.4	-0.7
Total revenue	56.8	51.7	51.5	51.4	51.1	50.7	50.7
Capital income	2.4	2.0	1.9	1.7	1.5	1.5	1.5
of which pension system	1.4	0.8	0.6	0.5	0.4	0.4	0.5
Assets in pension funds	32.5	26.7	17.6	13.8	10.7	12.1	14.9
of which assets other than government securities	20.0	21.5	15.6	12.8	10.0	11.4	14.0
Assumptions							
Labour productivity growth, GDP level	3.8	2.2	1.9	1.7	1.9	1.9	2.0
GDP growth	4.4	0.6	2.1	1.8	2.2	1.9	2.2
Unemployment	5.3	8.4	4.6	4.4	4.4	4.3	4.3
Population aged 65 and over as percentage of total population	17.2	18.5	21.0	22.9	24.1	24.0	25.1

¹ Age-related expenditure includes childcare. This expenditure is not included in the age-dependent expenditure, which an EU working group used in its calculations (presented in Appendix B).

² Pensions includes both old-age pension and disability pension.

Sources: Statistics Sweden and Ministry of Finance.

Appendix B – Comparison with long-term projections by the EU

A working group (Ageing Working Group) under the Economic Policy Committee (EPC), together with the European Commission, has made projections for the development of age-related expenditure up to 2060. These estimates were last reported in 2009.³⁸ The estimates in the convergence programme, however, are based on the data presented to the Riksdag in the Budget Bill for 2010. This section compares the demographic and macroeconomic key figures as well as age-related expenditure from these two sources.

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

Index unless otherwise stated

	2007	2010	2020	2030	2040	2050	2060
Population aged 15-64							
EPC	100.0	101.7	102.5	103.9	104.7	105.8	103.9
Convergence programme	100.0	101.1	100.8	102.1	103.3	104.8	104.3
Employed							
EPC, aged 15-64	100.0	96.7	107.0	108.0	109.0	110.7	108.9
Convergence programme, aged 16-64	100.0	94.8	103.0	103.9	105.1	107.4	106.9
Hours							
EPC	100.0	101.5	105.8	107.1	108.2	109.7	108.9
Convergence programme	100.0	96.1	104.2	105.1	106.4	108.5	108.5
ILO unemployment, per cent of labour force							
EPC, aged 15-64	6.1	10.4	5.9	5.9	5.9	5.9	5.9
Convergence programme, aged 16-64	6.1	11.4	6.3	5.9	5.9	5.9	5.8
Labour productivity							
EPC	100.0	106.2	126.9	150.7	178.2	210.8	249.3
Convergence programme	100.0	99.2	122.0	145.9	175.3	212.0	256.5
GDP							
EPC	100.0	107.8	134.2	161.2	192.6	230.7	271.0
Convergence programme	100.0	95.3	128.6	156.4	191.2	235.5	285.8
GDP per capita							
EPC	100.0	105.6	124.2	143.1	167.7	197.1	227.2
Convergence programme	100.0	93.2	119.7	140.5	168.9	204.4	244.8

Sources: European Commission and Ministry of Finance.

The population forecast used by EPC was prepared by Eurostat in 2008, while the convergence programme's estimates are based on Statistics Sweden's population forecast of May 2009. Population growth among people of working age is initially stronger in the ECP forecast, where net immigration is assumed to start converging towards zero after 2050. Ultimately, this means a decline in the working population from 2050 to

³⁸The 2009 Ageing report: Economic and budgetary projections for the EU 27 Member States (2007-2060).

2060. The elderly ratio ³⁹ is assumed to increase to 46.7 per cent in 2060 by EPC estimates, while in the convergence programme it is expected to be lower in 2060. This is mainly because EPC applies a higher average life expectancy, primarily for women, than Statistics Sweden. EPC diminishing net immigrations from 2050 on is also of importance.

Both EPC and the convergence programme assume that unemployment will adjust to a structural level of approximately 5.9 per cent. Throughout the period, EPC applies a stronger employment trend than the convergence programme.

The productivity level for 2060 is higher in the convergence programme than in EPC's calculations. Initially, however, it is lower.

The reason for the convergence programme's higher 2060 GDP level is the higher productivity level. While the number of people in employment is higher in the EPC calculations, the average number of hours worked as indicated by the convergence programme rises somewhat. This is in contrast with EPC's assumption that the number of hours worked remaining unchanged. Consequently, the difference between the calculations in the number of hours worked is considerably smaller than the difference in employment.

Table B.2 Change in age-related general government expenditure in EPC's estimates and the Swedish convergence programme.

Proportion of GDP.

	Change 2007-2060			Change 2007-2015			Change 2015-2060		
	CP09	EPC	CP - EPC	CP09	EPC	CP - EPC	CP09	EPC	CP - EPC
Pensions	-0.8	-0.1	-0.7	0.1	0.0	0.1	-0.9	-0.1	-0.8
Health care	0.3	0.8	-0.5	-0.1	0.2	-0.3	0.4	0.6	-0.2
Care of the elderly/disabled	1.8	2.3	-0.5	0.1	0.0	0.1	1.7	2.3	-0.5
Education	-0.4	-0.2	0.2	-0.3	-0.5	0.2	-0.1	0.3	-0.4
Unemployment benefit	0.0	0.0	0.0	0.1	0.0	0.1	-0.1	0.0	-0.1
Total	1.0	2.5	-1.5	-0.1	-0.5	0.4	0.9	3.0	2.1

Note: CP is the abbreviation for convergence programme.

Sources: European Commission and Ministry of Finance.

The differences in age-related general government expenditure are mainly found among pensions, health care and care of the elderly. This is a natural consequence of the higher average life expectancy applied by EPC. The differences increase over time as the difference in average life expectancy increases.

³⁹ The number of people aged 65 and over as a proportion of the number of people aged 15 to 64.

Appendix C – Tables

Table C.1 Forecast assumptions

Annual average, unless otherwise stated

	2008	2009	2010	2011	2012
GDP world ¹	0.6	-4.3	0.3	1.7	2.0
GDP eurozone ¹	0.4	-2.9	1.1	3.2	3.3
Hourly wages in Sweden ^{1,2}	4.4	3.2	2.2	2.1	2.5
TCW index ³	141.95	141.00	138.00	132.00	132.00
SEK/EUR ³	10.83	10.60	10.20	9.60	9.60
EUR/USD ³	1.35	1.38	1.35	1.28	1.28
Swedish 10-year government bond yield ⁴	3.90	3.33	3.71	3.96	4.32
Swedish 6-month interest rate	3.81	0.39	0.42	0.82	1.81
Oil price, (Brent, USD/barrel) ³	43.1	70	80	95	100

¹ Annual percentage change.

² Definition in accordance with the National Accounts.

³ Rate/price at year-end.

⁴ Annual average.

Source: Ministry of Finance.

Table C.2 Demand and output

	SEKbn	Percentage change in volume				
		2008	2009	2010	2011	2012
Household consumption expenditure	1 467	-0.2	-1.8	1.2	3.0	3.4
General government consumption expenditure	834	1.5	1.2	1.1	-0.3	-0.5
Central government	219	0.2	3.2	2.6	-0.3	-1.3
Local government	615	2.0	0.5	0.5	-0.3	-0.2
Gross fixed capital formation	615	2.7	-16.6	-6.6	4.0	8.4
Change in stocks ¹	5	-0.6	-0.7	0.4	0.4	0.2
Exports	1 711	1.8	-15.3	2.2	6.7	7.9
Imports	1 477	3.0	-16.1	1.3	6.2	7.8
GDP	3 157	-0.2	-5.2	0.6	3.1	3.8
GDP, calendar adjusted	3 154	-0.2	-5.1	0.3	3.1	4.2
GDP, fixed prices	3 157	3.0	-2.9	1.2	3.5	4.7

¹ Changes in stocks are expressed in terms of their contribution to GDP growth (percentage points) and not as percentage change in volume.

Sources: Statistics Sweden and Ministry of Finance.

Table C.3 Contributions to GDP growth

Percentage points

	2008	2009	2010	2011	2012
Final domestic demand	0.8	-3.7	-0.3	2.0	2.9
of which, household consumption expenditure	-0.1	-0.8	0.6	1.4	1.6
of which, general government consumption expenditure	0.4	0.3	0.3	-0.1	-0.1
of which, gross fixed capital formation	0.5	-3.2	-1.1	0.6	1.3
Stock investments	-0.6	-0.7	0.4	0.4	0.2
Net exports	-0.4	-0.8	0.5	0.7	0.7
of which, exports	1.0	-8.3	1.1	3.3	4.0
of which, imports	1.3	-7.5	0.6	2.6	3.4
GDP	-0.2	-5.2	0.6	3.1	3.8

Sources: Statistics Sweden and Ministry of Finance.

Table C.4 Deflators and price indexes

	Level	Percentage change				
	2008	2008	2009	2010	2011	2012
GDP deflator		3.2	20.4	0.6	0.4	0.9
Deflator for household consumption		2.8	2.2	0.5	0.4	0.8
Deflator for general government consumption		3.7	2.3	1.7	0.6	2.6
Deflator for investments		3.0	2.1	1.8	1.6	1.9
Export deflator		4.2	1.2	-2.2	-1.0	0.1
Import deflator		4.3	0.4	-1.5	-0.8	1.3
HICP, Dec-Dec		2.1	2.0	0.4	0.6	0.9
CPI, Dec-Dec		0.9	0.3	0.6	1.0	2.4
CPIX, Dec-Dec		1.4	1.5	0.4	0.6	0.9

Sources: Statistics Sweden and Ministry of Finance.

Table C.5 Labour market

	SEKbn	Percentage change				
	2008	2008	2009	2010	2011	2012
Number of employed ¹	4 593	1.2	-2.6	-3.5	-0.5	0.9
Number of hours worked ²	740 406	1.0	-3.7	-2.1	0.4	1.0
Unemployment ¹ (harmonised definition, Eurostat)	305	6.2	8.8	11.4	11.6	10.9
Labour market policy programmes ¹	85	1.7	2.7	5.0	4.9	4.8
Regular employment ratio, aged 16-64		75.7	73.3	70.5	70.0	70.6
Regular employment ratio, aged 20-64		80.0	77.8	74.7	73.9	74.2
Labour productivity ² (real GDP per employed)		-1.6	-2.6	4.0	3.7	3.2
Increase in hourly wages ³	189	4.4	3.2	2.2	2.1	2.5
Wage bill (incl. collective charges)	1 719	2.7	-0.8	0.7	2.5	3.6

¹ Per cent of the labour force 15-74 years.² Calendar-adjusted.³ According to the definition applied in the national accounts.

Sources: Statistics Sweden and Ministry of Finance.

Table C.6 Current account balance

Per cent of GDP

	2008	2009	2010	2011	2012
Balance of payments	7.8	7.2	7.1	7.4	7.4
of which, balance of trade	3.7	3.7	3.6	3.6	3.4
of which, balance of services	3.7	3.5	3.6	3.8	3.8
of which, factor income	1.7	1.2	1.2	1.3	1.5
of which, current transfer payments	-1.3	-1.2	-1.2	-1.3	-1.3

Sources: Statistics Sweden and Ministry of Finance.

Table C.7 Resource situation

Per cent of potential GDP

	2008	2009	2010	2011	2012
GDP gap	0.0	-6.4	-6.5	-5.0	-3.0
of which, employment gap	0.2	-3.1	-5.7	-5.7	-5.2
of which, productivity gap	-0.4	-2.8	-1.7	-0.4	1.3
of which, average hours worked gap	0.2	-0.5	0.9	1.3	1.1

Sources: Statistics Sweden and Ministry of Finance.

Table C.8 Public finances

Per cent of GDP

	SEKbn 2008	2008	2009	2010	2011	2012
Revenue excl. tax to EU	1 754	55.6	54.9	54.6	54.3	53.9
<i>Taxes and charges incl. tax to EU</i>	<i>1 485</i>	<i>47.1</i>	<i>46.4</i>	<i>46.2</i>	<i>46.1</i>	<i>45.8</i>
Taxes excl. tax to EU	1 124	35.6	35.3	34.7	34.6	34.4
Direct taxes	548	17.4	16.6	16.7	16.8	16.9
Product and production taxes	576	18.2	18.6	18.0	17.8	17.6
Taxes on capital	0	0.0	0.0	0.0	0.0	0.0
Social security contributions	374	11.9	11.6	12.0	11.9	11.7
Capital income, consolidated	77	2.4	2.2	2.0	2.0	2.1
Other revenues	179	5.7	5.9	5.9	5.8	5.6
Expenditure	1 675	53.1	57.1	58.0	56.3	54.9
Wages incl. collective charges and consumption	771	24.4	26.0	26.2	25.3	24.6
Wages and collective charges	465	14.7	15.6	15.7	15.2	14.8
Consumption	306	9.7	10.4	10.5	10.1	9.7
Total social security transfer payments	575	18.2	20.2	20.7	20.1	19.5
in kind	100	3.2	3.5	3.6	3.5	3.4
transfer payments	476	15.1	16.7	17.1	16.6	16.1
EDP interest, consolidated	53	1.7	1.3	1.2	1.2	1.5
Subsidies	46	1.5	1.6	1.6	1.6	1.5
Investment	105	3.3	3.7	3.6	3.5	3.4
Other expenditure	125	4.0	4.4	4.7	4.6	4.5
Net lending	79	2.5	-2.2	-3.4	-2.1	-1.1
of which central government	45	1.4	-2.1	-3.5	-2.1	-0.9
of which old-age pension system	31	1.0	0.2	0.1	0.0	-0.1
of which local government	2	0.1	-0.3	0.0	0.0	-0.1
Primary net lending	132	4.2	-0.9	-2.2	-0.8	0.4
Structural balance	73	2.3	1.4	0.2	0.7	0.6
Structural primary balance	126	4.0	2.7	1.4	1.9	2.1
Temporary tax revenue	11	0.3	-0.1	0.0	0.1	0.1
Temporary measures ¹		0,0	-0,1	-0,6	-0,1	0,0

¹ Temporary measures as a consequence of the recession. See also Section 6.3.
Sources: Statistics Sweden and Ministry of Finance.

Table C.9 Consolidated gross debt

Per cent of GDP

	2008	2009	2010	2011	2012
Consolidated gross debt	38.0	42.8	45.5	45.6	45.2
Change in gross debt	-2.5	4.8	2.6	0.1	-0.3
<i>Contribution to change</i>					
Primary net lending	-4.2	0.9	2.2	0.8	-0.4
Interest, consolidated	1.7	1.3	1.2	1.2	1.5
Stock flows	1.2	1.5	-0.3	-0.4	0.6
Sale of shares, extra dividends	-2.2	0.0	0.0	0.0	0.0
Allocation of interest and taxes	-0.5	0.2	-0.1	-0.1	0.4
Other	4.0	1.2	-0.1	-0.4	0.2
Nominal GDP growth	-1.2	1.1	-0.5	-1.6	-2.0
Implicit interest	4.3	3.2	2.9	2.8	3.4

Sources: Statistics Sweden and Ministry of Finance.

Table C.10 Net lending by sector

Per cent of GDP

	2008	2009	2010	2011	2012
General government sector	2.5	-2.2	-3.4	-2.1	-1.1
Household sector	4.9	6.7	6.8	5.7	4.5
Corporate sector	0.2	2.6	3.6	3.7	3.7
Abroad	7.6	7.0	7.0	7.3	7.2

Source: Ministry of Finance.

Table C.11 Household finances

	SEKbn 2008 ¹	Percentage change				
		2008	2009	2010	2011	2012
Real disposable income ²		3.6	0.6	1.2	1.2	1.6
Price index ³		2.8	2.2	0.5	0.4	0.8
Nominal disposable income	1 563	6.6	2.8	1.7	1.6	2.4
of which						
Wage bill ⁴	1 309	5.8	-0.6	0.1	2.5	3.6
Other factor income	261	3.0	0.5	1.4	2.1	3.3
Interest and dividends, net ⁵	-4	-0.5	-0.4	0.1	-0.1	-0.3
General government transfer payments	499	1.3	7.4	3.5	1.0	1.2
Private transfer payments	51	-1.2	6.4	0.4	1.7	2.2
Taxes and charges	554	-3.2	-2.9	-0.4	3.0	3.7
Household saving						
Own saving	96	6.1	8.4	8.3	6.8	5.1
Net saving in pension fund reserves (incl. premium pension system)	106	6.8	6.7	6.8	6.4	6.2
Total saving ratio ⁶	202	12.1	14.1	14.1	12.4	10.7
Net lending	155	9.9	12.7	13.0	11.0	9.0

¹ In current prices.² Household real disposable income is calculated by deflating nominal income by the implicit price index for household consumption expenditure.³ Implicit price index for household consumption expenditure.⁴ The wage bill is equivalent to the number of hours worked multiplied by hourly wages.⁵ For interest and dividends, the net contribution is stated in percentage change in volume.⁶ Total saving ratio = net saving including saving in pension fund reserves (incl. premium pension system) / (disposable income + net saving in pension fund reserves (incl. premium pension system)).

Sources: Statistics Sweden and Ministry of Finance.

Appendix D – Summary of support measures

Table D.1 Support measures aimed at the financial sector

SEK billion (unless otherwise stated)

Support measures	Amount	Forecast	Outcome	Net lending	Central government budget balance
Stable banks and other credit institutions					
Raised deposit guarantee	250 ¹	-	-	No effect ¹	No effect ¹
Guarantee programme	1 500 ²	-	353 ²	No effect ²	No effect ²
- honouring of guarantee	-	-	-	Weakened	Weakened
Stability fund	15 ³	-	-	No effect	No effect
Takeover of Carnegie	2.4	2.4	2.4	No effect	Weakened
Sale of Carnegie	-2.3	-2.3	-2.3	No effect	Improved
Capital injection programme	50 ⁴	5.6 ⁴	5.6 ⁴	No effect	Weakened
Increase companies' access to credit					
Swedish Export Credit Corporation (SEK)					
- capital injection	3	-	3	No effect	Weakened
- loan framework	100	-	-	No effect	Weakened
- credit guarantee	250 ⁵	-	-	No effect	No effect
- honouring of credit guarantee	-	-	-	Weakened	Weakened
Capital injection to Almi	2	-	2	No effect	Weakened
Transfer of shares in Venantius AB to SEK	2.8	-	-	No effect	No effect
Swedish Export Credits Guarantee Board (EKN)	300 ⁶	330	252 ⁷	No effect	No effect
- honouring of export credit guarantee	-	0.5 ⁸	-	Weakened	Weakened ⁸
Tax payment respite	-	0.5	-	Weakened	Weakened
Extended Articles of Association for SBAB	-	-	-	No effect	No effect
Strengthening of the Riksbank's currency reserves					
	100	100	96	No effect	Weakened
Measures aimed at the automotive industry					
Government-owned research and development companies					
	3	-	3	No effect	Weakened
Rescue loan	5	-	-	No effect	Weakened
credit guarantee	20	2.2 ⁹	-	No effect	No effect
- honouring of credit guarantee	-	-	-	Weakened	Weakened
Loans to other countries					
Loans to Iceland	EUR 0.5 bn	5.2	-	No effect	Weakened
Loans to Latvia	EUR 0.72 bn	7.3	-	No effect	Weakened
Other measures					
Extra issues by the National Debt Office	200	-	-	No effect	No effect ¹⁰
Shareholder's contribution to SAS	1.3	1.3	1.3	No effect	Weakened
Increased guarantee capital in the European Investment Bank					
	EUR 1.9 bn	-	-	No effect	No effect
Capital injection to Swedfund	0.4	0.4	0.4	No effect	No effect

¹ In 2008, guaranteed deposits rose by SEK 250 billion to SEK 886 billion at 31 December 2008. The increase is a result of the raised guarantee amount, the extension of the guarantee to cover all accounts and changed deposits over the year.

² The guarantee programme is limited to a maximum of SEK 1 500 billion. On 15 June 2009, the outstanding guarantees within the guarantee programme amounted to SEK 353 billion. The charges generated have a positive impact on net lending and the budget balance.

³ The stability fund was given an initial injection of SEK 15 billion. On 15 June 2009, the holdings in Nordea acquired by the stability fund amounted to SEK 26.4 billion including their market value. Excluding the Nordea shares, the fund's holdings amounted to SEK 8.8 billion on 15 June 2009. Funds paid out from the stability fund have a negative impact on the budget balance while charges paid to the fund have a positive impact on the budget balance and net lending. Net lending is affected negatively by the honouring of guarantees but not by financial transactions, such as capital injections.

⁴ The capital injection programme comprises SEK 50 billion at most. In February 2009, the Government decided to participate in Nordea's new share issue in the amount of SEK 5.6 billion.

⁵ In accordance with Riksdag decision (dec. 2008/09:NU12, Riksdag Comm. 2008/09:125), a credit guarantee framework was introduced for SEK amounting to at most SEK 450 billion. In the Budget Bill for 2010, it was proposed that this be lowered to SEK 250 billion in 2010.

⁶ In accordance with Riksdag decision (dec. 2008/09:NU12, Riksdag Comm. 2008/09:125), the framework for EKN's export credit guarantee was extended by SEK 150 billion to SEK 350 billion. In the Budget Bill for 2010, it was proposed that the framework be extended by a further SEK 150 billion to SEK 500 billion in 2010.

⁷ As of 30 June 2009 according to data from EKN. Guarantees issued amount to SEK 150 billion and bids issued amount to SEK 205 billion. It is estimated that 50 per cent of bids will lead to guarantees being issued.

⁸ If EKN utilises its foreign currency reserves, which are placed in commercial banks, neither the budget balance nor central government debt will be affected. If, on the other hand, EKN utilises its SEK reserves, which are placed with the National Debt Office, the budget balance weakens and central government debt increases. It is assumed that SEK 0.5 billion of the guarantee will be honoured in 2009 and it is estimated that half of that amount will be taken from EKN's SEK reserves.

⁹ The European Investment Bank has approved a loan of SEK 2.2 billion to Volvo Personvagnar AB. Negotiations are in progress between Volvo Personvagnar AB and the National Debt Office regarding the terms of the Government guarantee required for the loan. Consequently, the guarantee has not yet been issued.

¹⁰ The extra issues have no effect on the central government budget balance, although they do increase central government debt until they mature.