

■ Fiscal policy: assumptions and forecasts

In order to produce the most probable forecast for the development of the Swedish economy, the Riksbank also produces forecasts for fiscal policy. Fiscal policy is assumed to follow historical patterns and to act through automatic stabilisers as well as discretionary contracyclical policy. Another important consideration is that it is assumed that the target for public finances (the financial balance), a surplus of 1 per cent of GDP on average over an economic cycle, will be achieved in the long term. Different fiscal policy measures have, however, different effects on demand, supply and inflation.

What role does fiscal policy play in the Riksbank's assessment of economic development? There are several different explicit objectives for economic policy: that price stability should be maintained¹⁰, that the financial balance over an economic cycle should average 1 per cent of GDP and so on. These objectives are set by the Riksdag (the Swedish parliament). The forecasts that the Riksbank produces for the development of the Swedish economy relate to the most probable trends and developments, that is the assumptions on which the forecasts are based must be realistic. The Riksbank assumes therefore that fiscal policy follows historical patterns and that the surplus target will be met. However, various fiscal policy measures affect the economy in different ways, which in turn affects the Riksbank's assessment of the development of inflation. This box addresses the assumptions that the Riksbank makes about fiscal policy and its macroeconomic effects.

What is fiscal policy?

Fiscal policy affects total demand and production via the public sector's income and expenditure and via a range of legislation and regulations. By means of adjustments in various instruments, factors such as consumption, investments, employment, wages and prices are affected. On the income side, the various fiscal policy instruments include different tax rates for labour and capital. Instruments on the expenditure side include various transfers to households and companies, public consumption and investments. The aim of fiscal policy measures may be to promote stability, to redistribute wealth or to allocate resources in the economy in a certain way. This box focuses on fiscal policy as a means of promoting stability.¹¹

The budget effects of fiscal policy decisions to alter tax rates or benefit levels in, for example, the unemployment insurance scheme, is that income and expenditure in the public sector are changed. Changes of this type are referred to as discretionary fiscal policy. Discretionary fiscal policy in Sweden has on average followed a contracyclical pattern with

¹⁰ The objective has been defined by the Riksbank such that CPI inflation should increase by 2 per cent per year.

¹¹ For a further description of fiscal policy, see the 2008 report of the Swedish Fiscal Policy Council or the NIER's conceptual framework for fiscal policy, Special Study no. 16 March 2008.

the aim of stabilising the economic cycle.¹² When demand and production in the economy have been low, political decisions have been made that have increased expenditure and reduced tax revenues in order to increase demand and production, a so-called Keynesian fiscal policy.

Public income and expenditure may, however, be altered for several other reasons.¹³ If demand or production increases in the economy, public income increases mainly as a result of increases in tax revenues as the tax bases, for example the wage sum and household consumption, expand. At the same time, public expenditure falls as the higher production increases employment and reduces unemployment. This leads to lower expenditure for unemployment. The opposite occurs in the event of a slowdown in the economy. These are the so-called automatic stabilisers that mitigate the impact of an economic slowdown on incomes in the private sector. However, long-term trends, such as demographic trends, also affect the income and expenditure of the public sector. Fluctuations in asset prices may have a significant effect on the financial balance.¹⁴ Some tax revenues in Sweden are volatile and fall significantly in the event of an economic downturn, for example revenues from taxes on companies and capital. These taxes are linked to the companies operating profits and to price trends on the share and property markets.

The effects of fiscal policy on supply and demand¹⁵

The effects of discretionary fiscal policy on the real economy are highly uncertain and vary depending on the instrument concerned. According to various studies,¹⁶ the short-term effects of a reduction in public saving on GDP are generally positive and potentially great when resource utilisation is low. The effects are estimated to be greater for increases in expenditure than for tax changes. This relates partly to the fact that public expenditure, e.g. public consumption and investments, has a lower import content than other items in the balance of resources. Tax reductions for households usually lead to an increase in private consumption, but this has a higher import content than public consumption. In addition, the households normally save a part of the tax cuts. This leads to a less direct effect on domestic demand compared to public consumption and investments. The Riksbank constantly assesses how various discretionary fiscal policy decisions and proposals affect demand, supply and inflation in the short and medium term.

12 G. Hjelm (2007) "Aktiv finanspolitik i Sverige och OECD 1980-2004: pro- eller kontracyklisk?" Internal Memo, NIER, J. Galí, & R. Perotti (2003) "Fiscal policy and monetary integration in Europe", CEPR Discussion Paper no. 3933, and H. Ohlsson & A. Vredin (1996) "Political cycles and cyclical policies", *Scandinavian Journal of Economics*, 98 no. 2.

13 In the text and the analysis it is the consolidated public sector that is referred to, that is the total of the municipalities, the old-age pension system and the state sector.

14 For references see R. Boije (2004), "The general government structural balance", *Sveriges Riksbank's Economic Review*, no. 1.

15 Some measures are also expected to affect the long-term, sustainable level of employment and production. Tax reductions that stimulate the supply of labour can therefore also contribute to higher production and lower inflation.

16 For an overview see R. Hemming, M. Kell, & S. Mahfouz, (2002), "The effectiveness of fiscal policy in stimulating economic activity- A Review of the Literature". IMF Working Paper no. 208 and chapter 5 "Fiscal policy as a countercyclical tool" in IMF (2008), *World Economic Outlook*, October, IMF, Washington.

How does the Riksbank make forecasts for fiscal policy?

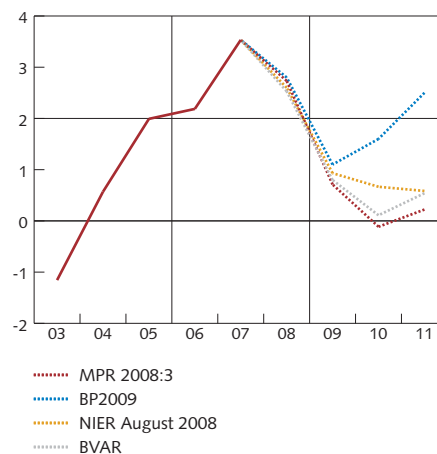
In order to forecast the development of the economy, the Riksbank produces a forecast for fiscal policy based on historical patterns. This covers both discretionary decisions and automatic stabilisers. The discretionary policy includes proposals that are presented by the government in the spring and autumn budget bills, as well as proposals at the municipal level. However, these proposals usually only apply to the current and following year. A zero assumption for discretionary fiscal policy in the longer term is not a realistic assumption, in part because the historical mean value for discretionary measures is positive. In practice, discretionary decisions on expenditure increases or tax reductions are required so that the financial balance, given the Swedish regulations, does not increase over time. The Riksbank's forecast is thus based not only on announced or decided measures, but also on an assessment of the normal extent of such measures.

Nowadays, fiscal policy is also governed by regulations that cover the expenditure ceiling, the budget process and balanced-budget requirements for the municipalities, as well as the surplus target for public finances which stipulates that the surplus should be 1 per cent of GDP over an economic cycle. If the assessment is that the financial balance will be higher or lower than 1 per cent of GDP for an extended period of time, the Government must take steps to reach the target.

Historical patterns in fiscal policy

The difference between the public sector's income and expenditure, the financial balance, is thus affected by the direction of discretionary fiscal policy and by the automatic stabilisers. One way of studying the link between the financial balance and the real economy is to use a time-series model. Such a model describes the normal link between fiscal policy and macroeconomic developments. Given the forecasts made for macro-variables, the Riksbank uses a Bayesian VAR-model as a comparative norm to assess the size of the balance in the period ahead.¹⁷ In Figure B1, the yellow line shows the Bayesian VAR model's forecast for the public financial balance based on the Riksbank's forecasts for the other variables included in the model. The historical link between the financial balance and the other variables indicates a decline in the balance in the

Figure B1. Financial balance in the public sector, forecasts
Percentage of GDP



Note: Broken lines represent the Riksbank's forecasts.

Sources: Ministry of Finance, National Institute of Economic Research, Statistics Sweden and the Riksbank

¹⁷ The Bayesian Vector Autoregressive model has been estimated using data for the period 1950-2007 (annual data). The model includes GDP, unemployment, the financial balance as a percentage of GDP and market capitalisation. GDP and market capitalisation are modelled in the first differences of logarithmed values, relative unemployment (ILO definition) in the first differences and the financial balance relative to GDP is modelled in the levels. The Bayesian VAR models include subjective judgements or experience by using so-called priors. One prior is that the financial balance in the long term is believed to be in line with the surplus target of 1 per cent of GDP. Prior views are then updated using the data in the estimates.

period ahead, even though there is a slight recovery in 2011. However, the decline starts from a high level in 2007. The red line shows the Riksbank's forecast for the financial balance given the macro picture and the assumptions concerning discretionary fiscal policy. In 2008 and 2009, the financial balance will decline according to the Riksbank's forecast, as is normal in such an economic situation according to the Bayesian VAR model. In 2010 and 2011, it is the Riksbank's assessment that the financial balance will be lower than the Bayesian VAR model's forecast due to a somewhat more expansionary fiscal model than normal. The main reason for this assessment is the assumption that the aim of fiscal policy will be to reach the target of a surplus of 1 per cent of GDP over an economic cycle more quickly.

Comparison with other forecasters

Figure B1 also shows the August forecast of the National Institute of Economic Research (NIER) and the government's forecast in the budget bill for 2009 (BP2009). The three forecasts for the financial balance are based on different macroeconomic forecasts and assumptions. For 2008 and 2009, the differences in the forecasts are only marginal. In August, the NIER did not have access to the budget bill for 2009, but its assumptions regarding discretionary fiscal policy were close to the figures presented in the bill. For 2010 and 2011, the differences in the forecasts are greater. The government assumes that the regulations will remain unchanged and that the surplus will therefore grow in line with the trend. Many items of expenditure, for example, remain nominally unchanged. The Riksbank and the NIER assume that additional discretionary fiscal policy decisions will be made in these years, although these will differ in scope. In August, the NIER's forecast for GDP and employment was much more optimistic than the Riksbank's current forecast, which also means of course that the NIER's forecast for the financial balance was higher.