

## **FISCAL RULES AND THE SCOPE FOR STABILISATION POLICY – THE CASE OF SWEDEN**

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### **1 Introduction**

The necessity of ensuring long-term sustainability in public finances is receiving substantial attention in a large number of countries.<sup>1</sup> A living memory of the rapid fiscal deterioration that can occur in unfavourable situations, together with an insight into the future burden on the public sector caused by an ageing population, have stimulated an interest in promoting fiscal discipline. One element of maintaining sound public finances is the existence of an appropriate institutional arrangement of the budget process. Concepts such as top-down budgeting, medium-term budgetary frameworks, independent fiscal institutions and numerical fiscal rules have been extensively explored in the literature. The discussion has, however, been somewhat one-sided, primarily focused on sustainability, without a thorough analysis of possible trade-offs in terms of difficulties in ensuring allocative effectiveness of public spending or possible limitations on running effective stabilization policies.

In Sweden, the budgetary framework was reformed in the 1990s, with the explicit objective of establishing a firmer control over fiscal development. Following an unprecedented increase in public expenditure, government deficit and debt ratio in the first half of the 1990s, it was observed that the Swedish budget process was ill-suited to ensure sustainable finances.<sup>2</sup> The reforms encompassed abolishing the use of open-ended appropriations, the introduction of top-down procedures for preparing the budget and new procedures for voting on the budget in Parliament. A cornerstone of the reformed budget process was the introduction of numerical fiscal targets in the shape of a multiannual ceiling on central government nominal expenditure and a surplus target for the general government net lending. Added to these fiscal targets, a balance requirement on local government finances was imposed.

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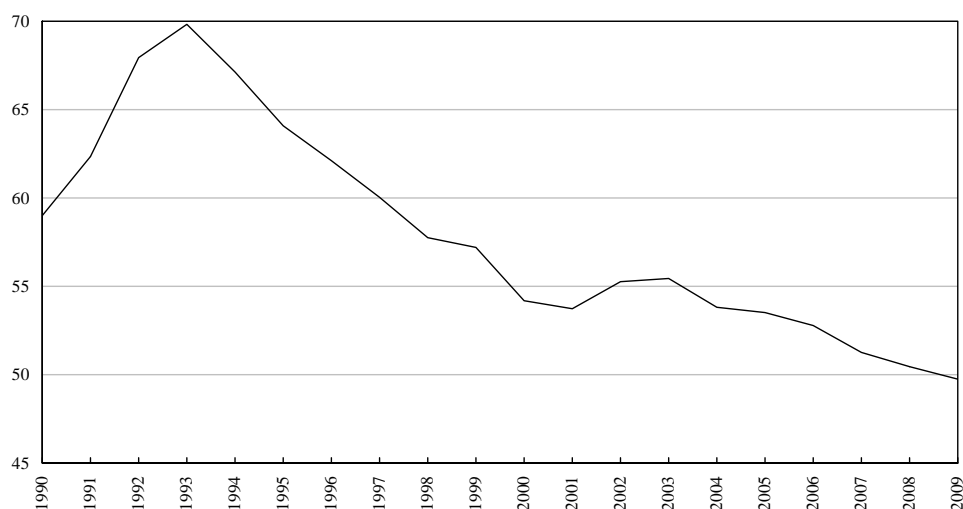
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<sup>1</sup> See, for example, Shick (2005).

<sup>2</sup> Molander (2000).

Figure 1

**General Government Expenditure, 1990-2008**  
(percent of GDP)

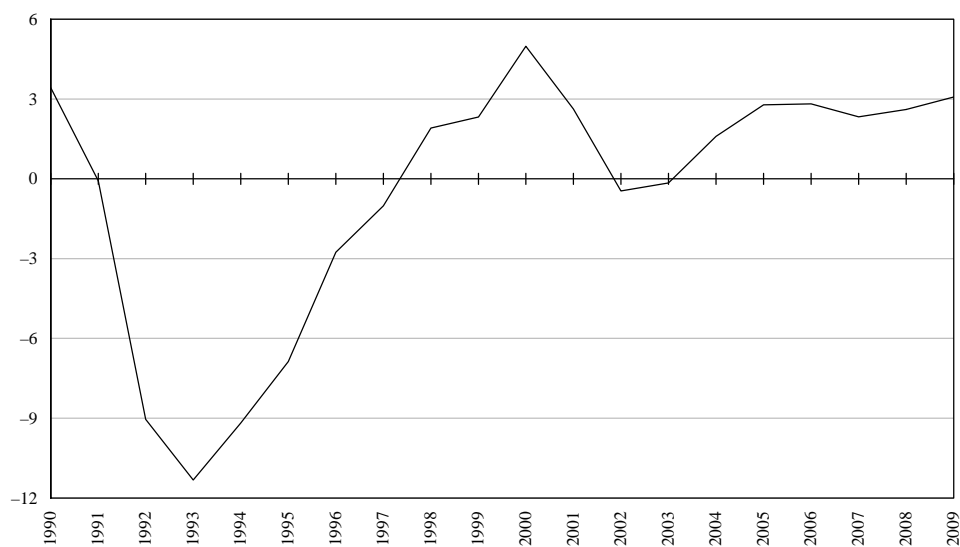


The results are striking. Following a rapid improvement of public finances through an ambitious consolidation program during the period from 1994 to 1998, the reformed budget process has contributed to maintaining a sound fiscal position, as indicated in Figure 1 and 2. The Government's and Parliament's control over the development of public finances has been greatly enhanced.

The effectiveness of the strict Swedish fiscal framework in general, and the fiscal targets in particular, in ensuring sustainable government finances is well established. A combination of a multiannual expenditure restriction and a target for general government net lending has proven to be an effective tool in controlling potentially destructive tendencies such as a fiscal illusion, a deficit bias and conflicting time horizons in public decision making.<sup>3</sup> In the context of the Swedish fiscal framework it is relevant to examine to what extent the restrictions on fiscal policy limit the possibilities of running countercyclical policies – both in terms of automatic stabilizers on the expenditure and revenue side of the budget, and in terms of discretionary fiscal policies.

This paper focuses on the conditions for stabilization policies in a strict fiscal framework, and puts forward some proposals for designing a balance target and an expenditure ceiling that will provide sufficient flexibility for countercyclical policies while maintaining fiscal discipline. The analysis is founded on cyclical

<sup>3</sup> For a comprehensive discussion of the existence of such characteristics of public decision making see, for example, Molander (2001).

**Figure 2****General Government Net Lending, 1990-2008**  
**(Budget Bill for 2007)**  
*(percent of GDP)*

situations that could be considered normal. Under a severe economic crisis, special clauses would have to be applied. The paper starts in Section 2 with a short overview of role of fiscal policy to stabilize the economy. Section 3 presents the Swedish fiscal framework. Section 4 discusses some of the problems with the surplus target. Countercyclical policies under the expenditure ceiling is the theme of Section 5. The paper ends in Section 6 with conclusions.

## 2 Fiscal Policy and Stabilization

A primary question in a discussion of whether or not countercyclical policy is constrained by strict numerical fiscal rules such as the ones applied in Sweden, should be to what extent stabilization policies are necessary or desirable. Unless there are convincing arguments for allowing government surplus and expenditure to vary with the cyclical variations, there is little reason to consider any trade-offs that have to be made between fiscal discipline and economic policy.

### 2.1 Arguments in favour of short term fiscal stabilization policies

Views on the need for and the possibility of stabilizing the economy in the

short and medium term have, as is well known, shifted substantially over the decades. In this paper we take a contemporary view as, for example, expressed by Andersen (2005). According to this position, fiscal policy can affect aggregate demand and, in this way, also the activity of the economy. By temporary discretionary changes in taxes and expenditures it is possible to support or dampen economic activity to smooth the cycle.

Demand-side arguments for fiscal stabilization policy are founded on the fact that economic activity is sub-optimal as a result of failures in price and wage adjustments. These effects of fiscal policy are independent of the factors determining the long run effects transmitted through the supply side of the economy. The scope for policies affecting aggregate demand is, however, dependent of the type of shock the economy is hit by. Important to point out is, moreover, that fiscal stabilization policy in this setting is only justified during the period in which the adjustment failure takes place.

Another case for countercyclical fiscal policy can be made on the grounds that a shifting composition of aggregate demand can stimulate economic activity.<sup>4</sup> In a dual economy in which one sector is open to international trade – tradables sector – and the other one is sheltered – non-tradables sector – there exists an alternative transmission mechanism for fiscal policy, even in situations where there are no adjustment failures. Changes in public consumption alter the ratio of demand for tradables to non-tradables. Even under the restriction of a balanced budget, the composition of demand, and consequently the general level of activity, will change.<sup>5</sup>

There may be yet another argument for government intervention to accelerate return to full-employment GDP levels. By relaxing the assumption of perfect capital markets, in which households can borrow against future income, the mechanisms through which Ricardian equivalence would eliminate the effects of fiscal policy may be ineffective. Liquidity constrained households will, in such situation, adapt their consumption and savings to changes in the tax system.

Stabilization policy can be seen as a form of insurance that dampens the effects of economic shocks on the income of individuals. Discretionary and temporary fiscal policy can in principle smooth production, employment and income. In that way, risk adverse individuals enjoy improved welfare. This mechanism is strengthened if there is heterogeneity among agents in the economy concerning their income and their position in the labour market.<sup>6</sup>

The effects of fiscal policy are not clear, and the range of the size of

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<sup>4</sup> Andersen (2005), p. 516.

<sup>5</sup> In the Swedish economic debate on stabilization policy prior to the referendum on adopting the Euro in 2003, fiscal policy measures effecting activity through composition effects played an important role. In particular, an *internal devaluation*, i.e. a balanced budget shift in payroll taxes and value added taxes, was seen as a possible, although far from complete, substitute to national monetary policy. See SOU 2002:16 and Calmfors (1998).

<sup>6</sup> Lucas (1987) was an early critic of this view and claimed that welfare costs of the cyclical effects of incomes are marginal.

multipliers is wide. Hemming *et al.* (2002) conclude, by studying different macro models, that expenditure multipliers are in the range of 0.6 to 1.4 (one percentage increase in government consumption will increase GDP by 0.6 to 1.4 per cent). Tax multipliers are in the size between 0.3 and 0.8. These multipliers are of the same sign as old type Keynesian multipliers would suggest, but are substantially smaller.

## 2.2 Arguments against short term stabilization policies

According to theoretical and empirical knowledge about effects of temporary expenditure and tax changes given above, there could be scope for discretionary fiscal stabilization policy. However, in reality a number of obstacles make such policies difficult. An appropriate fiscal stance for stabilizing the cycle would as a background require substantial information about the economy – including forward-looking information – that finance ministries and their staff *de facto* do not have. In particular, some of the indicators used to guide fiscal policy, such as output gaps, structural balances and indicators of fiscal stance, are to a large extent uncertain, and their appropriateness as a basis for fiscal policy decisions could be questioned.<sup>7</sup> Other significant obstacles are the lags that characterize fiscal policy, more specifically information lags, decision lags and implementation lags. Further, at the time of decisions there are often uncertainty about the nature of economic shock and the extent to which shocks are permanent or transitory.<sup>8</sup>

Furthermore, there are also political economy aspects related to fiscal policy. Politically rational policymakers may conduct discretionary policies with a deficit bias in order to please the electorates. The objective of such behaviour could, for example, be to enhance chances of being reelected.<sup>9</sup>

In the case of Sweden there exists an additional reason why discretionary fiscal policy may have a limited role to play. The stabilization framework includes the national central bank (The Riksbank), conducting monetary policy aimed at price stability in a regime with a flexible exchange rate. The Riksbank's Executive Board makes its decisions on the instrumental interest rate independently from external influences. In this setting, monetary policy aimed at price stability indirectly affects production and employment, mostly in a countercyclical way. Such an argument for a modest use of discretionary policies does not, however, hold for national fiscal policy in regimes with fixed exchange rates or a participation in a monetary union.<sup>10</sup>

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<sup>7</sup> See also Fischer and Boije (2006) for diverging calculations of structural balances for Sweden by different institutions and Hughes-Hallet, Katai, and Lewis, (2007) on the substantial differences between structural balances *ex ante* and *ex post*.

<sup>8</sup> In the last years, uncertainty about the sustainability of positive productivity shocks has been in focus in the debate about the consistency with monetary frameworks of inflation persistently lower than inflation targets. Such debates has occurred both in Sweden and in Norway in the last years.

<sup>9</sup> Kopits (2001).

<sup>10</sup> SOU 2002:16.

### 2.3 *Active countercyclical fiscal policy should be used with caution*

In the end, the *pros* and *cons* of fiscal activism must be balanced against each other. The position in this paper is that, although there are arguments supporting activism, there are significant problems, something which calls for a cautious attitude. Consequently, discretionary fiscal stabilization policy should not be used in normal cyclical situations. In exceptional cases, when the economy is threatened by large unemployment, significant overheating, or when there is substantial inflation pressure, discretionary fiscal policy may have a role to support monetary policy and the automatic stabilizers.

## 3 **The Swedish Fiscal Framework**

The fiscal framework in Sweden is founded on three pillars – a) a surplus target for general government finances, b) a nominal expenditure ceiling for central government finances and c) a balance requirement for local governments. Through the fiscal targets, Parliament and the Government make an explicit commitment to long term sustainability of government finances, and are provided with instruments that enable them to make well-informed and conscious decisions on relevant fiscal parameters.

### 3.1 *The surplus target*

In order to ensure that an ageing population will not lead to deteriorating public finances, Sweden applies a surplus target for the general government sector, *i.e.* central government, the old-age pension system and the local government sector. According to the surplus target, the average annual net lending over a business cycle should correspond to 1.0<sup>11</sup> per cent of GDP. The rationale behind the surplus target is that government debt should be reduced for a period of 15-20 years before the strains on public finances, caused by a shifting age structure and a temporary higher dependency ratio, sets in. Surplus in the early years of this period will be offset in later years, and the ratio of government debt to GDP in 2000 is expected not to exceed the corresponding ratio in 2050, when the demographic challenge fades.<sup>12</sup> The long-term profile of consolidated gross debt under a surplus of 1.0 per cent of GDP for the period 2000-15 is illustrated by Figure 3.

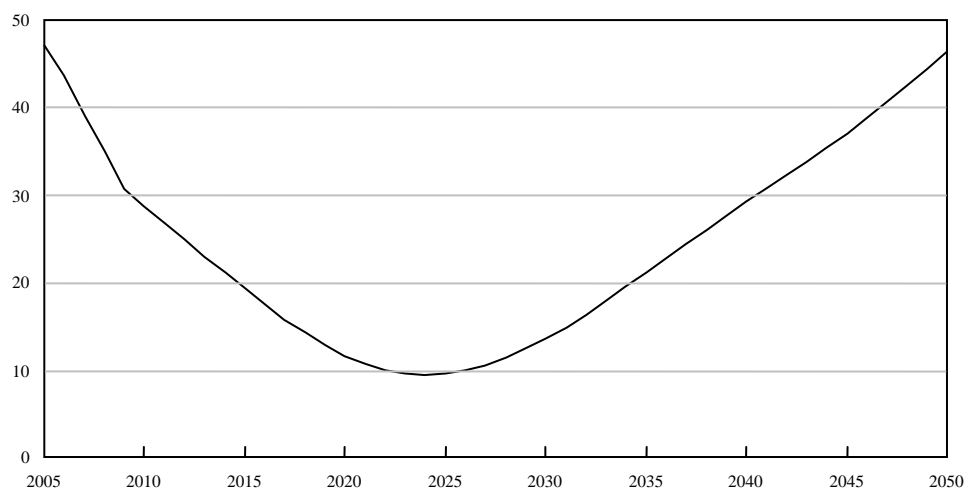
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<sup>11</sup> In April 2007 the surplus target was reformulated from a surplus of 2.0 per cent of GDP on average over the cycle to a surplus of on average 1.0 per cent of GDP over the cycle. This was done as a response to Eurostat's decision that funded pension systems, such as the Swedish premium pension system, are reported in the household sector, rather than in the general government sector.

<sup>12</sup> For a thorough discussion on pre-funding versus structural reforms to manage demographic shifts, see Andersen (2006).

**Figure 3**

**A Simulation of the Development of Central Government Debt 2005 to 2050  
under a Surplus Target of 1.0 per cent of GDP Held up to 2015**



Source: Swedish Updated Convergence Program, 2006.

The surplus target is formulated in terms of an average over the business cycle. It is, consequently, fully in line with the target that the actual net lending for an individual year deviates from a level corresponding to 1.0 per cent of GDP. In this way, there is scope for allowing the automatic stabilizers on both the revenue and expenditure side of the budget to diminish net lending below the targeted average value. In addition to this, the formulation of the surplus target allows for discretionary expansionary fiscal policy, as long as there are compensating contractionary measures raising the average net lending to the required level during the same business cycle.

An obvious problem with allowing such large discretion to diverge from the targeted average is that actual policies may not to a sufficient degree be guided by the target. The possibility of offsetting future surplus may be used as an argument not to take full responsibility for the long-term impact of current policies.

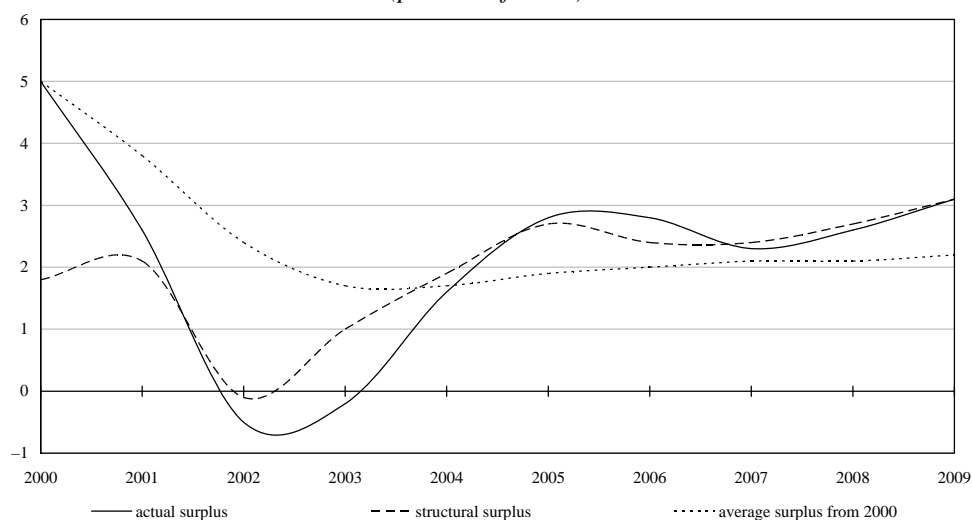
One way of analyzing the consistency of the past, current and future policies with the surplus target is to look at the structural net lending. Unless the government actively pursues policies to accelerate a return to full employment, the structural surplus should be very close to the average targeted level, *i.e.* 1.0 per cent of GDP. In Figure 4 the actual, structural and average general government net lending for the period 2000-09 is presented. The figure is based on the definition of the public sector before the Eurostat's decision on funded pension systems, when the surplus target was lowered from 2.0 to 1.0 per cent of GDP.

Figure 4

### General Government Net Lending 2000-09

(estimates for 2007 to 2009 are forecasts)

(percent of GDP)



Source: Budget Bill for 2007.

The fact that structural surplus consistently has departed from a level of 2.0 per cent of GDP clearly shows that the Swedish Government has been pursuing active fiscal policies for most years since the surplus target was introduced in 2000. Although the annual figures of the actual surplus have varied significantly over the years, the average figure – which is what is being targeted – has been brought back to a level corresponding to 2.0 per cent of GDP following the low surplus levels of the period 2002-04.

It is important to point out the perils of making structural adjustments of fiscal parameters. Any analysis, whether historical or forward looking, based on the non-observable concept of potential GDP is bound to be uncertain. This is the main reasons why the target is formulated as the average of the actual surplus over the business cycle, rather than in terms of structural surplus. The uncertainties associated with figures on the structural surplus also mean that the above analysis should be approached with some caution, especially for the forward looking period of 2007-09.

### 3.2 The Expenditure Ceiling

The Swedish fiscal framework is also founded on a multiannual nominal



expenditure ceiling for central government. The expenditure ceiling covers all expenditure on the budget together with the expenditure for old-age pensions, which is set up as an autonomous system outside the budget. The only expenditure that is excluded from the ceiling is interest payments on the government debt, since such expenditure, due to fluctuations in the interest rate and exchange rates, is volatile and outside the control of the Government. In addition, the Government has limited scope to influence the size of gross debt in the short term.

As a rule, the Government proposes, on a rolling basis, to Parliament an expenditure ceiling for the third additional year. This ceiling is constructed as a restriction on the outcome of expenditure, rather than a limit on budgeted or planned figures.<sup>13</sup> This naturally puts considerable pressure on the Government to make accurate projections for the development of expenditure, including an assessment of the impact of new expenditure programs. Since there is a ceiling not only for the upcoming fiscal year, but also for the second and third year, the Government also has to ensure that the medium-term outlook is consistent with previously determined expenditure ceilings. In addition, the Government has to monitor the development of ceiling restricted expenditure for the current year closely, and may be required to initiate measures to reduce expenditure in order to avoid breaching the ceiling.

The ceiling covers all items in the budget, except interest rates, including cyclically sensitive items such as unemployment benefits. It also covers entitlement programs such as health related benefits, student grants and child benefits. The ceiling is not adjusted due to an unfavourable development in these benefit systems. Since the ceiling is set in nominal terms, and not adjusted if inflation deviates from the level forecasted when the ceiling was initially proposed, there is an added degree of uncertainty that has to be managed. In order to absorb any increase in expenditure, the Government has to plan expenditure at a level lower than the ceiling. There is, consequently, a *budget margin* under the expenditure ceiling, which is an indication of the extent to which ceiling restricted expenditure can be augmented without the Government being forced to propose spending cuts. The size of the budget margin is not regulated, and the Government has to decide on the appropriate margin for the respective years, taking into account the degree of uncertainty in projected expenditure.

The expenditure ceilings enhance Parliament's and the Government's command over the size of the government sector. Through a decision on the total size of expenditure, largely separate from the process of evaluating expenditure proposals from various sector interest groups, decision making bodies are in a better position to ensure fiscal discipline. In addition, the expenditure ceiling is not affected by revised forecasts for revenue. Temporary high tax income cannot, hence, be used to expand expenditure, but would simply increase the surplus. The expenditure ceiling can, hence, work countercyclically in an economic upturn.

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<sup>13</sup> According to the Swedish Budget Act (1997:1059) the Government is required to take measures within its mandate or propose necessary measures to Parliament, if there is an indication that expenditure will exceed the ceiling.

### 3.3 *Local self-government balance target*

Local government, *i.e.* municipalities and county councils in Sweden is autonomous, with a constitutional right to decide on its own expenditure and to levy income tax on its citizens. Some 20 per cent of the revenue of local governments comes from grants on the central budget. In addition municipalities and county councils collect revenue from user charges. Local government is responsible for such areas as for primary and secondary education, child care, elderly care, local transport, public utilities and health care.

There is a legislated balance requirement on local governments. According to this, net lending is not allowed to be negative. In the case of under balanced finances, the municipality has to present a plan for consolidating its budget within a period of three years.

Accounting in the local self-government sector is on an accrual basis. In effect, this means that the balance target translates into a golden-rule requirement, *i.e.* net borrowing cannot exceed net investments.

### 3.4 *The targets are interrelated*

The three targets that make up the fiscal framework in Sweden are mutually supportive, and complement each other. The surplus target aims at ensuring that the overall fiscal position is sustainable over the period when the demographic composition changes. It should, therefore, be seen as a guide to medium to long term fiscal policy in terms of the relationship between revenue and expenditure. The surplus target is, however, problematic to use as an operational guide to the annual preparation of the central government budget. Firstly, net lending is the sum of revenue and expenditure – typically two large variables which are difficult to accurately forecast. In the case of Sweden, the surplus target has been defined as an average over a business cycle, and is not defined in terms of the annual surplus.<sup>14</sup> Secondly, the concept of net lending may not be ideal for enforcing compliance with the target. Incentives to respect a fiscal target are to a large extent related to the political costs associated with non-compliance. From this perspective, it is important that there is a wide understanding of the conceptual construction of the targeted parameters, and such a criteria may not be fulfilled for the surplus target. Furthermore, net lending is presented with a certain time-lag, and is typically revised for some time after the fiscal year. This complicates verification on an annual basis.

The surplus target aims at maintaining sustainable public finances, and is in this respect the key fiscal target in the framework. However in terms of actual impact on the Government's policies, and the amount of attention received in the

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<sup>14</sup> For the period 2003 to 2007 the Government proposed annual targets for net lending. These targets could deviate from the medium term target, with a reference to the cyclical situation in the labour market. However, poor experiences from this prompted the Government to propose abandoning the use of annual targets for net lending prompted in the Spring Fiscal Policy Bill for 2007.

political debate and mass media the expenditure ceiling is the central target. This should not, however, be interpreted as there being an internal hierarchy in the fiscal framework. The significant focus on the expenditure ceiling is probably explained by the fact that it is an intuitively comprehensible concept, that it can be easily monitored and almost instantaneously evaluated, and that it has a direct impact on the process for preparing the Government's budget proposal. In order to ensure that policies are consistent with the surplus target, the expenditure ceiling has to be set at a level generating the required net lending, given projected revenues. There is, hence, a link between the surplus target and the expenditure ceiling. Since the surplus target is formulated for general government net lending according to ESA 95<sup>15</sup> and the expenditure ceiling for central government expenditure – which is on an accounting basis that differs from that of net lending – it is necessary to make adjustments before a targeted surplus can be transformed into a nominal expenditure ceiling.

There have been discussions, both nationally and internationally, about certain features of the fiscal framework.<sup>16</sup> The definition of the surplus target has been claimed to be unclear, which has made *ex post* evaluation difficult. The surplus target was for some years not met *ex ante*. The expenditure ceilings have to some extent been circumvented by the use of tax expenditures and by other accounting measures. Finally, the budget margin has not been sufficiently large to absorb cyclically-induced expenditure increases and random variations of expenditure around the structural level. This has focused on the question if the expenditure ceilings in practice have fostered pro-cyclical policies.

#### 4 The surplus target and cyclical variations

As described above, the Swedish surplus target is formulated in terms of an average over the business cycle. There is, hence, full flexibility for countercyclical fiscal policies through automatic stabilizers. In addition to this, the surplus target gives room for discretionary fiscal policies, albeit with the restriction that expansionary policies should be counteracted by contractionary fiscal policies of the same size in other years during the same cycle. The flexible mechanism for automatic stabilizers is relatively uncomplicated, while sound discretionary fiscal policies are demanding to achieve, and could be undermined by time-inconsistent behavior.

##### 4.1 The target as an average over the cycle

The problem with the formulation “on average over the cycle” is that there

<sup>15</sup> European System of National Accounts.

<sup>16</sup> References: IMF (2005), EU Commission (2005), Hansson-Brusewitz and Lindh (2005), Boije and Fischer (2006) and the National Audit Office (2006).

exists no exact definition of the cycle. A forward looking, *ex ante*, determination of the length of the business cycle requires information that is not available, as discussed briefly in Section 2. Even historically the exact length of the business cycle may be open to interpretation. This ambiguity with regard to the length of the cycle constitutes an obstacle for the verification of the surplus target.

In the Swedish case, the economy in early 2007 probably has not elapsed through a full cycle since the surplus target was introduced in 2000. As seen in Figure 4 above, the *ex post* average of net lending 2000-06 is 2.0 per cent of GDP, and is expected to increase somewhat in the upcoming years. In spite of this encouraging result, it is important to emphasize the difficulties in determining whether or not net lending for individual years or periods within a business cycle are consistent with the surplus target.<sup>17</sup>

The definition of the surplus target clearly exposes the trade-off between firmness and flexibility in the Swedish fiscal framework. The surplus target is flexible enough to give room for countercyclical policy. At the same time it supports a fiscal policy aimed at long-term sustainability. But, is there an appropriate balance between the two?

#### 4.2 *Indicators of ex ante evaluation of target fulfilment*

Conceptually, the surplus target could be defined as a cyclically adjusted, or structural, balance (CAB). With fiscal policy being limited to the automatic stabilizers, the surplus target of 1.0 per cent of GDP on average over the cycle is equivalent to a target for CAB of 1.0 per cent of GDP for each year. In other words, a CAB of 1.0 per cent of GDP is a sufficient but not necessary condition to comply with the surplus target. If, however, fiscal policy also includes some discretionary measures a CAB that varies around 1.0 per cent of GDP in such a way that it on average over the cycle is equal to 1.0 per cent of GDP, is also consistent with the overall target. A CAB varying around its targeted value has been the situation in Sweden for the period 2000-06, as seen in Figure 4 above. Expansionary policies have, however, been balanced by contractionary measures at other times.

In practice, there is no consensus on how to measure CAB. Boije and Fischer (2006) show that different institutions – the EU Commission, the European System of Central Banks (ESCB), the National Institute of Economic Research (NIER) and the Swedish Finance Ministry – all use different methods to calculate CAB for Sweden. These institutions come to surprisingly different results. On average, over the period 2000-05, ESCB calculates a low CAB of 1.3 per cent of GDP. According to this estimate, it is unlikely that the surplus target was fulfilled during that period. NIER, on the other hand, calculates over the same period a CAB

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<sup>17</sup> During the period 2000-06 some positive one-off effects have affected net lending, among them unusually strong revenue from capital taxes and corporate income taxes.

Table 1

**Averages of Net Lending for Different Time Periods in Budget Bills  
for 2003 to 2007**

	<b>Budget Bill 2003</b>	<b>Budget Bill 2004</b>	<b>Budget Bill 2005</b>	<b>Budget Bill 2006</b>	<b>Budget Bill 2007</b>
5 years	2.3	1.3	0.6	1.6	2.7
7 years	2.5	1.3	0.7	1.1	2.5
9 years			1.4	2.0	1.8

Note: The averages are a combination of current, forward and backward looking years. The five and seven year averages are symmetrically forward and backward looking. The 9-years average consists of three forward and five backward looking years.

The averages for net lending are calculated including savings in the funded pension system. Hence, the figures should be compared to the old 2.0 per cent target.

reaching 2.4 per cent of GDP average.<sup>18</sup> A further problem with CAB is that there are often substantial revisions *ex post*. This problem has been discussed by Hughes-Hallet, Katai and Lewis (2007). They find the revisions *ex post* partly depend on revisions of the output gap and partly of revisions of net lending figures. As a conclusion they see problems of using CAB as indicators for fiscal surveillance.

Alternative indicators of fiscal policy and evaluation of surplus target compliance are averages of net lending over time periods within a business cycle. Such indicators are, however, not without problems. First, as discussed above, there are difficulties in defining a cycle. Second, it is an open question whether or not these averages should include both *ex ante* and *ex post* data. In Table 1 various options of averages of net lending, expressed as a ratio to GDP, are presented. The current cycle of the Swedish economy could roughly be assessed to have a length of 8 to 10 years.<sup>19</sup> The averages in the table are somewhat shorter, and are calculated so that the years  $t, t+1, \dots, t+3$  are forecasts while the other years, *i.e.*  $t-1, t-2, t-3, \dots$ , are *ex post* outcomes. The rationale for the forward-looking period of three years is that the medium-term fiscal framework in Sweden has that time horizon.

It is not possible to find perfect indicators for evaluation and surveillance of the surplus target, and consequently for guidelines for stabilization policy in a fiscal framework. To handle this problem a set of indicators could be used. In this paper, the view is taken that support for long-term sustainability is of significant importance, and a particular indicator should be chosen as the *leading indicator*, while a set of other indicator could give support to the evaluation of target compliance. In the Swedish case an average of a combination of *ex ante* and *ex post*

<sup>18</sup> These figures should be compared to the old 2.0 per cent target.

<sup>19</sup> Own calculations.

data could be such a choice. This could support fiscal policy to be directed towards long-term sustainability and to avoid pro-cyclical policies.

#### 4.3 *Supporting targets*

The surplus target does not fully preclude the use of pro-cyclical policies. The target can in principle be fulfilled with small surpluses in good times and strict policies in economic downturns. Such a pro-cyclical policy, which gives rise to negative efficiency and welfare effects as discussed in Section 2, should naturally be avoided. For these reasons, there are arguments for a guiding intermediate annual target to support the overall target. It is of course possible to formulate a formal rule determining a target for the next year's net lending. Such a rule could be used for the Government's proposals for budget policy in Budget Bills, and it could as arguments include both the net lending position compared to the overall target and the cyclical position of the economy.<sup>20</sup>

Another possibility is to issue guidelines such that in normal cyclical situations, characterized by small deviations from full recourse utilization (for instance small GDP gaps), the position of the surplus related to the overall target should be the leading guide for fiscal policy. This could also include guidelines for the speed of adjustment towards the overall target over a specified forward looking time period. If the economic situation threatens to be more severe, with high unemployment or high inflation pressure, the cyclical situation should have stronger weight for the guidance of fiscal policy.

Supporting targets of these kinds could be elaborated further. However, the position taken in this paper is that intermediate targets of this type, used to guide short term fiscal policy, are very difficult to implement in practice. Forecasts on net lending depend on forecasts on tax receipts. The experiences from the last decade is that especially capital tax receipts are very volatile and problematic to forecast and, hence, affects the accuracy of net lending forecasts. The alternative to this type of annual targets is to see the surplus target in the medium term perspective, as it is formulated. In the Swedish system the fulfilment of the surplus target leans heavily on the fulfilment of the expenditure ceilings. A clear principal for how the level of the expenditure ceilings are determined, and how the surplus target is taken into account in the calculation, is therefore very important.

## 5 **Countercyclical policies under the expenditure ceiling**

The multi-annual expenditure ceiling has proven to be a very effective tool to ensure fiscal discipline. The political significance of complying with this fiscal

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<sup>20</sup> Such an annual target has been in effect in Sweden since 2002. The experience with the annual target has, however, been disappointing. Serious questions can be raised as to the impact the annual targets have had on fiscal policy.

target in Sweden is considerable, and presently it does not seem likely that any government would be prepared to breach the ceiling. An indication of this is the expenditure reducing measures that have repeatedly been imposed at times when fiscal forecasts have indicated that there is a risk of exceeding the expenditure ceiling.<sup>21</sup>

An important feature of the expenditure ceiling is that it can restrain pro-cyclical pressures in good times. Since the expenditure ceiling is set well in advance of the start of the budget year – typically at a time when there is no macroeconomic forecast of the cyclical position of the economy for that year – it does not take into account any temporary revenue effects. Deviations from the structural revenue growth, or the effect of one-off events on government revenue, will neither warrant higher nor lower expenditure levels. Higher than expected revenue will, in the short term, lead to a larger central government budget surplus, and to a higher general government net lending for that year. Conversely, lower revenue will cause net lending to decrease below its long-term level. Such variations are fully in line with the construction of the surplus target, which is formulated as an average over the business cycle. Worth noting is that these short-term effects on net lending, when the expenditure ceiling is a preset factor, comes through government revenue rather than government expenditure.

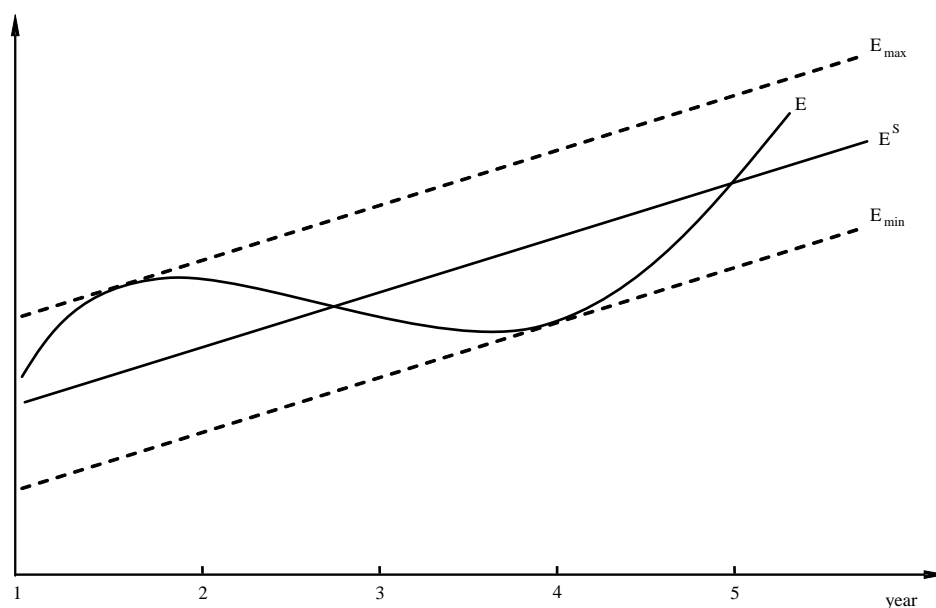
To a large extent, this analysis is appropriate in the sense that the main impact on government finances that stems from cyclical deviations from full-employment GDP levels is on the revenue side of the budget. It is estimated that the automatic stabilizers in Sweden work with  $\frac{3}{4}$  on the revenue and only with  $\frac{1}{4}$  on government expenditure. Although the most significant effect is on revenue, it is worth considering to what extent the expenditure ceiling is an obstacle to passive and active fiscal stabilizations policies in economic downturns, and how temporary variations in expenditure can be managed in a system of multi-annual nominal expenditure ceilings. The necessity of making this analysis is strengthened by the fact that apart from the cyclically-induced variations of expenditure around a trend expenditure level, there are other factors causing uncertainties about the actual expenditure outcome.<sup>22</sup>

<sup>21</sup> These measures have been of different character. In some cases, the Government has introduced measures reducing expenditure through cuts in programs. For example, there were over-the-board reductions of administrative appropriations in 2003 and 2005 of 0.72 and 0.6 per cent respectively. More frequently, selected expenditure has simply been deferred to another fiscal year. Since the accounting of ceiling restricted expenditure is cash-based, the postponement of a payment reduces pressure on the ceiling for current year – but increases expenditure in the following year. A somewhat more disturbing development has been a growing tendency to resort to net-budgeting of user-fees and various kinds of tax expenditure and tax credit schemes. Such measures reduce accounted expenditure, but have no effect on net lending. For a discussion on the incentives to resort to one-off measures and creative accounting under a system of fiscal rules see Koen and van den Noord (2005).

<sup>22</sup> The expenditure of all transfer systems are covered by the expenditure ceiling. An increase in the number of individuals eligible for health related entitlements or child-care benefits has to be absorbed under the ceiling. In addition, government agencies have a certain ability to both transfer unspent appropriations to the following fiscal year and to borrow against future appropriations. Such carry-over facilities mean that expenditure outcome, which is what is restricted by the ceiling, can deviate from the level of appropriations. Finally, the ceiling must be able to absorb pure forecasting errors.

Figure 5

## Cyclical Variations of Expenditure



A stylized illustration of the variations around an expenditure trend is given in Figure 5 above. The figure shows nominal expenditure outcome  $E$  for the structural level resulting from stable policies  $E^S$  in a scenario where actual GDP varies symmetrically with a given oscillation around a trend-GDP level.<sup>23</sup>

### 5.1 Managing cyclically-induced expenditure variations with a budget margin

The fundamental idea behind the concept of an expenditure ceiling is that there is an inherent pressure to increase government expenditure in public decision making, and that this tendency can be balanced by institutionalized fiscal restrictions.<sup>24</sup> By setting the level of expenditure in advance of the start of budget negotiations – and preferably based on available resources rather than expenditure

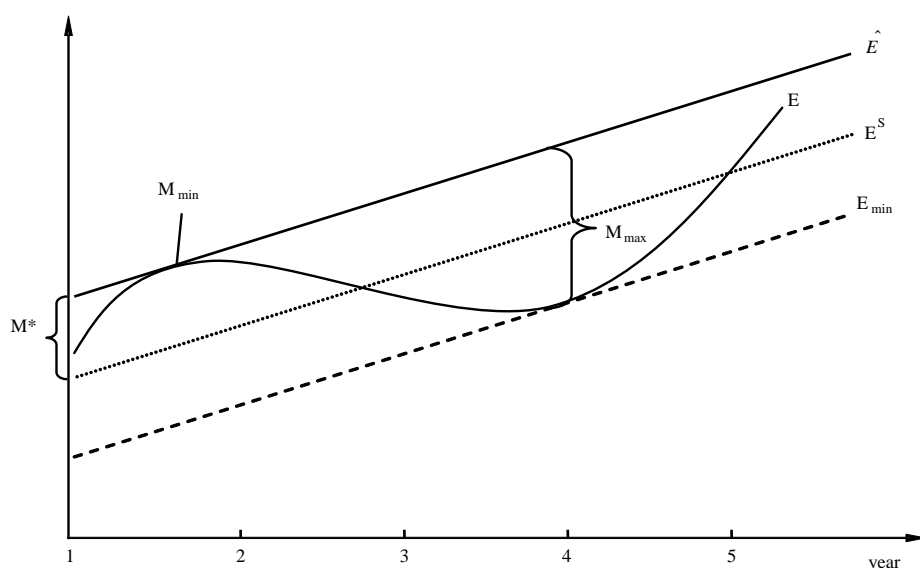
<sup>23</sup> The assumption of unchanged policies can be relaxed without changing the conclusion. The analysis in this section is based on an assumption that deviations from trend-GDP have a maximum limit, in the figure given by  $E_{\max}$ . In essence, this is a question of determining the degree of certainty with which actual events will fall within the range of expenditure levels assumed to be necessary for stabilization policies, *i.e.* below the level of the expenditure ceiling.

<sup>24</sup> See, for example, Kopits and Symansky (1998).



Figure 6

## Expenditure Ceiling with a Budget Margin



ambitions – the necessity of prioritizing between various policy options becomes evident, and overall fiscal discipline is facilitated. As discussed above, however, there are strong arguments to allow for expenditure variations to countercyclical variations in the economy and to ensure an effective implementation of government policies. These opposing perspectives have to be reconciled, and a balance between firmness and flexibility found.

One possibility of solving the need to allow for temporary variations of expenditure is to plan expenditure at a level below the expenditure ceiling.<sup>25</sup> Such a system of a *budget margin* is illustrated in Figure 6 above.

In this figure, the structural expenditure level considered consistent with fiscal sustainability<sup>26</sup> is given by the dotted line  $E^S$ . For reasons given above, actual expenditure outcome will fluctuate around this structural level, as illustrated by the

<sup>25</sup> A system with an institutionalized budget margin was proposed by the Government Commission "Evaluation and further Development of the Budget Process", SOU:61, Stockholm 2000 (in Swedish with a short summary in English).

<sup>26</sup> In the case of Sweden, this would be interpreted as the level of expenditure that, given the level of revenue, would generate general government net lending in line with what is necessary to achieve an annual average of 1.0 per cent of GDP.

curve  $E$ . In order to avoid exceeding the expenditure ceiling  $\hat{E}$  there is a budget margin  $M$  between planned – or structural – expenditure and the ceiling.

The budget margin can be interpreted in three ways, all relevant to the analysis. The first concept of a budget margin is the confidence interval for expenditure development for a particular structural level of expenditure. Based on an analysis of the sensitivity of expenditure to variations in the GDP level, it is possible to determine a budget margin, which – given the risk the Government is prepared to take that actual expenditure falls outside this range – will absorb expenditure levels above the structural level. In Figure 6 this *ex ante* notion of the budget margin is set at  $M^*$ .

A second interpretation of the budget margin is the relationship between the *ex post* outcome of expenditure and the expenditure ceiling. Variations in the expenditure level will lead to differing budget margins, assuming that any room under the ceiling is not immediately committed to new activities and programs, as discussed below. In Figure 6, the expenditure outcome results in margins from  $M_{\min} = 0$  to  $M_{\max} = 2 \times M^*$ .

A third interpretation is the *ex ante* difference between forecasted expenditure and the expenditure ceiling. At the time the expenditure ceiling is set for the third additional year, this notion of the margin should be equal to  $M^*$  since projected expenditure will be equal to structural expenditure.<sup>27</sup> At the end of the current year, the forecasted margin will approach the *ex post* margin. In between these periods, however, the forecasted budget margin can fluctuate significantly, reflecting the constant reassessments that are made of the macroeconomic and fiscal development. In particular, a small – or even a negative – margin is an indication of an unsustainable expenditure development requiring government interventions.

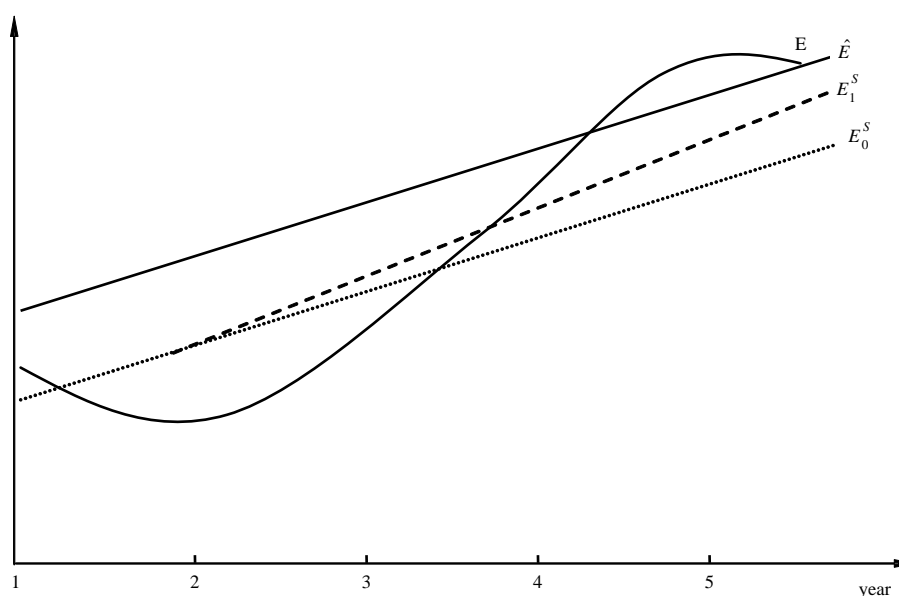
## 5.2 A budget margin may introduce an expenditure risk

An institutionalized *ex ante* budget margin can be used to manage uncertainties in expenditure development in a system with a hard nominal limit on expenditure outcome, such as the expenditure ceiling used in Sweden. The construction of a budget margins recognizes that temporary variation around a structural expenditure level are likely to occur, and that these should be allowed for macroeconomic reasons and to ensure efficiency in the public administration. The purpose of the expenditure ceiling is to control the long-term – or structural – expenditure level, not temporary fluctuations.

<sup>27</sup> In general, there is no forecast of the cyclical position of the economy in this perspective, given the uncertainties associated with such a time-horizon. Consequently, the base-line assessment of expenditure should coincide with the structural level of expenditure.

Figure 7

## Expenditure Risk with a Budget Margin



It is not, however, evident how to decompose expenditure into structural and temporary factors. For this reason, there is – with the added degrees of freedom given by a budget margin – a risk of misjudging to what extent actual expenditure is consistent with the desired and sustainable level.

Apart from the problem arising because of imperfect information, a significant budget margin may be inconsistent with assumptions regarding public decision making. If a medium-term restriction is considered necessary in order to control short-term pressure to increase expenditure beyond a sustainable level there will be a significant risk that the budget margin will be abused. The flexibility set aside to absorb temporary increases will instead be used to expand permanent expenditure. Such a development can be illustrated by Figure 7.

In this situation, there is a significant room under the expenditure ceiling in year 2. This is misinterpreted – intentionally or unintentionally – as grounds for expanding government policies. Instead of continuing along the path of sustainable expenditure levels given by  $E_0^S$  there is a shift to a new path given by  $E_1^S$ . In the following cyclical downturn, the budget margin is insufficient to absorb the increased expenditure and the ceiling will be exceeded unless expenditure cutting measures are initiated.

The above picture describes well the development of government finances in Sweden in the early years of this decade. Strong pressures to expand existing policies resulted in small budget margins for the upcoming period. In the economic downturn in 2001–04 there was insufficient room to allow for growing expenditure for labour market policies, and the government had to initiate expenditure reducing measures. In addition to this, the pressure on the ceiling lead to some dubious accounting practices, and the introduction of measures financed by tax expenditure.

### 5.3 *Institutional preconditions for a budget margin*

The above situation highlights the fact that fiscal rules in no way eliminate the underlying forces that put an upwards pressure on public expenditure. In order for these arrangements to result in the desired outcome, attention has to be given to a broader institutional context consisting of accounting conventions, verification mechanisms and independent monitoring. In particular, an institutionalized budget margin that allows for temporary variations in expenditure requires an additional restriction on its use.

An important restraining factor for an inappropriate use of the budget margin is a full presentation of the composition of *ex ante* budgeted and planned expenditure and *ex post* outcome in relation to the expenditure ceiling. Through a high level of accountability with regards to the use of the budget margin there will be disincentives for the Government to commit the added flexibility under the ceiling for unintended purposes.

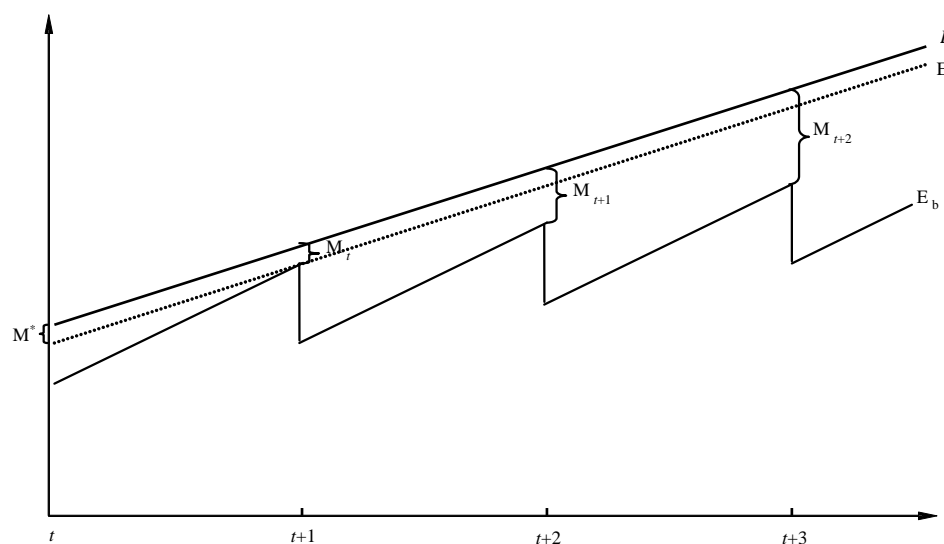
Full disclosure of the composition of government finances facilitates an evaluation of the performance in relation to the target as expressed by the expenditure ceiling. Information on the amount of resources allocated to cyclical expenditure is, however, only meaningful if set in relation to the state of the economy. Apart from the Government's forward looking assumptions and historical analysis of the macroeconomic development, it is valuable with independently produced forecasts, which can provide a second opinion on the necessity to allow for expenditure above or below the structural level.

### 5.4 *An alternative model*

The model outlined above assumes that it is possible to manage a significant budget margin, and that a situation where expenditure increases beyond what is sustainable in the longer run can be avoided. Alternatively, the cost of not being able to ensure complete fiscal discipline is considered to be less than the cost of not being able to pursue a countercyclical policy in an economic downturn. Such a stand is, however, not uncontroversial. Considering the severe fiscal imbalances experienced by many European countries in general and Sweden in particular, the importance attached sound public finances, and consequently the acceptable cost of enforcing expenditure discipline, may both be high.

Figure 8

## A System with a Minimal Budget Margin



If fiscal discipline is seen as the primary objective, it may be desirable to avoid the flexibility introduced by introducing expectations of a significant *ex post* budget margin on average. Instead, it may be prudent to aim for a minimal discrepancy between expenditure outcome and the expenditure ceiling. Recognizing that it is still necessary to have a certain room for unexpected events, it is possible that the budgeted or planned level of expenditure is lower than the ceiling. The Government is, however, allowed to use any room under the ceiling not required for unexpected expenditure increases. Such a model can be illustrated by Figure 8.

This figure shows the outlook for an upcoming three year period at the start of the current fiscal year  $t$ . The only requirement in this model is that the budget margin, *i.e.* the difference between budgeted or planned expenditure  $E_b$  and the expenditure ceiling  $\hat{E}$  at the end of the current fiscal year  $M_t$  should not be less than a certain preset value  $M^*$ , e.g. 0.5 per cent of the expenditure ceiling.<sup>28</sup> It may, however, be necessary for the Government to take into account the fact that future uncertainties about the expenditure development will be even larger, and therefore plan for budget margins for the outer years in the medium-term perspective that are larger than  $M^*$ . In the figure this is illustrated by the planned margins for  $t+1$  and

<sup>28</sup> Naturally, the expenditure outcome cannot exceed the expenditure ceiling.

$t+2$ , where  $M_{t+2} > M_{t+1} > M^*$ . It also becomes obvious that the Government has to plan expenditure reductions for future years in order to ensure that uncertainties can be managed under the expenditure ceiling. Such stop-and-go approach is not the most effective approach in public expenditure management, but may be considered a reasonable price to secure fiscal discipline.

## 6 Conclusions

The fiscal framework in Sweden has proven to be an effective tool in ensuring sustainable finances. The medium-term restrictions on net lending and central government expenditure, together with the balance requirement on local governments, have contributed to a strong fiscal position, and a promising prospect for meeting future strains from a shifting age structure of the population. With the restrictions on fiscal policy given by this framework, it is of interest to analyze to what extent the possibilities for countercyclical fiscal policies – dampening the variations in production and unemployment – are circumscribed in Sweden. Such a question is of particular interest given Sweden's historically high ambitions to curb unemployment.

In the economic literature, concern has been raised about the possibilities of conducting effective countercyclical policies. However, recent studies have given new fuel to the argument that fiscal policies can play a role in diminishing the welfare loss from temporary deviations from full employment levels of GDP. These studies emphasize imperfections in capital markets, the effect of expectations and adjustment paths. The view of this paper is that fiscal rules must allow for countercyclical fiscal policies. Such policies should, however, be limited to the automatic stabilizers unless the economy is hit by an exceptional shock, causing a significant deviation from full employment GDP. In such a case discretionary measures can be considered. Fiscal rules that contain enough flexibility to allow for severe imbalances will, however, hardly be restrictive enough in normal circumstances.

The Swedish surplus target is formulated for the annual average of general government net lending over a business cycle. There are, consequently, complete possibilities of conducting expansionary fiscal policies that reduce net lending for individual years as long as there is a corresponding higher-than-the-targeted average in other years during the same cycle. Such flexible definition requires instruments for verifying to what extent fiscal policies for an individual year is in line with the surplus target. The use of structurally adjusted net lending, *i.e.* CAB, could serve the role of such an indicator. Given the considerable uncertainties associated with this variable, especially for forward looking years, a CAB is not a suitable instrument to confirm compliance with the target. A second option is to use an average net lending based on both backward looking and forward looking years. In the case of Sweden, such an average could include a total of seven to nine years, consisting of the forecast for the three forward looking years in the medium-term framework ( $t+1$ ,  $t+2$

and  $t+3$ ), a forecast for current year ( $t$ ) and the outcome for three to five backward looking years. This average could be adjusted to give more weight to years close to the current year. A third option for verifying compliance with the surplus target and to guide fiscal policy in the short term is an annual target based on a more complex analysis of the justified fiscal policy than a simple CAB. However, such an intermediate target would be difficult to implement in practice.

The construction of the multiannual expenditure ceiling does not explicitly give any room for countercyclical fiscal policies on the expenditure side of the budget. Depending on the relationship between the ceilings and budgeted and projected expenditure, there may not be sufficient room for allowing increased expenditure in an economic downturn. Such a problem can be remedied by ensuring a margin under the ceiling, which can absorb unexpected increases in ceiling-restricted expenditure. With the explicit introduction of a budget margin, however, it becomes necessary to consider the relationship between the ceiling and targeted structural expenditure level. Assuming that it is possible to preserve a margin not required by temporary expenditure variations, the ceiling could be set at a level higher than targeted expenditure level. On average over the cycle, this margin would not be used. Such a construction is, however, not consistent with an assumption of the existence of a short term fiscal illusion and a deficit bias. An alternative solution is, therefore, to set the ceiling at the level of targeted expenditure. A margin that can absorb unexpected expenditure increases is created by a successively decreased level of expenditure in the medium term. In this model, any unutilized room under the ceiling can be used for new reforms, given that the medium-term expenditure profile allows for a sufficient margin.

**REFERENCES**

- Andersen, T.M. (2005), "Is There a Role for an Active Fiscal Stabilisation Policy?", CESifo, Working Paper, No. 1447, April.
- Andersen, T.M. and L. Haagen Pedersen (2006), "Assessing Sustainability and the Consequences of Reforms", in *The Budgetary Implications of Structural Reforms*, workshop organized by the European Commission, December 2, 2005, acts published as *Economic Papers*, No. 248, May.
- Anderson, B. and J.J. Minarik (2006), "Design Choices for Fiscal Policy Rules", Working Party of Senior Budget Officials, OECD, Paris.
- Balassone, F. (2005), "The Swedish Fiscal Framework: Towards Gradual Erosion", International Monetary Fund, Selected Issues, Washington (D.C.).
- Buchanan, J.M. and R.E. Wagner (1977), *Democracy in Deficit – The Political Legacy of Lord Keynes*, Academic Press, New York.
- Calmfors, L. (1998), "Macroeconomic Policy, Wage Setting and Employment – What Difference Does the EMU Make?", *Oxford Review of Economic Policy*, No. 14.
- Campbell, J.Y. and N.G. Mankiw (1991), "The Response of Consumption to Income: A Cross-Country Investigation", *European Economic Review*, No. 25.
- European Commission (2006), "Numerical Fiscal Rules and Institutions for Sound Public Finances", in *Public Finances in EMU 2006*, pp. s149-68, Brussels.
- Fischer, J. (2005), "Swedish Budget Rules: Praise from Brussels, Pressure at Home", *ECFIN Country Focus*, Vol. 2, No. 4, Brussels.
- Fischer, J. and R. Boije (2006), "The Swedish Budget 'model': A Genuine Beauty or in Need of a Face-lift?", presented at the seminar organized by the European Commission *The role of Fiscal Rules and Institutions in Shaping Budgetary Outcomes*, Brussels, preliminary version.
- Hansson-Brusewitz, U. (2002), "The Swedish Medium-term Budget Framework", in *A Collection of Country Reports*, KDI School of Public Policy and Management, Seoul (Korea).
- Hansson-Brusewitz, U. and Y. Lindh (2005), "Expenditure Ceilings and Fiscal Policy – Swedish Experiences", in *Public Expenditure*, proceedings of the 7th Banca d'Italia workshop on Public Finance, Perugia.
- Hemming, R. *et al.* (2002), "The Effectiveness of Fiscal Policy in Stimulating Economic Activity. A Review of the Literature", International Monetary Fund, Working Paper, WP/02/208.
- Hughes-Hallet, A., R. Katai and J. Lewis (2007), "Early Warning or Just Wise After the Event?", DNB Working Paper, No. 124, January.



- IMF (2006), Article IV Consultation.
- Koen, V. and P. van den Noord (2005), “Fiscal Gimmickry in Europe: One-off Measures and Creative Accounting”, OECD, Economics Department, Working Paper, No. 417, Paris.
- Kopits, G. (2001), “Fiscal Rules: Useful Policy Framework or Unnecessary Ornament?”, International Monetary Fund, Working Paper, No. 145, Washington (D.C.).
- Kopits, G. and S. Symansky (1998), “Fiscal Policy Rules”, International Monetary Fund, Occasional Paper, No. 162, Washington (D.C.).
- Kydland, F.E. and E.C. Prescott (1977), “Rules Rather than Discretion: The Inconsistency of Optimal Plans”, *Journal of Political Economy*, Vol. 85, No. 3, pp. 473-91.
- Larsson, A. (2007), “Real Effects of Monetary Regims”, Academic Dissertation, Stockholm University.
- Lucas, R.E. Jr. (1981), *Studies in Business Cycle Theory*, MIT Press, Cambridge.
- Manasse, P. (2005), “Deficit Limits, Budget Rules, and Fiscal Policy”, International Monetary Fund, Working Paper, No. 120, Washington (D.C.).
- Molander, P. (1999), “Reforming Budgetary Institutions: Swedish Experiences”, in J. von Hagen and R. Strauch (eds.), *Institutions, Politics and Fiscal Policy*, Kluwer Academic Publishers.
- (2001), “Budgeting Procedures and Democratic Ideals”, *Journal of Public Policy*, Vol. 21, No. 1, pp. 23-52.
- Mundell, R.A. (1968), *International Economics*, Macmillan, New York.
- Ricciuti, R. (2003), “Assessing Ricardian Equivalence”, *Journal of Economic Surveys*, No. 17, pp. 55-78.
- Schick, A. (2005), “Sustainable Budget Policy: Concepts and Approaches”, OECD, *Journal on Budgeting*, Vol. 5, No. 1, pp. 107-29, Paris.
- Snowdon, B. and H.R. Vane (1999), *Conversations with Leading Economists*, Edward Elgar Publishing.
- SOU 2002:16, “Stabiliseringspolitik i valutaunionen”, (“Stabilisation Policy in the Monetary Union”). A Summary of the Report is available in English.
- Swedish National Audit Office (2006), “The Government’s Monitoring of the Surplus Target”, Report 2006:17, Stockholm.
- Tanner, E. (2003), “Fiscal Rules and Countercyclical Policy: Frank Ramsey meets Gramm-Rudman-Hollings”, International Monetary Fund, Working Paper, No. 03/220, Washington, (D.C.).

