

THE CASE FOR SPENDING RULES

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Introduction

According to the Stability and Growth Pact (SGP), European countries should achieve a budgetary position ‘close to balance or in surplus’ over the medium term while keeping the public deficit within the value of 3 per cent of GDP. The ‘close to balance or in surplus’ target is usually interpreted as applying to the cyclically-adjusted fiscal balance: the governments should let the automatic stabilisers operate freely, with discretionary policy being the exception rather than the norm. Such type of behaviour implies a substantial change compared to the past experience: empirical evidence indicates that European fiscal policies have tended to behave pro-cyclically. However, the ‘close to balance or in surplus’ target is a guideline rather than a rule as there is no process to sanction deviations from this objective.

Within the boundaries of the Maastricht Treaty and of the SGP, a number of European countries have complemented the SGP with multi-year frameworks. These frameworks are designed to ensure consistency between the SGP and the medium-term objectives for the debt and the government share in the economy. In addition they bring more discipline to fiscal policy-making during ‘good times’.

The objective of the paper is to shed light on the usefulness of a medium-term framework anchoring fiscal policy on spending rules. Although it is widely recognised that expenditure-based fiscal retrenchments are more successful than tax-based consolidations (Alesina and Perotti, 1997; Zaghini, 1999), permanent spending rules have not retained much attention in the economic literature. We argue here that a spending rule curbs the tendency to relax fiscal policy during ‘good times’, hence preserving the free operation of automatic stabilisers on the revenue side. The first section of the paper discusses to what extent a stable cyclically-adjusted position – ‘close to balance or in surplus’ - can be seen as a relevant target for fiscal policy. In a second section, we draw the

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lessons from the difficulty to adjust for the cycle in real time: a spending rule is more transparent than a cyclically-adjusted balance and more operationally targeted. The spending rule could be usefully inserted in a medium-term framework to ensure *ex post* compliance and to avoid excessive tax cuts during 'good times'. The framework should, in particular, specify how expenditure overruns should be clawed back in the following years and how 'growth dividends' and revenues overshoots should be used.

1. Cyclically-adjusted fiscal targets: a critical evaluation

The aim of the paper is not to review the various shortcomings of the cyclically-adjusted balance (see, for a comprehensive assessment, Blanchard, 1992; Chouraqui *et alii*, 1992 and Mackenzie, 1989), but to deal with the conceptual and technical difficulties the policy-makers in the European Union face in real time. A stable cyclically-adjusted balance may not be a relevant target given the difficulties to identify the type of shocks hitting the economy and to perform the cyclical adjustment.

1.1 *From nominal to cyclically-adjusted balance targets*

Balanced budget rules, or more generally nominal deficit targets, may be useful as temporary, strategic initiatives to aid the process of fiscal consolidation when the initial position of the public finances is weak (Kopits and Symanski, 1998). However, a balanced budget rule is at odds with the operation of automatic stabilisers and appears unsustainable in the event of a recession. The limits of nominal targets have induced policy-makers to shift more or less explicitly to cyclically-adjusted targets. Drawing the lessons of past failures, the cyclically-adjusted balance target meets two of the main requirements identified in the literature on fiscal rules: the rule can be applied on a permanent basis by successive governments; the rule is state-contingent, so as to give the authorities sufficient flexibility to react to unforeseen shocks. However, the rule fails to meet another requirement: it is neither simple to define nor easy to monitor in real time.

A stable cyclically-adjusted balance should normally indicate that the stance of fiscal policy has remained unchanged and that variations in

the budget balance reflect the impact of cyclical variations in economic activity. More specifically:

- the level of the cyclically-adjusted balance provides an idea of the room of manoeuvre to allow the operation of automatic stabilisers within the 3 per cent ceiling enshrined in the SGP;
- changes in the cyclically-adjusted balance indicate to what extent fiscal developments depart from the operation of automatic stabilisers.

In practice, targeting a stable cyclically-adjusted position - close to balance or in surplus – over the business cycle, with the idea of allowing automatic stabilisers to operate fully, raises several difficulties. Labelling the sensitivity of public deficits as ‘automatic stabilisers’ is ambiguous as the stabilisation properties of the budget depend on the nature of the underlying economic disturbances. Moreover, all technical approaches to adjust for the business cycle tend to suffer from a procyclical bias: they exhibit a positive correlation between the estimated cyclically-adjusted balance and the cycle.

1.2 The limits of cyclically-adjusted fiscal targets

1.2.1 Automatic stabilisation in the face of demand and supply shocks

A cyclically-adjusted target is based on the idea that automatic stabilisers should be allowed to operate freely in response to macroeconomic fluctuations and shocks. The automatic stabilisation of output almost always refers to the stabilisation of demand. In the face of a fall in aggregate demand, fiscal stabilisers unambiguously act as a shock absorber: the higher the automatic stabilisers, the more the output gap is stabilised. The conclusions are different, however, if the economy is affected by a supply shock. A temporary negative supply shock leaves long-term potential GDP unchanged, leading to deterioration in the output gap. Automatic stabilisers do smoothen output, but at the cost of higher inflation. A long-lasting supply shock leads to a fall in potential GDP. Hence, the cyclically-adjusted balance deteriorates, as public expenditures are rigid or indexed on higher prices, while potential GDP is falling. In this context, the automatic stabilisers delay the adjustment towards the new

Box : Cyclical Adjustment

In practice, the cyclical and cyclically-adjusted balance-to-GDP ratios (bc and bs respectively) are usually derived from the nominal balance (b) by a two-step procedure: an estimate of the output gap (og) and then of the sensitivity of tax and spending items to GDP (e_t and e_g respectively). The output gap reflects the deviation of actual GDP (Y) from a trend or potential GDP (Y_p) as a share of GDP. Once the influence of the output gap has been removed, the cyclically-adjusted component is calculated as a residual. It provides an idea of the budget balance that would prevail under 'normal conditions'. Formally:

$$bs \cong (1 + e_g og)g - (1 - e_t og)t$$

with $t = T/Y$ the tax-GDP ratio and $g = G/Y$ the expenditure-GDP ratio

$G = \bar{G}Y^{-e_g}$ and $T = \bar{T}Y^{e_t}$ where \bar{G} and \bar{T} are autonomous taxes and public expenditures.

If the output gap is equal to 0, the cyclically-adjusted balance is equivalent to the nominal balance: $bs = g - t$. If the elasticity of public spending vis-à-vis GDP is equal to 0 and the tax elasticity equal to 1, the cyclically-adjusted balance can simply be written: $bs \cong g - t(1 - og)$ where tog represents the cyclical component.

Assuming a zero public spending elasticity, variations in the cyclically-adjusted balance (as a share of GDP) can be written as:

$$\Delta bs = \Delta b - \Delta bc = [(\Delta \bar{G} / \bar{G}_{p-1}) - (\Delta Y_p / Y_{p-1})] g + (1 - e_t)t (\Delta Y_p / Y_{p-1})$$

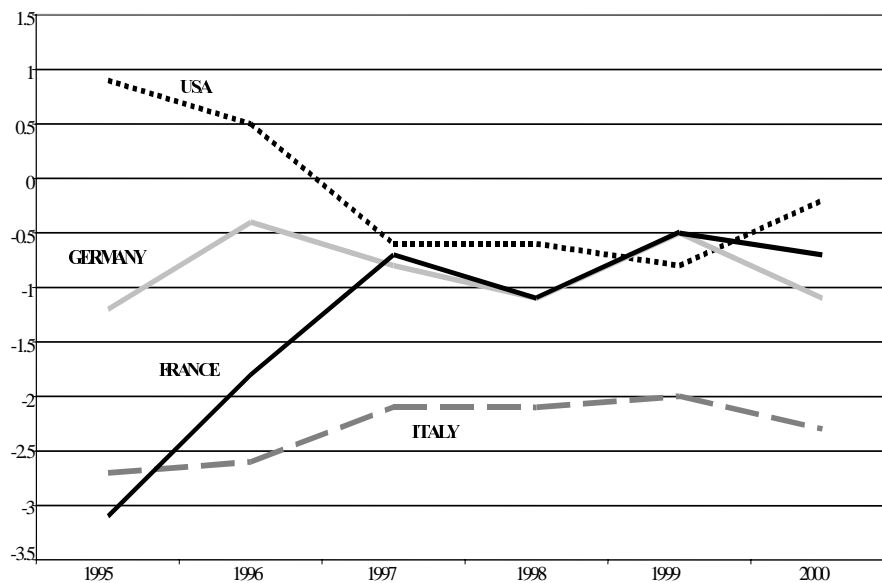
With a unitary tax elasticity ($e_t = 1$), variations in the cyclically-adjusted balance depend on the relative growth of public expenditures vis-à-vis potential GDP. The fiscal balance improves if the tax elasticity is above 1 (the so-called fiscal drag).

equilibrium level of potential output¹.

As it is very difficult to identify in real time the nature and the length of the shocks, the risk of treating changes in budget position that have structural roots as if they were the result of automatic stabilisers is high. This point is illustrated in Chart 1: an estimate of the output gap for the year 1995 made at the time is likely to be less reliable than one made five years later, given all the information that has become available in the intervening period.

Chart 1

Output gap for the year 1995



Source : OECD Economic Outlook (December 1995, 1996, 1997, 1998, 1999, 2000)

¹ Fiscal policy may contribute to smooth supply shocks *via* a reallocation of public spending and taxes: income transfers may help to spread overtime the necessary but sometimes painful adjustment in relative prices; cutting the tax wedge on labour may impulse a positive counter supply shock to the economy. However, any attempt to prevent demand from falling in line with potential GDP, *via* deterioration in the public deficit, can become counterproductive.

1.2.2 Performing the cyclical adjustment

Various approaches have been developed to disentangle the cyclical and cyclically-adjusted components of public deficits. These approaches mainly differ with respect to the method used to identify the position of the economy in the business cycle. By contrast, the marginal sensitivity of the budget balance to GDP is very close from one estimation to another (Giorno *et alii*, 1995; Hagemann, 1999; Roger and Ongena, 1999). It is therefore generally considered that the main source of uncertainty surrounding the cyclical adjustment concerns the evaluation of the output gap. However, tax elasticities matter: they vary pro-cyclically during the business cycle, while the cyclically-adjusted budget balance is evaluated on the basis of an average long-term elasticity – generally close to unity.

1.2.2.1 The correlation between output gap and potential GDP

Two ways to identify the business cycle co-exist. A mechanical approach uses smoothing devices (such as Hodrick-Prescott filters) to establish a trend level of output, with the output gap representing the difference between actual and trend output. A production function approach provides an assessment of the level of GDP consistent with stable wage or price inflation. Various methods give widely different estimates of the output gap, mainly reflecting the uncertainties surrounding the estimation of the NAIRU. All tend to entail a positive correlation between potential output and the output gap.

Potential GDP based on a production function is procyclical as it captures the cyclical behaviour of the capital stock. In the long run, the capital/output ratio and the structural unemployment rate are constant; potential GDP growth only depends on labour efficiency gains and increases in the labour force. In the short run, however, the accumulation of capital during upswing raises potential GDP above its ‘solovian path’. In this context, the investment cycle may lead to overstate the long-term potential GDP growth, increasing the risk of ‘bad policies in good times’. The correlation between the output gap and the growth rate of the economy is more pronounced with the Hodrick Prescott (HP) filter. The symmetric property of the HP filter, which requires that output gaps sum to zero over the sample, tends to limit the absolute size of the output gap at the end of the period. The HP filter tends to mistake in part the strength of demand during upswings for an acceleration in potential GDP. Conversely, if the

end of the sample is characterised by a recession, the estimated trend will be lower.

1.2.2.2 The tax elasticity fluctuations

The income elasticity of budget items used to perform the cyclical adjustment reflects the average cyclical responsiveness of these items over the sample period. However, actual year-on-year sensitivity may differ substantially from this average responsiveness. More specifically, there is widespread evidence that tax elasticities are sensitive to the business cycle, with tax revenues falling more rapidly than GDP during a downturn and increasing more rapidly during an upswing. Direct taxes, in particular, react in a non-linear way to GDP variations, reflecting the volatility of the number of profitable firms and the progressiveness of the personal income tax. This is highlighted in the French case by the volatility affecting the aggregate tax elasticity for the central government - assuming unchanged legislation: for an average elasticity of 0.9, the standard deviation stands at 0.6. Variations are less pronounced at the general government level: for an average elasticity of 1, the standard deviation stands at 0.3 (see Chart 2).

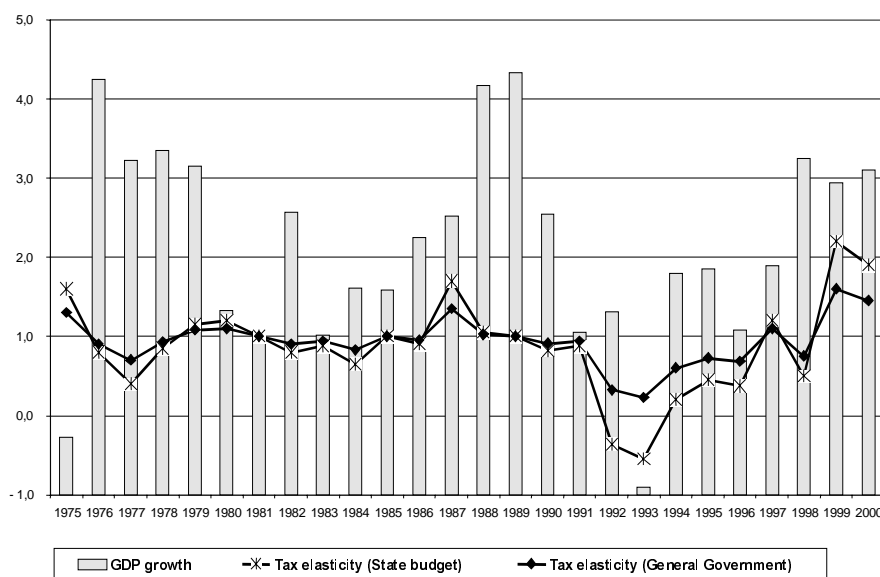
The size of the bias implied by a time-varying tax elasticity is given by the impact of the difference between the effective and the average tax elasticity used to perform the calculation. An improvement in the cyclically-adjusted balance, estimated on the basis of average tax elasticity, may be artificial if the rise in the tax burden is not due to new measures but to a transitory high elasticity. Conversely, if short-term elasticities tend to be pro-cyclical, a stable cyclically-adjusted balance may mask a deterioration in the underlying position of the public finances.

2. Anchoring fiscal policy on a spending rule

In this section, we draw the lessons from the conceptual and technical difficulties to adjust for the cycle. A spending rule is easier to define and monitor, while allowing the automatic stabilisers to work fully on the revenue side. For these reasons, several European countries such as the Netherlands, Finland, France, Sweden and the United Kingdom have turned more or less explicitly on spending rules. The credibility of the anchor is enhanced by the fact that a multi-annual budgeting framework forming part of the budgetary process supports it.

Chart 2

Tax elasticity and GDP growth



Source : Commission Economique de la Nation (2000) for the State budget. Calculations of the authors for the general government assuming a unitary tax elasticity for the other subsectors of the economy

2.1 The relevance of spending rules

Over the long run, the spending rule seems to dominate other rules, particularly deficit rules, for the following reasons:

- expenditure rules make governments accountable for what they can control directly;
- the rule allows the automatic stabilisers to operate fully and symmetrically on the revenue side. It contributes to macroeconomic stabilisation while minimising distortions – the traditional tax smoothing argument. A total spending norm may lead to pro-cyclical behaviour on the spending side, as a fall in interest rates or cyclically-sensitive spending items (mainly unemployment-related expenditures) may be accommodated with an increase in discretionary spending. However, as long as the main goal of the spending rule is to make sure

that objectives regarding the debt and the tax burden are mutually compatible, interest payments and unemployment benefits should remain in the control aggregate;

- the cap on expenditure growth can be set at different growth rates with reference to potential growth, according to preferences about the level of debt or the government share in the economy.

It is important to note that a spending rule is in essence close to a cyclically-adjusted balance target. Both aim at maintaining fiscal prudence while allowing the automatic stabilisers to work fully. The comparative advantages of spending rules are mainly practical: they are easy to define and monitor, hence minimising the risks of error or creative accounting in the short run². However, a spending rule and a cyclically-adjusted balance target are mutually compatible over the medium run: an explicit medium-term target for the budget balance can supplement the spending rule.

2.2 *Real versus nominal rules*

Whether the spending norm should be expressed in nominal (as in the UK strategy) or in real terms (as in the Dutch or French strategy) mainly depends on the time horizon.

Over a short-term horizon, nominal rules may help fiscal stabilisation. If public expenditures are set in nominal terms, a positive demand shock or a negative supply shock automatically lead to a downward shift in public spending in real terms. This fall tends to stabilise both the output gap and the position of the public finances. By contrast, a rule set in real terms may be destabilising. The differences between nominal and real spending rules should not be overemphasised in face of demand shocks, as modern economies exhibit strong price inertia. In face of a surge in imported inflation (e.g. an oil price hike or a fall in the euro), by contrast, whether the rule is set in nominal or in real terms makes a difference. A nominal target seems preferable, but it requires a high degree of flexibility in real spending, notably wages and entitlements.

² As highlighted in section 1, the uncertainties surrounding the growth rate of potential GDP are less pronounced than when one considers the level of the output gap, as long as the former is based on a prudent assessment (i.e. as long as the investment cycle is not included in the evaluation of long-run potential GDP). Therefore, setting a spending rule in relation to long-run potential GDP largely overcomes the problems raised by cyclical adjustment.

Over a medium term horizon, targeting the evolution of public spending in real terms makes more sense. The distinction between nominal and real spending rules seems *a priori* less relevant, as the norm is always implicitly based on an underlying assessment of trend inflation. The key issue is how to deal with surprises or forecast errors. If inflation forecasts are efficient (i.e. entail no systematic bias), the distinction between real and nominal expenditures is irrelevant, especially when the multi-year program permits overspending in one year if offset in the following years. However, if the effective inflation rate differs on average from the forecasts, the nominal rule may be difficult to sustain. A nominal-spending rule may stabilise the economy if the inflation rate differs from the initial path because of a long-lasting demand shock. If the inflation rate differs from the initial path because of a forecast error, a nominal-spending rule clearly destabilises the underlying position of the public finances.

2.3 *Spending rules and internal stability pacts*

Important areas of government activity are carried out by social security funds and by sub-national governments. Historically, legally binding balanced-budget rules have been enacted to restrain local deficits – with the stabilisation function generally carried out at the national or federal level. Restraining local deficits prevents externalities from fiscal misbehaviour in one jurisdiction from being transmitted, through higher interest rates, to other sub-national jurisdictions and to the national government. However, such rules create an incentive to offset by discretionary measures the operation of automatic stabilisers. As long as any significant decision-making responsibility for expenditures is devolved to local levels of government, the incentives could well be for them to spend excessively in good times, therefore undermining the credibility of a spending rule.

Hence, switching to a spending rule may require to alter the incentives faced by social security funds and local authorities or to reach a broad-based agreement among public authorities enshrined in an ‘internal stability pact’. Two necessary conditions for an internal domestic pact are the effectiveness of the information system and the public nature of the arrangement. Monitoring *ex ante* and *ex post* compliance to the spending rule requires timely fiscal aggregates at the subnational level. In addition, the rules and the procedure should be made public. The implied increase in transparency and accountability would provide in turn an incentive for

public authorities to give more weight to the longer-term consequences of their decisions.

3. Conclusion

The basic argument in favour of a spending anchor is that a policy of targeting expenditures preserves microeconomic efficiency while allowing tax revenues to act as automatic stabilisers. We have argued that a spending rule is more transparent and easier to monitor than a cyclically-adjusted balance target.

A spending rule is a necessary but not a sufficient condition to secure the symmetric operation of automatic stabilisers. Controlling expenditures does not guard against deficits being created through excessive tax cuts. A spending rule may indeed have some asymmetric effect: while allowing the automatic stabilisers to operate fully during downturns, the rule does not guarantee that windfalls are used to ‘reload the fiscal gun’. A fiscal framework anchored on a spending rule should include a medium-term target – typically a debt-to-GDP ratio - and ‘contingent rules’ to secure nominal surpluses during good times. Contingent rules should pre-establish how much of growth dividends or revenues overshoots are used to cut taxes or reduce the deficit.

REFERENCES

- Alesina, A. and R. Perotti (1997), "Fiscal adjustments in OECD countries: composition and macroeconomic effects", IMF Staff Papers, Vol. 44, No. 2, pp. 210-48.
- Blanchard, O.J. (1992), "Suggestions for a New Set of Fiscal Indicators", OECD Economics and Statistics Department Working Papers, No. 79.
- Chouraqi, J.C., R. Hagemann and N. Sartor (1992), "Indicators of Fiscal Policy: A Reassessment", OECD Economics and Statistics Department Working Papers, No. 78.
- Giorno, C., P. Richardson, D. Roseveare and P. van den Noord (1995), "Potential output, output gaps and structural budget balances", OECD Economic Studies, 24, pp. 167-209.
- Hagemann, R. (1999), "The structural Budget Balance: the IMF's Methodology", IMF Working Paper, 99/95.
- Kopits, G. and S. Symansky (1998), "Fiscal Policy Rules", IMF Occasional Paper, 162.
- Mackenzie, G.A. (1989), "Are all Summary Indicators of the Stance of Fiscal Policy Misleading?", IMF Staff Papers, Vol. 36, No. 4, pp. 743-70.
- Roger, W. and H. Ongena (1999), "The commission services' cyclical adjustment method", in *Indicators of structural budget balances*, Rome, Banca d'Italia.
- Zaghini, A. (1999), "The economic policy of fiscal consolidations: the European experience", Temi di Discussione, No. 355, Rome, Banca d'Italia, June.