ISSN 1608-7143

OECD JOURNAL ON BUDGETING

Volume 5 – No. 4

Design Choices for Fiscal Policy Rules

by

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This article discusses issues regarding budget process rules in the context of the current pattern of rising fiscal deficits. It begins by explaining the premise that budget process rules have multiple objectives, and so must be judged according to multiple criteria. Prominent among those criteria, given the apparent economic sluggishness of the early years of the 1990s and the resulting fiscal deficits, are how any particular set of rules might facilitate economic recovery and growth, but also maintain fiscal responsibility and public credibility. This discussion is pertinent to both the euro area countries and the United States, and the article explores aspects of the European Union Stability and Growth Pact and the United States Gramm-Rudman-Hollings system. The article then proceeds to analyse alternative fiscal control measures according to these and other criteria, such as the ability to maintain sound core operations of government to attain all of its long-standing policy objectives, including the funding of public investment. The article concludes by weighing the alternative rules against these criteria.

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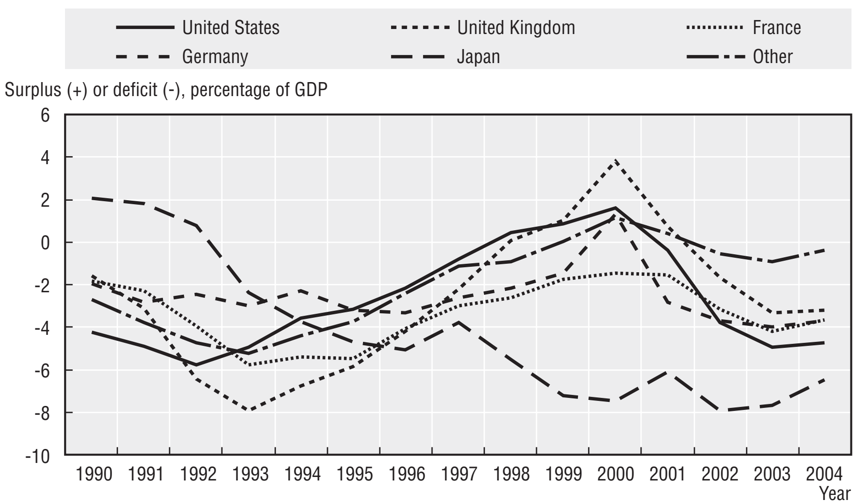
Fiscal deficits have reclaimed their place as a pressing public policy issue around the world, as the brief respite of smaller deficits and even budget surpluses in the late 1990s has come to an abrupt end. The swing back toward large deficits is somewhat concentrated in the developed world's largest economies, with Germany, the United Kingdom and the United States all moving from surplus five years ago to deficits in excess of 3% of GDP. France's deficit has swelled from well under 2% of GDP to almost 4% in 2004; Japan's budget gained ground in the 1990s from its larger deficit, but has lost that ground again. The smaller OECD countries, taken as a group, have also seen a budget deterioration, but of smaller magnitude (see Figure 1).

Figure 1. General government deficit for OECD countries, 1990-2004



Source: OECD, *OECD Factbook 2006: Economic, Environmental and Social Statistics*, March 2006.

Large sovereign credit demands on the part of the world's major developed countries are potentially destabilising, both domestically and in the global financial markets. To the extent that those demands are met by transnational borrowing, they could eventually and suddenly cause substantial drops in debtor country currency values, which could in turn increase domestic interest rates and raise prices of imports, challenging macroeconomic stabilisation policy. Over the longer term, large fiscal deficits can reduce domestically financed investment, and thus future incomes.

Large fiscal deficits on the part of the wealthiest countries are problematic also in that they draw capital out of the world's developing countries, where it is urgently needed to raise the lowest living standards.

These pressing issues have again drawn the attention of fiscal specialists to effective budget process rules – or the lack thereof. Different OECD countries face different procedural or political issues.

In the European Monetary Union (EMU), the Stability and Growth Pact (SGP) imposes medium-term budgetary objectives to achieve and maintain a status close to balance or in surplus, and a ceiling on fiscal deficits at 3% of GDP. In the early years of the SGP (and before that, the Maastricht Treaty), budget rules helped to bring the European countries toward or fully into compliance with the conditions for membership (Kopits, 2004, p. A9). However, recent developments tested the procedures for enforcement. Problems encountered in the implementation of the SGP, particularly the decisions of the ECOFIN Council in November 2005, have made it clear that the credibility of the framework to constrain deficits of member countries has been, in the words of the European Commission itself, "seriously dented" (European Commission, 2004, p. 107). Others, who are not quite so charitable in their description of the ECOFIN Council's decision, say that the legal framework of the SGP has been "effectively suspended" (Annett and Jaeger, 2004, p. 25). Whatever words are used, it is clear that the EMU's current fiscal rules need to be revised. Whether the 2005 revisions, which were intended "to solidly re-establish the credibility of the Pact and to strengthen the enforcement of budgetary discipline" (European Commission, 2005, p. 68), will be successful or not remains to be seen.

Certain attributes of the SGP played a big role in the decision to discard the current mechanism, including:

- "[R]igid adherence to annual deficit targets can impart a procyclical bias to fiscal policy through contractionary measures to buttress revenues in a downswing and a temptation to spend windfall tax receipts in an upswing" (Dabán Sánchez et al., 2003, p. 1).
- In particular, the current mechanism permitted pro-cyclical loosening of fiscal policy during the good times.[1]
- The measurement uncertainties involved with the estimation of potential output and budgetary elasticity have led to confusion, not the least of which concerns what constitutes a valid one-off

measure. "The basic problem is that changes in the primary CAB [cyclically adjusted balance] may correctly measure neither the impact nor the final effect of fiscal policy on aggregate demand" (European Commission, 2004, p. 81).

- The SGP does not deal with country-specific circumstances in a consistent manner.
- "[T]he enforcement procedures of the SGP have been found wanting at critical junctures. In particular, the early-warning mechanism was not effective" (European Commission, 2003, p. 52).
- The SGP process is complicated and confusing, and it has been difficult to communicate effectively with the media, markets, and the public on how the SGP works.

The European Commission recognises that the "number of countries that experienced excessive deficit positions in the past few years, and the difficulties in the co-ordination and surveillance processes, have highlighted the need for improvement[s]" (European Commission, 2004, p. 113) in the SGP process. Thus, they have reviewed and promoted a number of ways to rejuvenate the SGP, including:

- Allowing for country-specific circumstances by redefining the medium-term budgetary objectives of "close to balance or in surplus";
- Placing more focus on debt and sustainability in the surveillance of budgetary positions;
- Ensuring earlier actions to correct inadequate developments to foster both prudent and symmetric-over-the-cycle behaviour, and surpluses in good times;
- Catering for protracted slowdowns and ensuring consistency with the medium-term budgetary objectives by, for example, redefining the clause on "exceptional circumstances" concerning the application of the deficit criteria; and
- Allowing for country-specific elements in the enforcement of the correction of excessive deficits.

The EC recognises that by placing even more emphasis on attempting to adjust the current deficit and debt targets of the SGP for the business cycle, it may be introducing additional problems. For example, making budgetary corrections conditional on economic growth may give rise to moral hazard in forecasting GDP, because countries may have an incentive to make over-optimistic growth projections *ex ante* in order to blame lower than expected growth *ex post* for any slippage compared to plans. Likewise, the EC recognises that assessing budgetary adjustments by means of observed changes in the cyclically adjusted balance (CAB) has proven to be problematic, because changes in the budget can result from either fiscal policy actions, or higher- (or lower-) than-expected growth. In addition to these reforms of the current SGP process, the EC reviewed two alternatives to the SGP: a permanent balance rule (Buiter and Grafe, 2002) and a golden rule. But it found even more weaknesses with these alternatives than it did with rejuvenating the current SGP (European Commission, 2004, pp. 108 and 119).

Nevertheless, the proposed changes to the deficit/debt-based mechanisms of the SGP can, at best, only mitigate some of the problematic attributes of the current process; they do not fix them. The SGP process, even with the changes proposed by the EC, does not prevent countries from taking pro-cyclical actions during the good times, does not provide for consistently applied country-specific limits, and is not measurably more enforceable than the current process. At the same time, the changes proposed by the EC would make the process more complicated, with no certainty that the additional adjustments for the cycle would be accurate. Efforts to provide for more flexibility in the current system appear particularly misguided; as was stated in a 2004 *Financial Times* op-ed: "Germany and France are on course for their fourth year of excessive deficits. What would they do if they had even more flexibility?" (Munchau, 2004, p. 11).

Budget process issues are also under scrutiny in the United States. After an extended period of compliance with that country's latest budget rules (enacted in essentially their final form in the Budget Enforcement Act [BEA] of 1990), which helped to bring about significant fiscal improvement, the rules were repeatedly waived in the fiscal years of the 1990s until they expired at the end of 2002. Despite occasional discussion and some abortive legislative attempts, they have not been renewed.

Scholars have considered the effectiveness of fiscal rules, and have concluded that countries that practice fiscal discipline without rules do not need them, and that countries that flout rules will not achieve fiscal discipline with them (Kennedy and Robbins, 2001; Kopits, 2004). However, at the same time, some countries (those of the EMU among them) have determined that they need fiscal rules, and others (the United States prominently) have achieved favourable fiscal results when following sound fiscal rules, and have failed when ignoring those rules (or allowing them to expire). For this reason, the current authors undertake this inquiry regarding fiscal rules, and believe that it is useful.

This paper discusses issues regarding budget process rules in the context of the current pattern of rising fiscal deficits. It begins by explaining the premise that budget process rules have multiple objectives, and so must be judged according to multiple criteria. Prominent among those criteria given the apparent economic sluggishness of the early years of the 1990s and the resulting fiscal deficits are how any particular set of rules might facilitate (or at least not harm) economic recovery and growth, but also maintain fiscal responsibility and public credibility. This discussion is pertinent to both the euro area countries and the United States, because both have budget process issues on their respective policy agendas.

The paper then proceeds to analyse alternative fiscal control measures according to these and other criteria, such as the ability to maintain sound core operations of government to attain all of its long-standing policy objectives, including the funding of public investment. The paper concludes by weighing the alternative rules against these criteria.

1. Criteria for sound fiscal discipline rules

The core motivation of every fiscal policy rule is to promote stable economic growth through control of the accumulation of debt. As evidence of that fundamental point, every step in the evolution of the United States budget rules came on the heels of bad fiscal news – from the creation of the congressional budget process in the early 1970s, to the initial so-called Gramm-Rudman-Hollings deficit limit rule in the mid-1980s, to the enactment and refinement of the final stage of the rules in 1990, 1993, and 1997. Then, demonstrating the obverse, when concern about the budget faded with the achievement of a surplus in the late 1990s, the interest in the budget rules waned, and they were eventually allowed to expire.

The motivation behind the European Union Stability and Growth Pact was reportedly a variation on that same theme. Leaders of EU member countries believed firmly that the benefits of a credible common currency could be maintained only if all the members of the Union achieved fiscal credibility as well. The SGP was designed to counteract the potential motivation of each individual country to attempt to enjoy budgetary freedom while relying on all the others to endure the fiscal discipline necessary to maintain institutional credibility. A “free rider” country might assume that a single central bank for the entire EMU would not raise interest rates to punish a lack of fiscal discipline on the part of just one country.

However, even though every fiscal policy rule has one primary motivation, creating such a rule requires a multi-dimensional choice. There are at least two proximate objectives: (a) long-term fiscal responsibility and sustainability; and (b) short-term macroeconomic stabilisation.

The first objective, fiscal responsibility, is measured most simply in terms of control over the accumulation of debt. Assuming rational financial markets and economic actors, that criterion must extend over time into the foreseeable future, raising issues about the long-term outlook and sustainability. It also requires that the fiscal authorities establish confidence in the public that future policy choices will be sound and responsible.

At the same time, control over the accumulation of debt should be achieved at the least possible cost of unemployment and economic slack in the near term, very simply for the well-being of the population at large. In the extreme, policy that needlessly prolongs an economic downturn could prove self-defeating even in the long run. It would add to the stock of debt, even if only on a one-time basis. It may deter private business investment, at least for a time, extending the period during which economic performance would be sub-par and fiscal deficits and debt accumulation would be larger than necessary.

Thus, achievement of long-term fiscal sustainability requires credibility with the financial markets and the public. Achievement of either long-term sustainability or short-term stabilisation requires that the fiscal rule be transparent and administrable, in terms of both its ongoing implementation and its enforcement, and that it be viable in the political domain. A rule that is impossible to enforce cannot have its desired effect on debt accumulation, sustainability and credibility. Likewise, credibility will not be achieved by a discipline mechanism that is not publicly accepted as politically sustainable over a meaningful time horizon. And no fiscal rule should interfere with the core functions of government as it strives to achieve all of the public sector's other long-standing objectives. This involves, among other things, predictable funding and adequate funding for public investment.

Because of the multi-dimensional objectives of fiscal rules, the apparent superiority of any rule on the basis of one criterion is not a sufficient justification for adoption. This is most obviously true regarding the need for a balance between macroeconomic stabilisation and debt restraint. However, it may be especially noteworthy with respect to real-world constraints such as administrability, credibility and political viability. Because so much of the public benefit of fiscal responsibility comes through the behaviour of financial markets, any successful budget rules must be demonstrably workable and credible.

Furthermore, because debt control is solely a function of budgeting, whereas macroeconomic stabilisation can be pursued through monetary as well as fiscal policy, any policy must have substantial advantages with respect to the secondary goal of stabilisation to offset any disadvantage with respect to the primary goal of fiscal control. There is some difference of circumstance between the European Monetary Union, with its single central bank and numerous fiscal authorities, and the United States. However, this distinction should not be exaggerated; the 50 states are not small and are quite diverse, and the EMU countries have for decades been constrained in their fiscal and monetary policies by trade and currency considerations. The European Central Bank can be expected to respond to adverse macroeconomic shocks that are strong enough to affect the greater part of the EMU, and the SGP does provide exceptions that would apply if a significant shock should be more localised. So to a certain degree, the principle remains that monetary policy can carry at least some of the load of macroeconomic stabilisation, and that fiscal rules therefore should focus somewhat more closely on debt accumulation.

For the same reason, fiscal policy rules should be judged as well on their harmony with sound monetary policy making. Predictability and stability should be important considerations. Monetary authorities would be more confident in taking important decisions, either to act or not to act, if they could rely on the fiscal process to follow a sound and steady course. On the other hand, a fiscal rule that could respond to sharp movements in budget outcomes with abrupt changes in the fiscal stance would make monetary policy making much harder, and make monetary authorities in effect compete with fiscal policy makers, rather than co-operate with them.[2]

In sum, the choice of a fiscal rule, like fiscal policy making itself, requires perspective and judgment. The focus must extend over time and across policy making criteria. The optimal choice may not be the best by one particular standard, but must balance several important objectives and must be durable under stressful economic and political conditions.

2. Some alternative fiscal rules

Among the numerous fiscal rules that have been implemented, there are probably two distinct broad classes that may serve as potential models: (1) deficit-and-debt-based rules, and (2) expenditure rules.

Deficit-and-debt-based rules ("deficit rules", for convenience) generally operate through numerical limits on the amount of the annual deficit – either a limit denominated in terms of currency, such as zero, or a limit set as a percentage of the GDP. Examples of this type of fiscal rule include the European Union's Stability and Growth Pact, and the United States Gramm-Rudman-Hollings system (which was in effect for fiscal years 1986 through 1990).

The US system was based on statutory dollar deficit limits, gradually falling to zero, which were revised once (to ease the restrictions) before the system was replaced. The Stability and Growth Pact sets a maximum deficit of 3% of GDP.

A possible alternative to this approach, to be discussed in some detail in this paper, is to adjust the deficit limit according to the state of the economy – for example, to set a deficit limit as a percentage of potential, rather than actual, GDP. This would leave unchanged the maximum permissible fiscal deficit in currency for a country whose GDP was determined to have dropped below (or risen above) an unchanged estimate of potential. Some would argue that such a modification would be an improvement upon a fixed percentage-of-GDP limit (although the Stability and Growth Pact already allows exceptions for temporary increases in deficits).

The key characteristic of the second broad class of fiscal rules, expenditure rules (or "spending rules" for short), is that they aim to limit policy-induced increases in spending and reductions in taxes, rather than to focus directly on the deficit. Note, importantly, that the terms "expenditure rules" and "spending rules" should **not** be construed necessarily to exclude controls on revenue-losing changes in tax policy. The now-expired US system was in some respects the most elaborate model. It used dollar-denominated caps on annually appropriated spending, with pay-as-you-go (PAYGO) restrictions on the aggregation of spending mandated by permanent appropriations (mostly for programmes with important automatic stabilisation implications) **and taxes**. In the US case, it is unlikely (in the judgment of the present authors) that the rule would have succeeded without including revenues as well as spending. Other examples of spending rules use caps on all spending, or on a broader range of spending than did the United States; this is a policy choice that can accommodate the rule to different countries and institutions, as is discussed further below.

A second characteristic of the US version of a spending rule is that it has its effect *ex ante*, rather than *ex post*. In other words, the spending rule constrains policy actions as they are taken, and thus their future effects, rather than requiring remedial action for their budgetary results after those results are recorded for a past fiscal year. The enforcement of the spending caps therefore constrains appropriations as they are enacted, and the enforcement of the PAYGO rule constrains the estimated future effects of changes in tax policy and in mandatory spending programmes. The US system used across-the-board spending cuts ("sequesters") to remedy policy overages shortly after they were enacted.

The US version of an expenditure rule was enacted at the start of fiscal year 1991, to replace the prior deficit-based rule. It continued in force, having been re-enacted twice, through the end of fiscal 2002, when it expired. It was, however, overridden by statute numerous times in the last three years of its life, after helping the budget to leave fiscal deficit and enter surplus in the late 1990s.[3]

This paper will analyse an expenditure rule generally following the US model in more detail, as an alternative to a deficit rule (with or without cyclical adjustment). In keeping with the discussion above, this comparative analysis will aim to determine which of the two alternative classes of rules might better satisfy, on balance, several criteria. To be preferred, an alternative should achieve the better mix of debt control and counter-cyclical macroeconomic policy, taking into account the administrability, political viability and credibility of the rule itself.[4]

3. Evaluating two alternatives

3.1. Background: Uncertainty and fiscal rules

At the outset, it is important to discuss a possible simple misconception. A deficit rule might be assumed to be superior to a spending rule for purposes of long-term sustainability and control of debt, for the simple reason that it at least in name targets precisely the ultimate cause of additional public borrowing, the deficit, rather than the controllable proximate causes, spending increases or tax decreases. However, that assumption is incorrect; the linkage between the rule and the ultimate borrowing outcome is by no means exact. The US experience helps to explain this point.

The long-term goal of fiscal rules – sustainability – necessarily extends over time. Thus, any deficit rule, to be successful, must control future deficits – and therefore must operate through estimates. (Deficit rules can also target the deficit in an ongoing fiscal year. The US system from fiscal years 1986 through 1990 purported to limit deficits in the ongoing fiscal years, though it was never effective. In part, its ineffectiveness in constraining deficits for ongoing fiscal years arose because of the difficulty of predicting the deficit even for a fiscal year in progress.) Experience shows that it is uncertainty about the future that leads such estimates to be imprecise, much more than imprecision in the relationship between the components of the budget (spending and revenues) and the deficit itself.

For example, the United States dissipated a large budget surplus and fell into substantial fiscal deficit in the last five years. However, throughout the crucial policy decisions that contributed to this adverse development, policy makers maintained that the budget would not and could not fall into deficit.

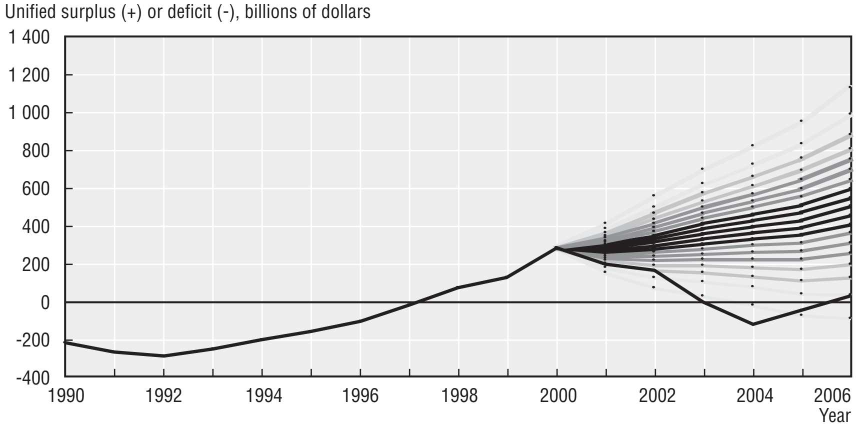
Thus, a substantial part of that development arose not because of the policy changes that were undertaken, but rather because of economic and technical developments that drove the budget far below its previously estimated path in the absence of policy changes. This was true both in the sense that the unwinding of overly optimistic estimates played a major numerical role in the disappearance of the budget surplus, and in that those erroneous estimates were used to justify the policy steps that contributed still further to the fall from fiscal grace.

Figure 2 illustrates that development. It reproduces the probability map of future budget outcomes released by the US Congressional Budget Office (CBO) in January 2001, based on its statistical analysis of available prior years of data. Superimposed upon that probability map is the actual outcome – that is, the best estimate included in that same map, adjusted only for the economic and technical budget re-estimates subsequently published by the CBO. By the now-current fiscal year (2006) and over all preceding years since 2000, the outcome is approximately the 10th percentile expectation (with the 50th percentile being the most likely estimate, and percentile rankings below that designating more adverse outcomes), even before considering the effects of any policy changes. As is apparent from the figure, economic developments and the correction of prior technical forecasting errors would have driven the budget into deficit even before policy changes. Because US policy changes – including large tax cuts and substantial increases in defence and health-care spending – during and since 2001 have sharply increased the deficit, the actual budget outcomes have been worse still than the so-called baseline, as is shown in Figure 3.[5] (Still, had the US budget rules been obeyed, budget outcomes would have been far superior and well within the bounds of, for example, the EMU guideline of 3% of GDP.)

There is no reason to believe that the US experience in this respect is atypical. Countries around the world have been surprised by the strength of the descent of budgets into deficit in the 1990s.

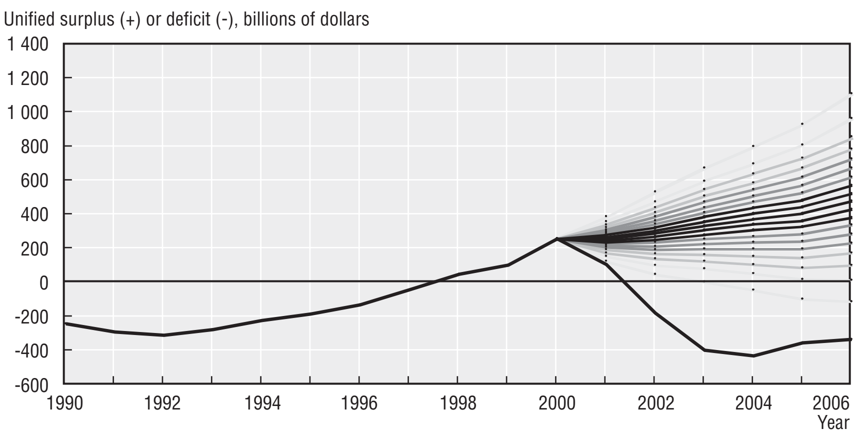
The reality, then, is that **any** fiscal rule, whether based on deficits or spending, must be implemented through imperfect knowledge of the future. Imperfect foreknowledge is the primary source of error in any such rule. Thus, in this most important respect, the same key problem afflicts any fiscal rule, and a deficit-based rule, even though it focuses nominally on “the deficit”, has no inherent superiority.

Figure 2. Uncertainty in CBO projection of the US budget deficit: Baseline



Source: Congressional Budget Office, *Budget and Economic Outlook: Fiscal Years 2002-2011*, January 2001.

Figure 3. Uncertainty in CBO projection of the US budget deficit: Actual



Sources: Congressional Budget Office, *Budget and Economic Outlook: Fiscal Years 2002-2011* (January 2001) and *Budget and Economic Outlook: Fiscal Years 2007 to 2016* (January 2006).

Put another way, the creation of any fiscal rule, whether based on deficits or spending, involves the selection of policies that achieve a satisfactory projected future deficit path, under conditions of uncertainty. Therefore a deficit-based rule would immediately require the choice of an economic forecast and policies that would reach a deficit below the reference level. Thus, for example, countries under the SGP would present an economic forecast and programmes that would take their budget results "close to balance or in surplus" within the requisite number of years. Similarly, a spending-based rule would likely be initiated using prospective estimates of the policies, both spending and tax levels, which would be required to achieve a target deficit level; that was the US experience. The issue is not that a spending rule is sensitive to longer-term budget forecasting, and a deficit rule is not; **both** require budget forecasts. One might argue that under a deficit rule, those forecasts must be reviewed with each budget cycle, and that this constitutes a safeguard. However, the track record of currently operating deficit rules is not encouraging. And on the other hand, a spending rule would likely keep a tighter leash on policy.

In fact, in the three instances of enactment and re-enactment of the most recent US system – in 1990, 1993, and 1997 – the rule was designed so that the budget would reach its target of balance or significant deficit reduction five years hence if annual appropriations hit their numerical caps for the next five years, and if taxes and mandatory spending taken together were precisely deficit neutral. The same structure could have been initiated to achieve greater deficit reduction if the discretionary caps were lower, and/or if the pay-as-you-go rule were programmed to achieve net savings over time, rather than to be precisely deficit neutral. That is, the same "PAYGO scorecard" that was created to keep track of subsequent policy action could have been initiated with future-year debits, rather than zeros, that would have required future policy savings. These design issues will be important in the discussions on spending rules and on all of the objectives of fiscal rules in general, to follow later.

A deficit-based rule may have one limited advantage over a spending rule, in that the public at large may be more reassured by a fiscal discipline rule that at least in name places a limit on the deficit itself. The economics and policy science professions would likely see through the nominal distinction fairly quickly, and participants in financial markets would surely engage in deeper analysis; but for immediate public relations purposes, a deficit limit might have some additional impact. Still, experience suggests that the performance of fiscal discipline rules will be the telling issue for the public over the longer term.

Thus, the use of proximate spending and tax-policy targets, rather than a target with respect to the deficit itself, might be thought an imprecision and a disadvantage. However, a deficit-based rule would be implemented through the same estimates of the effects of spending and tax policy, chosen to achieve the particular deficit target. Thus, under the EU model, fiscal authorities are expected to set policy to limit deficits to less than the reference value of 3% of GDP, and to achieve the medium-term “close to balance or in surplus” objective, on the basis of economic forecasts and budget projections. At the outset, the two processes are in substance the same; policy under both rules would be made based on the same kinds of forecasts and estimates. Thus, there is no inherent precision or superiority in the deficit-based rule.

3.2. Compliance with alternative fiscal rules

An explicit deficit rule might be preferred on the belief that it would be easier to enforce if adverse budgetary developments pushed the fiscal result into deficit. The presumption would be that the measurement of the problem and the selection of a solution would be easier, again because the measure used by the rule is the deficit itself. However, again, this conclusion presumes too much.

For one thing, as was noted earlier, a deficit rule would provide policy makers with no more information than a spending rule. The excess of an historical fiscal deficit over the chosen target is a datum, available whether the rule was based on the deficit or on spending. The excess of a projected future deficit over a target is uncertain in any event.

Nor would a deficit rule provide any greater precision as to the magnitude of the solution for a fiscal problem. Corrective action would of necessity be based upon forecasts of the future, which would be uncertain in either case. Therefore, the policy remedy under either a deficit or a spending rule would be the amount of savings – spending reductions or tax increases – needed to reach a target future fiscal deficit, which would in either case be uncertain.

And finally, the policy measures needed to solve the problem would be no more palatable under a deficit rule. Whatever rule were being applied, an excess of borrowing of any given amount would require that same amount of pain to be imposed upon taxpayers and spending beneficiaries. The type of rule that had been imposed would yield no difference in the ease of accepting and enduring a remedy.

Therefore, an understanding of this choice must begin without preconceptions and with an understanding that any rule operates through an uncertain future and, in the event of trouble, through reducing government spending or increasing taxes. There is no obvious inherent advantage to either rule on these grounds; decisions must be made on the basis of a deeper analysis.

This paper will proceed with discussions on alternative fiscal rules and the criteria of fiscal responsibility, macroeconomic stabilisation, and the effectiveness of the core functions of government.

4. Alternative fiscal rules and long-term budget responsibility

For purposes of analysis, one might separate changes in the budget outlook from year to year into two classes: they may be cyclical, or they may be trend-related (as, for example, with an enduring productivity shock). If the distinction between the two were hard and fast, they would require separate analysis. However, one lesson of the economic boom of the 1990s was that what might appear to be an enduring productivity shock can in fact be short-lived. In the discussion that follows immediately, and in the later discussion pertaining to macroeconomic stabilisation, this distinction will be considered, but will not be assumed to be crucial to the argument.

4.1. Deficit rules and fiscal responsibility

A deficit rule such as that imposed by the SGP sets an upper bound on the fiscal deficit that in essence applies at all times, regardless of the cyclical condition of the economy. (There is an "early-warning system" based on the cyclically adjusted balance [CAB], intended to head off a growing fiscal deficit that has not yet reached the 3% of GDP reference limit. However, that system has not in practice led to any tangible action by the European Commission.) Such a constant reference limit on the fiscal deficit might cause significant problems, and some would argue that the incentives embodied in such a rule are not conducive to fiscal discipline.

For example, assuming the most perverse motivations, one country's fiscal authorities might choose to set their budget deficit as close to the limit as possible (taking into account any effective early-warning system) when the economy is operating at its potential. That country would forecast an optimistic fiscal outlook that would bring the budget into close-to-balance status (CTB) within the time period required. If the economy should surprise and grow even further, then the percentage-of-GDP reference limit would yield even more room for fiscal deficits. If the economy weakened and thereby raised the deficit, however, policy makers might expect that those deficits could be exempted from discipline on the grounds that they were "temporary". The result would be that this country could hope to reap the benefit of monetary stability paid for through the discipline of the other EU members, while itself enjoying the fruits of public spending in excess of revenues collected. Of course, if every country were to behave in such a fashion, monetary stability would not last long; but such short-sighted policy making is not unusual.

Beyond the threat to monetary stability, the fiscal stability of the country in question would be short-lived. With fiscal deficits just within the boundaries of sound policy in the best of times, any cyclical economic weakness, or any adverse productivity shock, would see the budget in excessive and substantial deficit.

As was noted above, the country in question might well throw itself upon the mercies of the Commission, claiming that the excessive deficit was caused by recession and was temporary in nature. Frequent appeals of this sort would strain the cohesion of the EU, and also would cause the country in question to add significantly to its accumulated burden of debt by the time the procedural issues were resolved. The additional debt would make it harder for the country in question to meet the Commission's fiscal standards in the future.

4.2. Cyclical adjustment

It might be thought that a variation on the deficit rule, in which the reference value for the fiscal deficit is simply set at a percentage of potential rather than actual GDP, would solve this problem. At best, however, it would moderate the problem, not solve it. In practice, the difference in the fiscal target from such a revised rule would be too small to change incentives and behaviour; a country's fiscal authorities would have the same incentive (and perhaps even more so; see below) to target their deficit as close to the limit as possible.

In an economy operating at its potential, for example, the reference fiscal deficit amount of 3% of GDP, measured in currency, would be unchanged under such a revised rule. If the economy grew beyond its estimated potential, the deficit limit would not grow in currency terms if the rule were based on potential rather than actual GDP; but with a strong economy, the actual deficit would decline, leaving policy makers more room for spending and tax reductions in any event. And of course, this assumes that the extra spurt of growth would be recognised quickly as beyond potential. If it were interpreted as an increase in potential, then there would be still further room for pro-cyclical deficit-increasing policy.

On the other side of the coin, if the economy grew less strongly, policy makers would have more room to expand their deficit, because 3% of potential GDP would be greater than the same fraction of actual GDP.[6]

Given these limited differences in the deficit rule, policy makers still might be expected to push their near-term deficit toward 3% of GDP in an economy at its potential, relying on favourable assumptions for the coming years to demonstrate eventual compliance with a close-to-balance-or-in-surplus standard. Given exceptions for recession, they might expect that they would need to tighten policy even less if budget outcomes proved less favourable. In this regard, a deficit rule is no less vulnerable to long-term forecasting error than is a spending rule.

It is surely at least somewhat cynical to assume that countries would choose to manipulate a deficit-based fiscal rule to the limits of its elasticity. Policy makers are mindful of the well-being of their constituents, and understand that debt begets debt service, which can beget further debt. Even those who believe that the incentive effects of existing deficit-based rules are powerful enough to lead to some measure of fiscal irresponsibility would concede that this is in spite of policy makers' concern about the public interest, as they define it.

However, it cannot be denied that a deficit-based fiscal rule such as that described above is in the nature of a one-way instrument. It provides no meaningful, productive guidance to countries whose deficits are smaller than the reference level, allowing them to move toward that limit with impunity – thereby adding to their accumulations of debt, and their debt-service obligations. (The medium-term CTB requirement might be thought to provide such guidance, but recent practice has not been encouraging, perhaps in part because it is easy to project budget improvement beyond a current fiscal year with an economy that is forecast to grow, and with hopeful assumptions of future spending restraint.) One might argue that the structure and incentives of the deficit-based fiscal rule do not require malfeasance to yield adverse results; the pressure of short electoral cycles against long-term interests, plus a little bad luck, will suffice.

4.3. Enforcement

Furthermore, based on experience in the United States from 1985 to 1990, there would be significant opportunities for manipulation and evasion under a deficit-based budget rule. The rule in the United States had attempted to impose spending discipline prospectively, before the beginning of a fiscal year. Alternatively, one could try to enforce the rule retrospectively, during the final months of a fiscal year. Both instances would be subject to manipulation.

A deficit-based rule does, in some circumstances, allow manipulation through the choice of an economic and budget forecast that drives a politically desirable outcome. For example, the authority responsible for the economic forecast used in the budget could forestall the need for tax increases or spending cuts by issuing a more optimistic economic forecast, and therefore a lower projected budget deficit. In the experience of the United States, such manipulation allowed different actors in the budget process to force the responsibility to recommend policies to achieve budget savings onto other actors, which presented an additional political motive to manipulate the system. Because a spending rule does not rely directly on a budget forecast (but rather involves a pre-stated appropriations cap and a pay-as-you-go requirement for mandatory spending and taxes, which are often less dependent on the underlying economic forecast), it raises less of a prospect of such a moral hazard.[7]

At present, enforcement in the EU appears to be based mostly upon retrospective views of deficits in excess of the reference amount. However, at the time of enforcement, optimistic budget projections might be used to argue that the past deficit was merely temporary. This pattern suggests that enforcement under deficit rules can often be unsatisfactory.

5. Spending rules and fiscal responsibility

Based on a view of incentives and experience, an alternative fiscal rule based upon spending might well be judged more conducive to responsible fiscal policy under a range of economic conditions.

As was noted above, spending rules have been initiated to achieve targeted fiscal goals over a period of years, based upon underlying economic and continuing spending programme forecasts and prescribed annual caps for appropriated spending. The underlying economic forecast has typically assumed that the economy would gradually converge to its estimated potential output. This process and its underlying assumptions are really no different than the plan that a government would need to formulate to comply with a deficit rule over time. Once such budget policy amounts have been determined, the spending rule might require that entitlement spending and tax policy changes be no worse than deficit-neutral, and that annual appropriations comply with the stated caps. However, the spending rule could be made more rigorous with lower discretionary caps and a requirement for future budget savings through mandatory spending and taxes; the opposite, of course, could also be true.

A spending rule would provide continual guidance to policy makers, under any and all economic and budget conditions. If budget results proved more favourable than expected, whether because of cyclical economic improvement or a positive productivity shock, the rule would allow no additional budgetary resources to the fiscal authorities. Therefore, unlike a deficit rule, under which a lower deficit or a higher GDP (actual or potential, depending on the formulation) would allow (some might say "encourage") greater spending or tax cuts, a spending rule would require that policy remain unchanged, and thus that the budgetary bonus be saved. Given the lesson of the 1990s – that even apparently durable positive budgetary shocks might well evaporate – this aspect of spending rules would seem advantageous and prudent; it would make it more likely that budgets would remain in balance over the macroeconomic cycle and into the long run. (It also would make sense from a counter-cyclical point of view, as will be discussed below.)

A spending rule might seem well suited for the current situation of the EMU. With already high government expenditure ratios in most EU member countries, it might be desirable to put more policy focus on attaining sustainability through spending restraint. Some countries have already taken this approach. Another case for greater focus on the expenditure side is that it is where slippages have often occurred (European Commission, 2003). The European Commission noted that expenditure rules can be a national complement to the deficit rule, but given the success of expenditure rules in some countries, more focus on this issue would be valuable.

On the other side of the coin, should fiscal performance prove weak, a spending rule would tolerate the deterioration of the budget through its automatic stabilisers, but would not allow further shifts in policy. (Some might contemplate allowing inter-temporal policy shifts, in which greater spending or tax cuts in one or two years could be offset by future spending restraint or tax increases. Going even further, a spending rule might allow a purely one-time counter-cyclical stimulus without offset. Such policy flexibility might make sense if future compliance could be assured. Whether such future discipline should be relied upon is a matter of judgment.) If the fiscal deficit remained below the reference level, a deficit rule would, like the spending rule, tolerate the deterioration. However, if the fiscal deficit did cross the reference level, policy makers would have to choose between raising taxes or cutting spending, on the one hand, and seeking extraordinary relief (through, for example, an appeal to treat the deficit as temporary), on the other. Such fiscal constraint might possibly be seen as appropriate discipline, but it would raise potentially serious macroeconomic stabilisation concerns (discussed below).

Thus, one possible argument for the spending rule is that it provides continual guidance to the fiscal authorities; at all times and under all circumstances, policy changes must be deficit-neutral. In contrast, a budget rule does not bind policy makers unless the budget deficit is in proximity to the reference value. Some might argue that this limited restriction implicitly condones, or even encourages, the fiscal authorities' moving their deficit toward the reference limit in a pro-cyclical fashion in good times.

5.1. Administrability and enforcement

One potential way to strengthen the deficit rule from this perspective of fiscal responsibility might simply be to reduce the reference limit – in the EU instance, for example, to a smaller deficit or even balance rather than the reference level of 3% of GDP. That would make the reference level binding in more instances, and would limit the fiscal damage even if countries chose to operate close to the reference level. Which raises the question: Why was the US spending rule aimed toward a budget in balance with the economy at potential GDP, whereas the EU deficit rule sets a reference value at 3% of GDP? Why not set the reference value for the deficit rule at a smaller deficit, or at balance?

The answer might centre on administrability. A maximum fiscal deficit amount of zero would lead to more frequent episodes of apparent overstepping of the limit, which in turn would result in numerous contentious debates and inevitable instances of alleged unfair treatment of one country or another. Those disputes would rest on controversial estimates of the affected countries' entire budgets.

In comparison, questions of compliance with a spending rule would be more transparent and less disputable. Even if there were dispute with respect to an estimate of a policy change in entitlement spending or taxes, the universe in dispute would be only that one change; and because the rule would require the policy change to aim for a net effect of zero, the amount at stake would be much smaller than in controversies regarding a deficit rule. Thus, routine enforcement of a spending rule would focus more on policy changes before the fact. Enforcement of existing deficit rules has tended to arise after deficits are already excessive, and has not been notably successful.

Overall fiscal outcomes depend upon both central and sub-national government policy, especially in those countries where local government constitutes a comparatively large share of the total. This issue could be approached in several ways. One would be to impose an expenditure rule at the sub-national level. Particularly for a pay-as-you-go type rule, this could be complex for the governmental units involved. However, this course might not be necessary if those governments do not have significant counter-cyclical roles. The alternative would be to use deficit-based rules at the sub-national level. This is *de facto* the approach in the United States, where virtually all sub-national units face constitutional or statutory balanced budget requirements. Of course, even deficit rules can be problematic for sub-national governments, for all of the same reasons as for national governments.

In the end, these advantages in administrability might lead to greater compliance and cohesion among the countries involved under a spending rule.

5.2. Limits to and values of rules

Still, there are limits to the effectiveness of any fiscal rule which should be clear from experience – for example, the United States fell back into deficit while its spending rule remained nominally in place – but might still be forgotten as the advantages and disadvantages of any alternatives are weighed. At bottom, no fiscal rule should be expected to do the impossible. No fiscal rule will achieve its desired budgetary results if and when the political will of policy makers is to the contrary. A legislature’s procedural rules can be changed or waived, and restrictive laws can be amended or repealed; and the recent experience of both the United States and the largest countries of Europe makes clear that these contingencies are very real, for both spending and deficit rules.

However, what a fiscal rule can do is expose steps contrary to stated fiscal guidelines. Policy makers must vote to waive or change the procedural rules, and to amend or repeal the statutory fiscal rules. These steps must usually be in addition to the enactment of the policies themselves. These additional procedural steps usually involve an explicit admission that the policies that follow do violate the budget restrictions that had hitherto been accepted rules. Such restrictions clearly are not insuperable, as recent experience again would show clearly. However, they might provide some measure of deterrence against violations of fiscal responsibility, because they are transparent, and because they can be cited later by political opponents if events go awry.

This deterrent value of fiscal rules may apply more tellingly to a spending rule than to a deficit rule. Budget deficits are incontestable only after the fact, and – long after policy actions have been taken – policy makers can argue with optimistic assumptions or estimates that their policies will not result in further deficits in excess of reference limits. In contrast, policy steps that might violate appropriations caps or pay-as-you-go restrictions are apparent as soon as they are taken and, as was noted above, the numerical results are more transparent and less subject to dispute. Therefore, policy makers who could deny that their actions would push fiscal deficits beyond a reference limit would more likely be confronted with the certainty that their policies violated a spending rule.

5.3. Credibility

Achievement of the benefits of fiscal responsibility rests heavily on the credibility of fiscal policy. Currency will not be respected, and investment within a country's borders will not be attractive, unless fiscal policy is perceived as responsible and as likely to remain so. (The recent retroactive re-designation of the dates of an economic cycle in the United Kingdom to provide additional flexibility under a fiscal rule – a voluntarily self-imposed rule, to be sure – cannot be ignored in this regard.) No fiscal rule can add to credibility if it is flouted, but a rule that is more conducive to compliance might fairly be scored more highly than one that is less so. Here again the advantage probably rests with the spending rule.

From the political perspective, there are risks to allowing fiscal targets to move up and down with some frequency. If spending targets are allowed to rise or revenue targets are allowed to drop because of improvements in the budget outlook, it may be difficult for government to reclaim those ostensibly temporary benefits if and when circumstances reverse. And should there be resistance in the budget process to any formula-induced imposition of pain, it may erode the credibility of that process.

This suggests that the difficulty of complying with and enforcing a deficit rule, which calls for continual (even if usually small) adjustment of the fiscal targets and of budget policy, might in the end raise greater concern in the financial and investment markets. This would be especially true if policy makers were eager to loosen fiscal policy when circumstances allowed, but were reluctant to tighten policy when situations required. From this perspective, a deficit rule would create more occasions for loss of credibility than would a spending rule, which would allow freedom of action for automatic stabilisers, but would limit tax and spending policy changes to deficit-neutral steps.

5.4. Productivity shocks

There could be differences in circumstances depending upon whether the changing budget fortunes were caused by a purely cyclical economy or by an enduring productivity shock.[8] As was argued earlier, the budgetary benefits of apparent favourable productivity shocks can themselves prove to be temporary. However, in theory, a productivity shock could confuse the implementation of a cyclically adjusted deficit rule, because potential GDP would be mismeasured until the shift was recognised and estimates were corrected. But in truth, any fiscal rule would be confused by an unrecognised productivity shock, and economic policy makers could be expected to search the data for productivity changes, whether a fiscal rule were cyclically adjusted or not, and to adjust their budget policy making accordingly. So it would not appear to be productive or fair to judge any fiscal rule differently because of the possibility of a change in productivity growth. If a shock can be accurately perceived under a cyclically adjusted deficit rule, it can be accurately perceived under a spending rule. In either instance, corrective action would have to be undertaken by policy makers.

Still, theoretically, it could happen that a true, enduring productivity shock would be recognised quickly and distinguished from a cyclical movement in the economy. In that event, and should the productivity shock be adverse, a cyclically adjusted deficit rule would perceive the lower level of potential GDP and would reduce the reference deficit limit in currency, thus requiring a reduction in the budget deficit – if, again, at that time, the deficit was already in proximity to the deficit limit. Such a development could be conducive to good policy if, yet again, the economy were not at that time sufficiently weak that an additional stimulus would be needed for reasons of macroeconomic stabilisation. On the other hand, recognition of a favourable productivity shock could lead to an increase in estimated potential GDP, and so in the reference deficit limit in currency; and the allowance of a higher deficit in currency at the time of a favourable productivity shock would likely not be helpful for reasons of either fiscal responsibility or stabilisation. Furthermore, if such a favourable shock should in time prove to be temporary rather than permanent, as was the case in several countries during and after the 1990s, the initial allowance of additional room for deficit spending could prove difficult to reverse.

A spending rule would not be affected directly by any productivity shock. Thus, in the event of a favourable productivity shock, a spending rule would not allow a higher deficit – which would likely be judged to be the preferred outcome. A negative productivity shock, similarly, would not force a fiscal tightening. This could be unfortunate if the shock in fact proved to be permanent, but not if it reversed itself in time. One might imagine formalising a looser, longer-term deficit rule to back up a spending rule, to cover instances of enduring adverse productivity shocks. Alternatively, the judgmental political process would have to step in.[9]

In sum, one might conclude that a spending rule would prove superior to a deficit rule – even one that was cyclically adjusted – in maintaining fiscal responsibility in a satisfactorily performing economy. This conclusion rests in part on the workings of the rule itself, but also on its probable greater credibility and durability in the political process. The argument for a cyclically adjusted deficit rule is theoretically plausible, but is based on what would seem to be an unlikely combination of hypothetical circumstances.

6. Fiscal rules and macroeconomic stabilisation

Just as fiscal responsibility requires control of debt at times when the economy is strong or weak, so macroeconomic stabilisation requires sound budgeting in good times and bad. The discussion above has already suggested that a deficit rule is an imperfect instrument for macroeconomic stabilisation.

6.1. Deficit rules and macroeconomic stabilisation

Under a deficit-based rule, the stabilisation options available to fiscal policy makers depend upon the pre-existing state of the budget. If, for example, the economy softens with the budget in surplus or small deficit, the reference limit on GDP would decline in currency terms (because the amount of GDP would fall short of expectations), but there might still be budgetary room to allow the automatic stabilisers to increase the deficit, and for additional action to stimulate the economy and/or provide relief for affected persons and businesses. If, however, the fiscal deficit were already close to the reference level of 3% of GDP, a lower amount of GDP would reduce the room even for operation of the automatic stabilisers, and might force policy makers to consider pro-cyclical tightening of the budget (European Commission, 2004, Graph II.10, p. 90). The affected country could contend that its deficit was temporary, because it was caused by an economic cycle, and ask for forbearance with respect to the deficit reference level until the economy recovered; this would involve uncertainty for policy makers and the affected public, and possible contentiousness with the Commission authorities.

In the case of a strengthening economy and an improving budget, the effects of a deficit rule are again, if anything, pro-cyclical. As actual GDP increases, the currency value of the 3% reference level of GDP increases, and the fiscal authorities have more room to cut taxes or increase spending. If the budget began in deficit beyond the reference level, the growth of the economy would either reduce the necessary amount of fiscal rationalisation or eliminate it entirely. Although these deficit-rule effects would not themselves compel a country to act, the incentives would in fact be perversely pro-cyclical.

To summarise, the failings of a deficit rule are that it allows – perhaps encourages – countries to run excessively loose fiscal policies in good times, and may constrain counter-cyclical fiscal policy, including notably the workings of automatic stabilisers, in bad times. One frequent reaction is that the deficit rule should be cyclically adjusted to solve these problems. However, again, to solve these problems it would take a policy change far more complicated than merely using cyclically adjusted GDP rather than actual GDP in the existing deficit rule.

6.2. Macroeconomic stabilisation: A deficit rule with cyclical adjustment

If the deficit rule were cyclically adjusted and based on estimated potential rather than actual GDP, the perverse incentives would be reduced but not eliminated. In a weakening economy, the currency amount of permissible deficit would not decline, because potential GDP would not decrease. However, the actual deficit would go up, and so it would still be possible that the affected country would find itself in excess of the deficit reference amount, facing pro-cyclical budget policy tightening. In the case of a strengthening economy, the converse would be true. The deficit reference level would not change in currency terms, because estimated potential GDP would not change; but the actual deficit would decline, and so policy makers would find that they had increased latitude to engage in pro-cyclical fiscal expansion.

So to solve the pro-cyclical tendencies of deficit rules, one would need to do more than merely substitute potential for actual GDP in the rule itself. Rather, one would need to reduce the maximum percentage of GDP allowed for a deficit in a strong economy, and increase the percentage in a weak economy. In short, reasonably speaking, one would need to make the deficit rule behave more like a spending rule.

6.3. Macroeconomic stabilisation: A spending rule

Design choices for the categorisation of spending programmes for constraint by numerical caps as opposed to pay-as-you-go procedures would affect macroeconomic stabilisation. In the US implementation, spending programmes were assigned to one or the other instrument by a fairly simple rule. Programmes subject to annual appropriation were limited by the spending caps; programmes funded by continuing law were subject to pay-as-you-go procedures. To some extent, that distinction was based on the perceived length of time needed so that programme changes could be implemented and have meaningful effect on the amount of outlays. However, an alternative criterion for this distinction could be the strength of the automatic stabiliser effects of different spending programmes. In the US context, the two criteria would yield approximately the same result.

In another governmental structure, however, a categorisation based directly on automatic stabiliser effects could be just as valid. Depending on that governmental structure, the amount of spending subject to numerical caps, as opposed to pay-as-you-go, could be comparatively large or it could be smaller. In Sweden, for example, all of central government non-interest spending is subject to a cap; there is no pay-as-you-go category. Spending rules can be accommodated to different governmental institutions in different countries through similar policy choices.

With such design choices determined, a spending-based fiscal rule would not change in character with cyclical fluctuations in the economy. That provides some significant advantages, but in some measure does constrain policy responses.

In a weakening economy, a spending rule requires continued compliance with the caps on annual appropriations. At the same time, the rule fully accommodates increases in counter-cyclical spending programmes, and decreases in revenue, that would occur without changes in the underlying law. In other words, a spending rule fully accommodates the workings of the automatic stabiliser programmes in the budget. This is in favourable contrast to a deficit rule, whether cyclically adjusted or not, that could require pro-cyclical budget tightening if the deficit approaches the reference limit. Furthermore, the spending rule is, in effect, cyclically adjusted in real time; because it unconditionally allows the workings of the automatic stabilisers, it raises no questions in the minds of policy makers, the public or the financial markets as to whether the automatic stabilisers in tax and counter-cyclical spending policies can be allowed to work.

A spending rule would have further advantages in the instance of a strengthening economy and an improving budget. Unlike a deficit rule, where a larger GDP would allow a larger pro-cyclical deficit, a spending rule would require that policy remain deficit-neutral. That would allow the automatic stabilisers in the budget to restrain a strengthening economy, in a counter-cyclical fashion.

Thus, a spending-based fiscal rule would have the appropriate effect of allowing the automatic stabilisers in the budget to work continuously, whether the economy was on the upside or the downside. In a strengthening economy, increases in revenues and declines in entitlement spending would tend to dampen any excess growth. The rule would, of course, allow the fiscal authorities to enact further restraint in a strengthening economy. The monetary authorities could also act more freely. (It is possible that monetary policy could be more effective if it could count on comparative budget policy stability, rather than continuous adjustments in fiscal policy.) The spending rule would, however, prevent policy makers from enacting an additional stimulus in a weakening economy (in the absence of some extraordinary measures, such as declaring an excessive deficit under the SGP as temporary and thus permissible). A spending rule could be allowed to adjust for one-time outlays required by natural disasters and other such unanticipated needs (as was the case in the United States), which could provide a counter-cyclical stimulus under those circumstances. (The apparently weakest scenario for a spending rule – a weakening economy where the rule, strictly interpreted and enforced, does not allow judgmental stimulative fiscal policy – is of course the situation in which policy makers are most likely to take the decision into their own hands in any event.)

The track records of spending-based rules thus far have been encouraging. Although at the end of the day the rule is only a part of the total system, both Sweden and the United States did perform well when spending-based rules were in place and observed. In particular the progress of the United States under its rule was striking. Finland and the Netherlands have successful expenditure rules as well. Descriptions of the systems of Finland, the Netherlands and Sweden are appended to this paper.

Questions of judgment arise regarding the preferred properties of a fiscal rule. Would the best rule be one that allows the automatic stabilisers to work at all times and without restriction, but that prevents or at least restricts additional counter-cyclical policy in a weakening economy? Or would the best rule rather be one that sometimes constrains those stabilisers in an economic downturn and never requires their action on an economic upturn, but would with a small pre-existing deficit allow additional expansionary counter-cyclical policy? This is clearly a matter of judgment.

However, arguably, and allowing for consideration of other criteria, giving free rein to the automatic stabilisers on both the upside and the downside of the economy might be the better policy.[10] There is no reason to believe that a spending-based rule would be less conducive to a stable macroeconomy than would a deficit-based rule; in fact, the pro-cyclical tendencies of deficit-based rules would suggest that spending rules would be superior. This judgment depends in part upon the inexact nature of the economic and budget forecasting process.

6.4. Weaknesses of judgmental counter-cyclical fiscal policy

A spending rule would not allow additional judgmental changes in fiscal policy for stimulative counter-cyclical purposes; however, for that reason, it would neither overstep any counter-cyclical fiscal adjustment, nor move in the wrong direction because of false indicators in the macroeconomic data. (It should be noted that, depending on circumstances, the rule could in fact be made to allow such actions. But that is not the topic in this discussion.)

When viewed purely through the lens of stabilisation policy, a fiscal rule driven in some way by a cyclically adjusted deficit measure might seem superior. However, there are numerous problems in the implementation of judgmental counter-cyclical fiscal policy. For one thing, there are multiple lags in the data development and budgeting processes which result in a substantial delay between the occurrence of economic phenomena and the ultimate implementation of fiscal policy.

Data are collected, processed, and revised with significant lags, which might be called technical lags. As has been made abundantly clear in recent years, economic data can be misread for years, let alone quarters, and so there is no guarantee whatever that even "final" figures will be meaningful at their release.

The Congressional Budget Office summarised the inaccuracies of US real-time economic forecasting – its own, that of the Presidents' budgets, and that of the private sector consensus – as follows:

> As the track record shows, forecasters collectively tend to err during periods that include either turning points in the business cycle or significant shifts in the trend rate of productivity growth. For example, most forecasters overestimated the economy's growth rate in forecasts they made just before the two back-to-back recessions of the early 1980s. That pattern was repeated in the forecasts they made just before the more moderate recession of the early 1990s. In addition, during the mid- to late 1970s, forecasters continued to assume that the productivity trend of the previous two decades would prevail. In retrospect, however, the productivity trend of the 1970s and 1980s was significantly lower than that of the 1950s and 1960s. Because forecasters in the 1970s expected the previous trend to return, their forecasts of real output in the mid- to late 1970s turned out to be too optimistic. Partly for the same reason, forecasters repeatedly underestimated inflation in the late 1970s.
>
> The years from 1995 to 2000 were a mirror image of the forecasting experience of the late 1970s. Partly because forecasters underestimated the trend rate of productivity growth beginning in 1996, they underpredicted the economy's growth rate and overpredicted inflation.
>
> (Congressional Budget Office, 2005, p. 3)

In short, and in summary, economic forecasting has been highly accurate except when it mattered. The CBO elaborated on this point in qualifying any optimistic interpretation of the averages of forecasting errors over long periods of time:

> As noted earlier, forecast errors tend to be larger at turning points in the business cycle and when there are shifts in major economic trends. That tendency can be clearly seen in the forecasts of real output growth by comparing the large errors for 1979 through 1983 – when the economy went through its most turbulent recessional period of the post-war era – with the smaller errors recorded for the mid-expansion years from 1985 to 1987. More recently, the recession of 2001 and slow recovery in 2002 account for the overpredictions made by all three forecasters in 2000 and 2001.
>
> (Congressional Budget Office, 2005, p. 4)

There is no reason to believe that the US experience is unique in this respect. Thus, one might argue that reliance on the operation of the automatic stabilisers, rather than on judgmental fiscal policy, would be significantly less error-prone.

Even after the economic data are fully formed, they enter the policy-making process at different points in the budget cycle. And policy decisions are made with varying degrees of rapidity, involving political lags in the recognition of the data and in acting upon them. These lags can add a further measure of delay in the response of judgmental fiscal policy actions.

The European Commission recognised this problem in its 2004 summary report when it noted that requirements for pro-cyclical policy adjustments "…coupled with the traditionally long lags in identifying the growth shortfall and the slowness of the decision-making process in fiscal policy put fiscal authorities under strain" (European Commission, 2004, p. 90).

Given the annual budget cycle and the lags in collecting, processing, and acting upon economic data, the delay from real-world developments until the actual impact of fiscal policy under a deficit rule could easily be two years, or even longer. In the scale of economic cycles, that is a very long time.

For the same reasons, fiscal policy – in contrast to monetary policy – is much more difficult to reverse even should circumstances require. The annual cycle of policy making could be delayed even more. Changing the benefits of spending and tax policies in reverse is difficult politically. Thus, a shift of direction in fiscal policy would be much more difficult than, for example, the reversal of US monetary policy in the face of the international currency instabilities of 1998.

Such lags are among the reasons why economists have come over time to lean more on the monetary authorities for stabilisation policy, with or without a deficit-based fiscal rule.

Because of the problem of lags in discretionary macroeconomic stabilisation, some might argue that changes in fiscal policy could move somewhat faster if the policy-making system allowed less intervention by political decision makers. But that would require a substantial, if not complete, surrender of stabilisation policy judgment to the outcomes of a formula.

Such a quick-reaction deficit rule would require budget policy makers to yield their control over the details of spending and tax policy, so that actual policy decisions could be made in step with a mechanical formula. Policy makers could not take the time to debate the details of counter-cyclical policy choices and still remain timely. Accordingly, proposals for heavy reliance on fiscal policy for counter-cyclical purposes have sometimes suggested that limited options for policy tools be pre-selected, and perhaps chosen purely by formula. Such a mechanised process would be unlikely to yield sound budget decisions. Both economists and public sector decision makers would almost certainly prefer the freedom to exercise some judgment.

Rejecting a cyclically adjusted deficit-based budget rule would not mean that policy makers would forsake the wisdom in calculations of cyclically adjusted deficit estimates. Rather, those models would be used as inputs to policy-making processes instead of as determinants of the outcomes of those processes.

7. Macroeconomic stabilisation, deficit rules, and productivity shocks

As was argued in the discussion on fiscal responsibility, if a productivity or other supply shock should occur, and once it is correctly categorised as temporary or permanent, then under any fiscal rule, the entire outlook and budget policy must be recalibrated. Until the shock is recognised, results under the fiscal rule will be sub-optimal. No fiscal rule is immune from such a problem.

Until an adverse shock is recognised, and until the necessary action is then taken, a deficit rule will be too lenient, in that GDP estimates used to compute the reference deficit limit in currency will be overstated. The reverse will be true with respect to a favourable shock; in this case, the deficit rule will be too restrictive. The excessive leniency in the case of an adverse productivity shock might be thought to be an advantage, if the lower productivity coincides with a cyclically weak economy, or if the productivity shock should prove not to be permanent.

A deficit rule using a cyclically adjusted output measure would have only limited advantages. Recognition of a favourable productivity shock would give a larger reference deficit limit in currency, which would give more room for fiscal deficits in what would likely be an already strong economy, and thus would provide at least the potential for pro-cyclical policy. Recognition of an adverse productivity shock would reduce the reference deficit limit in currency, and thus might require pro-cyclical budget tightening in a weak economy. Recognition of any shock that proved to be temporary rather than permanent would require difficult policy readjustments in the future.

A spending rule, as in the instance of a cyclical economic movement, would allow the automatic stabilisers to work in real time. Thus, in an adverse productivity shock, the spending rule would allow counter-cyclical spending to grow and receipts to decline. In a favourable productivity shock, the automatic stabilisers would work in the opposite direction, but still counter-cyclical. But again, the spending rule would not allow further stimulative counter-cyclical policy action.

7.1. Fiscal rules, public investment, and other issues of resource allocation

There has been concern that fiscal rules might prevent the provision of adequate funding for public investment (such as human capital building, infrastructure, research, and so on). This might be thought to be a particular problem with a spending rule because it imposes a cap on annual appropriated spending, through which much of public investment occurs. However, that potential problem is readily avoided. First, the spending rule can be given parameters to achieve any given deficit goal, over any given time profile of fiscal consolidation, with higher annual appropriated spending and a requirement for lower spending and/or higher receipts under the pay-as-you-go category. (This approach could use the same technique described earlier – a "debit" on the "pay-as-you-go scorecard" – that could be used to mandate additional deficit reduction.) Second, as was the case for part of the history of the spending rule in the United States, there could be separate appropriations caps for different categories of spending, which could allow more spending for investment purposes and mandate less spending for other appropriations programmes.

Similar techniques could be used to ensure adequate public investment funding under other fiscal rules. Otherwise, some might fear that any fiscal rule could distort choices of allocation of resources between public and private uses, or among alternative public uses. On the former point, there will always be difficult choices between public spending with positive societal returns, and private spending; and imposing a system of fiscal constraints only makes such choices more explicit. Those decisions can and should be addressed explicitly at the imposition of a spending rule, and the outcomes need be no less desirable than in any alternative process that achieved fiscal sustainability. And as illustrated above with respect to the allocation of resources toward public investment, a spending rule can encourage explicit debate on alternative uses of public resources, which can only be for the good; and the tools exist under a spending rule to achieve the allocation that is desired by decision makers.

7.2. Deficit rules and core government functions

In the standard theory of public finance, the levels of government spending and revenues should be determined by the marginal cost of raising an additional dollar of public funds and the marginal benefit of spending that dollar. And even in practice, spending decisions are often based upon a rough consensus on an appropriate size and role of government, which in turn presumes at least some stability in the availability of funds.

A fiscal rule that relies upon unpredictable annual upward and downward adjustments of spending and revenue amounts, based solely on fiscal projections and without reference to programmatic considerations, would inject an increased measure of uncertainty and instability in public sector decisions – surely much more instability than the most basic public finance principles would welcome. This instability would most likely reduce the efficiency and effectiveness of the core functions of government. Likewise, uncertainty with respect to tax parameters could lead to inefficient and even pro-cyclical decisions in the private sector. For example, if private decision makers perceive that the economy is strengthening and that tax parameters would therefore become less generous, they might accelerate economic activity – with pro-cyclical effect. The converse pro-cyclical impact would result from instances of economic weakening.

In this respect, a spending rule might be more conducive to the sound operation of the customary functions of government and to greater stability in the expectations held by the private sector. A multi-year spending rule, as was the pattern in the United States, would provide accurate expectations about future appropriations, allowing policy makers and programme managers to plan more effectively, and inducing them to consider the tradeoffs inherent in multi-year allocation decisions. In contrast, a deficit-based rule, which might allow an increase in spending in one year (through an increase in the allowable deficit in currency) but require a decrease in spending in the next, would make planning much more difficult and might lead government programmes to waste resources in changing course unpredictably. In this regard, as argued above, a spending rule could improve the efficiency of the allocation of resources within the public sector.

Similarly, because a spending rule would allow receipts to fall through the workings of the automatic stabilisers during an economic downturn, the private sector could have reasonable confidence that tax policy would remain stable. In contrast, under deficit-based rules, taxpayers might have to fear tax increases, perhaps shortly after having enjoyed tax cuts, because the economy would weaken and the deficit would rise toward its reference limit. That could lead to pro-cyclical behaviour in the private sector.

7.3. Fiscal rules and monetary policy

The uncertainty in public sector planning (and in private sector planning relative to the tax system), and the potential pro-cyclical bias of a deficit-based fiscal rule, recall why economists have changed their general preference over the last 40 years away from counter-cyclical fiscal policy and toward reliance on the monetary authorities for stabilisation, with spending and tax policy aimed more toward longer-term structural goals. This trend in economic thinking suggests a preference for the greater stability and certainty that could be had in an expenditure-based rule.

The trend in economic thinking toward reliance on the monetary authorities for stabilisation policy would have to be considered in the particular circumstances of the European Union, given its single monetary authority but individualised budget policies. But as was noted earlier, the difference between the United States and the countries of the European Union – and the difference between the European countries' policy flexibility now and several decades ago – though real, should not be exaggerated.

7.4. Outlines of an expenditure rule in a multi-country monetary union

In the instance of a multi-country monetary union such as the EMU, or for other monetary unions that have been discussed in other parts of the world, the following characteristics of a possible expenditure rule would seem pertinent:

- **Coverage:** The PAYGO provisions of the US Budget Enforcement Act (BEA) permit both revenue collections and entitlement programmes to function as automatic stabilisers, but still provide for effective restraint on un-paid-for expansions of entitlement programmes and tax cuts. The US PAYGO appears to be more effective in providing for a counter-cyclical expenditure rule than the Swedish case with minimal – or non-existent – margins for years t and t+1, leaving no scope for automatic stabilisers in a cyclical downturn.

- **Time frame:** Three years has been an effective budget horizon for Sweden. Although the United States nominally sets five-year caps, the caps were actually effective for closer to three years, in that the 1991-95 caps were slightly revised and extended in 1993, the 1994-98 caps were increased and extended in 1997, and the 1998-2002 caps were essentially disregarded in their last years. Because of the impending impacts of the retirement of the baby-boom generation, however, a longer time frame might be considered.

- **Country specificity:** All aspects of an expenditure rule could be country specific: the caps; the categories used (capital investments; defence; programmes for the poor; etc.); the deficit/debt targets on which the categories are based; the enforcement procedures (see below); even many of the economic assumptions. This is not to say that some aspects could not be shared by several groups of countries; for example, caps for countries with higher debt or greater demographic problems may be set at different levels than for countries that do not have these problems to the same degree. Similarly, some aspects (treatment of natural disasters and emergencies, for example) may be the same for all countries. The point is that the expenditure rule can provide the flexibility to address most country-specific problems without surrendering the restraints on spending needed to promote long-term fiscal sustainability.

- **Enforcement:** Sweden and the United States provide some lessons on enforcing an expenditure rule even though the characteristics of groups of sovereign countries collectively may be very different from the characteristics for any single country.

  – **Warnings do not work; laws do.** National rules will never be stronger than the political commitment to keep them, because the national legislature can always change the rule. Political support will always be important, but even that will not be enough. Warnings can be ignored too easily, but caps (and enforcement provisions) that are set in law are difficult to change – procedurally and politically. This implies that caps for each country should be accepted by all the countries in the monetary union, but then also enacted into law by each country individually. The same applies to enforcement procedures. Uniformity of enforcement procedures is less important than having some kind of binding procedure that requires a change in law to ignore or overturn.

– **Statistics matter.** The data on which the caps and enforcement mechanisms are based should be of high quality and consistent across countries. The sovereignty of each country can be protected through the establishment of small, nonpartisan, independent national budget agencies[11] in each country to make regular public reports of budget implementation and forecasts. Although created by law in each country, these agencies should be obliged by law to use the concepts, procedures, and definitions on budgetary matters set forth by a central authority, such as the European Commission. Also, these national bodies should be scrutinised by a central authority, to ensure that the data are accurate.

8. Conclusion

In sum, both in abstract analysis and in the practical record, there seems to be little identifiable advantage in the use of deficit rules for fiscal behaviour. If anything, the balance would seem to lean toward spending rules that are simpler and less prone to malfeasance.

The balance between deficit-based rules and spending rules is summarised in Table 1. It weighs the pros and cons of the various options, and highlights the following differences:

- With respect to fiscal responsibility, deficit-based rules that set only (in effect) a maximum limit on the deficit might be thought to encourage countries to run the largest deficits permitted, creating risks of excessive deficits under unexpected adverse conditions. In contrast, a spending rule would provide firm guidance to policy makers whether the economy and the budget are strong or weak.
- With respect to macroeconomic stabilisation, deficit-based rules provide no incentive for counter-cyclical policy in strong economies, and can limit even the operation of automatic stabilisers in the budget in weak economies. In contrast, spending rules allow

the automatic stabilisers to work in full at all times and in any economic conditions.

- Violations of a spending rule are transparent and incontrovertible. In contrast, non-compliance with a deficit rule, including either a reference deficit limit or required progress toward close-to-balance-or-in-surplus status, can be hidden behind optimistic economic assumptions or unlikely plans for future spending and revenue discipline.

- The performance of the core functions of government – its ability to achieve all of the traditional objectives of the public sector – can be adversely affected if the availability of resources is subject to unpredictable decreases or increases based only upon cyclical developments, as can be the case under deficit rules. Spending rules make the availability of resources more predictable, notably with respect to annually appropriated funding for those core functions of government.

- Funding for public investment can be protected under a spending rule, by requiring additional fiscal restraint through mandatory spending or taxes, or by setting a separate appropriations limit for investment.

- In contrast to the unpredictable fiscal constraints imposed by deficit rules, the more predictable fiscal behaviour encouraged by spending rules can lead to easier co-ordination with monetary policy, and to greater confidence and steadier behaviour within the private sector.

Based on this analysis, and in the judgment of the current authors, policy analysts should consider this alternative approach to fiscal policy making carefully.

Table 1. Alternative fiscal rules

	Deficit rule	Cyclically adjusted deficit rule	Spending rule
Fiscal responsibility:			
Expansion	Encourages larger deficit	Encourages larger deficit	Requires that surplus be saved
Recession	May require a smaller deficit	May require a smaller deficit	Allows deficit to grow
Macroeconomic stabilisation:			
Expansion	Pro-cyclical	Pro-cyclical, but less so than unadjusted deficit rule	Counter-cyclical, through automatic stabilisers
Recession	Pro-cyclical	Pro-cyclical, but less so than unadjusted deficit rule	Counter-cyclical, through automatic stabilisers
Administrability	Verification more difficult	Verification more difficult	Verification easier
Credibility	Status more contentious	Status more contentious	Status more transparent
Public investment	Can be protected	Can be protected	Can be protected, possibly better than under deficit rules
Core government functions	Volatile funding	Volatile funding	Predictable funding
Monetary policy	Co-operation difficult	Co-operation difficult	Co-operation easier

Notes

1. See, among others, European Commission (2003, p. 52), and Gros *et al*. (2004).

2. Blinder (1982) highlights this concern; Canzoneri *et al*. (2002) give this consideration less weight.

3. The failure of the United States to follow its own rule in recent years should not be seen as an inherent flaw of the rule, any more than should the SGP necessarily be indicted because the larger member countries have flouted it. Rather, the current analysis seeks to evaluate the alternative rules for their relative merits, understanding that "Although all rules, including those prescribed by legislation, are intended to apply strictly and permanently – over successive governments – they are, in practice, open to some interpretation and conceivably can be revised, suspended, or repealed through subsequent legislative action" (Kopits and Symansky, 1998, p. 8).

4. Kopits and Symansky (1998, p. 4) and Kopits (2001, p. 6) would characterise the US budget rule not as a fiscal policy rule, but as a procedural rule. Readers who prefer the latter characterisation may construe this paper as a comparative analysis of a deficit fiscal policy rule and a spending procedural rule. The current authors see no reason to conclude pre-emptively that either rule is necessarily superior or inferior on the basis of such a characterisation.

5. Even this picture may understate the degree of uncertainty in the 2001 US budget outlook, and similarly in all other years. The US federal government, by convention, does not revisit its estimates of budgetary consequences of its policy changes; the original estimates stand into the indefinite future. Then, after accounting for the previously estimated policy effects and for the effects of errors in economic forecasts, all remaining errors in budget predictions are assigned to a residual "technical" category. Notwithstanding that policy effects are not re-estimated officially, it is generally the case that economic weaknesss would reduce the "true" budgetary effects of most tax cuts (certainly those based on reductions in tax rates) in an accounting sense. This is simply because the cost of a tax rate cut would be less if there were less income to tax. It is not because of any presumed effect of tax cuts on the supply of factors of production, or on productivity. Note that the relationship between the cost of entitlement spending programmes (even those with counter-cyclical purposes) and the state of the economy *ex post*

is probably not so systematic and strong. Thus, if the actual budget path in Figure 2 were recalculated today, using currently known information, the cost of the policy steps would likely be lower and, as a direct result, the adverse economic and technical re-estimates would be larger, in equal dollar amount; and the "baseline" budget outcome, without the policy decisions, would have been even worse than depicted in Figure 2.

6. An additional use of cyclical adjustment by the SGP is to assess the required 0.5% of GDP minimum fiscal adjustment for countries out of compliance with the SGP, making references to the existing concept of cyclically adjusted balance (CAB). This application of cyclical adjustment is fully legitimate, though it does not address the other problems of deficit rules raised here.

7. The United States once attempted to enforce a deficit rule for a fiscal year in progress to achieve the actual budget outcome mandated in the targets, based on estimates at the beginning of that year. The US process used only automatic, across-the-board spending reductions; in general, such enforcement could occur through tax increases as well. In practice, such enforcement could require spending cuts that would be painful and impossibly large. Because some major spending items, such as medical care and old-age pensions, could not practically be subject to substantial short-term reductions, the base for cutting spending to enforce the rule would likely be relatively small. And even annual appropriations can be difficult to cut over a time span of several months, given that some of the annual appropriations concern the fulfilment of contracts, some of which are long-term. Therefore, it is easily possible that such spending cuts would be obviated by legislation, eroding the credibility of the budget enforcement process. In practice, all of the significant attempts to enforce the US budget rules through automatic spending cuts were overridden by subsequent legislation, with only the smallest cuts enforced.

8. The generic term "productivity shock" is used to denote any potentially enduring change in the rate of growth of potential output. One-time shocks to the budget, whether favourable or adverse, present a much simpler choice under any fiscal rule: their effects must be either offset or accepted (or some arithmetic compromise between the two).

9. To avoid ambiguity, the current authors do not use the word "discretionary" (which in the United States refers to all annually appropriated spending, but elsewhere is often used to denote decisions made on fiscal policy). Instead fiscal policy decisions are described as "judgmental".

10. "…even governments enjoying a solid reputation may want to refrain from pursuing discretionary countercyclical fiscal policy in view of the associated implementation lags, irreversibility, and political constraints. In fact, accumulated evidence on the ineffectiveness of discretionary activism suggests that they should rely simply on a fiscal rule that allows for the operation of automatic stabilizers" (Kopits, 2001, p. 8).

11. See Gros *et al.* (2004), and European Commission (2004, p. 113).

Bibliography

Annett, A. (2006), "Enforcement and the Stability and Growth Pact: How Fiscal Policy Did and Did Not Change under Europe's Fiscal Framework", *International Monetary Fund Working Paper*, No. 06/116, IMF, Washington DC.

Annett, A. and A. Jaeger (2004), "Europe's Quest for Fiscal Discipline", *Finance and Development*, June, IMF/World Bank, Washington DC.

Atkins, R. and R. Minder (2005), "Brussels threatens action over Italy's 'worrying' deficit: Economic Affairs Commissioner Joaquin Alumnia has set himself on a collision course with Rome after predicting breach of EU fiscal rules", *Financial Times*, 5 April, London.

Begg, I. and W. Schelkle (2004), "The Pact is Dead: Long Live the Pact", *National Institute Economic Review*, No. 189, Sage Publications, Thousand Oaks, California, United States.

Bergsten, C. (2004), "The Euro and the Dollar: Toward a 'Finance G-2'?", paper prepared for the conference on "The Euro at Five: Ready for a Global Role?", 26 February, Washington DC.

Bizer, K., H. Rahahleh, and W. Sesselmeier (2004), "Innovating the Stability and Growth Pact of the European Union by Introducing Tradable Deficit Permits", paper prepared for the conference on "Future EU Enlargements", 18 June, Portoroz-Koper, Slovenia.

Blanchard, O. (1990), "Suggestions for a New Set of Fiscal Indicators", *OECD Economics Department Working Papers*, No. 79, OECD, Paris.

Blanchard, O., J. Chouraqui, R. Hagemann and N. Sartor (1990), "The Sustainability of Fiscal Policy: New Answers to an Old Question", *OECD Economic Studies*, No. 15, OECD, Paris.

Blanchard, O. and F. Giavazzi (2004), "Improving the SGP through a Proper Accounting of Public Investment", *Centre for Economic Policy Research Discussion Paper*, No. 4220, CEPR, London.

Blinder, A. (1982), "Issues in the Coordination of Monetary and Fiscal Policy", in *Proceedings of a Conference on Monetary Policy Issues in the 1980s*, Federal Reserve Bank of Kansas City, 9-10 August, Kansas City, Kansas, United States.

Blitz, J. and C. Giles (2005), "Brown averts risk of tax rises", *Financial Times*, 20 July, London.

Buiter, W. (2003), "Ten Commandments for a Fiscal Rule in the E(M)U", *Oxford Review of Economic Policy*, Vol. 19, No. 1, Oxford University Press, Oxford, United Kingdom.

Buiter, W. and C. Grafe (2002), "Patching up the Pact: Some Suggestions for Enhancing Fiscal Sustainability and Macroeconomic Stability in an Enlarged European Union", *Centre for Economic Policy Research Discussion Paper*, No. 3496, CEPR, London.

Buti, M., D. Franco and H. Ongena (1998), "Fiscal Discipline and Flexibility in EMU: The Implementation of the Stability and Growth Pact", *Oxford Review of Economic Policy*, Vol. 14, No. 3, Oxford University Press, Oxford, United Kingdom.

Buti, M. and G. Giudice (2002), "Maastricht's Fiscal Rules at Ten: An Assessment", paper presented to the CEPR/CREI workshop, 20-21 May, Barcelona, Spain.

Buti, M. and P. van den Noord (2003), "Discretionary Fiscal Policy and Elections: The Experience of the Early Years of EMU", *OECD Economics Department Working Papers*, No. 351, OECD, Paris.

Calmfors, L. (2002), "Fiscal Policy as a Stabilization Policy Tool in the EMU", speech delivered at the conference on "International and Danish Economic Policy", 23 May, Copenhagen.

Calmfors, L. and G. Corsetti (2003), "How to Reform Europe's Fiscal Policy Framework", *World Economics: The Journal of Current Economic Analysis and Policy*, Vol. 4, Issue 1, NTC Economic and Financial Publishing, Henley-on-Thames, United Kingdom.

Canzoneri, M.B., R.E. Cumby and B.T. Diba (2002), "Should the European Central Bank and the Federal Reserve Be Concerned about Fiscal Policy?", paper prepared for the symposium on "Rethinking Stabilization Policy", 29-31 August, Jackson Hole, Wyoming, United States.

Chote, R. (1996), "Budget taxes Labour's ingenuity: the chancellor has posed a nice problem for his shadow colleague", *Financial Times*, 2 December, London.

Chouraqui, J., R. Hagemann and N. Sartor (1990), "Indicators of Fiscal Policy: A Re-examination", *OECD Economics Department Working Papers*, No. 78, OECD, Paris.

Collignon, S. (2003a), "Is Europe Going Far Enough? Reflections on the Stability and Growth Pact, the Lisbon Strategy, and the EU's Economic Governance", April.

Collignon, S. (2003b), "The European Republic: Policy Proposals for a Future Constitution", *Center for Applied Policy Research Working Paper*, October.

Collignon, S. (2005a), "The 'New' Lisbon Strategy, the Stability and Growth Pact and European Democracy".

Collignon, S. (2005b), "The Three Sources of Legitimacy for European Fiscal Policy", paper presented for the workshop "Which Social and Tax Policy for Which European Union?", 10-11 June, Stockholm.

Congressional Budget Office (2005), "CBO's Economic Forecasting Record", CBO, October, Washington DC.

Dabán Sánchez, T. *et al.* (2003), "Rules-Based Fiscal Policy in France, Germany, Italy, and Spain", *IMF Occasional Paper 225*, International Monetary Fund, Washington DC.

Dombey, D. (2003), "Brussels warns on budget deficit breaches", *Financial Times*, 30 October, London.

Economist Magazine (2003), "The death of the stability pact", 29 November, London.

Eichengreen, B. (2003), "Institutions for Fiscal Stability", paper prepared for the Munich economic summit, 2-3 May, Munich, Germany.

Eichengreen, B. and C. Wyplosz (1998), "Stability Pact: More than a Minor Nuisance" in D. Begg, J. Von Hagen, C. Wyplosz, and K. Zimmermann (eds.), *EMU: Prospects and Challenges for the Euro*, Blackwell Publishing, Oxford, United Kingdom.

European Commission (2003), *Public Finances in EMU – 2003*, European Economy No. 3, Brussels.

European Commission (2004), "Evolving Budgetary Surveillance", in *Public Finances in EMU – 2004*, European Economy No. 3, Brussels.

European Commission (2005), *Public Finances in EMU – 2005*, European Economy No. 3, Brussels.

European Commission (2006), "Survey on Fiscal Rules and Institutions: Summary of First Results", 4 April, Brussels.

Financial Times (2005), "In one bound, Brown is free – for now. But the chancellor's fiscal framework has lost credibility", 20 July, London.

Fixler, D. and B. Grimm (2002), "Reliability of GDP and Related NIPA Estimates," *Survey of Current Business*, January, Bureau of Economic Analysis, United States Department of Commerce, Washington DC.

Fixler, D. and B. Grimm (2003), "Revisions, Rationality, and Turning Points in GDP", *Bureau of Economic Analysis Working Paper*, No. 2003-01, Bureau of Economic Analysis, United States Department of Commerce, Washington DC.

Fixler, D. and B. Grimm (2005), "Reliability of the NIPA Estimates of U.S. Economic Activity", *Survey of Current Business*, February, Bureau of Economic Analysis, United States Department of Commerce, Washington DC.

Fuller, T. (2003), "France defends its flouting of Europe's rules on deficits", *New York Times*, 28 August.

Giles, C. (2005a), "Tough decisions on tax now officially postponed: Gordon Brown has dodged some difficult economic choices. But is the chancellor just delaying the inevitable?", *Financial Times*, 20 July, London.

Giles, C. (2005b), "City frowns on chancellor's bending of the golden rule: most economists are unhappy with the reinterpretation of the economic cycle", *Financial Times*, 19 August, London.

Girouard, N. and C. Andre (2005), "Measuring Cyclically-adjusted Budget Balances for OECD Countries", *OECD Economics Department Working Papers*, No. 434, OECD, Paris.

Gramlich, E. (1990), "Fiscal Indicators", *OECD Economics Department Working Papers*, No. 80, OECD, Paris.

Gros, D., T. Mayer and A. Ubide (2004), "The Nine Lives of the SGP", a special report of the CEPS Macro Policy Group (unpublished presentation, February), Centre for European Policy Studies, Brussels.

Herzog, B. (2004), "The Stability and Growth Pact and its Institutional Inconsistencies", paper presented to the Second Pan-European conference, 24-26 June, Bologna, Italy.

HM Treasury (2004), "The Stability and Growth Pact: a Discussion Paper", London, www.hm-treasury.gov.uk/media/0E5/B3/stability_pact_276.pdf.

Jonung, L. and M. Larch (2004), "Improving Fiscal Policy in the EU: The Case for Independent Forecasts", *European Commission Economic Papers*, No. 210, Brussels.

Kennedy, S. and J. Robbins (2001), "The Role of Fiscal Rules in Determining Fiscal Performance", *Canadian Department of Finance Working Paper*, No. 2001-16, Ottawa.

Koen, V. and P. van den Noord (2005), "Fiscal Gimmickry in Europe: One-off Measures and Creative Accounting", *OECD Economics Department Working Papers*, No. 417, OECD, Paris.

Kopits, G. (2001), "Fiscal Rules: Useful Policy Framework or Unnecessary Ornament?", *International Monetary Fund Working Paper*, No. 01/145, IMF, Washington DC.

Kopits, G. (2004), "State of the union: the pact is dead, long live the pact", *Wall Street Journal*, 15 July, New York.

Kopits, G. and S. Symansky (1998), "Fiscal Policy Rules", *International Monetary Fund Occasional Paper*, No. 162, IMF, Washington DC.

Lindbeck, A. and D. Niepelt (2005), "Improving the SGP: Taxes and Delegation Rather than Fines", *CESifo Working Paper*, No. 1389, CESifo, Munich, Germany.

Meller, P. (2003), "France to continue bailouts despite criticism by Europe", *New York Times*, 9 September, New York.

Moulton, B. (2000), "Improved Estimates of the National Income and Product Accounts for 1929-99: Results of the Comprehensive Revision", *Survey of Current Business*, April, Bureau of Economic Analysis, United States Department of Commerce, Washington DC.

Moulton, B., E. Seskin and D. Sullivan (2001), "Annual Revision of the National Income and Product Accounts: Annual Estimates, 1998-2000, and Quarterly Estimates, 1998:I-2001:I", *Survey of Current Business*, August, Bureau of Economic Analysis, United States Department of Commerce, Washington DC.

Munchau, W. (2004), "Europe needs a strategy, not looser fiscal rules", *Financial Times*, 24 May, London.

Peston, R. (1995), "Labour takes tough line on spending: Brown seeks to reassure the City on party's proposals for taxation and borrowing", *Financial Times*, 16 May, London.

Rostowski, J. (2004), "The Stability and Growth Pact – Essential and Unfeasible", *Center for Social and Economic Research Studies and Analyses*, No. 275, Center for Social and Economic Research, Warsaw.

Saving, J. (2005), "European Economic Integration: A Conflict of Visions", *Southwest Economy*, Issue 4, Federal Reserve Bank of Dallas, Dallas, Texas, United States.

Schelkle, W. (2004), "Improving the 'Quality of Fiscal Policy Rules' – On the Political Economy of Reforming the Stability and Growth Pact", paper presented to the Second Pan-European conference, 24-26 June, Bologna, Italy.

Seskin, E., S. Smith, and T. Weadock (2005), "Annual Revision of the National Income and Product Accounts: Annual Estimates for 2002-2004; Quarterly Estimates for 2002:I-2005:I", *Survey of Current Business*, August, Bureau of Economic Analysis, United States Department of Commerce, Washington DC.

Swedish Ministry of Finance (2005), "Update of Sweden's Convergence Programme", submitted to the European Commission, November.

Uhlig, H. (2002), "One Money, but Many Fiscal Policies in Europe: What Are the Consequences?", *Centre for Economic Policy Research Discussion Paper*, No. 3296, CEPR, London.

United States Government Accountability Office (2006), "Mandatory Spending: Using Budget Triggers to Constrain Growth", Report No. 06-276, GAO, Washington DC.

Wicks, N. (2003), "EMU: past, present and future", remarks delivered at the symposium on "EMU: Assessing the Impact", 5 December, New York.

Wolf, M. (2005), "Brown deserves more time to prove his strategy works", *Financial Times*, 4 May, London.

Wyplosz, C. (2002), "Fiscal Policy: Rules or Institutions?", paper prepared for the meeting of the group of economic analysis of the European Commission, 16 April.

Wyplosz, C. (2005a), "Fiscal Policy: Institutions Versus Rules", *National Institute Economic Review*, No. 191, January, Sage Publications, Thousand Oaks, California, United States.

Wyplosz, C. (2005b), "European Monetary Union: The Dark Side of a Major Success", paper prepared for the panel meeting of economic policy, 21-22 October, London.

Appendix
Expenditure rules in Finland, the Netherlands, and Sweden

Finland

In addition to the rules that come with being a member of the EMU, Finland has introduced further national expenditure rules. Expenditure ceilings were introduced in Finland in the late 1980s and early 1990s. The initial aim was to strengthen the budget process; in recent years the problems of an aging population have resulted in increased support for the ceilings. The Budget Law mentions in general terms that the government is to set frames for expenditures; however, the ceilings are not just a political commitment but also a customary practice of Finland's government.

The ceilings are set for four years on a rolling basis. They are set in real terms and for central government only, although they include transfers to sub-national governments. Cyclical expenditures – such as unemployment benefits and accommodation subsidies, interest on central government debt, and expenditures that are matched by revenues from the European Union – are excluded. All in all, around 75% of central government expenditures are under the ceiling and account for around 20% of GDP.

When the current government took office it stated a number of fiscal policy objectives, including reducing the central government debt to GDP ratio, securing balanced central government finances in national account terms, and controlling growth of central government spending in real terms. Controlling central government spending is a key feature. The ceiling is stated in real terms and adjusted to nominal terms according to price development for different expenditure items every year.

The Finnish system also includes a "brake" to avoid excessive deficits, stating that the government will take actions, even in conditions of weak economic development, if the deficit according to forecasts will be higher than 2¾% of GDP.

Furthermore, there have been recent discussions about expenditure control for sub-national governments. In a country like Finland, with a high degree of sub-national decision making enshrined in the Constitution, it may be hard for the central government to impose binding rules with sanctions.

References

Finnish Ministry of Finance (2003), "Decision on central government spending limits 2004-2007", VM 3/214/2003, Helsinki, www.vm.fi/tiedostot/pdf/en/35302.pdf..

Finnish Ministry of Finance (2005), "Decision on central government spending limits 2006-2009", VM 5/214/2005, Helsinki, www.vm.fi/tiedostot/pdf/en/92324.pdf.

OECD (2004), *Economic Surveys – Finland 2004*, OECD, Paris.

Finnish Prime Minister's Office (2003), "The government program of Prime Minister Matti Vanhanen's government on 24 June 2003", Helsinki, www.valtioneuvosto.fi/tiedostot/pdf/en/39357.pdf.

The Netherlands[1]

In the Netherlands, after a dramatic increase in deficits in the early 1980s, the government embarked on a new policy to bring deficits down. After some success, however, a high structural deficit limited the scope for allowing automatic stabilisers to work, and required the government to take judgmental measures to meet the targets. From 1989 to 1994, budget projections were frequently overtaken by downward revisions in economic activity, forcing the government to introduce new fiscal packages with greater budget savings than the original budgets. This system of "continuous budgeting" resulted in major decisions on an *ad hoc* basis and at the last minute. As a result, it was recognised that the framework for budgeting had to be reformed.

In 1993, the minister of finance appointed a study group on the budget that recommended a new budget formulation system focused on the **level of expenditures**, rather than the **level of the deficit**,[2] and on cautious economic assumptions. This created more stability, as any extra revenue would not automatically translate into extra expenditures, and the cautious economic assumptions would help compensate for uncertainty.

In new coalition agreements between different political parties, separate caps on expenditures were to be established for each of the three sectors of the Dutch budget: the “core” budget sector; the health care sector; and the social security and labour market sector. The coalition agreements would also incorporate the multi-year expenditure projections of each ministry as the basis for sub-caps for each minister within the “core” budget sector. Caps were to be established in real terms, which serve to prevent the coalition agreements from having to be re-opened during the course of the government’s term of office. Transfers were to be permitted between sectors and between sub-caps established within the “core” budget sector. Surpluses in one area, however, could be used only to fund **existing** policies that are experiencing higher costs than projected. The consent of the entire cabinet would be required to finance **new** proposals.

Budget over-runs must be offset in the area of the over-run. In exceptional cases, the cabinet may decide that more than one ministry should contribute to financing an over-run. There are strong “firewalls” between revenue and expenditures. If the budgetary situation turns out more favourable than anticipated, then some of the extra revenues may be used to cut taxes, depending on the size of the remaining deficit.

The new budget process has been the key to the successful turnaround of public finances in the Netherlands. The coalition agreements have proven to be an excellent instrument for control, both before and after the Netherlands joined the European Monetary Union.

Sweden

In the early 1990s Sweden experienced a recession and the most severe fiscal crisis since the Second World War. A weak budget process was identified as part of the problem.[3] A reform was initiated that led to significant changes in the budget process in the second half of the 1990s. The introduction of a nominal expenditure ceiling for the central government in 1997 was an important part of the reformed budget process. The ceilings on expenditure were accompanied by a top-down budget process and a surplus target for the general government sector of 2% of GDP over the business cycle. In 2000, a balanced budget requirement was introduced for local governments. Although the expenditure ceilings are not explicitly derived from the overall surplus target, the surplus target is taken into account when setting the expenditure ceilings.[4]

Annual nominal expenditure ceilings are set three years in advance as part of the budget process, and are considered to be binding. The ceilings apply to central government primary expenditure, including transfers and grants to local governments, plus expenditures by the old-age pension system outside the central government budget. Each year, as part of a rolling budget framework, an additional ceiling is applied to expenditures three years out.[5] The ceilings for years t+1 and t+2 could in principle be altered, but this has not happened since the system was adopted in 1997 (except for technical adjustments). The ceilings are set with a margin over projected expenditures to allow for some policy flexibility and, more importantly, for increases in cyclical spending during an economic downturn. An attempt by parliament to change a proposed budget has to be presented in the form of a complete package that respects the previously determined expenditure frames and ceilings. This requirement has strengthened the hand of the minister of finance in the budget process and has made it more difficult for the budget to be defeated or amended in parliament.

Nominal expenditure ceilings have been an effective means of achieving the surplus target in Sweden. In fact, the ceilings together with a prolonged economic upswing, where revenue collections continuously exceeded projections, produced surpluses that exceeded 2% of GDP between 1999 and 2001. As a result of the expenditure ceilings, fiscal headroom produced by this boom was saved or used for tax cuts rather than for expenditure increases. However, the margins for cyclical fluctuations have been fully used during economic upturns even though they were intended to be only a safety cushion during unexpected downturns. As a result, the ceilings came under pressure following the 2002-03 downturn, forcing the government to scale back some expenditure commitments. The habit of using all headroom under the ceiling for expenditure increases and using the ceiling more as an expenditure target is worrisome and has contributed to a general government surplus lower than 2% of GDP since 2002, but still the ceiling has been important in reducing the expenditure ratio for the central government in the late 1990s and after that keeping it at a stable level.

Apart from the tendency to use up the margins for expenditure, Sweden’s fiscal framework has two potential weak spots. First, expenditure restraint has been less evident at the local level, where most government consumption takes place, than at the central government level. Second, the government has resorted to the limited use of tax expenditures to introduce new policies without breaching the ceiling or requiring balancing measures.

Notes

1. This section is drawn from Jón R. Blöndal and Jens Kromann Kristensen (2002), "Budgeting in the Netherlands", *OECD Journal on Budgeting*, Vol. 1, No. 3, pp. 43-80.

2. This is similar to the caps on discretionary expenditure applied in the United States, except they apply to all expenditure in the Netherlands. For a discussion of the United States experience, see Barry Anderson (1999), "Budgeting in a Surplus Environment", PUMA/SBO(99)3/FINAL, OECD, Paris.

3. For a more thorough description of Swedish fiscal rules, see, for example, Urban Hansson Brusewitz and Yngve Lindh (2005), "Expenditure Ceilings and Fiscal Policy: Swedish Experiences" (paper presented at the Banca d'Italia Workshop on Public Finance, held in Perugia, 31 March-2 April) or Willem Heeringa and Yngve Lindh (2001), "Dutch Versus Swedish Budgetary Rules: A Comparison" (paper presented at the Banca d'Italia Workshop on Public Finance, held in Perugia, 1-3 February).

4. Or using the words of the 2005 Spring Fiscal Policy Bill: "One fundamental factor in the Government's deliberations on expenditure ceilings is the determination to keep expenditures at a level that is compatible with the public finances surplus target, while also ensuring margins for conducting an active labor market policy and meeting unforeseen expenses, such as costs associated with climate-related and other natural disasters."

5. Between 1997 and 2001 the ceiling for t+3 was set by parliament in the spring (March-May). Since 2002 it is instead proposed in the Budget Bill and decided in the autumn (September-November). In autumn 2004 no ceiling was set for 2007. Instead, the government planned to propose ceilings for both 2007 and 2008 in the Budget Bill for 2006 (in autumn 2005).

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