

FISCAL POLICY: INSTITUTIONS VERSUS RULES

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Fiscal discipline is as much needed as monetary discipline. Many countries have attempted to counter the deficit bias by adopting fiscal rules that typically set a limit to their annual budget deficits. The record is not satisfactory; rules are either too lax or too tight and then ignored. This article suggests that the solution is to adopt the approach followed by inflation targeting central banks, with great success. Independent and accountable Fiscal Policy Committees, given the task of achieving debt targets and the authority to decide – or recommend – annual deficits, will be free from the deficit bias. This will allow them to exercise discretion in the short run while delivering debt sustainability in the long run.

I. Introduction

Faith in the ability of macroeconomic policies effectively to erase business cycles has long been oscillating. From the enthusiastic hopes of the 1960s that we could erase business cycles (Tobin, 1972) to the view of the 1980s that policies are ineffectual,¹ the pendulum seems to be moving to an intermediate position that emphasises incentives and institutions.

This evolution can be traced back both to facts and academic research. Double-digit inflation and record levels of peacetime public debts have exposed the excesses of unconstrained policymaking and prompted a rejection of activism. Academic research has exposed the limits of discretion following the discovery by Kydland and Prescott (1977) of the phenomenon of time inconsistency. In parallel, the effectiveness of macroeconomic policies has been questioned. In the field of monetary policy, Lucas (1972) and Sargent and Wallace (1975) have concluded that “only unanticipated money matters”. In the field of fiscal policy, Barro (1974) established the principle of Ricardian equivalence which denies any stabilising role to discretionary actions.

Both results have been questioned. Clarida *et al.* (1999) and Woodford (2003) have shown theoretically and empirically that systematic monetary policy can be effective without necessarily leading to high inflation. The verdict on Ricardian equivalence remains largely undecided after a massive research effort spread over more than two decades.² On the theory side, the assumptions required for fiscal policy to be ineffective are too demanding to be met in practice.³ Ricardian

equivalence fails in the presence of such realistic features as uncertain lifetime, non-altruistic bequest motives, credit rationing and distortionary taxation. On the other hand, the picture that emerges from a host of empirical studies is muddy; some Ricardian effects are not rejected although complete equivalence is rarely found.

A further influence has been the growing recognition that governments may not always serve the public interest. This view, championed by Buchanan and Tullock (1962), has been refined by the political economy literature (Drazen, 2000; Persson and Tabellini, 2000). In the presence of government failures, policies justified by the existence of market failures may do more harm than good. The implication seems to be that governments can help out but only if properly constrained.

The impact of these ideas on monetary policy has been profound. The initial result that only monetary surprises matter has led to the adoption of rules, mostly monetary growth rules championed by the Bundesbank and taken up by the Federal Reserve in the early 1980s. But growing dissatisfaction with rigid rules has led to a more subtle emphasis on incentives. Central banks have been made independent and given a very precise mandate, price stability, along with the recognition that they have an output stabilising role to play. This has led to the strategy of *flexible* inflation targeting, pioneered by the Reserve Bank of New Zealand and developed in Svensson (2003). So far at least, the results have been impressive. Wherever it has been implemented, the inflation targeting strategy has delivered low inflation at

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no major output cost. In addition, the strategy has provided central banks with the incentive to become more transparent and accountable, which enhances policy effectiveness.⁴ Interestingly, even non-inflation targeting central banks have also become more transparent, witness the evolution of the Federal Reserve, the European Central Bank and the Bank of Japan.

As far as fiscal policymaking is concerned, the evolution has been slower and is still trailing behind monetary policy. As with central banking, the initial steps involve the adoption of rules. In the OECD area, multiannual limits on spending have been introduced in the Netherlands, New Zealand, Sweden, the US and the UK. Debt rules have been introduced in New Zealand and Poland. Chile and Brazil now set strict limits on the budget deficit. The Growth and Stability Pact (GSP), which formalises the excessive deficit procedure specified in the Maastricht Treaty, may be the most elaborate arrangement. Relying on a combination of peer pressure and aggressive fines, it seeks to limit budget deficits and bring public debts down.

These fiscal rules are either very flexible, as in the British case, or quite stringent, as in the case of the GSP. In either case, they lack the elaborate underpinnings of the flexible inflation targeting strategy. Their theoretical background remains largely unspecified and their institutional backing is crude. It should not come as a surprise, therefore, that debts and deficits continue to flourish in many countries and, in particular, that the GSP all but collapsed in 2003. It would seem that we are now ready to move to the next step, replacing rules with adequate incentives backed by institutions. This is the theme of the present article.

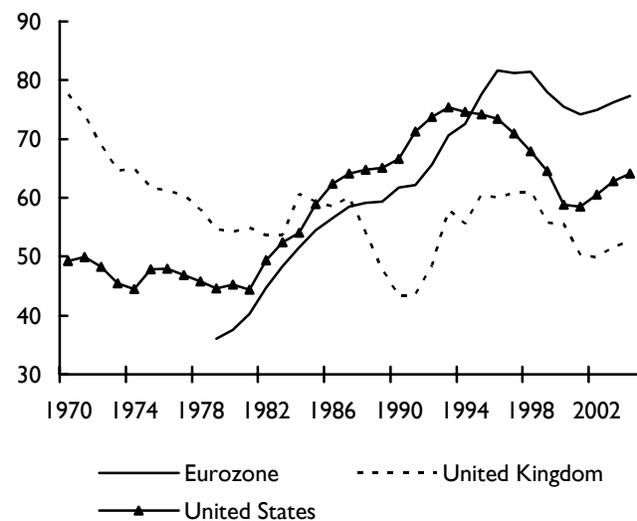
The next section briefly documents the evolution of fiscal policies in three economies, the Eurozone, the UK and the US. Section 3 then takes up the similarity between fiscal and monetary policy: the need to achieve long-run discipline while allowing for short-run flexibility. Section 4 reviews how fiscal rules operate and concludes that they are either too rigid or too flexible. This paves the way for Section 5, which articulates a set of characteristics that should underpin the design of fiscal policies to bring them in line with accepted principles and match the performance of modern central banks. Practical proposals are presented in Section 6. The last section wraps up the main arguments.

2. Bringing public debts under control: an unfinished business

Starting in the late 1970s in most of Europe, and in the early 1980s in the US, debt levels have started to rise quickly. Chart 1, which presents gross debt-to-GDP ratios, documents this pattern in a few illustrative cases. The US and Eurozone's upward trend of the 1970s and early 1980s was clearly unsustainable. Facing rising concern on financial markets and within the population, most governments started to shift gear during the 1980s. The emergence of public indebtedness at the top of the economic policy agenda has resulted in a sharp trend reversal, less marked in the European Union than in the US. However, the 2000s seem to be witnessing a reversal, with public debts on the rise again.

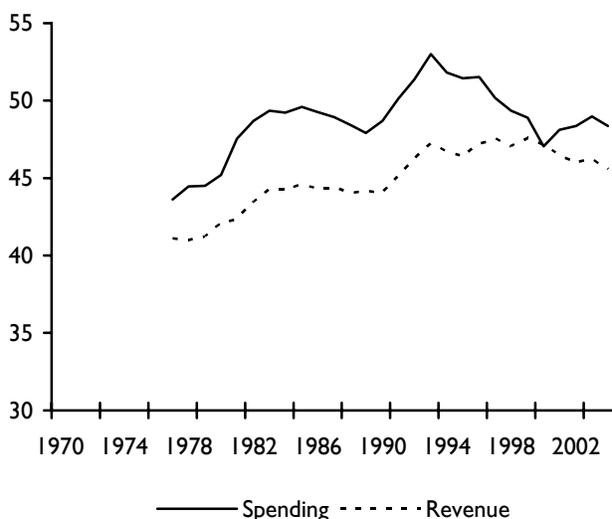
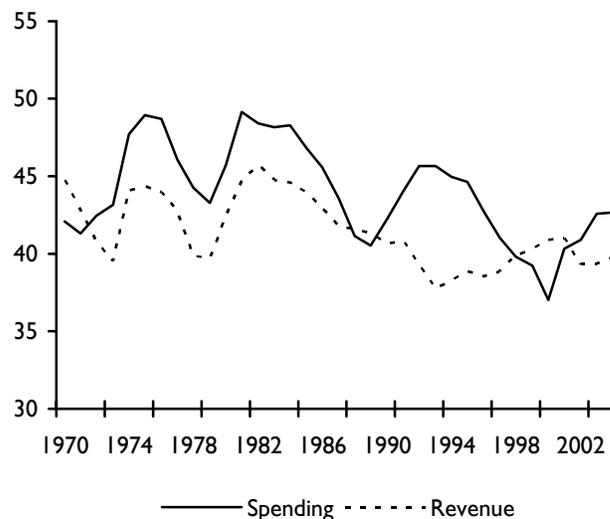
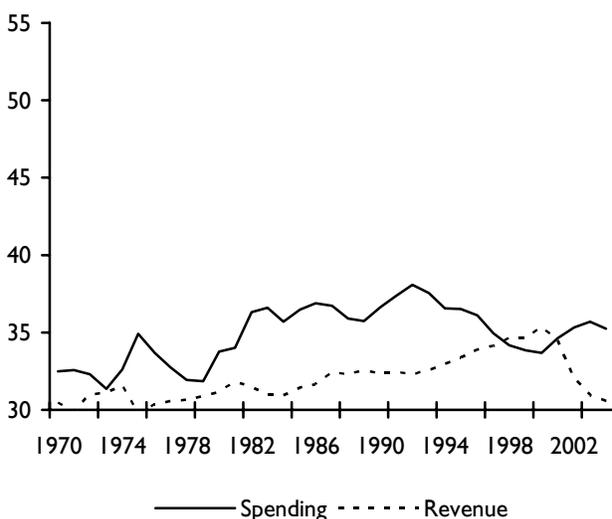
How did many governments fall into the debt trap? Chart 2 shows that, in the US and Europe, spending rose ahead of revenues in the 1970s and 1980s. In the US, fiscal policy was decidedly counter-cyclical as downswings were usually accompanied by a sharp increase in spending, but these apparent relapses were corrected over the ensuing upswing, until the massive Reagan spending boost definitely tipped the odds of keeping the debt under control. In the 1990s, the pattern changed again when the federal government enacted tax cuts not compensated by spending cuts. In Europe during

Chart 1. Gross public debt (% of GDP), 1970–2004



Source: *Economic Outlook*, OECD, 2004:2.

Note: The OECD figures differ from the Maastricht and some national definitions.

Chart 2. Public spending and revenues (% of GDP), 1970–2004**Eurozone****United Kingdom****United States**

Source: *Economic Outlook*, OECD, 2004:2.

Note: The OECD figures differ from the Maastricht and some national definitions.

the 1980s public spending was increased every year without a corresponding adjustment in tax intakes. A significant part of the increase in public spending consisted of apparently hard-to-reverse welfare payments and yet, as in the US, the correction of the 1990s took the form of reduced spending alongside continuously rising tax collection.

The British situation stands apart; public debt declined in the 1970s and then fluctuated trendlessly. Spending was brought down, with some relapse during cyclical downswings, and this reflux was followed by reductions in total revenues. Yet, spending appears to be highly countercyclical, with taxes following suit in a somewhat muted way. This all changed in the 1980s; up until the mid-1990s, revenues have been declining as has spending which, however, remained counter-cyclical, hence large swings in the debt-to-GDP ratio.

In the Eurozone and the US, the debt trend correction of the 1990s relied on spending cuts, accompanied in the Eurozone by a modest reduction in tax revenues once budget balance had been restored and the debt-to-GDP ratio had finally started to fall.⁵ In the US, revenues continued to rise until sharp tax cuts were decided upon by the Bush administration.

The most striking aspect of this evolution is the apparent inability to keep bringing the debt down in the Eurozone and the US in the 2000s. In the Eurozone, where growth has markedly slowed down, the re-opening of sizeable budget deficits may be largely endogenous. This is not the case in the US, where the increase in public spending and the tax cuts were decided before the downswing. In addition, the downswing did not last long – partly, at least, as a result of the very expansionary fiscal policy stance.

The picture that emerges from this selective survey of

events is far from clear. At one end of the spectrum, in Britain, public debt has been under control for more than three decades, maybe with the exception of the troubled early 1990s, and the size of government has shrunk. At the other end of the spectrum, the Eurozone – mostly the three largest countries, France, Germany and Italy – has only temporarily managed to reverse the trend of an ever increasing public debt and of ever larger government. The US stands in the middle. The recent combined rise in public spending and cuts in revenue clouds any reading of whether the size of government is increasing or not. At any rate, US public debt is again rising rapidly and no end appears in sight.⁶

3. What is the problem with fiscal policy? A monetary policy interpretation

3.1. *The time consistency problem*

Monetary policy theory and practice have been influenced by the perception that monetary authorities exhibit an inflation bias, a consequence of temporal inconsistency. As described by Kydland and Prescott (1977), and documented by the high rates of inflation observed in the 1980s, monetary policy came to be seen as hostage to policymakers' temptation to inflate when faced with difficulties such as high unemployment or public indebtedness. Work by Alesina and Tabellini (1990) and Persson and Svensson (1989) also shows that fiscal policy may suffer from a deficit bias driven by time inconsistency.

Monetary and fiscal policymakers face a similar, generic issue. Monetary policy can be used for two different purposes; in the long run it is required to deliver price stability, in the shorter run it is asked to help stabilise output over the business cycle. The challenge is to deliver on the short-run objective without giving up the long-run objective. In the 1970s and 1980s, many central banks failed to meet this challenge. As they struggled to meet various contractionary shocks – including the infamous oil shocks – they gave up on inflation. The initial response to this failure was to adopt monetary aggregate growth rules. Inflation receded but the rules were soon found to be too rigid, in particular in the face of sharp changes in financial markets that modified the behaviour of monetary aggregates. The next step was to replace rules with new central banking institutions. Formal or informal independence along with some form of inflation targeting were found to provide more short-run flexibility without jeopardising the long-run price stability objective. The explicit aim

was to replace necessarily arbitrary rules with incentives; short-run discretion was constrained by long-run discipline. Bound by clear objectives and the accountability of their actions, independent central banks have escaped the time inconsistency problem. They do not commit to specific predetermined actions, as the 'rule school' used to prescribe; they are simply free of the inflation bias.

Fiscal policy can be set in the same mould. The long-run objective is fiscal discipline, i.e. debt sustainability. In the short run, fiscal policy may also make a contribution to output stabilisation over the business cycle – in the European monetary union it is the only stabilisation tool available at the national level. The deficit bias, well documented in many countries, reflects another time inconsistency problem whereby the long-term discipline objective is systematically overlooked when short-term discretion is being used. The 'rule school' aims at preventing discretion by binding fiscal policy in the short run. Rules can work as far as the long-run pursuit of discipline is concerned, but at the cost of ignoring the short-run objective. In practice the risk is that fiscal policy becomes procyclical, especially during downswings when tax revenues are endogenously declining.⁷

3.2. *Limits to the monetary policy analogy: economics*

While the time consistency analogy is powerful, fiscal policy differs in many respects from monetary policy. The differences concern the economic role and effectiveness of fiscal policy, as well as some important political aspects.

In comparison with monetary policy, fiscal policy is relatively ineffective as a short-run output stabilisation tool. Not only is its impact rather slow (Blanchard and Perotti, 2002), it is also uncertain. The debate on Ricardian equivalence has made it clear that much depends on how economic agents perceive fiscal policy actions. Temporary tax measures are understood to be ineffective, because agents adjust their saving behaviour. Even 'permanent' tax measures are of limited credibility because any decision can be reversed later on, another manifestation of the time consistency problem. Spending actions raise the question of how they are to be financed, which may elicit partially offsetting private saving reactions. In the extreme case where the debt path is seen as unsustainable, restrictive fiscal policies have been observed to exert an expansionary effect if they are seen as stabilising an

otherwise explosive public debt (Giavazzi, Jappelli and Pagano, 2000).

In addition, while the long-term objective of price stability is relatively straightforward to state and easy to observe, fiscal discipline is not as clear cut. Fiscal discipline ultimately means that the Government respects its budget constraint, but this constraint is intertemporal, in effect spreading out over a very long horizon. For instance, governments are expected to deliver both explicit and implicit entitlements such as welfare payments and the retirement of future generations. Faced with an ageing population, many governments have moved to establish funded pension plans which are meant to deal with the future payment of retirement deficits. While this represents a step forward towards making these future payments explicit and funded, it still leaves open the possibility that the financial performance of the funds will turn out not to provide enough resources for what society will consider a decent retirement income twenty or fifty years down the road. In addition, governments often operate with an explicit on-budget side and an implicit off-budget side. This complexity cannot be fully eliminated even if implicit commitments are taken into account and off-budget items are eliminated.

3.3. Limits to the monetary policy analogy: politics

Monetary policy actions can be decided virtually instantaneously and are not typically subject to *ex ante* political control. Central bank independence is designed precisely to shield the monetary authorities from political influence. Fiscal policy actions, on the other hand, must typically be approved by parliament, which means that precious time can be lost. In addition, the parliament-sanctioned result may be quite different from the Government's initial intentions, possibly with no action at all. Indeed, one of the strongest arguments against the discretionary use of fiscal policy is that it often is implemented too late and not as initially intended, thus destabilising the economy. The solution is to allow the Government to make some decisions without parliament's approval. This aspect is elaborated upon in Section 6.4.

Even if governments enjoy some short-run room for manoeuvre, they do not escape parliamentary oversight. The result is a high degree of politicisation, which not only involves natural differences of opinion but also opens the door to lobbying by a myriad of interest groups that care little for the common public good.⁸

'Democratic control' often amplifies the time consistency problem. There is a good reason for this difference between monetary and fiscal policy. Virtually any fiscal policy decision involves some income or wealth redistribution, either through tax-financed spending or through changes in tax collection. Monetary policy, on the other hand, is less redistributive. Once inflation – a powerful source of redistribution – is ruled out, monetary policy mainly affects the interest and exchange rates. Changes in real interest and exchange rates are redistributive too, but these effects are temporary and reverse themselves fairly soon. The real interest rate may be temporarily high, benefiting lenders at the expense of borrowers, but it eventually returns to its equilibrium level. Much the same applies to the exchange rate so that, on average, monetary policy is not redistributive. From a democratic viewpoint, this justifies delegating monetary policy to unelected officials or technocrats. The fundamentally redistributive nature of fiscal policy requires that all conflicts be settled by democratically elected bodies, even if it injects an excessive degree of politicisation and opens the door to private interest meddling.

In addition, policy is conducted in an uncertain world. Economic forecasts are far from precise and largely unreliable when it comes to identifying the all-important turning points that typically trigger the need for a change of course for policy. Not only does this require rapid action when the situation is becoming less cloudy, but it may also result in the need to reverse gear when previous forecasts turn out to be wrong. Central banks are known to be loath to reverse themselves for fear of sending confusing signals – possibly for fear of being seen as confused. Governments simply cannot turn around, at least not fast enough. At best they can abort an action if it is still under consideration by parliament.

4. Existing fiscal rules

Many countries have followed the logic of adopting rules that aim at constraining fiscal policy decisions. The rules vary greatly, both regarding precision and objectives. This section provides an overview by examining some examples, some of which are listed in table 1, which does not intend to be exhaustive.

4.1. Multiannual spending limits

A number of countries have introduced limits on public spending. Such arrangements exist in the Netherlands, New Zealand, Sweden, the US and the UK. In most

Table 1. A sample of national fiscal rules

Country	Spending limits	Deficit rule	Debt rule
Brazil	Cap on personnel	4.5% surplus	
Chile		1% structural surplus	
Eurozone		SGP	
Germany		Golden rule	
Netherlands	Selected items	SGP	
New Zealand		Operating surplus on average	
Poland		SGP	60%
Sweden	Three year planning	2% over cycle	
Switzerland		Structural balance over cycle	
UK		Golden rule over cycle	40% (net debt)
USA	Ten year planning		

cases, these rules are multiannual, and for good reason. It would be too easy to circumvent these rules by shifting some specific items, especially public investment, to further years. Other rules concern specific budgetary items or stipulate, as in the US, that additional spending must be matched by additional revenues (pay-as-you-go).

Such rules do not directly concern fiscal discipline, they rather aim at limiting the size of government. However, since fiscal indiscipline is often the consequence of increased spending not matched by increased revenues, these rules may also have a discipline effect. Indeed, most lasting deficit reduction measures start with spending cuts. On the other hand, the case of the US is not encouraging; the Budget Enforcement Act (BEA), which sets spending rules over a ten-year horizon, has been circumvented through the creative use of ‘sunset clauses’.⁹

4.2. Budget deficit rules

A number of countries have adopted rules that restrict the size of the budget deficit or mandate a surplus. Switzerland has amended its constitution, which now requires that the budget be balanced over the cycle. It is too early to know whether this measure, which came into effect in 2003, will have the intended effect. Chile and Brazil set strict limits on the budget deficit, in effect aiming at a surplus. In the case of Chile, the rule calls for a structural surplus of 1 per cent of GDP; since its inception in 2000, the rule has been respected. The

Brazilian rule establishes that the Congress sets limits to spending on personnel over a three-year horizon while the Government commits itself to a pre-announced primary budget balance. The record so far has been good, with a 4.5 per cent surplus achieved in 2004. The UK is among countries that have established a golden rule. The Government has committed itself to limit the deficit to public investment over the cycle.

In many cases, these limits are self-imposed by government and, except for the SGP, in none of the cases listed in table 1 are sanctions imposed when the deficit limits are reached. This feature is similar to the case of inflation targets with an important qualification; inflation targeting central banks, being independent from government and parliament, do not face the time inconsistency problem that plagues fiscal policy. It should not come as a surprise if violations occur.

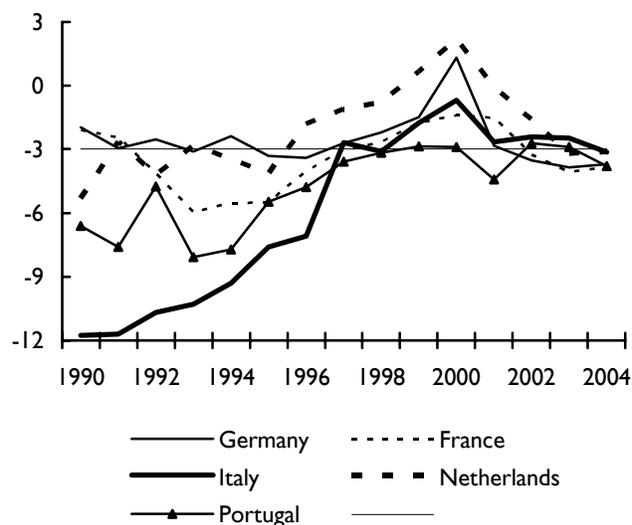
4.3. Debt rules

Rules can also mandate debt ceilings. In the US, the total nominal debt is subject to a ceiling that must be changed by Congress, which is routinely done and therefore not binding.¹⁰ The British Code for Fiscal Stability includes a statement concerning the net public debt, which must remain at “a stable and prudent level”, currently understood to be 40 per cent of GDP. Poland has adopted the Maastricht limit of 60 per cent of GDP.

4.4. The Growth and Stability Pact

The GSP is the most elaborate fiscal rule to date. It formally sets a limit of 3 per cent for the annual budget deficit, every year.¹¹ If the deficit limit is breached for more than two consecutive years, sanctions apply. The possibility of sanctions underpins a highly structured surveillance process. Each country must submit every year to the EU Commission its budget forecasts for the three following years. When the deficit limit is breached, upon recommendation from the Commission, the Council of Ministers triggers a procedure that becomes increasingly binding and leads to sanctions in the form of graduated fines. In principle, the SGP concerns all EU member countries but only monetary union members may be fined.

Chart 3 shows that, by end-2003, half of the Eurozone member countries had excessive deficits. France and Germany had reached a situation where the sanction procedure should have been triggered. Their commitments over the two previous years, part of the

Chart 3. Budget balances in the European Monetary Union (% of GDP)

Source: *Economic Outlook*, OECD, 2004:2.

Note: The OECD figures differ from the Maastricht and some national definitions.

early warning procedure, had been repeatedly violated. But sanctions are a deterrent – dubbed the equivalent of an atomic bomb by Eichengreen and Wyplosz (1998) – that are designed not to be used. Unsurprisingly, in November 2003, against the recommendations of the Commission, the Council of Ministers ‘suspended’ the sanction procedure. The Commission took the Council to the European Court of Justice, which found that the decision, as framed, was in violation of the European Treaty. With deficits still above 3 per cent in 2004, the Council again lifted the procedure in December 2004; this time the Council respected the form, if not the spirit of the pact.

The SGP has been proven to be excessively tight and rigid. In contrast to most other fiscal rules, the pact does not rest upon voluntary commitments; it includes sanctions that its initiators wanted to be automatic.¹² What the SGP overlooked is that unforeseen circumstances may make the rule counter-productive. The downturn that affected Europe over 2001–3 was mild but unusually protracted. It pushed into excessive deficits many countries, including one of its staunchest defenders, the Netherlands. Excessive deficits could have been avoided only by adopting highly restrictive fiscal policies. Having misbehaved during the preceding upswing, France and Germany were required to make up the hard way, during the downswing; by then, however,

both economic and political logic led them to demur. This is a clear case of time inconsistency. The true failure of the SGP is that it has been designed to constrain the deficit bias, not to eliminate it.

Taking account of this failure, the EU Commission has made new proposals (European Commission, 2004). The intention is to introduce more flexibility. To that effect, the Commission proposes to apply the SGP on a case by case basis and to recognise specific circumstances less drastic than the “exceptional circumstances” provided for in the pact. It also suggests taking into account the debt position of countries in excessive deficits when assessing their situation. Yet, the proposals uphold the principle of sanctions and seek to entrust more decision power to the Commission at the expense of the Council. At the time of writing, it is expected that a reform of the SGP, possibly along the lines suggested by the Commission, will be decided upon during the first semester of 2005.

5. Principles for fiscal policy

Current fiscal policy arrangements deal with the time inconsistency problem by adopting rules. Since these rules are generally non-binding, chances are they will be set aside as often as economic or political expediency require. The SGP is the main exception since its rules are meant to be binding, and yet they have been set aside when they clashed with economic and political reality. Fiscal rules are bound to be counterproductive when they mandate procyclical policies. Much as money growth rules in the 1980s did, fiscal rules do not eliminate the time inconsistency problem; they try to bury it deep under quasi-legal arrangements based on arbitrary norms.

It may be surprising that the principles that have greatly improved central bank practices in the 1990s have not yet been applied to fiscal policy. This is understandable, however, once it is realised that fiscal policies involve income and wealth redistribution, which requires *ex ante* democratic oversight. The challenge then is to imagine procedures and institutions that directly lessen the time inconsistency inherent to democratic politics while still adopting the core principles that underpin current monetary policymaking. This section first establishes a number of principles and then makes proposals.

5.1. What is fiscal discipline?

Like monetary policy, fiscal policy must deliver long-

term discipline (price stability for monetary policy, budgetary discipline for fiscal policy) while allowing for flexibility in pursuing counter-cyclical policies in the short run. The first step is to define fiscal discipline. As table 1 indicates, most existing rules identify the annual budget balance as the key indicator of fiscal discipline. This is a misconception.

A basic economic principle is that, like any other agent, the Government faces an intertemporal budget constraint, as summarised in Box 1. Fiscal discipline, therefore, means that this constraint is not violated. Caps on annual budgets are neither necessary nor sufficient. To start with, the annual budget is endogenous and therefore beyond government control. This is why, maybe, some rules refer to cyclically-adjusted balances. Next, discipline is not incompatible with a succession of annual deficits provided that they are matched by surpluses. This is why some rules focus on average balances over several years, typically a business cycle. Finally, growth-enhancing public spending may well pay for itself, like any investment. This is what underpins golden rules, which explicitly admit that some deficits may not be a threat to discipline. One problem with such qualifications is that they open up the door to arbitrariness. Our ability to compute cyclically-adjusted balances is quite limited; the resulting gauge of discipline is far too imprecise to sustain a rule that is meant to be strict. As for golden rules, from an economic viewpoint it is impossible to distinguish between public spending and public investment. For instance, public spending on education is likely to be far more socially productive than the building of roundabouts. We simply are unable to

evaluate adequately the social returns from most budgetary items, so any golden rule is bound to be arbitrary and therefore impossible to uphold.

The intertemporal budget constraint rests on the transversality condition, which states that the present value of the debt- to-GDP ratio must remain finite. This is precisely what we mean when we say that the debt is sustainable. As stated, however, the transversality condition requires knowing the evolution of the debt over the infinite future. In order to make it operational, the transversality condition must be approximated. The challenge is to design a condition that may be more than necessary to satisfy the transversality condition but that is sufficient, just about.

Carefully interpreted, with a view to making it as light as possible, the transversality condition implies the following. First, the proper measure of fiscal discipline is the public debt (as a ratio to GDP), not the annual deficit in any particular year. Second, debt sustainability is a long-run concept. A few years of debt decline are not enough to achieve sustainability, nor does a temporarily rising debt necessarily signal unsustainability.¹³ What is needed is a procedure that guarantees year after year that the debt-to-GDP ratio is stabilised, at any level that is deemed desirable.

The solution is quite straightforward. To start with, we do not need to foresee the debt at an infinite horizon; this is mission impossible. Much like central banks foresee inflation at a policy-relevant horizon, the fiscal authorities should commit to stabilising the debt at a feasible distance. This means that the horizon should be

Box I. The intertemporal budget constraint

The intertemporal budget constraint can be written in two equivalent ways:

(1) Transversality condition
$$\lim_{i \rightarrow \infty} \frac{d_{t+i}}{(1+r)^i} = 0$$

(2) Present value
$$d_t \leq \sum_{i=0}^{\infty} \frac{b_{t+i}}{(1+r)^i}$$

Where d_t is the debt- to-GDP ratio in year t , b_t is the year's budget balance as a ratio to GDP, and r is the real interest rate (assumed to be constant, for simplicity).

Fiscal rules that set a limit to b_{t+i} (e.g. $b_{t+i} > 0$) do not necessarily satisfy the constraint.

We simply do not have a theory of the optimum debt level, nor clear guidelines on how soon a target debt level should be achieved. In addition, the debt target may be time-varying; demographic considerations, major upheavals like political disruptions, natural disasters or wars, may warrant some rebasing. This should warn us against setting a definitive quantitative target, like Maastricht's infamous 60 per cent. Yet, a quantitative target can serve several useful purposes. It anchors expectations and provides a clearly understandable policy goal. In addition, the debate on the objective itself forces into the open a concern that exists anyway, often it is even left for internal debates within the polity. An open democratic debate will not only make political players feel responsible but it will also alert the broader public to the need for understanding, and hopefully support the ultimate constraint faced by fiscal policy.

For these reasons, the debt target should not be set according to some ideal level but in order to achieve debt sustainability in the sense of the transversality condition.¹⁶ As previously noted, this condition can only be approximated. A few examples follow.

Countries with high debt levels need to bring them down. A feasible downward trend is an adequate target. Countries with moderate debt levels – whatever the judgement is on what is moderate – can specify a debt target that is constant, moderately rising or declining. Countries with low debt levels need not be overly concerned since, most likely, their governments so far have not displayed any tendency towards a deficit bias; still, specifying a target, any target, can serve useful purposes, including that of avoiding the deficit bias and making fiscal policy transparent.¹⁷

The SGP is an example of a badly set target. To start with, the debt level is a subsidiary objective since most of the weight is put on annual budget balances. Then, the 60 per cent reference is an accident of history, the average debt level in Europe on the day the Maastricht Treaty was finalised. Applying a unified target to countries whose debts range from 5 per cent to 120 per cent of GDP is clearly senseless. The presumption that deficits should on average be in surplus implies that debts will eventually be eliminated, which is not evidently a valid objective as noted above.

Since it involves both intratemporal and intertemporal redistribution, the transversality condition carries political aspects and must therefore be set by the

political authorities, which raises a number of delicate questions of time inconsistency. Since a government cannot bind its successors, the debt target may change over time. As long as the target meets the transversality condition, this is not a source of concern. More troublesome is the question of honest book-keeping. Some governments have displayed a tendency to play with their accounts, shifting some items off budget, sometimes even falsifying numbers.

Even more troublesome is the definition of the public debt. In principle, the proper concept is the net debt, defined as the present value of all known commitments net of the present value of all expected receipts. Obvious difficulties arise, most of which cannot be solved, if only because they involve forecasts of events that can lie decades ahead. The only answer is to acknowledge these limits and proceed to provide the best possible evaluations. For example, it is well understood that the demographic transition implies massive implicit liabilities, which often dwarf current gross debt figures. As it turns out, various independent evaluations of these liabilities provide similar figures.¹⁸ Incorporating any of these estimates may inject some degree of imprecision into the debt figures, but much less than is currently the case with present official data. The same applies to net vs. gross debt; an evaluation of public assets is necessarily imprecise but ignoring them altogether makes matter considerably worse. In all cases, there is a need for 'honest' reporting, an issue that belongs to institution-building, see below.

6.2. *The radical solution: fiscal policy committees*

The most radical institutional solution is to mimic fully the approach adopted in the case of monetary policy. That approach rests on four key elements. Monetary policy is delegated to an independent group of unelected experts, usually identified as the Monetary Policy Committee (MPC).¹⁹ This committee is given a clear mandate (price stability, generally, sometimes quantitative inflation targets) by the political authorities. The committee has full authority to carry out monetary policy, nowadays it means setting a short-term interest rate. Finally it is *ex post* accountable to a political body for its performance, and often regularly required to explain its actions and thinking to the broader public.

This approach has been proven to eliminate time inconsistency. MPCs are not known to have an inflation bias and they have been highly successful both in

achieving their mandated objectives and in being transparent to the public and accountable to the political authorities.

A natural step would be to set up Fiscal Policy Committees (FPCs) with the corresponding features:

- The FPC members are unelected experts appointed for a fixed duration, long enough to make them fully independent and to exceed the horizon of the policy target.
- The FPC is given by the relevant political authorities a debt target to be achieved over a given horizon that is commensurable with business cycles.
- The FPC is given the authority to decide on the budget balance on the basis of an explicit GDP growth forecast. The final budget law approved by parliament must specify a budget balance that matches the FPC's decision for the most likely growth forecast.
- The FPC is accountable to parliament.

Each of these four characteristics needs detailed elaboration, which is outside of the scope of the present paper, but a few remarks are in order.²⁰

Delegating the budget balance is generally seen as a serious infringement on the sovereignty of parliament. A first answer is that parliaments have delegated the power to set monetary policy to MPCs; they can do exactly the same for the budget balance, in the same terms. Of course, they can always take back the authority from the FPC, which is where accountability becomes meaningful. Alternatively, where applicable, the delegation may take the form of a constitutional amendment. A second answer starts by recognising the point, made in Section 3.3, that delegation in this case is not acceptable because fiscal policy is considerably more redistributive than monetary policy. However, the proposal leaves all of the fiscal authority in current hands, except for the budget balance, the net of spending and revenues. In comparison with the hundreds of politically-sensitive spending and revenue items that are not delegated to the FPC, the budget balance is not really more redistributive than the interest rate.²¹ Redistribution through the budget balance mainly occurs among generations and it can be argued that future generations are not better represented by current political bodies than by the FPC. Finally, it must be noted that any commitment to debt sustainability must

include a constraint on budget balance decisions by deficit biased political bodies; in fact, the Government's intertemporal budget constraint necessarily includes such a limit. The proposal simply makes the intertemporal budget constraint explicit and operational.²²

The proposal's main advantage in comparison with budget rules is to replace mechanical limits with judgement, exactly as inflation targeting does in comparison with monetary aggregate rules. The demonstrated success of MPCs to balance their *long-term* objective against shorter-run output stabilisation can be replicated in the case of FPCs. What seems to be squaring the circle, combining short-run flexibility with long-run discipline, can be achieved in the area of fiscal policy in the same way as it has been achieved in the area of monetary policy. Good institutions adequately shape the incentives of policymakers, in this case independent experts to whom a narrow and precise task is being delegated and for which they remain fully accountable.

How distant should the horizon be? Multi-year commitments are essential to allow for short-run countercyclical policies. Such an arrangement sets the incentives right. An accountable FPC realises *ex ante* that any budget relaxation will have to be clawed back in the not-too-distant future. As a result, it is likely to adopt a debt-increasing stance only if it has determined that it will be efficient, not only in the short run but intertemporally, i.e. if today's gains outweigh tomorrow's costs. Similarly, the FCP will take advantage of favourable conditions to garner room for manoeuvre in anticipation of future adverse shocks.

Given the endogeneity of budget balances to cyclical fluctuations, ideally the horizon should coincide with the duration of business cycles. Unfortunately, business cycles are of uneven duration and can only be timed *ex post*. Cycles create problems because their shape affects feasible balances and their actual duration can exceed or fall short of any pre-set horizon. In addition, from a democratic viewpoint, each legislature should be free to set its own debt target, which would suggest that the horizon should match that of a legislature. In some countries, however, the term of the legislature is variable; early elections could play havoc with the FPC strategy.

There is probably no perfect solution to the horizon problem, which equally affects several existing fiscal

rules that are (correctly) meant to be binding over a full cycle, e.g. in the UK and Switzerland. One solution would be to match the horizon with the duration of FPC member mandates and ignore cycles; sometimes this would make the FPC's task easier, sometimes it would make it harder and possibly impose some macroeconomic costs if fiscal policy becomes procyclical but, as always with cycles, it should work out well on average.²³ Another solution, which is desirable on its own anyway, would be to appoint another independent committee whose task would be to date business cycles and evaluate the performance of the FPC. This would allow the horizon to coincide with the term of a legislature and thus fully preserve the right and duty of a newly elected government to set its own debt target.

An important remaining question concerns the accuracy of debt and deficit figures, as discussed in Section 6.1. A related issue concerns the forecasts that accompany any budget law and how these forecasts are used to determine the planned budget balance. Jonung and Larch (2004) advanced the idea of delegating this essentially technical task to an independent authority. The FPCs could very well fulfil this function as well. Indeed, they should be equipped with a competent staff that would not only produce its own forecasts, but also provide an estimate of the net debt along the lines suggested in Section 6.1 and formally confirm that the budget target that it is given by the political authorities is both feasible and compatible with debt sustainability.

6.3. The soft solution: wisepersons

If full delegation is perceived as too much of a break with current perceptions, there exist many ways of watering down the previous proposal. The most obvious one would be to make the FPC an independent advisory body. It would perform the same functions as envisaged above but it could only issue non-binding recommendations. Wiseperson arrangements exist in a number of countries (Belgium, Chile, Germany) and have been recently proposed by the EU Commission (2004) as part of a reformed SGP and by the Conservative Party in the UK. Experimenting with a consultative FPC could be a way of preparing public opinion for the more demanding version described in the previous section.

6.4. Short-term flexibility

Part of the advantage of monetary over fiscal policy is its speed of reaction. Monetary policy can be decided

and implemented in a short time. The countercyclical use of fiscal policy requires that the automatic stabilisers be powerful enough and, for discretionary actions, that the decision and implementation lags be sharply reduced.

Automatic stabilisers are mostly the by-product of the tax system, with some limited contributions from the expenditure side. One possibility would be to reconsider the tax system with an eye to increasing the size of the stabilisers. This is likely to be a daunting undertaking for the tax system is primarily designed to gather resources in the least distortionary way possible and to redistribute income. Both requirements are extraordinarily difficult and politically controversial to put into practice. Adding a third criterion will considerably complicate an already difficult task. For that reason, it is better to accept the stabilisers as they happen to be and focus instead on the essential role of sound discretionary policy.

Discretionary fiscal policy is typically carried out with annual budgets, which is a major impediment since it imposes long lags. In most countries, the solution is to amend the budget law during the year, but even that is not allowed in some countries, as can be seen in table 2. When this is allowed, as it generally requires parliamentary approval, the process can be both slow and politicised, which is an additional source of deficit bias. A faster procedure would be the use of reserve funds, which can be rapidly disbursed or replenished. Many countries indeed have reserve funds but they are often set aside for emergencies, not for casual fiscal policy. All in all, the contrast between monetary and fiscal policy is striking; monetary policy is subject to *ex post* democratic control while fiscal policy is subject to *ex ante* control.

Table 2. Fast-speed discretionary fiscal policy in the EU-15

	Intermediate budget law	Reserve funds		Intermediate budget law	Reserve funds
Austria	Yes	Yes	Ireland	No	No
Belgium	Yes	Yes	Italy	Yes	Yes
Denmark	Yes	Yes	Netherlands	Yes	Yes
Finland	Yes	No	Portugal	No	Yes
France	Yes	No	Spain	Yes	No
Germany	Yes	No	Sweden	No	No
Greece	Yes	Yes	UK	No	Yes

Source: Hallenberg *et al.* (2001).

There are many reasons to limit the ability of governments to carry out changes in fiscal policy without *ex ante* parliamentary approval, including the need to preserve the integrity of parliamentary control and the concern with fiscal indiscipline. On the other side, the need to use fiscal policy for output stabilisation may warrant some flexibility. This is already the case in some countries. For instance, in the UK the Chancellor can vary some taxes (within 10 per cent of their existing values). In Germany, the federal finance minister can authorise borrowing in excess of what is foreseen in the budget law by a specified amount; the money should be spent by accelerating investment expenditures, and the projects have to be in the original budget law.²⁴ By removing the deficit bias, the adoption of FPCs (whether authoritative or consultative) could be the occasion to generalise such procedures, which should remain strictly temporary and limited to preserve parliamentary control.

6.5. The case of the European Monetary Union

These proposals can be used to overhaul the SGP. Four principles ought to figure prominently in any serious reforms:

- Annual budget deficit ceilings are bound to be counter-productive, as the events of 2003–4 have amply demonstrated; they should be replaced by debt commitments.
- Debt targets must be established country by country on the basis of the starting position.
- Since fiscal policy remains a national competence, as it should be, debt targets should take the form of national commitments and enforcement should be carried out at the national level.
- On the other hand, the Maastricht Treaty has established the principle that national fiscal discipline is a matter of common concern, hence the Excessive Deficit Procedure. Thus, any national solution must be made ‘euro-compatible’.

The natural solution is the mandatory establishment of national FPCs. In a new SGP each country would be required to create an FPC that meets common requirements, pretty much as each national central bank has to satisfy a common set of features (Protocol on the Statute of the European System of Central Banks and of the European Central Bank, Chap. 3, Art. 19). Each

country would propose its own budget target, which would be negotiated with the other monetary union members with a view of achieving consensus.²⁵ Such an arrangement would go a long way towards guaranteeing fiscal discipline by removing the deficit bias while preserving sovereignty. Currently, monitoring by the Commission and externally-imposed sanctions are both perceived as intrusive. National FPCs with a clear mandate and associated formal or informal authority would achieve the same aims while leaving the fiscal policy instrument as an effective tool of output stabilisation now that monetary policy is not available at the national level.

Here again, the FPCs could initially be advisory, possibly working closely together with the Commission, which would retain its oversight responsibilities. At a later stage, granting the national FPCs the authority to decide on annual budget balances would be accompanied by a less formal role for the Commission. In all cases, sanctions must be abandoned, formally or informally.

7. Conclusions

The need for combining long-run fiscal discipline and short-term flexibility is an inherently difficult exercise. The natural tendency has been to establish fences, in the form of quantitative ceilings and rules. The problem with fences is that, to be effective, they have to be rigid. In normal times, fences can be set so as to leave a reasonable degree of flexibility but circumstances stubbornly tend to be unusual and to test the best-crafted devices. The risk is that the countercyclical use of fiscal policy, already limited, be lost to the quest for sturdiness. Then fences are likely to be trespassed, as has repeatedly happened.

Competent and dedicated policymakers are better able than quantitative rules to exercise good judgment and deliver an adequate mix of restraint and flexibility. To do so, however, they must be shielded from the temptation and pressures that are part of political life. This is the approach that has been adopted for monetary policy by an increasing number of countries, so far successfully.

Fiscal policy has not yet benefited from a similar treatment both because of traditions and the perception that fiscal policy belongs exclusively to the political sphere. Traditions too were once invoked to keep central banks under the thumb of politicians, but the recent

changes show that traditions can be shaken. The challenge for a new type of fiscal policy to emerge is to recognise that spending and taxation ought to remain in the political sphere, but that the deficit and the debt level ought to be delegated to independent experts.

Fiscal rules are a clumsy way of recognising and making operational the government intertemporal budget constraint. They are clumsy because they focus on annual budget balances while the constraint is intertemporal. Focusing on averages over the cycle or on cyclically-adjusted balances is an improvement, but this raises insurmountable technical difficulties; business cycles are of varying duration and amplitudes; cyclical adjustments are open to a large degree of arbitrariness. Adopting a long-run debt target, while not a panacea, brings us closest to the transversality condition, the proper definition of discipline.

The natural implication is that the institutions adopted for monetary policy can and should be applied to fiscal policy as well. Independent Fiscal Policy Committees can play the same role as Monetary Policy Committees, deciding on deficits and the evolution of the debt. To deliver good results, they need to be given a clear mandate, debt sustainability, so that they are freed from the time inconsistency problem that leads to a deficit bias. There is no reason why FPCs would be less successful than the MPCs, which are now recognised as free of any inflation bias.

Independent FPCs, properly instructed to achieve debt sustainability and made accountable according to national laws and tradition, may be ahead of present times. They project an aura of technocracy, and indeed they are technocratic, much as independent MPCs. MPCs typically devote considerable efforts to establishing their legitimacy, and FPCs will have to do so as well. Consultative FPCs – Wisepersons – can have much of the required flavour and can provide for experimentation with both the procedure and its political acceptability. Eventually strengthening their power would then be a short step to fully-fledged FPCs as presented in this paper.

NOTES

- 1 The Symposium on Keynesian Economics Today in the Winter 1993 issue of the *Journal of Economic Perspectives* provides a good idea of the conventional wisdom at that time.
- 2 Surveys can be found in Bernheim (1987), Seater (1993), Becker (1997) and Gruen (1991).
- 3 For evidence that people ignore the size of the public debt, and that the cost of this ignorance is likely to be trivial enough to be near-rational, see Gruen (1991).
- 4 For a survey of the changing world of central banking, see Blinder et al. (2001).
- 5 This overall picture of the Eurozone conceals important national differences; in France and Germany, the debt did not decline in the 1990s, nor did public spending.
- 6 It is sometimes suggested that financial markets can enforce fiscal discipline. The record is mixed at best. The near-consensus view is that they tend to react too much too late (see e.g. Bayoumi, Goldstein and Woglom, 1995).
- 7 A large literature has been devoted to the question of whether fiscal policy has become procyclical in Europe. The evidence is controversial but a general lesson is that the Maastricht convergence criteria, which were effectively binding in the mid-1990s, reduced the countercyclical use of fiscal policy, and in some case resulted in procyclical policies.
- 8 See von Hagen and Harden (1994).
- 9 Sunset clauses stipulate that some fiscal decisions are temporary. This allows, for instance, temporary spending increases without violating the BEA.
- 10 In the 1970s, Congress refused to raise the ceiling, which led to a halt in public spending. The resulting public outcry has forced Congress to relent, a lesson apparently not forgotten.
- 11 Exceptional circumstances allow for a suspension of the limit but these circumstances are so exceptional that they are unlikely to ever be invoked, see Eichengreen and Wyplosz (1998).
- 12 For a fascinating narrative by a key player of the negotiations that led to the SGP, see Stark (2001).
- 13 Witness the Eurozone's experience. During the 1990s, all candidate countries strived to attain the Maastricht convergence criteria. Once admitted, several countries relaxed their commitment. Debt sustainability was not achieved by 1999 when the euro was launched, nor is the current situation an indication of debt unsustainability. Badly designed discipline simply does not discriminate between debt sustainability and unsustainability.
- 14 Buchanan's Leviathan theory of government, that it will tax as much as its citizens will let it get away with, predicts no correlation between the size of the debt and the tax burden.
- 15 It can be objected that the four Nordic countries and Japan are outliers. Without these four countries, the partial correlation coefficient is positive (0.08) but not significant either (t -statistics = 1.39).
- 16 See Perotti et al. (1998) for a discussion of sustainability as well as for useful references. They consider fiscal policy to be sustainable when there is no need for sharp adjustments. These authors conclude that, because sustainability cannot be appropriately defined and measured, attention should shift to controllability. In a sense, this is the view adopted here too, as the focus shifts to institutions which are likely to deliver a debt that remains under control, independently of its size.
- 17 The transparency issue is not taken up in the present paper, yet it is an important consideration. It lies at the heart of recent reforms in New Zealand and is prominently recognised in the British Code for Fiscal Stability as well as in the Conservative Party proposals. Transparency is also given consideration in the European Commission's proposal of SGP reform.
- 18 For a review, see Wyplosz (2005).
- 19 Not all independent central banks have an MPC and sizes and remits vary greatly across countries. But the characteristics listed in the text are very general.
- 20 An important issue not covered here is how FPCs can be made accountable. The solution is likely to depend on na-

tional institutions (e.g. the form of democracy) and traditions.

- 21 The FPC would have no authority regarding the size of the budget, the tax structure and the allocation of public spending, all matters left to the currently existing political process. The FPC would have to approve the budget bill, checking its spending and revenue projections, before it becomes law.
- 22 Truly exceptional circumstances – unforecastable, by definition – may warrant a suspension of the debt sustainability obligation. As any escape clause, there is a risk that an override be abused. On the other hand, in the absence of an override, the whole FPC procedure stands to lose credibility and to be abandoned in the midst of unusual and unforeseen events. What is needed is an exceptional procedure that is difficult to trigger.
- 23 There is no guarantee, of course, that the bonuses from good luck events match the costs of bad luck events. The difference is likely to be of secondary order of magnitude, yet politically sensitive.
- 24 I am grateful to Martin Weale and Jürgen von Hagen for providing this information.
- 25 The model is the way exchange rate realignments were agreed upon within the Exchange Rate Mechanism prior to 1999.

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