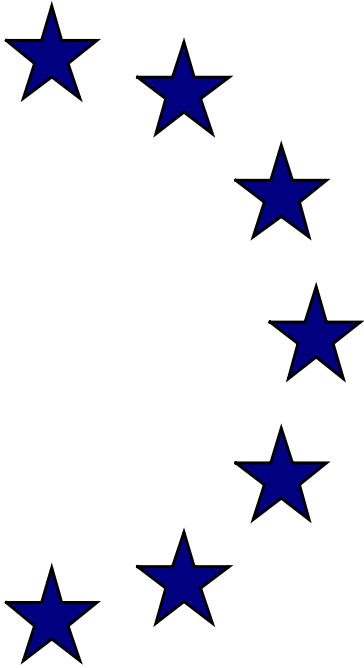


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**Revisiting the Stability and Growth Pact:  
grand design or internal adjustment?**

by

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# Revisiting the Stability and Growth Pact: Grand Design or Internal Adjustment?<sup>(\*)</sup>

## Abstract

The Stability and Growth Pact is under fire. Problems have appeared in sticking to the rules. Proposals to reform the Pact or ditch it altogether abound. But is the Pact a flawed fiscal rule? Against established criteria for an ideal fiscal rule, its design and compliance mechanisms fare reasonably well. Where weaknesses are found, they tend to reflect trade-offs typical of supra-national arrangements. In the end, only a higher degree of fiscal integration would remove the inflexibility inherent in the recourse to predefined budgetary rules. This does not mean that the EU fiscal rules cannot be improved. However, given the existing degree of political integration in EMU, internal adjustment rather than attempting to re-design the rules from scratch appears a more suitable way to bring about progress. Redefining the medium term budgetary target, improving transparency, tackling the pro-cyclical fiscal bias in good times, moving towards non-partisan application of the rules and improving transparency in the data can achieve both stronger discipline and higher flexibility.

Keywords: Fiscal Policy, Fiscal Rules, Economic and Monetary Union, Stability and Growth Pact

JEL Classification: E61, H3, H6, H7

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## NON TECHNICAL SUMMARY

The Stability and Growth Pact (SGP) has been subject to a heated controversy ever since its inception. This debate has accelerated in 2002 under the influence of public finance developments in a number of euro area countries which have called into question its effectiveness and wisdom.

While proposals to revamp the SGP appear by the day, no systematic analysis has been carried out so far of the “quality” of the existing EU fiscal rules.

According to the literature on fiscal rules, an ideal rule should be well-defined, transparent, simple, flexible, adequate for the final goal, enforceable, consistent, and underpinned by public finance reforms. In order to ensure compliance, fiscal rules have to be reviewed ex post; overriding with a majority rule must not be allowed; access is open; the enforcer is independent; penalties are strong and the amendment process is difficult.

Our analysis shows that, overall, the EU fiscal rules perform quite well when assessed against such criteria. Their strong points are simplicity, ex post obligation of results, and high costs of overriding and amendment. Their weak points are enforceability and the incentives for creative accounting. These features – both the good ones and the bad ones - somewhat reflect the multinational character of EU rules.

While this conclusion helps put the current tensions into perspective, it is of little use in confronting the concerns raised in the implementation of the Pact. Several allegations have been made against the Pact. According to critics, the SGP reduces budgetary flexibility, works asymmetrically, does not sanction politically-motivated fiscal policies, discourages public investment, disregards the aggregate fiscal stance, and, by focussing on short term commitments, disregards long term sustainability.

Many proposals to reform the SGP have been put forward to resolve these alleged problems. The most radical suggestions envisage the abolition of the SGP: fiscal soundness in EMU should rely either on financial market mechanisms or the self-restraint of governments. The latter could be strengthened by reforms in national fiscal rules and institutions. Alternatively, it has been proposed to replace or to integrate the SGP with rules regarding different public finance variables. It has been suggested to replace deficit targets with expenditure targets. The introduction of the so-called golden rule has been proposed to deal with the public investment problem. A number of proposals aim at tackling the fiscal stance issue. One suggestion is to set the deficit target for the euro area as a whole and then share it between member countries. This solution is consistent either with community-level decisions setting the budget balance of each country or a market-based allocation of deficit permits.

Each one of these proposals draws the attention to one or more potentially serious problems with the design and implementation of the SGP. The suggestion to implement institutional and procedural reforms has highlighted the need to have an independent enforcer. Within the current rules, such an enforcer can only be the Commission. The idea to move to a golden rule stresses the need to preserve the growth aspect of the SGP and highlights the need to make the rule compatible with the features of catching up economies – a serious concern in view of EU enlargement. Taking into account the different levels of public debt points to the need to insert the sustainability dimension into the “core” of the SGP. The

proposal of establishing a market for deficit permits attempts to tackle the problem of the pro-cyclical bias in good times.

However, none of the proposals outlined above represents a Pareto improvement: while appropriate to tackle some of the questions highlighted in the debate and to lessen the fiscal hardship that some countries are currently facing, they only solve some of the problems and may even aggravate others. Also, from a political perspective, attempting to rewrite the rules from scratch may lead to a vacuum in which the current rules are suspended while none of the alternative options is supported by a sufficiently large political constituency.

The current tensions originate from the difficulties that four countries – Germany, France, Italy and Portugal - meet in coping with a cyclical slowdown before having reached their close-to-balance budgets. While they signal an asymmetry in the incentive structure (the countries not having made use of the previous better cyclical conditions to reduce their structural deficits), these difficulties are largely of a temporary nature. An assessment of the “steady-state” functioning of the SGP is essential in the search for solutions to these tensions. If a need for rules in EMU is not recognised and/or some alternative rule appears superior to the SGP, there could be no reason to worry about the budgetary reactions to the current downturn. On the contrary, if, as the authors believe, rules are necessary in a decentralised fiscal framework and no alternative solution is clearly superior to the Pact, policy-makers should aim at safeguarding the SGP while improving its implementation and incentive structure.

In short, improvements the functioning of the SGP should be sought, but such changes are likely to be incremental rather than radical. They can be attained by using the room for manoeuvre allowed by the current rules, rather than making *tabula rasa*, with the risk of opening a Pandora’s box.

Key aspects in this internal adjustment are allowing a certain country-specificity, re-balancing sticks and carrots, and enhancing enforcement mechanisms. Our main proposals concern redefining the medium term budgetary targets, improving transparency, tackling the pro-cyclical fiscal bias in good times and moving towards non-partisan application of the rules. This set of changes can allow to achieve both stronger discipline and higher flexibility, thereby lessening the problems raised by the critics of the SGP. Moreover, they can be implemented via a “code of conduct” agreed between the EMU players without requiring any major revision of the existing rules.

These proposals take as given the current preferences for political integration. This implies that fiscal policies stay decentralised and coordination continues to be mainly of the negative type (i.e. surveillance) reflecting an enduring mistrust among euro area members. Obviously, if the single currency increases the taste for political integration towards a fully-fledged federal structure, a different and more efficient public finance system could be devised.

# Revisiting the Stability and Growth Pact: Grand Design or Internal Adjustment?

*"The stability pact is a vote of no confidence by the European authorities in the strength of the democratic institutions in the member countries. It is quite surprising that EU-countries have allowed this to happen, and that they have agreed to be subjected to control by European institutions that even the International Monetary Fund does not impose on banana republics."* Paul de Grauwe, Financial Times, 25 July 2002

*"Of course, the stability pact restricts the room for manoeuvre enjoyed by national fiscal policymakers. But this is the price that must be paid for a common currency. Historically, stability between currencies has been possible only when countries have been prepared to relinquish some national sovereignty."* Horst Siebert, Financial Times, 6 August 2002

## 1. Introduction

The Stability and Growth Pact (SGP) is one of the pillars of EMU. It is a discipline device aiming at ensuring sound budgetary balances and low public debts. The Pact is widely regarded as a major innovation: it "must rank as one of the most remarkable pieces of policy coordination in world history. Its construction makes it in some respects comparable to the founding of the Bretton Woods system." (Artis, 2002: 115).

The Pact has been the subject of a heated controversy ever since its inception. It has been extensively criticised by academics and opinion makers. Proposals for radical changes have been put forward and even the suppression of the Pact has been considered.

This debate has accelerated in 2002 under the influence of public finance developments in a number of euro area countries which have called into question its effectiveness (and wisdom). Four countries of the euro-area recorded in 2001 budget deficits which are clearly inconsistent with the close-to-balance clause of the SGP. In two of these countries, the deficit largely exceeds 3% of GDP, the "hard ceiling" for the deficit under the SGP. Moreover, one-off measures have been extensively used to meet budgetary targets. Some countries have made recourse to new accounting and financial operations, which, even if formally consistent with EMU rules, do not improve the underlying public finance conditions.

In a way, these policy problems and debates are related to the success of EMU rules in curbing deficits. When the public finances in a number of EU countries appeared to be on an unsustainable path, the benefits of lower deficits were evident. Fiscal discipline was recognised as a pre-condition to lower interest rates, to use fiscal policy for cyclical stabilisation and to ensure a permanent reduction of tax rates. Every fiscal norm or rule will have some arbitrariness by definition but is considered to be necessary to enforce fiscal discipline in EU Member States ("stick in the ground"). Even an arbitrary target such as the 3% of GDP deficit limit was deemed desirable because it forced countries to undertake the

(inevitable) adjustment. Now that the budgetary situation has been improved, the issue of the proper balance between fiscal discipline and other targets has come to the fore.

While proposals to revamp the SGP appear by the day, no systematic analysis has been carried out so far of the “quality” of existing EU fiscal rules. How does the SGP fare in the light of the theoretical and empirical work on fiscal rules? How does the SGP’s multinational character affect its design and implementation? We review the criteria which have been identified in the literature as important in the success of fiscal rules and assess their relevance in a multinational context.

Two issues should be stressed at the outset. First of all, this paper mainly focuses on the “steady state”, that is a situation in which countries have accomplished the transition towards medium term positions of close-to-balance, as required by the Pact. As such, it does not provide a ready-made recipe for tackling the problems that countries with deficits still close to the upper ceiling face in the event of a cyclical downturn. However, a neat distinction between steady state and transition is difficult to draw: an unfinished transition may be partly due to fundamental weaknesses in the rules which need to be tackled to ensure their survival in the long run. An assessment of the steady-state functioning of the SGP is essential in the search for solutions to the current tensions. If a need for rules in EMU is not recognised and/or some alternative rule appears superior to the SGP, there could be no reason to worry about budgetary reactions to the current downturn. If rules are considered necessary in a decentralised fiscal framework and no alternative solution is found clearly superior to the SGP, policy-makers should aim at safeguarding the SGP while improving its implementation and its incentive structure.

Second, our analysis and proposals take as given the current preferences for political integration. This implies that fiscal policies stay decentralised and coordination continues to be mainly of the negative type (i.e. surveillance) reflecting an enduring mistrust among euro area members. Obviously, if the euro increases the taste for political integration towards a fully-fledged federal structure a different and more efficient public finance system could be devised.

The outline of the paper is as follows. Section 2 analyses how the SGP qualifies against ideal standards to be met when designing a fiscal rule. Section 3 evaluates the critical issues in the implementation of the SGP. Section 4 examines the main proposals put forward to replace or radically revise the Pact. In Section 5, we make some moderate suggestions for improving the functioning of the SGP, which can be implemented within the current institutional setting. The final section concludes.

## **2. Fiscal rules: design and compliance**

### ***2.1 The debate on fiscal rules***

Before assessing the recent proposals to address the alleged shortcomings of the SGP, it is necessary to put the controversy on the SGP in the context of a wider debate on fiscal rules.<sup>1</sup> While the balanced budget has generally remained the reference point, the need for

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<sup>1</sup> See Kopits and Symansky (1998), Kopits (2001) and the essays in Banca d’Italia (2001).

exceptions has long been recognised for (i) cyclical factors, (ii) investment projects, and (iii) exceptional events (Pigou, 1929).

For a long time fiscal rules were generally not written into constitutions and laws, rather they were part of an accepted set of attitudes about how government should carry on its fiscal affairs (Buchanan, 1997). In recent decades, under the influence of the high deficits of the 1970s and 1980s, the debate has gradually focused on the introduction of explicit rules in legislation.

The role of fiscal institutions and procedures in shaping budgetary outcomes has been increasingly recognised. While certain political configurations, such as weak coalition governments, have been documented as more likely to induce budgetary misbehaviour or hamper attempts to redress the budgetary situation,<sup>2</sup> inadequate budgetary institutions and procedures may contribute to a lack of fiscal discipline.<sup>3</sup>

In this context, institutional reforms in the fiscal domain have been discussed and introduced in several countries. These reforms come in two main categories: (a) procedural rules conducive to responsible fiscal behaviour and (b) numerical rules, such as permanent constraints on the budget balance, borrowing or debt of central and/or local government (Beetsma, 2001). In national experiences, both types of measures have proved effective tools in containing political biases in fiscal policy-making and in achieving and sustaining budgetary discipline.

With EMU for the first time the issue of fiscal rules has arisen in a multinational context. In the early 1990s a clear consensus emerged about the introduction of common numerical rules and a multilateral surveillance mechanism.<sup>4</sup> Compared to institutional or procedural reforms, numerical rules are simpler to evaluate, easier to grasp by public opinion and policy-makers, and faster to implement. Institutional reforms would have represented a feasible alternative only if more decisive steps towards political unification had been taken.

EMU fiscal rules reflect the interaction between the multinational nature of EMU and the lack of a political authority of federal rank (Balassone and Franco, 2001). The highly decentralised setting of fiscal policy in EMU gave prominence to moral hazard issues.

All in all, the approach taken by the EU is stricter than the solutions adopted in some federally structured countries.<sup>5</sup> This strictness also reflects the heterogeneity of the EU economies and the need for building up rapidly the stability-oriented reputation of the new policy regime.

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<sup>2</sup> See, e.g., Roubini and Sachs (1989), Alesina and Drazen (1991), Alt and Lowry (1994), Alesina and Perotti (1995), De Haan and Sturm (1994, 1997), Balassone and Giordano (2001) and Volkerink and De Haan (2001).

<sup>3</sup> See, e.g., von Hagen and Harden (1994) and the essays in Strauch and von Hagen (2000).

<sup>4</sup> See Buti and Sapir (1998) and Stark (2001).

<sup>5</sup> See Balassone and Franco (1999).



## 2.2 Design: EU fiscal rules against Kopits-Symanski's criteria

Are the fiscal rules of EMU “good” rules? Kopits and Symansky (1998) identify a number of desirable features against which the quality of fiscal rules should be assessed.<sup>6</sup> According to these criteria, an ideal fiscal rule should be well-defined, transparent, simple, flexible, adequate relative to the final goal, enforceable, consistent and underpinned by public finance reforms.

Table 1 rates the EU fiscal rules against the Kopits-Symansky checklist. The first column presents the ideal standards to be met by a fiscal rule. The second column provides a subjective judgement of the “quality” of EU fiscal rules.<sup>7</sup>

**Table 1. The EU fiscal rules against ideal rules standards**

<b>Ideal fiscal rule</b>	<b>EU fiscal rules</b>
1. Well-defined	++
2. Transparent	++
3. Simple	+++
4. Flexible	++
5. Adequate relative to final goal	++
6. Enforceable	+
7. Consistent	++
8. Underpinned by structural reforms	+

*Legend: +++ very good, ++ good, + fair*

A *well-defined* fiscal rule, in terms of the indicator to be constrained, institutional coverage and escape clauses, is paramount for effective enforcement. The Treaty criteria is well-defined as to the policy variables subject to constraints (budget balance and gross public debt) and the institutional coverage (general government). The SGP specifies the escape clauses (the exceptional conditions under which the 3% of GDP deficit ceiling can be exceeded) and the penalties to be applied in case of persistent excessive deficits. However, elements of ambiguity remain. First, it is not specified how close to the ceiling the deficit should remain without being deemed excessive. Second, the SGP medium term target of “close to balance or in surplus” remains vague. Third, the SGP is silent on how to apply the Excessive Deficit Procedure in the case of violation of the public debt criterion of the Treaty which requires the debt ratio to be on a declining trend as long as the it is above the 60% of GDP reference value.

*Transparency* has several dimensions. It includes accounting conventions, forecasting exercises and reporting practices. The Treaty and the SGP use ESA-95 accounting. While this system is undoubtedly superior to its predecessor (ESA-79), a number of uncertainties remain and are being cleared only gradually. *Ad hoc* decisions have to be taken when countries introduce new accounting operations. The definition of general government units still allows margins for interpretation. While economically more significant than cash data,

<sup>6</sup> See also Kopits (2001).

<sup>7</sup> For a similar exercise separating the Treaty and the SGP, see Buti and Giudice (2002). For an application of the Kopits-Symansky criteria to the UK fiscal framework, see Kell (2001).

accrual data imply judgmental elements (Balassone, Franco and Zotteri, 2002). The Commission forecasts are the reference point for assessing the risk of an excessive deficit or for detecting a “significant divergence” from the set of budgetary targets. However, the respective roles of Commission and national forecasts in the assessment of Stability and Convergence Programmes remain undefined. Budgetary reporting takes place in March and September of each year. Data, however, are frequently revised at subsequent dates and moral hazard problems (incentives for creative accounting) may occur especially when countries are close to the deficit ceiling.

The EU fiscal rules are *simple*. The Maastricht criteria, especially the 3% of GDP deficit ceiling, enjoy high visibility. Compared to the Treaty, some simplicity has been lost by the more complex mechanisms and procedures of the SGP. However, compared to other fiscal rules, those underpinning EMU remain simple, even in the SGP version.

As to *flexibility*, different elements play differently. On the one hand, the SGP includes a tight specification of the escape clauses, thereby reducing the discretion of the Council and the flexibility of the rules. On the other hand, by putting more emphasis on medium-term targets and highlighting the implications of cyclical fluctuations, it increases flexibility compared with a simple deficit ceiling expressed in actual terms.

*Adequacy* of the rules has to be assessed in relation to their final goal. The goal of the EU fiscal rules is ensuring budgetary prudence. The deficit limit guarantees fiscal discipline on a yearly basis, but there is no consideration of long term sustainability, i.e. of the future deficit path inherent in current policies which may imply large contingent liabilities. Moreover, the current rules may not be adequate for peripheral countries which have large public investment needs which may be difficult to reconcile with maintaining broadly balanced budgets. This may become a concern in the context of EU’s enlargement<sup>8</sup>. Finally, from a short-run perspective, the current rules do not address the pro-cyclical bias in good times.

The specification in the SGP of the sanctions and the timetable of the Excessive Deficit Procedure are set to improve *enforceability*. However, doubts can be expressed on the plausibility of the imposition of sanctions on sovereign countries. This is heightened by the fact that the Council is in charge of the final decision on the implementation of sanctions and hence a risk of a partisan application of the rules exists (see also Amtenbrink et al., 1997). It remains to be seen whether peer pressure involves reputational costs sufficient to discipline national authorities.

A good fiscal rule has to be internally *consistent* and consistent with other policies. The SGP implies that countries attain broadly balanced budgets in cyclically-adjusted terms and then let automatic stabilisers play freely. Empirical evidence show that this would be consistent with attaining a relatively high cyclical smoothing while safeguarding the 3% deficit ceiling.<sup>9</sup> Such behaviour would imply a neutral fiscal stance at the euro area level and be consistent with a monetary policy entrusted with maintaining price stability. From a procedural standpoint, the overall framework of the Pact is set to ensure consistency of policies by moving towards a better integration of fiscal surveillance and economic policy coordination under the Broad Economic Policy Guidelines of Article 99. However, a strong

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<sup>8</sup> However, as pointed out by Pench (2002), the extension to new EU members of the cohesion policy of the Union will lessen the incompatibility between the close-to-balance rule and their high investment needs.

<sup>9</sup> See, e.g. Artis and Buti (2000) and Brunila, Buti and in’t Veld (2002).

emphasis on annual targets may create a tension between fiscal policies and structural policies. For instance, the existing rules may deter reforms from unfunded (Pay-As-You-Go) to funded systems which enhance sustainability in the long run but may involve a temporary rise in the deficit. Another problem arises from the reference to both a stock indicator (the public debt) and a flow indicator (the budget balance): in order to avoid increases in the debt to GDP ratio, countries with debt ratios greater than 60 per cent may have to take a pro-cyclical action even if the deficit is below the 3% limit (Balassone and Monacelli, 2000).

Finally, given the increasing attention to composition and long term sustainability in the stability programmes, the implementation of the SGP is more likely to be underpinned by *tax and spending reforms* necessary to buttress fiscal prudence. However, such reforms remain outside the core of the SGP and no sanctions are foreseen in case of violation of the commitments on “quality” in the stability programmes.

All in all, the EU fiscal rules appear to fare relatively well against Kopits-Symansky criteria. Their strongest point is simplicity while their weakest aspects concern enforceability.

The Kopits-Symansky criteria were devised for assessing the quality of domestic fiscal rules. The multinational character of EU rules clearly affect their design and implementation in at least two respects.

First, national sovereignty and subsidiarity concerns had to be respected. This implies that the rules had to be as neutral as possible vis-à-vis the countries social preferences which are quite heterogeneous in the EU. This prevented, for instance, the adoption of rules which, explicitly or implicitly, entail a choice of the role and size of the public sector in the economy.

Second, there are trade-offs between the various criteria, namely between simplicity and flexibility, between simplicity and adequacy, and between flexibility and enforceability. These trade-offs are influenced by the multinational nature of the rules. This feature, however, plays in different directions. On the one hand, there may be a preference for simplicity and transparency over flexibility to allow peer pressure, central monitoring and prevent moral hazard. On the other hand, a multiplicity of countries increases heterogeneity and dispersion of preferences with the consequence that a one-size-fits-all fiscal rule is likely to be sub-optimal.

This reasoning is exemplified in Figure 1 which shows a non-linear relationship between simplicity/flexibility and the number of participants: the preference for simple rules increases with the participants but only up to a point ( $N^*$  in Figure 1) beyond which the need to take into account country-specific situations would make a very simple rule sub-optimal.<sup>10</sup>

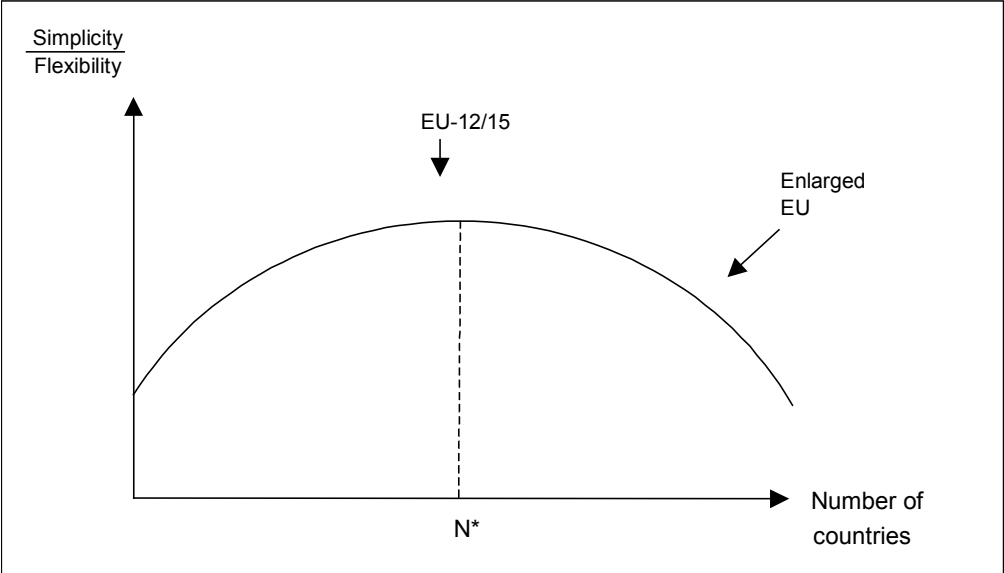
Given the stylised nature of the analysis, the specific position of the EU on the hump-shaped curve in the figure is obviously highly judgmental. We believe that, if the potential for country diversification embodied in the current rules is fully exploited, the existing degree of simplicity versus flexibility appears broadly appropriate for present EU

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<sup>10</sup> This is based on the analysis by Alesina et al. (2001) who find that, as the heterogeneity of members of the EU rises, the number of common policies and rules would decrease.

members. However, this is unlikely to be the case in an enlarged EU where the need for flexibility will increase considerably.

Figure 1. Simplicity versus flexibility



2.3 Compliance: the SGP against Inman’s criteria

Once a rule has been established, the right commitment technology has to be devised in order to ensure compliance. Based on his analysis of US states, Inman (1996) indicates four main criteria for compliance: timing for review, overriding, enforcement and amendment. Table 2 gives the characteristics of weak and strong fiscal rules according to Inman’s criteria and an assessment of the performance of EU fiscal rules (see also Amtenbrink et al., 1997).

Table 2. Specification of fiscal rules

Specification	Weak fiscal rules	Strong fiscal rules	EU rules
<b>Rule</b>			
Timing for review	Ex ante	Ex post	Ex post
<b>Override</b>			
Majority rule	Allowed	Not allowed	Not allowed
<b>Enforcement</b>			
Enforcer	Partisan	Independent	Partisan
Access	Closed	Open	Closed
Penalties	Small	Large	Large
<b>Amendment</b>			
Process	Easy	Difficult	Difficult

Source: adapted from Inman (1996) and Eijffinger and De Haan (2000)

For a fiscal rule to be effective there must be *ex post, not ex ante, deficit accounting*. Ex ante rules apply only to the beginning of the fiscal year and ex post rules require fiscal balance at the end of the year. As to the SGP, the timing for review is ex post with respect to the 3% limit for the deficit to GDP ratio. Member states are judged on the basis of realised fiscal performance. The time schedule is precise and relatively short. Hence, regarding the timing for review, the SGP qualifies as a strong fiscal rule.

A fiscal rule is strong when it cannot be *overridden or temporarily suspended* by a simple majority vote of the legislature. A strong fiscal rule is constitutionally, not statutorily, grounded. The SGP qualifies as a strong fiscal rule since overriding by majority voting is not allowed. Unanimity is required to change the regulations. Given the large number of countries involved, this is a very tight constraint.

Rules have to be *enforced* by an open and politically independent, not partisan, review panel or court. Independence means that the enforcing review panel is disconnected from the political bodies that set the fiscal policies. While a partisan court is assumed to respond to the preferences of those who placed it in office, an independent court can be expected to adhere to the letter of the fiscal rules. In the case of the SGP, the same ministers of finance who are responsible for drafting national budgets also have to decide whether they breach the Treaty and SGP rules. So enforcement is not independent but partisan.<sup>11</sup>

For strong enforcement, there has to be open access to the review panel or court to allow all potentially affected parties to point to a violation of the fiscal rules. In the SGP case, access is virtually closed for private citizens and institutions. Therefore, under this respect, the SGP qualifies as a weak fiscal rule.

When the fiscal rules are violated, there must be significant sanctions. The penalties must be enforceable and sufficiently large. In the case of the SGP, the sanctions (first deposits and then fines) for violation of the fiscal rules are nominally quite high and tough. However, their application is a lengthy process subject to several political decisions by the Council.

When *amendment* of the rules is costly, sticking to the fiscal rules becomes more attractive than trying to get round them. As changing the 3% of GDP deficit ceiling requires unanimity, EU fiscal rules qualify as a strong fiscal rule. However, to modify the interpretation of the close-to-balance rule a majority of the ministers of finance would be enough. The downside of the difficulty to introduce amendments is that international agreements may simply break under strain without being replaced by a new regime.

Again, the multinational character of EU fiscal rules affects their basic features. Typically, ex post timing for review is particularly important in a supra-national context, given the higher risks of moral hazard and the higher difficulty in monitoring ex ante policy announcements. Ensuring open access is considerably more complicated when many countries are involved. While the sanctions under the SGP are nominally high, their actual implementation remains under question because of the political difficulty of imposing sanctions between sovereign countries. This is, of course, a consequence of the lack of a federal government with

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<sup>11</sup> While the Pact contains specific provisions aiming at reducing discretion in the case of violation of the rules, the experience in Spring 2002 with the 'early warning' against Germany and Portugal raised doubts about the determination of the Council to enforce the SGP.

sanctioning powers. Hence in a multi-country set of rules, one has to stress the reputational effects of the ‘early warnings’ and excessive deficit positions<sup>12</sup>.

As to enforcement, a parallel can be drawn here between the ECB and national central banks in the pre-EMU period. An independent ECB, facing dispersed fiscal authorities having different interest, is in a stronger position to fend off political pressures than national monetary authorities, in spite of their formal independence (see e.g. Beetsma and Bovenberg, 1998). Similarly, an independent fiscal enforcer would have a considerably higher power in the case of supra-national rules. This may explain why partisan enforcement is a feature of the EU fiscal rules.<sup>13</sup>

As to amendment, the experience of several countries in the post-war period points to frequent changes of national fiscal rules (Banca d’Italia, 2001). However, given the political complications involved in negotiating binding agreements, difficulty in amending the rules is a natural feature of multinational arrangements such as the EU fiscal rules.

Overall, the EU fiscal rules perform quite well (except with respect to enforcement) when compared with compliance criteria (see also Amtenbrink et al., 1997). Several of these requirements are met and, when they are not, it appears to be due to the supra-national nature of the rules.

### **3. Critical issues in the implementation of the SGP**

In the recent debate on the SGP, six main lines of criticisms have been put forward (see Table 3 below on references to the literature).

#### **Allegation 1: The SGP reduces budgetary flexibility**

Under the Pact, the 3% of GDP reference value has become a hard ceiling to be breached and only in exceptional circumstances and for a limited period. As the literature on currency areas has shown, higher budgetary flexibility is required to respond to country-specific shocks in absence of national monetary independence.<sup>14</sup> In order to create sufficient room for manoeuvre, a rapid transition to broadly balanced budgets in structural terms is required. In a situation of subdued growth, such transition would require pro-cyclical policies that may worsen the cyclical conditions. Pro-cyclical policies cannot be excluded in the future if the room for manoeuvre envisaged by the SGP turns out to be insufficient to cope with large scale recessions and adverse shocks.

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<sup>12</sup> Reputational effects were perceived as being quite high in the case of the early-warning episode of Germany at the beginning of 2002. On the contrary, such moves may actually galvanise public opinion against “Brussels” and have the opposite political effects. This was arguably the case when a recommendation for violating the BEPGs recommendation on avoiding a pro-cyclical policy was addressed to Ireland in spring 2001.

<sup>13</sup> The initial proposal for a Stability Pact by the then German finance minister Theo Waigel foresaw the application of automatic sanctions in the event of a deficit exceeding the 3% of GDP ceiling. However, this proposal encountered fierce resistance and was ultimately rejected also on legal grounds. See Costello (2001) and Stark (2001).

<sup>14</sup> On the other hand, because of the common monetary policy, in the euro-area monetary shocks should not take place anymore (see Frankel and Rose, 1998).

### **Allegation 2: The SGP works asymmetrically**

The Pact does not curb governments' incentives to increase expenditure or cut revenue in favourable cyclical periods. There is nothing in the SGP preventing countries from undertaking pro-cyclical expenditure increases and tax reductions during periods of strong growth (Buti and Martinot, 2000; Korkman, 2001). While headline budget figures may not deteriorate, the underlying budgetary position will, thereby leaving the countries exposed in the event of a slowdown in economic activity. Evidence of a pro-cyclical bias still affecting budgetary policies in euro area countries is provided by fiscal behaviours in the year 2000. In a situation of buoyant growth (3.4% for the euro-area as a whole) and an oil price hike which put upward pressure on inflation, countries with high deficits failed to seize the opportunity to reduce their fiscal imbalances.<sup>15</sup>

### **Allegation 3: The SGP does not sanction politically-motivated fiscal policies**

Unlike the Maastricht convergence, sticking to the rules of the SGP may not pay politically. As argued by Buti and Giudice (2002), rewards for complying with Maastricht public finance requirements and penalties for failing to do so were very clearly laid out in the run up to EMU. Meeting the convergence criteria would allow budgetary laggards to join the virtuous countries in the new policy regime. Conversely, failure carried the penalty of exclusion from the euro area. Under the SGP, the carrot of entry has been eaten while the stick of exclusion has been replaced by the threat of uncertain and delayed sanctions. Moreover, the very success of the SGP in reducing the budget deficits would in fact rebuild the capacity of governments to pursue politically-motivated fiscal actions. This temptation may prove irresistible in election years<sup>16</sup>.

### **Allegation 4: The SGP discourages public investment**

Maintaining budget positions "close to balance or in surplus" implies that capital expenditure will have to be funded from current revenues. Hence, it will no longer be possible to spread the cost of an investment project over all the generations of taxpayers who benefit from it. This may imply a disincentive to undertake projects producing deferred benefits and entailing a significant gap between current revenues and current expenditures. The disincentive is stronger during consolidation periods.<sup>17</sup>

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<sup>15</sup> As shown in Buti and Sapir (2002), budgetary consolidation in Germany, France and Italy – three of the countries which did not meet the close-to-balance rule of the SGP – was considerably worse than the already timid efforts which were planned in their stability programmes. This contrasts sharply with the rest of the euro-area members whose budgetary out-turn was better than planned.

<sup>16</sup> Buti (2002) shows that negative deviations from the targets in cyclically-adjusted terms set out in the Stability Programmes appear larger and more systematic in election years than in other years. With a different approach, von Hagen (2002) finds that in the period 1998-2001 the expansionary stance in the year preceding the election had been twice as large as that in other years.

<sup>17</sup> The idea that investment is reduced more than other items during fiscal consolidations is largely shared in the literature. See Oxley and Martin (1991) and De Haan *et al.* (1996). Balassone and Franco (2000a) show how the introduction of a deficit ceiling can imply a reduction in investment in a two period model where a policy maker with a finite horizon maximises disposable income and the latter is positively affected by investment with a lag.

### **Allegation 5: The SGP disregards the aggregate fiscal stance**

Under the Pact, each country is responsible for national fiscal policies. However, the aggregation of nationally-determined fiscal policies may not result in an optimal fiscal stance at the euro area level. In turn, the aggregate fiscal stance may not be suitable to ensure an adequate policy mix. An inappropriate fiscal stance may occur without formally violating the rules of the SGP. For instance, a shift from surplus to balance in several countries at the same time may lead to an over-expansionary fiscal stance while remaining within the boundary of the Pact. Conversely, the rule-based coordination envisaged by the Pact may not be adequate to respond to large common shocks which would require a coordinated response.

### **Allegation 6: The SGP focuses on short term commitments and disregards structural reforms**

This criticism has different nuances. First, the SGP focuses almost exclusively on short term objectives for the budget deficit. As such, it provides incentives for creative accounting and one-off measures which blur the transparency of public accounts. Second, the stock of public debt does not enter the SGP and neither do the contingent liabilities of public pension systems. Hence, the Pact treats equally countries with different medium and long-term prospects and different debt levels. This may imply that the Pact is too demanding for countries in sound fiscal positions. Third, the Pact may prevent countries from implementing policies – such as pension reforms which improve sustainability over the medium and long term at the price of a short term deficit worsening.<sup>18</sup>

## **4. Revisiting the SGP: main proposals**

According to the above allegations, the Pact is too uniform; it does not include incentive-compatible mechanisms; it does not encompass area-wide concerns and does not properly address the issues of economic growth and long term sustainability.

In one way or another, all the proposals for revisiting the SGP draw on one or more of the above criticisms. A summary of the main proposals put forward by academics and policy makers to replace, reform or improve the SGP is presented in Table 3.

The arguments for and against these proposals are assessed in the rest of this section.

### **4.1 Reform procedures and institutions**

The first-best strategy in ensuring sound fiscal policies would be that of dealing directly with the factors leading to excessive deficits at the national level. This would also avoid relying on numerical parameters which are necessarily arbitrary. Three sets of proposals come under this heading: (i) enforce financial market discipline by adjusting existing EU regulations, such as the *large exposure directive* and the *solvency ratio directive*; (ii) *procedural reforms* strengthening the hand of the Treasury Minister vis-à-vis spending ministers and limiting the Parliament's ability to amend budget laws; and (iii) *institutional reforms* such as the creation of an independent Fiscal Policy Committee (FPC) in charge of ensuring fiscal discipline and debt sustainability.

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<sup>18</sup> For a theoretical model, see Razin and Sadka (2002). According to Ballabriga and Martinez-Mongay (2002), EMU has shifted fiscal policy to a shorter horizon compared with the pre-EMU period.



### *Enhancing financial market discipline*

One element for imposing rules on national fiscal policy is that it can play a role in staving off a banking crisis which may result from government fiscal distress. The vulnerability of banks to sharp movements in the public debt markets depends on two conditions: (1) the degree of government debt diversification by banks, and (2) the degree of correlation between the default risk of different governments. Thus, if banks are not diversified in their government bond holding and all government default risk is systemic, banks are more likely to fail.<sup>19</sup>

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<sup>19</sup> Arnold and Lemmen (2001) have estimated the cross-country correlation coefficients of government default risk between 10 EU countries. Their calculations suggest that the diversification gains from investing in a European-wide portfolio of governments bonds is considerable, notably for Finland, Ireland, Portugal and Italy.

**Table 3. Reforming the SGP: main proposals**

<u>Critical issue</u>	<u>Reform proposals</u>	<u>Authors</u>	<u>Institutional implications</u>
Numerical rules do not tackle at source the budgetary misbehaviour; SGP needs a more credible and non-partisan enforcement.	Improve rational budgetary procedures; create independent Fiscal Policy Committee. Strengthen financial market discipline	Wyplosz (2002), Wren-Lewis (2000 and forthcoming), von Hagen (2002)	Reform the Treaty, abolish Excessive Deficit Procedure. Amend Large Exposure Directive.
The SGP pays too much attention to the deficit, not to the quality of public finance.	Introduce expenditure rule; move to golden rule.	Mills and Quinet (2001), Brunila (2002), IMF (2001), von Hagen (2002), Fitoussi and Creel (2002)	The golden rule requires changes in the Treaty and the SGP. It is only in a soft version that it is not inconsistent with them.
Sustainability depends on the stock of debt, not on the deficit.	Introduce a Debt Sustainability Pact; move to a country-by-country articulation of the close-to-balance target.	Pisani-Ferry (2002)	The Debt Sustainability Pact requires changes in the Treaty. For some countries it replaces the SGP.
The 3% and the close-to-balance target are arbitrary and inconsistent with an appropriate fiscal stance.	Move to structural balance; introduce the notion of Permanent Balance Rule.	Buiter and Grafe (2002)	Abolishing the close-to-balance requires changes in SGP; abolishing the 3% requires changes in the Treaty.
The SGP does not address the issue of the appropriate fiscal stance for the euro area.	Agree on the aggregate budget balance. Market solution via deficit permits.	Casella (2001)	Within the 3% ceiling, it is not incompatible with the current rules.

If banks do not voluntarily increase their diversification, adjusting current supervision regulations might be an alternative<sup>20</sup>. For instance, the *large exposure directive*, which states that a bank cannot lend more than 25% of its capital to a single borrower, does not apply to government debt at present. Furthermore, under the *solvency ratio directive* Treasury bills and the long-term central government debt of OECD countries is placed in the 0% risk category at present. If, say, it were placed in the 20% risk category, banks would have to hold more capital against government debt and seek recovery of the additional cost on the interest rate. The higher burden for government would provide an incentive for reducing budget deficits. Some form of automatic linkage between a country debt and its credit rating would also have the advantage of introducing some elements of automaticity and flexible response which are missing from the Pact.

There are, however, some problems with this view. First, the required changes in the regulations would imply a competitive loss for the European banking sector. Second, even if the solvency ratio and the large exposure directives were changed, as long as government debt is mainly held domestically, which is the case in the early life of the euro, a government funding crisis could still endanger the stability of the financial system. Third, financial markets may not be disciplining governments enough or may be too slow. However, the disciplining effect of the bond market may be strengthened due to the SGP. If the credit rating of member countries would depend on the approval of their stability programmes by the Council, they would have an additional incentive to keep their public finances in order.

#### *Procedural reforms*

Procedural reforms impose changes on the rules concerning the presentation, adoption and execution of government budgets. Hierarchical procedures are more conducive to fiscal discipline than collegial procedures. At the national level, hierarchical rules attribute strong power to treasury ministers to overrule spending ministers during the intra-governmental preparation of the budget and limit the ability of the parliament to amend the government's budget proposals. At supra-national level, such rules attribute the power to assess and sanction the budgetary behaviour of national governments to a supra-national body.

Empirical evidence (see von Hagen and Harden (1994)) shows that procedural rules have proven effective to achieve and sustain fiscal discipline.

While numerical targets and procedural reforms are often seen as alternative options to guarantee budgetary prudence, they are not mutually exclusive in practice. In the case of EMU, while numerical targets had a clear primacy, procedural rules (such as common accounting conventions or the adoption of stability programmes) were also called upon to ensure compliance with the budget constraints.

Replacing the numerical limits with procedures ensuring sound budgetary positions would raise two problems. First, there would still a need for transparent and rapid

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<sup>20</sup> The idea of tackling the problems of high-debt countries via prudential rules for the financial systems was suggested at the outset of the EMU debate by Begg et al. (1991).

criteria for selecting new entrants to the euro area. Second, the adoption of harmonised budgetary procedures would raise fundamental problems from the point of view of national sovereignty and might conflict with national institutions and traditions. The alternative solution - country-specific procedures approved at EU level - would also be problematic. The ex ante effectiveness of these procedures would be very difficult to evaluate. Moreover, in case they did not prove effective in constraining deficits, the attribution of responsibility would be difficult as national governments might argue that they have implemented the agreed procedures.

In the end, while effective national budgetary procedures are important in ensuring sound fiscal policies at the national level they do not appear at present to be a viable alternative to numerical rules.

### **Institutional reforms**

The proposal to assign to a newly created independent body the role of setting fiscal targets draws on the experience of central banks running monetary policy. As central banks, the independent body would aim at delivering both long-term stability/sustainability and flexible short-term stabilisation. Setting up such institutions would imply a principal-agent solution for the fiscal discipline problem.

Wyplosz (2002) suggests to allocate to a newly created Fiscal Policy Committee (FPC) at the national level the responsibility for setting the budget balance on the basis of a debt sustainability constraint defined over a number of years. The constraint would either be expressed as an obligation to achieve budget balance over the cycle or to reduce or stabilise the debt ratio over a given horizon. The FPC would be accountable to Parliament. In order to replace the existing EU rules, each country would have to adopt a statute for the new body compatible with agreed norms. The FPC's statute would indicate its goals, powers and the conditions under which deviations from its goals are allowed.

While intellectually appealing, this proposal runs into serious feasibility problems. Fiscal policy is - differently from monetary policy - at the heart of the political decision-making process. The separation between setting a target for the budget balance (to be entrusted to the FPC) and the allocative and distributive function (to remain in the responsibility of government and parliament) may turn out to be difficult. Decisions about the budget balance affect the composition of expenditure and revenues. Politically, it is hard to conceive that a minister of finance would delegate part of fiscal policy authority to an independent agency.

### ***4.3 Factoring in the “quality” of public finances: expenditure rules and the golden rule***

While the SGP focuses on deficits, a growing body of literature points out that the composition of public finances matters as well.<sup>21</sup> The focus on quality has been

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<sup>21</sup> Analysis of the composition of adjustment shows that retrenchments based on reducing public spending, and in particular primary spending, are more likely to trigger non-Keynesian effects

translated into two proposals for reforming the SGP: shifting from a deficit target to (a) an *expenditure target/rule* or moving to (b) the so-called *golden rule* of deficit financing.

### **Expenditure rules**

Focus on expenditure has the advantage of controllability because expenditure depends much less than revenue on the business cycle. Several countries make use of rules setting limits to expenditure growth.<sup>22</sup> These rules can either refer to real or nominal targets. Expenditure rules present some positive aspects: they can link the annual budgetary process to a multi-annual policy framework; they refer to the budgetary items that governments can control; and they can be easily defined and monitored. Moreover, they allow stabilisers to work on the revenue side and may prevent expenditure relaxation in upturns.

Ideally, expenditure rules should use a comprehensive definition of public expenditure, including both discretionary items and entitlements, and apply to the different levels of government. They should require both *ex ante* and *ex post* compliance. Deviations in one year should be compensated in the following years.

The use of expenditure rules in a multinational context, however, appears problematic. First, uniform spending rules would *de facto* impose homogeneous social preferences to politically heterogeneous countries while country-specific rules would be difficult to enforce. Second, spending norms do not refer to the fiscal variables which can produce negative externalities. While a rising deficit or debt level in one country can create area-wide problems, a rising expenditure level as such does not have negative repercussions on other countries. Since no uniform expenditure to GDP ratio can be prescribed, countries would be required to indicate targets for the expenditure ratio consistent with the desired deficit ratio. However, expenditure rules cannot prevent deficit and debt increases stemming from tax cuts. Therefore, they would have to be complemented by a deficit or debt rule. Finally, the size of the budget typically reflects the political preferences of the government. A new government may want to renegotiate the commitments of its predecessor.

In sum, while expenditure rules may prove useful at the national level, they are more appropriate as complements rather than substitutes of rules on deficits and debt.

### **The golden rule**

According to the golden rule of deficit financing, borrowing is allowed to finance public investment. Implementing the golden rule requires establishing a dual budget separating investment spending from current spending. The usefulness of a

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and less likely to be reversed in the future. See Alesina and Perotti (1997) and European Commission (2000) for a survey of the evidence.

<sup>22</sup> See Heeringa and Lindh (2001).

dual budget has been debated since the 1930s, when a dual budget was proposed in order to foster the acceptance of using public debt to finance investment.<sup>23</sup>

The main advantages of the golden rule are those of spreading the burden of capital projects over the different generations of taxpayers benefiting from them and avoiding the efficiency loss caused by distortionary taxation if the tax rate fluctuates over time. The lack of this possibility may negatively affect capital spending. The problem is particularly relevant in the initial transition period, in which current generations have to tax-finance new projects while also paying interest on past debts.<sup>24</sup>

However, there are a number of arguments against the introduction of the golden rule<sup>25</sup>

First, the alleged incompatibility between the SGP and a properly defined golden rule is questionable. In order to spread the burden of capital spending over the different generations of taxpayers, the rule would have to refer to net spending.<sup>26</sup> Indeed, it is only the net addition to public capital that should be financed via borrowing while the part that covers depreciation should remain tax-financed. While commonly agreed estimates of amortisation are not available, in developed countries in which infrastructures are partly developed by subjects not included in general government, the level of net investment seems limited and not necessarily inconsistent with the close-to-balance rule of the SGP.<sup>27</sup>

Second, if applied to gross public investment, the golden rule would be an obstacle to deficit and debt reduction. In particular, given the ratio of public investment as a percentage of GDP, the long-run equilibrium level of government debt could be very high, especially in an environment of low inflation. This could imply that the debt ratio would rise in low-debt countries, while in high-debt countries there would be a very slow pace of debt re-absorption. Indeed, even if it could be proved that the social rate of return on public investment is higher than the rate of return on private investment, singling out public investment would not necessarily make sense from the point of view of debt sustainability, where what matters are the returns that can be appropriated by the government.

Third, in a general equilibrium perspective, singling out public investment from other budget items makes little sense. What is important is overall capital

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<sup>23</sup> Proposals to exclude capital outlays from the operating budget and to include depreciation of government capital stock date back at least to Musgrave (1939). The issue is reviewed, for example, in Goode and Birnbaum (1955), Premchand (1983) and Poterba (1995).

<sup>24</sup> The double burden determined by this transition can be assimilated to that arising from the transition from a pay-as-you-go to a funded pension system. See Kitterer (1994) for an analysis based on an overlapping generations-general equilibrium model. The Central Planning Bureau of the Netherlands estimates that the shift from deficit to tax finance would entail a welfare loss for current generations equal to 34 per cent of GDP (van Ewijk, 1997).

<sup>25</sup> For some of these criticisms, see Balassone and Franco (2000a) and Buiter (2001).

<sup>26</sup> The UK Code for Fiscal Stability refers to net capital spending and specifies that the deficit should not increase the public debt to GDP ratio problem (see HM Treasury, 1998, and Kilpatrick, 2001).

<sup>27</sup> For Germany, see Wendorff (2001).

accumulation in both private and public capital. For instance, a well-devised tax reform that, by lowering tax burden and distortions, leads to higher investment may be preferable to public investment. Moreover, there is no clear evidence in the empirical literature that investment in public infrastructure always leads to significant positive growth effects. Some studies suggest that government investment may be subject to rapidly decreasing returns.<sup>28</sup> Also from the standpoint of intergenerational equity, it is not clear that a combination of higher infrastructure investment and higher public debt would necessarily be preferable to lower investment *cum* lower debt.

Fourth, a dual budget may distort expenditure decisions in favour of physical assets and against spending on intangibles that can make a relevant contribution to economic growth, for example those increasing human capital. Moreover, the possibility of borrowing without strict limits in order to finance investments can lower the attention paid when evaluating the costs and benefits of each project.

Finally, the golden rule provides leeway for opportunistic behaviour as governments would have an incentive to classify current expenditure as capital spending. This would make the multilateral surveillance process more complex.<sup>29</sup>

#### **4.4 Set a budgetary target for the euro area as a whole**

In a currency union, only the aggregate fiscal stance is relevant for the policy mix at the euro area level and, as such, enters the reaction function of the central bank.<sup>30</sup> Hence it is suggested to set a target for the euro area as a whole and then share it between member countries. This solution is consistent both with community-level decisions prescribing the budget balance of each country and a market-based allocation of deficit permits.

#### **Community allocation of deficit shares**

A proposal for a coordination mechanism in the budgetary domain was submitted by the then French Finance Minister, Dominique Strauss-Khan, at the informal Ecofin Council in Dresden in April 1999. The French proposal stressed that the aggregate policy stance at the EMU level must be examined on the basis of an aggregate stability programme. The proposal pointed out that the objective to achieve an adequate policy stance for EMU as a whole should be taken into account when examining the national stability programmes.

The sequencing in the proposed scheme is the following:

- (i) an assessment of the situation in the euro area is obtained by aggregating the national programmes into a “euro area stability programme”;

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<sup>28</sup> See, e.g. de la Fuente (1997). Easterly and Rebelo (1993) suggests that the positive impact on growth depends on the equality of public investment: a positive correlation is found only for transport and communication investment.

<sup>29</sup> See the literature quoted in Balassone and Franco (2001).

<sup>30</sup> It should be mentioned that the European Central Bank has only price stability as its policy goal.

- (ii) the desired policy stance for EMU as a whole is determined;
- (iii) national contributions are assigned.

A natural implication of this is that the 3% of GDP deficit criterion would only apply to the average deficit for the euro area as a whole. However, individual Member States would be permitted to overshoot the 3% deficit ceiling as long as there were other countries with deficits below that value. Therefore, countries with deficits that are close to the 3% threshold would be allowed to exploit the larger room for manoeuvre enjoyed by other countries. Such an interpretation would also imply that the budgetary targets Member States have to aim for could be less ambitious. Since the amplitude of cyclical fluctuations is much smaller for the euro-zone as a whole, the targets needed to prevent an overshooting of the aggregate deficit ceiling are less stringent than those that are necessary for each Member State individually.

However, it is clear that in the present institutional set-up of EMU the deficit criterion applies to each Member State individually and not to the euro area as a whole. The Maastricht budgetary rules would thus have to be renegotiated in order to allow this interpretation to be implemented. Bureaucratic allocation of deficit shares would be highly controversial. Moreover, if the norm for budgetary behaviour in EMU is that of relying on automatic stabilisers, the likelihood that the aggregation of the national fiscal stances gives rise to an inappropriate stance at the aggregate level is negligible. It is fair to recognise, however, that such cross-country compensation would help in the transition to close-to-balance.

### **Market allocation of deficit permits**

An alternative to a political/bureaucratic mechanism is to use market mechanisms in the allocation of “deficit shares”. Casella (2001) proposes a system of tradable budget deficit permits as a mechanism for implementing fiscal constraints in EMU. Having chosen an aggregate target for the Union and an initial distribution of deficit permits, EMU countries could be allowed to trade rights to deficit creation. While this system keeps the aggregate area-wide deficit unchanged, it allows individual Member States to deviate from the initial allowances in case of idiosyncratic shocks. If a country is hit by a negative shock, it can use fiscal policy to counteract the shock by buying permits from surplus countries.

The proposal combines the belief that markets are unable to ensure fiscal discipline with the appreciation of the role of markets in the allocation of resources. The mechanism would minimise the aggregate cost of compliance with the aggregate targets and provide rewards for countries running surpluses in favourable cyclical conditions. It would also reduce the room for political manipulation.

This scheme is however subject to three main difficulties. First, efficacy requires that the deficits of the various governments generate the same externality and are thus perfect substitutes. But the risk of triggering a financial crisis is not uniform across governments. This risk could be obviated by making the value of the deficit permits of the governments inversely proportional to their stock of debt. However, this would complicate the system and re-introduce a political/bureaucratic dimension.



Second, the efficiency of the market in permits depends on how competitive it is. This makes the mechanism ill suited to situations in which the number of governments is small.

Finally, there is no easy solution to the problem of determining the initial allotment of permits. The possible criteria (GDP, population, etc.) would produce greatly differing allocations. If the initial demand for permits exceeded the supply, then the countries with an allotment greater than their requirement would enjoy positional rents.

In spite of these criticisms, the idea of deficit permits is interesting and worth exploring further. For instance, it would be useful to experiment it at a country level in setting targets for sub-national entities. At that level, the number of market operators would be greater and the allocation of permits may raise smaller political problems. A market in deficit permits for regional and local governments could help combine the limits set by the SGP for the general government balance with the flexibility required to allow for different investment needs. Moreover, the permit system seems better suited to financing investments than to buffering the budgetary effects of the business cycle.

#### **4.5 Focus on debt level and sustainability**

The current EU rules do not focus on the issue of sustainability and they disregard the fact that countries are different. Two solutions have been put forward in the literature: the first is to choose a medium term target that ensures long term sustainability while taking on board country specificities; the second is to focus directly on the public debt ratio.

#### **From the Maastricht parameters to tax smoothing**

The accumulation of public debt depends on the deficit and on the growth of nominal GDP. As catching up countries are characterised by higher potential growth and higher inflation (the latter due to the Balassa-Samuelson effect), they can afford to have higher deficits without endangering the long term sustainability of public finances. Hence the 3% ceiling and the close-to-balance rule are over-restrictive for these countries. Given the higher public investment needs of less mature economies (especially in an enlarged EU), the current fiscal rules could harm the catching up process.

Buiter and Grafe (2002) propose what they call a Permanent Balance rule which would ensure sustainability and fiscal prudence while taking into account country differences. Their rule is a strong form of tax smoothing: it requires that the inflation-and-real-growth adjusted permanent government budget is in balance or surplus. The permanent budget balance is given by the difference between the constant long run average future values of tax revenue and government spending.

While the rule is theoretically rigorous, its applicability appears doubtful<sup>31</sup>. First of all, it requires the estimate of the permanent value of tax and spending, thereby

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<sup>31</sup> For a thorough criticism, see Pench (forthcoming).

requiring to take into account future social and political preferences and make assumptions on future growth rates. This would likely violate the criteria of simplicity and enforceability discussed in section 2.

Second, nominal GDP growth can be higher in catching up economies but also highly variable. This implies a potential conflict between discipline and stabilisation. If a country which maintains a high structural deficit is hit by a shock, the automatic stabilisers may lead to very high deficits. While in principle these deficits are of a cyclical nature, the risk of spiralling debt and interest payments should not be disregarded. This risk is particularly high in accession countries which still suffer from limited creditworthiness and may see capital inflows dry up quickly.<sup>32</sup>

### **From the Stability Pact to the Debt Sustainability Pact**

Pisani-Ferry (2002) suggests to give countries the choice of opting out of the Excessive Deficit Procedure and embrace a Debt Sustainability Pact. This Pact would allow countries keeping their debts below 50 per cent of GDP and publishing comprehensive fiscal accounts to be exempted from the standard excessive deficit procedure and sanctions. Fiscal accounts would provide estimates of the future impact of budgetary commitments, such as the financing needs of public Pay-As-You-Go (PAYG) pension schemes. Better fiscal accounting provides more discipline by the financial markets (see subsection 4.2).

The countries adopting the Debt Sustainability Pact would be required to submit a medium term programme indicating a five year target for the debt ratio, which would represent the benchmark for assessing their results. They would have greater flexibility in the short term. The focus of EU monitoring would shift from the year-by-year monitoring of the deficit to a medium term perspective based on long term fiscal sustainability.

While greater reference to the debt ratio does not raise measurement problems, reference to implicit liabilities is more problematic. Estimates are subject to considerable uncertainty related to the macroeconomic, demographic and behavioural scenarios. Moreover, accrued pension rights differ in many ways from conventional public debt and there are practical as well as theoretical reasons for not including accrued pension liabilities in the deficit and debt statistics used in defining and evaluating current fiscal policy.<sup>33</sup>

Although targets for the debt ratio may install incentives for governments in the long term, there may be some room for manipulation, by, for example, sale-and lease back constructions. Moreover, the proposal is built on the assumption that, as

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<sup>32</sup> It is noteworthy that, the issue of the 3% rule has not been raised by them during the accession negotiations.

<sup>33</sup> Pension rights are not embodied in formal contracts and are not tradable (the debtor can modify both the timing and the amount of the payment even taking individual characteristics into account). The assimilation of pension liabilities to financial liabilities may hamper pension reforms. Moreover, the acquisition of pension rights is usually compulsory. This means that a large pension-debt does not determine any direct pressure on financial markets. It also implies that the debt is automatically renewed. See Franco (1995).

other suggestions to reform the Pact, deficits do not matter in EMU if debt levels are under control. This however is doubtful, especially from a policy mix standpoint.

## **5. Revisiting the SGP: workable improvements**

### ***5.1 Lessons from the debate***

Each of the proposals examined above draws the attention to one or more potentially serious problems with the design and implementation of the SGP. The suggestion to implement institutional and procedural reform highlights the need for an independent enforcer. The idea to move to a golden rule stresses the need to preserve the growth aspect of the SGP. A number of proposals highlight the excessive uniformity of the current rules. Taking into account the different levels of public debt points to the need to insert the sustainability dimension into the core of the SGP. The proposal of establishing a market for deficit permits tackles the problem of the pro-cyclical bias in good times.

However, in our view, none of the proposals outlined above represents a Pareto improvement: while appropriate to tackle some of the problems highlighted in the debate, each of them does not solve all problems and may even aggravate some of them. Some reform proposals present the same element of inflexibility of the current regime (golden rule); others require estimates which may turn out problematic in a multinational context (debt sustainability pact, permanent balance rule); others again require a decisive leap forward in the integration of fiscal policy (procedural reforms). The adoption of some proposals (procedural reforms, FPC, budgetary target for euro area) would allow to tackle the transition problem by removing the 3% limit. But, without a preliminary period in which their effectiveness is tested, this would represent a leap in the dark. Also, from a political perspective, attempting to rewrite the rules from scratch may lead to a vacuum in which the current rules are suspended while none of the alternative options is supported by a sufficiently large political constituency.

Our analysis of the SGP against desirable rules standards for design and compliance shows that the current EU fiscal rules fare reasonably well, especially if account is taken of their multinational character. Nonetheless, improvements can be achieved. In our view, key aspects are allowing a certain country-specificity, re-balancing their sticks and carrots, and enhancing enforcement mechanisms. These improvements can be done within the current set of rules, via a code of conduct agreed between EMU players.

### ***5.2 A proposal of internal adjustment***

Our proposal involves a diversification of the medium term targets, higher transparency and better monitoring, mechanisms to correct misbehaviour in good

times and a non-partisan application of the rules.<sup>34</sup> Table 4 summarizes the thrust of the proposal.

**Table 4. Revisiting the SGP**

<u>GOAL</u>	<u>PROPOSAL</u>	<u>OPERATIONAL STEPS</u>
Overcome excessive uniformity of the rules	- Diversify close-to-balance	- Common estimates of contingent liabilities - Common estimates of net investment.
Improve transparency	- Structural balance targets - Monitor cash figures	- Define one-off measures - Countries to explain divergence between cash and national accounts
Correct pro-cyclical bias	- Early warning in good times - Rainy-day funds	- Define maximum allowed worsening of cyclically adjusted balance - Interpretation ESA 95
Move to non-partisan enforcement	- Commission implements the rules, Council decides on policy measures	- Define relative tasks between Commission and Council

**Proposal 1: A country-by-country articulation of the medium term budgetary target**

The close-to-balance rule interpreted as broadly balanced budgets in cyclically-adjusted terms may lead to excessive uniformity between countries. This interpretation treats equally countries with different levels of public debt, different contingent liabilities, and different public investment needs. So far, the only dimension along which countries are differentiated is the variability of the cyclical component of the budget balance: economies subject to higher business cycle volatility and having larger automatic stabilisers require a larger cyclical safety margin in order to avoid breaching the 3% of GDP deficit ceiling under normal cyclical circumstances. The latest Commission estimates of the so-called “minimal benchmarks” indicate that the large euro area countries should have a cyclically-adjusted deficit below 1.5% of GDP while most of the other countries should be below 1% of GDP (European Commission, 2002).

The articulation of the medium term budgetary targets could be extended to other dimensions, such as:

- (a) the financial fragility of the country embodied in stock of public debt;

<sup>34</sup> Our proposals are largely consistent with the new strategy of implementation of the SGP put forward by the Commission on 24 September 2002. In order to tackle effectively the imbalances of Germany, France, Italy and Portugal, the Commission restates the 3% of GDP as a ‘hard’ ceiling for the deficit, suggests to focus on underlying balances when assessing compliance with the close-to-balance rule of the Pact, requires to attain an annual minimum structural adjustment of 0.5% of GDP for the countries still away from close-to-balance and asks for a commitment to accelerate the adjustment in times of boom.

- (b) the threat to long term sustainability given by the implicit liabilities of pension systems.

More specifically, countries with a relatively low stock of debt – i.e., well below the 60% of GDP reference value – and with relatively low estimated contingent liabilities could be allowed to have cyclically-adjusted budget deficits up to their minimal benchmarks. In practice, this implies a medium term deficit target for countries without sustainability concerns in the range of 1 to 1.5% of GDP.<sup>35</sup> This solution would be consistent, in most cases, with a prudent version of the golden rule. As pointed out above, in the case of public investment, the right concept is that of *net* investment (hence taking into account amortisation).

In order to avoid moral hazard, commonly agreed estimates of contingent liabilities in EU countries would have to be computed, following the experience of the Economic Policy Committee's estimates of age-related public spending (EPC, 2001). Countries would have to provide transparent projections on a regular basis.<sup>36</sup> The possibility to have a small structural deficit could be limited to the countries for which expenditure trends do not imply a debt level rising above the 60% threshold over a certain period of time.<sup>37</sup> Alternatively, a variety of sustainability indicators could be used: tax-gaps, government net worth, and generational accounting. Since each indicator requires some arbitrary choices, it would be necessary to predefine the relevant assumptions and parameters.<sup>38</sup>

The debt ratios in high debt countries and in countries with expected rising expenditure levels would decline fast, thereby contributing to offset the burden of ageing in the future, while in the other countries deficit levels would ensure the maintenance of a small public debt.

To ensure fiscal prudence however, permanent and temporary flexibility should not be additive: in order to safeguard the 3% deficit ceiling, the medium term target should not exceed the minimal benchmark.

## **Proposal 2: Improving transparency**

An effort should be devoted to enhancing transparency in current and perspective fiscal accounts. In general, transparency can increase the credibility of rules by allowing a better judgement of fiscal performance and by limiting the role of accounting creativity in meeting targets (IMF, 2001). This can allow greater flexibility in the implementation of rules (Kilpatrick, 2001). In recent years, several countries have taken measures to improve fiscal reporting and ensure greater fiscal transparency (Janssen, 2001).

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<sup>35</sup> According to the European Commission estimates, these margins would be adequate for the larger countries. See also the estimates of Dalsgaard and de Serres (2001), Barrell and Dury (2001) and Buti, Franco and Ongena (1997). The risk of breaching the 3% threshold would be further reduced by the introduction of rainy-day funds (see below).

<sup>36</sup> It would also be useful to attribute the responsibility for projections to independent authorities or to competing institutions. See Franco and Marino (2002).

<sup>37</sup> See the exercises in Delbeque and Bogaert (1994) and Franco and Munzi (1997) .

<sup>38</sup> See Balassone and Franco (2000b) and the other essays in Banca d'Italia (2000).

The current EMU fiscal framework has been criticised for a certain lack of transparency. As spelled out above, this issue has different facets. First, in order to meet the short term targets, countries have frequently adopted one-off, cash-raising measures instead of making the necessary structural adjustment. Second, under the current system of national accounts, monitoring is hampered by delays in data provision with the implication that the whistle is often blown far too late. Again, especially in election period, incumbents can exploit this lack of transparency. Third, data on off-budget liabilities and budgetary prospects have generally been rather limited.

To remedy the first problem, compliance with the EU rules should distinguish between long-lasting and one-off measures.<sup>39</sup> Given the current legislation and accounting conventions, the 3% rule cannot be modified to allay this concern. However, the size of one-off measures could be easily publicised. Moreover, in deciding whether or not to address an early warning to a deviant country, the existence of temporary measures should be ascertained. In practice, the danger threshold for the actual deficit should be lower in the event of a country relying on temporary measures.

As to the medium term target, in assessing compliance with the close-to-balance requirement, the *structural balance* should be computed, which implies correcting the cyclically-adjusted balance for the budgetary effects of one-off measures.<sup>40</sup> In short, the experience of 2000-2001 with the UMTS proceeds should be extended to all temporary measures. In order to implement this, an agreed definition of one-off measures should complement the existing agreement on how to compute cyclically-adjusted balances.

The problem of early detection of deviations from targets was vividly exposed in the case of Portugal in 2001. Moreover, one can see that public debt growth has frequently exceeded the deficit level. Stock-flow effects have systematically contributed to debt growth. A way to tackle this issue is to resurrect, in parallel with national accounts definitions, regular monitoring of cash flows. National authorities would be required to indicate ex ante cash figures broadly consistent with the ESA95 balance. Alternatively, changes in the debt level (net of the effects of exchange rate changes and privatisation proceeds) could be monitored.<sup>41</sup> If a significant departure from target is detected in financial flows, it would be up to the them to explain this difference.

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<sup>39</sup> The measurement of one-off effects in public budgets raises some methodological problems. Public spending normally reflects several measures and events with temporary expansionary or restrictive effects. It may probably be useful to consider only the measures having transitory effects on public revenues (e.g. sales of assets, anticipation of tax payments, tax amnesties). Guidelines concerning the definition of one-off measures would have to be agreed in advance.

<sup>40</sup> This is one of the salient features of the new strategy for the implementation of the SGP put forward by the Commission on 24 September 2002. The Commission suggests to define structural adjustment as a change in the budget balance net of cyclical effects and of one-off measures. With the exception of France, the Eurogroup on 7 October 2002 broadly endorsed the Commission proposals.

<sup>41</sup> See Balassone, Franco and Zotteri (2002).

Finally, on the basis of an agreed and transparent framework, governments could be required to provide estimates of off-budget liabilities, of their net asset position and of long term budgetary trends.<sup>42</sup> Estimates should be revised every year. Changes should be extensively explained.

These reforms would greatly improve the capacity of the general public and financial markets to evaluate budgetary positions.

### *Proposal 3: Tackling misbehaviour in good times*

It is widely recognised that the SGP does not provide sufficient incentives for countries to run prudent fiscal policies in good times. Within the boundaries of the current rules, a two-pronged approach would be the following: first, devise a sanction to punish early slippages in good times, and second, facilitate countries to behave prudently in periods of upturn.

In order to step up peer pressure, a possible solution could be that of using the early warning procedure of the SGP not only in bad times when the deficit approaches the 3% ceiling, but also in good times when a significant divergence from structural targets is detected. The current formulation of the early warning provisions tends to excluded their use in the absence of the risk of an excessive deficit. A political agreement would be required to allow a more extensive use of the early warning procedure.

The introduction of rainy-day funds may improve policies in good times. These are reserve funds that would be used in times of recession and replenished in upturns. Rainy-day funds are used by several US states and Canadian provinces to buffer the effects of unexpected negative events and cyclical downturns.<sup>43</sup> These funds might increase the incentive for governments not to waste the surpluses in good times and increase the room for manoeuvre in bad times. They would also increase the role of public budgets in stabilising the economy over the cycle.

The establishment of rainy-day funds would imply a review of the current ESA accounting rules for calculating budgetary indicators. In the current interpretation of national accounts, transfers of resources to and withdrawal from the fund are financial operations (below the line) and hence deficit-neutral. A revised interpretation should establish that transfer of resources to the fund in good times reduces the budget surplus while withdrawal from the fund in bad times is considered as additional revenue and thus reduces the deficit. There should be some rule to ensure that rainy-day funds are used only in recessions.

The possibility to establish rainy-day funds would not obviously tackle at the root the incentive problem that governments have in good times. However, the flexibility that they would provide would allow a tightening of sanctioning procedures for countries exceeding the 3% limit. For instance, the payment of the

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<sup>42</sup> A first step in this direction is represented by the indication to introduce long term expenditure projections in the stability programmes.

<sup>43</sup> See Knight and Levinson (1999) and McGranahan (1999) for the US experience.

non-interest bearing deposit could be accelerated and the closeness clause (the amount by which the 3% limit can be exceeded) could be defined in a strict way.

*Proposal 4: Non-partisan implementation of the rules*

A strong criticism of the Treaty and the SGP is that enforcement is partisan: national authorities are supposed to apply the rules to themselves, thereby having incentives for collusion and horse-trading.

In order to move to a non-partisan implementation of the rules, one has to distinguish between three types of decisions which need to be taken in the implementation of the SGP: (a) technical decisions on the compliance with the rules; (b) political decisions on measures to be taken to prevent or correct an excessive deficit; (c) implementation of sanctions.

The Commission should be entrusted with the implementation of decision (a). This implies that the Commission should be entitled to deliver the first early warning, and to determine the existence of an excessive deficit. The Commission, without requiring the approval by the Council, would also assess whether exceptional circumstances apply.

The Council should take decision (b) on the measures to be implemented to correct the fiscal imbalance. Hence, the Council should decide on the second early warning which requires to specify the corrective measures. As prescribed by current rules, the decision would be taken by the Council on a qualified majority basis following a recommendation by the Commission.

Decision (c) on the application of sanctions is of both technical and of a political nature. Leaving it exclusively to the Commission alone would be unthinkable. A solution that would reduce the risk of a partisan (non) application of sanctions would be to move from a Commission *recommendation* to a Commission *proposal*. The difference is that the Council can move away from the Commission proposal only with unanimity and not with qualified majority as in the case of a Commission recommendation.

These changes are consistent with the spirit of the current rules. However, in order to be implemented fully, a change in the Treaty would be required. If agreement on the principle is achieved, this could be enshrined in a European Council resolution which would state that, in the case of the technical decisions, the Council commits to reject the Commission recommendations only with unanimity. The crucial question is, of course, whether or not the Council is prepared to strengthen the authority of the Commission in the interest of the credibility of EU fiscal rules. While taken on its own this shift could encounter political resistance; seen within an overall package of sticks and carrots, it would have a better chance of rallying the necessary political consensus.



## 6. Conclusions

This paper takes the view that the current EU rules should be examined in the light of the theoretical and empirical work on fiscal rules. Our conclusion is that the SGP does not fare badly. Its aim is to balance fiscal discipline and fiscal stabilisation in a multinational context in which countries ultimately remain responsible for fiscal policy. It tries to combine some flexibility for exceptional events with a need for predefining the necessary room for manoeuvre to smooth the business cycle. Sound budgetary positions would actually remove the constraints that high public finance imbalances frequently have set in the past to national stabilisation policies. As such, the SGP largely reflects the long debate on budgetary rules which suggests balancing the budget with exceptions for cyclical developments and events outside the control of policy authorities.

While the Pact presents some drawbacks - particularly in terms of investment financing, asymmetric incentives and lack of a long term view - it is not evident that any alternative would be preferable on every account. Most of the benefits of alternative rules can be attained by an appropriate interpretation of the SGP provisions which would diversify countries' fiscal commitments according to their specific economic and public finance features.

The basic tenet of this paper is that there are no miracle solutions to cure the Pact's weaknesses. If one takes into account the political economy of fiscal rules in a multinational context, it is difficult to envisage that, at the existing levels of political integration between EMU countries, even designing from scratch EMU fiscal rules, the solution would be dramatically different from that introduced in the 1990s. Changes might obviously regard the specific values of the parameters, but not the underlying philosophy – that is, setting a prudent budgetary objective in normal times and a deficit ceiling in bad times which are consistent with the free working of automatic stabilisers and are coupled with a system of multilateral surveillance to ensure respect of budgetary commitments.

Moreover, only four years into EMU, any radical change would be highly problematic from a political standpoint. The obvious risk is that of ending up in a vacuum in which the old rules are called into question while the agreement on a new set of rules fails to materialise. Venturing into an EMU without fiscal rules would be a leap in the dark. At the same time, given the current level of political integration, the conditions for a federal system of public finances do not seem to exist.

While we are sceptical of re-opening the debate on the SGP, we think that its functioning can nonetheless be improved. Our main proposals concern redefining the medium term budgetary targets, tackling the pro-cyclical fiscal bias in good times, moving towards non-partisan application of the rules and improving transparency in the data. This set of ideas can allow to achieve both stronger discipline and higher flexibility and can be implemented without requiring any major revision of the existing rules. These proposals do not provide a recipe for tackling the problems encountered by countries still in transition towards lower deficits in the event of a cyclical slump. Nevertheless, if implemented, they would

limit the type of behaviour which is largely responsible for the current fiscal tensions.

## References

- Alesina, A. and A. Drazen (1991), 'Why Are Stabilizations Delayed?', *American Economic Review*, 82: 1170-88.
- Alesina, A. and R. Perotti (1995), 'The Political Economy of Budget Deficits', *IMF Staff Papers*, 42: 1-31.
- Alesina, A. and R. Perotti (1997), 'Fiscal Adjustment in OECD Countries: Composition and Macroeconomic Effects', *IMF Staff Papers*, 44: 210-248.
- Alesina, A., I. Angeloni and F. Etro (2001), "The Political Economy of International Unions", *CEPR Discussion Papers*, 3117.
- Alt, J.E. and R.C. Lowry (1994), 'Divided Government and Budget Deficits: Evidence from the States', *American Political Science Review*, 88: 811-28.
- Amttenbrink, F., J. de Haan and O.C.H.M. Sleijpen (1997), 'Stability and Growth Pact: Placebo or Panacea?', *European Business Law Review*, 202-210 and 223-238.
- Arnold, I. and J. Lemmen (2001), 'The Vulnerability of Banks to Government Default Risk in the EMU', *International Finance*, 4(1): 101-125.
- Artis, M.J. (2002), 'The Stability and Growth Pact: Fiscal Policy in the EMU', in F. Breuss, Fink, G. and S. Griller (eds.), *Institutional, Legal and Economic Aspects of the EMU*, Springer, Wien-New York.
- Artis, M.J. and M. Buti (2000), 'Close to Balance or In Surplus' - A Policy Maker's Guide to the Implementation of the Stability and Growth Pact', *Journal of Common Market Studies*, 38(4): 563-92.
- Ballabriga, F. and C. Martinez-Mongay (2002), 'Has EMU Shifted Policy?' European Commission, *Economic Papers*, 166.
- Balassone, F. and D. Franco (1999), 'Fiscal Federalism and the Stability and Growth Pact: A Difficult Union', *Journal of Public Finance and Public Choice*, XVII(2-3): 135-163.
- (2000a), 'Public Investment, the Stability Pact and the Golden Rule', *Fiscal Studies*, 21(2): 207-29.
- (2000b), 'Assessing Fiscal Sustainability: a Review of Methods with a View to EMU', in Banca d'Italia (2000): 22-60.
- (2001), 'EMU Fiscal Rules: a New Answer to an Old Question?', Banca d'Italia (2001): 33-58.
- Balassone, F., D. Franco and S. Zotteri (2002), 'Fiscal Rules: Indicators and Underlying Statistical Frameworks', Banca d'Italia, mimeo.
- Balassone, F. and R. Giordano (2001), 'Budget Deficits and Coalition Governments', *Public Choice*, 106: 327-49.
- Balassone, F. and D. Monacelli (2000), 'EMU Fiscal Rules: Is There a Gap?', Banca d'Italia, *Temi di discussione*, 375.
- Banca d'Italia (2000), *Structural Budget Balances*, Rome.
- (2001), *Fiscal Rules*, Rome.
- (2002), *The Impact of Fiscal Policy*, Rome, forthcoming.

- Barrell, R. and K. Dury (2001), 'Will the SGP Ever Be Breached?', in Brunila, Buti and Franco (2001): 235-255.
- Beetsma, R. (2001), 'Does EMU Need a Stability Pact?', in Brunila, Buti and Franco (2001): 23-52.
- Beetsma, R. and A.L. Bovenberg (1998), 'Monetary Union without Fiscal Coordination May Discipline Policymakers', *Journal of International Economics*, 45: 239-58.
- Begg, D. et al. (1991), *The Making of Monetary Union*, Monitoring European Integration, CEPR.
- Brunila, A. (2002), 'Fiscal Policy: Coordination, Discipline and Stabilisation', paper prepared for the Group of Economic Analysis of the European Commission, April.
- Brunila, A., M. Buti and D. Franco (eds.) (2001), *The Stability and Growth Pact – The Architecture of Fiscal Policy in EMU*, Palgrave, Basingstoke.
- Brunila, A., M. Buti and J. in't Veld (forthcoming), 'Fiscal Policy in Europe: How Effective Are Automatic Stabilisers?', *Empirica*.
- Buchanan, J.M. (1997), 'The Balanced Budget Amendment: Clarifying the Arguments', *Public Choice*, 90: 117-138.
- Buiter, W.H. (2001), 'Notes on a 'Code for Fiscal Stability'', *Oxford Economic Papers*, 53(1): 1-19.
- Buiter, W.H. and C. Grafe (2002), 'Patching up the Pact – Some Suggestions for Enhancing Fiscal Sustainability and Macroeconomic Stability in an Enlarged European Union', *CEPR Discussion Paper*, 3496. Reprinted in Buti (forthcoming).
- Buti, M. (2002), 'Public Finances in the Early Years of EMU: Adjusting to the New Policy Regime', paper prepared for a workshop of the Foundation for the Modernisation of Spain, October.
- Buti, M. (ed.) (forthcoming), *Monetary and Fiscal Policies in EMU: Interactions and Coordination*, proceedings of a Commission workshop of March 2002.
- Buti, M., Franco, D. and H. Ongena (1997), 'Budgetary Policies During Recessions – Retrospective Application of the Stability and Growth Pact to the Post-War Period', *Recherches Economiques de Louvain*, 63, 4: 321-66.
- Buti, M. and G. Giudice (2002), 'Maastricht's Fiscal Rules at Ten: An Assessment', *Journal of Common Market Studies*, 40(5): 823-47.
- Buti, M. and B. Martinot (2000), 'Open Issues in the Implementation of the Stability and Growth Pact', *National Institute Economic Review*, 174: 92-104.
- Buti, M. and A. Sapir (eds.) (1998), *Economic Policy in EMU*, Oxford University Press, Oxford.
- (2002), "EMU in the Early Years: Differences and Credibility", in M. Buti and A. Sapir, eds., *EMU and Economic Policy in Europe – Challenges of the Early Years*, Edward Elgar: Cheltenham.
- Buti, M., von Hagen, J. and C. Martinez Mongay (eds.) (2001), *The Behaviour of Fiscal Authorities*, Basinstoke: Palgrave.

- Casella, A. (2001), 'Tradable Deficit Permits', in Brunila, Buti and Franco (2001): 394-413.
- Costello, D. (2001), 'The SGP: How Did We Get There?', in Brunila, Buti and Franco (2001): 106-136.
- Daban, T., E. Detragiache, G.M. Milesi Ferretti and S. Symansky (2001), 'Rules-Based Fiscal Policy and the Fiscal Framework in France, Germany, Italy and Spain', IMF, mimeo.
- Dalsgaard, T. and A. de Serres (2001), 'Estimating Prudent Budgetary Margins', in Brunila, Buti and Franco(2001): 204-234.
- De la Fuente, A. (1997), 'Fiscal Policy and Growth in the OECD', *CEPR Discussion Paper*, 1755.
- Delbecque, B. and H. Bogaert (1994), 'L'incidence de la dette publique et du vieillissement démographique sur la conduite de la politique budgétaire: une étude théorique appliquée au cas de la Belgique', Bureau du Plan - *Planning Papers*, 70, November.
- Easterly, W. and S. Rebelo (1993), 'Fiscal Policy and Economic Growth: An Empirical Investigation', *Journal of Monetary Economics*, 32(3): 417-458.
- Economic and Policy Committee (2001), *Budgetary Challenges Posed by Ageing Populations: the Impact of Public Spending on Pensions, Health and Long-term Care for the Elderly and Possible Indicators of the Long-term Sustainability of Public Finances*, EPC/ECFIN/655.
- Eijffinger, S.C.W. and J. de Haan (2000), *European Monetary and Fiscal Policy*, Oxford University Press, Oxford.
- European Commission (2000), *Public Finances in EMU – 2000*, European Economy, Reports and Studies, 3.
- (2001), *Public Finances in EMU – 2001*, European Economy, 3.
- (2002), *Public Finances in EMU – 2002*, European Economy, 3.
- Fitoussi, J.-P. and J. Creel (2002), *How to Reform the European Central Bank*, Centre for European Reform.
- Franco, D. (1995), 'Pension Liabilities - Their Use and Misuse in the Assessment of Fiscal Policies', *Economic Papers*, European Commission, 110.
- Franco, D. and M.R. Marino (2002), 'The Role of Forecasts in Social Security Policy', *Giornale degli economisti*, forthcoming.
- Franco, D. and T. Munzi (1997), 'Ageing and Fiscal Policies in the European Union', *European Economy*, 4: 239-388
- Frankel, J. and A. Rose (1998), 'The Endogeneity of the Optimum Currency Area Criteria', *Economic Journal*, 108: 1009-25.
- Goode, R. and E. A. Birnbaum (1955), *Government Capital Budgets*, IMF, Washington.

- Haan, J. de and J.E. Sturm (1994), 'Political and Institutional Determinants of Fiscal Policy in the European Community', *Public Choice*, 80: 157-172.
- Haan, J. de and J.E. Sturm (1997), 'Political and Economic Determinants of OECD Budget Deficits and Government Expenditures: A Reinvestigation', *European Journal of Political Economy*, 13: 739-750.
- Haan, J. de, J.E. Sturm and B.J. Sikken, (1996), 'Government Capital Formation: Explaining the Decline', *Review of World Economics*, 132: 55-74.
- Heeringa, W. and Y. Lindh (2001), 'Dutch Versus Swedish Budgetary Rules: A Comparison', in Banca d'Italia (2001): 487-513.
- Hemming, R. and M. Kell (2001), 'Promoting Fiscal Responsibility: Transparency, Rules and Independent Fiscal Authorities', in Banca d'Italia (2001): 433-460.
- HM Treasury (1998), *The Code for Fiscal Stability*, November.
- (1999), *Fiscal Policy: Public Finances and the Cycle*, March.
- IMF (2001), *Fiscal Policy and Macroeconomic Stability*, May.
- Inman, R.P. (1996), 'Do Balanced Budget Rules Work? U.S. Experience and Possible Lessons for the EMU', *NBER Working Paper Series*, 5838.
- Janssen J. (2001), 'New Zealand's Fiscal Policy Framework: Experience and Evolution', in Banca d'Italia (2001): 171-216.
- Kell, M. (2001), 'An Assessment of Fiscal Rules in the United Kingdom', *IMF Working Paper*, 91.
- Kilpatrick, A. (2001), 'Transparent Frameworks, Fiscal Rules and Policy-Making Under Uncertainty', in Banca d'Italia (2001): 171-216.
- Kitterer, W. (1994), 'Tax- versus Debt-financing of Public Investment: A Dynamic Simulation Analysis', *Kredit und Kapital*, 2: 163-187.
- Knight, B. and A. Levinson (1999), 'Rainy Day Funds and State Government Savings', *National Tax Journal*, LII, 3: 459-472.
- Kopits, G. (2001), 'Fiscal Rules: Useful Policy Framework or Unnecessary Ornament?', in Banca d'Italia (2001): 59-84.
- Kopits, G. and S. Symansky (1998), 'Fiscal Policy Rules', *IMF Occasional Paper*, 162.
- Korkman (2001), 'Fiscal Policy Coordination in EMU: Should it Go Beyond the SGP?', in Brunila, Buti and Franco (2001): 287-310.
- Mc Granahan L. (1999), 'State Budgets and the Business Cycle: Implications for the Federal Balanced Budget Amendment Debate', Federal Reserve Bank of Chicago, mimeo.
- Mills, P. and A. Quinet (2002), 'How to Allow the Automatic Stabilisers to Play Fully? A Policy-Maker's Guide for EMU Countries', in Buti, von Hagen and Martinez-Mongay (2002): 115-29.
- Musgrave, R.A. (1939), 'The Nature of Budgetary Balance and the Case for a Capital Budget', *American Economic Review*, 29: 260-271.
- Oxley, H. and J.P. Martin (1991), 'Controlling Government Spending and Deficits: Trends in the 80s and Prospects for the 90s', *OECD Economic Studies*, 17: 145-189.

- Pench, L.R. (forthcoming), 'Comment on Buiters and Grafe', in Buti (forthcoming).
- Pigou, A.C. (1929), *A Study in Public Finance*, 2nd revised edition, London, Macmillan.
- Pisani-Ferry, J. (2002), 'Fiscal Discipline and Policy Coordination in the Eurozone: Assessment and Proposals', paper prepared for the Group of Economic Analysis of the European Commission, April.
- Poterba, J.M. (1995), 'Capital Budgets, Borrowing Rules and State Capital Spending', *Journal of Public Economics*, 56: 165-187.
- Premchand, A. (1983), *Government Budgeting and Expenditure Controls: Theory and Practice*, IMF, Washington.
- Razin, A. and E. Sadka (2002), 'The Stability and Growth Pact as an Impediment to Privatizing Social Security', *CEPR Discussion Paper*, 3621.
- Roubini, N. and J.D. Sachs (1989), 'Political and Economic Determinants of Budget Deficits in the Industrial Democracies', *European Economic Review*, 33: 903-38.
- Stark, J. (2001), 'Genesis of a Pact', in Brunila, Buti and Franco (2001): 77-105.
- Strauch, R. and J. von Hagen (eds.) (2000), *Institutions, Politics and Fiscal Policy*, Dordrecht, Kluwer Academic Publishers.
- van Ewijk, C., (1997), 'Infrastructure, Intergenerational Conflict and the Golden Rule of Finance', *De Economist*, 145, 3: 447-460.
- Volkerink, B. and J. de Haan (2001), 'Fragmented Government Effects on Fiscal Policy: New Evidence', *Public Choice*, 109: 221-242.
- von Hagen, J. (2002), 'More Growth for Stability – Reflections on Fiscal Policy in Euroland', *ZEI Policy Paper*, June.
- von Hagen, J. and I. Harden (1994), 'National Budget Processes and Fiscal Performance', *European Economy - Reports and Studies*, 3: 311-418.
- Wendorff, K. (2001), 'The Discussion of a National Stability Pact in Germany', in Banca d'Italia (2001): 677-712.
- Wren-Lewis, S. (2000), 'The Limits to Discretionary Fiscal Stabilisation Policy', *Oxford Review of Economic Policy*, 16: 92-105.
- (forthcoming), 'Fiscal Policy, Inflation and Stabilisation in EMU', in Buti (forthcoming).
- Wyplosz C. (2002), 'Fiscal Policy: Rules or Institutions?', paper prepared for the Group of Economic Analysis of the European Commission, April.