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Maastricht's Fiscal Rules at Ten: An Assessment[(*)]

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Abstract

The Maastricht Treaty is ten year old. Its fiscal rules played a key role in kick starting and sustaining the budgetary retrenchment efforts in European Union countries in the run up to EMU. The experience of the Maastricht-induced fiscal consolidation shows that the political economy dimension of the rules is key for their success. It remains to be seen whether the Stability and Growth Pact, which complements the Treaty, aims at locking EMU members into a fiscal discipline commitment while allowing for flexibility to cushion cyclical fluctuations. In order to succeed in this undertaking, EU governments and institutions have to bank on the political economy "drive" which made Maastricht a success while tackling a number of open issues in the implementation of the Pact.

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

JEL classification: E61, H3, H6, H7

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EMU's Fiscal Rules Ten Years On : An Assessment

1. Introduction

The Maastricht Treaty is ten years old. It was negotiated in 1990-91 and signed on 7 February 1992. One of the most relevant and best known provisions of the Treaty are the numerical criteria on budget deficit and debt for joining the euro area. These 3%-60% targets were complemented in 1997 by the Stability and Growth Pact (SGP) which aims at making budgetary prudence a permanent feature of the new currency region.

The rationale of European Union (EU)'s fiscal rules can be found in the fiscal policy failures in Europe during the 1970s and 1980s (Buti, 2001): high and persistent budget deficits feeding a rising stock of public debt; a tendency to run a pro-cyclical policy which, instead of smoothing the business cycle, has contributed to accentuate its swings; and finally, a high share of public sector in the economy going hand in hand with a rising tax burden which hampered efficiency and job creation.

In the run up to EMU, the Maastricht-*cum*-SGP framework has been widely debated. Some, especially in the academic community, have pointed to its excessive rigidity: as euro area members lose national monetary independence, it may hamper cyclical stabilisation. On the opposite side of the spectrum, others have pointed to the weakness of sanctions in the event of budgetary misbehaviour which may eventually undermine fiscal discipline and bring Europe back to its pre-Maastricht years.

While EMU is still in its infancy and some of its institutional features are not yet fully consolidated, a number of lessons can nonetheless be drawn on the design and implementation of its budgetary rules. The aim of this paper is to review EMU's fiscal policy framework with a view to identifying its strengths and weaknesses.

The paper is organised as follows. After a brief overview on the debate on fiscal rules, section 2 focuses on the rules enshrined in the Maastricht Treaty. Section 3 assesses the budgetary consolidation in Europe during the 1990s in terms of both size and composition in order to ascertain the success of Maastricht convergence process. The following section reviews the main features of the SGP, by focussing on its preventive and dissuasive aspects. The economics of national fiscal policy under the Treaty and the SGP is analysed in section 5 by means of a simple model of an optimising government subject to a deficit constraint. Section 6 attempts to identify the key determinants of the Maastricht "success" and assesses the strengths and weaknesses of the SGP. The final section concludes.

2. Maastricht's fiscal rules

2.1 *Why fiscal rules in EMU?*

EMU was built on strong macroeconomic stability requirements. The Treaty of Maastricht contains a clear mandate for an independent monetary authority - the European Central Bank (ECB) – to preserve price stability. It also lays out specific rules ensuring budgetary prudence as a condition to join the euro-area.

In principle, fiscal rules can be justified either to internalise spillovers or by national interest. Both arguments played a role in the design of EMU's budgetary architecture.

The spillovers argument is particularly relevant in a currency area formed of independent countries. Spillovers occur either directly between fiscal authorities or indirectly via the impact of national fiscal policies on the single monetary authority.[1] The perception of a lower steepness of the interest rates schedule in EMU may lead to an overly expansionary fiscal policy and an excessive accumulation of public debt. While the commitment of the central bank to price stability is crucial in preventing such outcome, such commitment is itself a function of budgetary behaviour. The clearest (and somewhat extreme) example of such relationship is given by the so-called Fiscal Theory of the Price Level, which concludes that if the government solvency is not guaranteed then monetary authorities will not be able to control the price level. Hence, fiscal rules are needed to protect the "functional" independence of the central bank.

Insulating the newly-created central bank from possible pressures of EMU's undisciplined members was a particular concern of traditionally fiscally prudent countries, especially Germany. The EMU framework was seen as a screening device to ensure that only countries with a sufficiently good track-record of fiscal discipline could enter EMU.

Rules justified by national interest are intended to tie governments' hands in a binding supra-national agreement. In such a case, budgetary rules help to counter the factors which have determined fiscal profligacy and resulted in a deficit bias in the domestic political game. This external constraint has been useful in the run-up to EMU. In spite of the favourable period of high growth enjoyed during second half of the eighties, several EU member states were in the early nineties still confronted with serious fiscal imbalances. Given the relentless increase in the stock of debt, the need to regain sustainable fiscal positions was increasingly recognised even in countries traditionally characterised by weak budgetary discipline. The argument of having to make painful budgetary retrenchments for the "sake of Europe" was used to win support of reluctant public opinions (McKinnon, 1997, Buti and Sapir, 1998).

[1] For a review of the literature on the rationale for fiscal rules and interplay between monetary and fiscal authorities in a monetary union, see Beetsma (2001), Buti, Roeger and in't Veld (2001), Canzoneri and Diba (2001), and Dixit (2000).

In order to achieve and sustain fiscal prudence, two kinds of fiscal rules can be envisaged: [2]

a) numerical targets, i.e. a constraint on domestic fiscal policy in terms of an indicator of the overall fiscal performance (spending, borrowing, debt);

b) procedural reforms of budgetary institutions conducive to a responsible fiscal behaviour.

Numerical targets impose a permanent constraint on budgetary policy by establishing a requirement to meet specific targets or by imposing upper ceiling on given budgetary variables. Their severity depends on the degree of coverage of the government sector, on the budgetary indicator chosen, and on the threshold being targeted. Rigid balanced-budget rules covering both the current and capital balances of general government are an example of highly binding rules, while contingent rules, allowing for tax-smoothing or with escape clauses, are less stringent. The downside of very tight rules is their lack of flexibility in the face of changing economic circumstances.

Procedural reforms impose changes on the procedures according to which government budgets are presented, adopted and executed. "Hierarchical" procedures are more conducive to fiscal discipline than "collegial" procedures. At the national level, hierarchical rules attribute strong power to the treasury minister 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 a supra-national body to assess and sanction the budgetary behaviour of national governments.

Numerical and procedural rules have both proven effective to achieve and sustain fiscal discipline. Eichengreen (1993) finds that the statutory and constitutional deficit restrictions in US states exert a significant restraining influence on the budgetary behaviour of state governments, and that the more stringent the restrictions the more conducive they are towards the targeted position of a balanced budget. Looking at European experience, Von Hagen (1992) and von Hagen and Harden (1994) also provide empirical evidence which suggests that hierarchical rules helped to avoid excessive government spending and deficits.[3]

A drawback of numerical targets is the incentives they introduce for one-off or accounting measures in an attempt to satisfy the criteria at any cost. This entails a loss of

[2] For a discussion of the main characteristics as well as the advantages and disadvantages of numerical targets and procedural rules, see, for example, Alesina and Perotti (1996a and 1996b) Buti and Sapir (1998) and Corsetti and Roubini (1992).

[3] The lower government deficits which follow from the imposition of numerical budget targets in US states are mainly obtained in the short run via lower levels of government spending, and not via increased taxation (Bayoumi and Eichengreen, 1995; Poterba, 1996). Over longer time horizons, however, both taxes and spending tend to adjust.

information about the government's true budgetary situation and as a result negatively affects the credibility of the government's commitment to fiscal discipline. Empirical evidence for US states shows, however, that even though accounting devices make up a non-negligible part of the fiscal adjustment to numerical targets in the short run, they do not appear to be the primary source of deficit reduction in the longer run (Poterba, 1996). To prevent their circumvention and in order to reduce monitoring problems, these targets and, more broadly, the overall accounting framework, need to be simple and transparent.

The choice between numerical and procedural rules depends on several factors. Von Hagen and Harden (1994) find a clear correlation between the size of a country and the nature of its commitment to fiscal discipline: the larger EU member states, such as Germany and France, which were relatively successful in maintaining fiscal discipline during the eighties relied on procedural rules, while the smaller countries opted for numerical targets.[4]

While numerical targets and procedural reforms are often seen as alternatives options to guarantee budgetary prudence, they are not mutually exclusive in practice, and are frequently implemented in parallel. As we will see below, in the case in EMU, while numerical targets had a clear primacy, procedural rules were also called upon to ensure compliance with the budget constraints. An assessment of the characteristics of EMU's fiscal rules against ideal rules standards is provided in section 6.

2.2 *Maastricht's rules on budget deficit and debt*

The Treaty (Article 121) requires a high degree of sustainable convergence for admitting a Member State to monetary union. Compliance with such requirement is assessed by looking at the degree of price stability; the sustainability of the government financial position; the fluctuations in the exchange rate; and the durability of convergence reflected in the convergence of long-term interest rates.[5]

More specifically, concerning budgetary issues, the Treaty states that, once part of the monetary union, "Member States shall avoid excessive government deficits" (Article 104). Compliance with budgetary discipline is assessed on the basis of two criteria. First, whether the government deficit is below the reference value of 3% of GDP, or, if not, whether "the excess over the reference value is only exceptional and temporary and the

[4] According to these authors, in view of their more complex administration and the heterogeneity of interests, the larger countries apparently need more flexible and discretionary rules, while the smaller countries find it easier to unite behind a single budgetary target. Thus, the main determining factor appears to be more the state organisation and institutional complexity of a country rather than simply its size.

[5] It should be recalled here that these convergence criteria are still to be applied as a condition to join the euro-area to the three countries currently members of the Union but not having adopted the euro (Denmark, Sweden, the United Kingdom). They will also apply to accession countries.

ratio remains close to the reference value.". As to the government debt, the second criterion, it should not exceed the reference value of 60% of GDP or, in case of a higher debt ratio, it should be on a decreasing trend and approach the reference value at a satisfactory pace. In addition to setting specific numerical ceilings for government deficit and debt levels, the Treaty rules out monetary financing and privileged access to credit by public authorities.

In assessing the existence of an excessive deficit, the European Commission, which is entrusted with the task of budgetary surveillance in conjunction with the Council, should also take into account whether the government deficit exceeds public investment, and consider all other relevant factors including the medium-term economic and budgetary position of the country.

When a country is subject to a Council decision on the existence of an excessive deficit, a procedure aimed at correcting this situation is initiated. This procedure includes several steps designed to increase pressure on the Member State to take effective measures to curb the deficit. If such corrective measures are not implemented, sanctions may be applied to countries participating in the euro-area. Amongst the sanctions foreseen by the Treaty are non-interest bearing deposits and fines. The Treaty, however, leaves a certain discretion to the Council on the application and the content of these sanctions and does not set time limits on the various steps of the procedure.

Numerical targets have been complemented by a common accounting framework (ESA-95). By increasing the transparency and comparability of budget figures, accounting rules restrain the temptation of policy makers to obtain a strategic advantage by creating confusion concerning the government's underlying budgetary situation (Alesina and Perotti, 1996a and 1996b). They also increase the feasibility of expenditure control (Tanzi, 1995).

While the importance of effective national budgetary procedures is recognised in the Treaty, their design and application is left to the realm of subsidiarity. Article 3 of Protocol n° 5 on the Excessive Deficit Procedure specifies that "Member States shall ensure that national procedures in the budgetary area enable them to meet their obligations in this area deriving from this Treaty". In a number of countries, the combination of a harmonised accounting framework with the need to meet the numerical targets has led to significant reforms in domestic procedures conducive to budgetary discipline.[6]

[6] See European Commission (2001a), Fischer (2001) and Fischer and Giudice (2001).

3. Have the Maastricht rules been effective?

As referred to above, international experience shows that both numerical and procedural rules can be effective in curbing governments' bias towards deficits. Furthermore, we have argued that the sharp dichotomy between the two types of rules often found in the literature is somewhat misleading in the case of the Maastricht Treaty.

The bottom line of this debate, however, is the effectiveness of the Maastricht process in achieving and sustaining fiscal rectitude. The main questions therefore are: Have the rules introduced by the Maastricht Treaty helped consolidate public finances? Have they allowed EU countries to escape from the trap of unsustainable deficits and growing debt in which they seemed to be stuck in the past two decades? Does the current budgetary consolidation represent a genuine regime-shift in running budgetary policy?

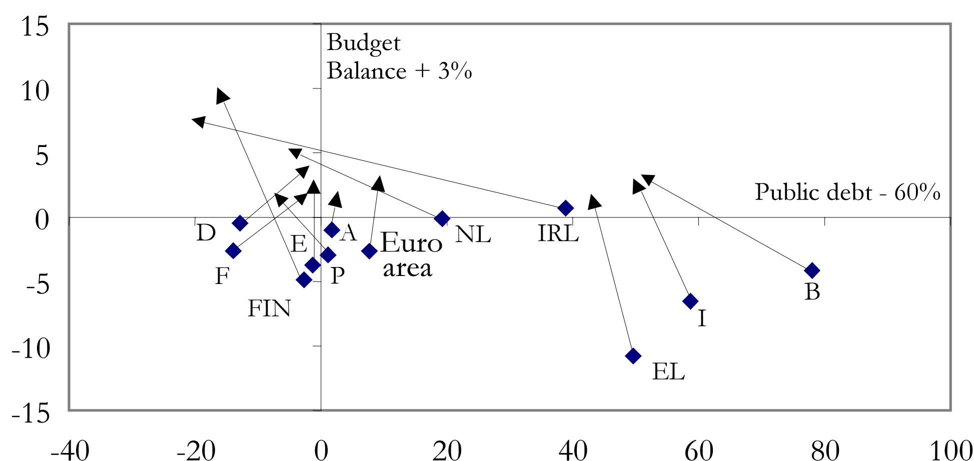
3.1 *Size of the budgetary retrenchment*

Undeniably, the imposition of the Maastricht budgetary targets set off a genuine consolidation process in euro area member states. As can be seen in Graph 1, in practically all member states budget deficits declined substantially since 1993, the year which marked the entry into force of the Maastricht Treaty and in which the euro area registered the historically high deficit ratio of 5.5% of GDP.[7] However, in some countries, public debt started to decrease only in the second half of the period - when primary surpluses became high enough to compensate the snow-ball effect - and in Germany and France it actually increased though starting from a level below the 60% of GDP reference value.

Faced with the need of putting public finances on a sounder footing and in some cases to come to grips with a looming unsustainability problem, policy-makers enacted a strong adjustment as of 1993. Under pressure from the calendar for joining EMU, fiscal consolidation continued through 1996 and 1997 aided by lower interest rates thanks to reduced risk premia. Between 1993 and 1997, the actual deficit fell by 3.5 percentage points in the euro area, and was brought back below the 3% of GDP threshold in all Member States, except Greece which did so in 1999. Since then, deficits have continued to fall towards balance at the end of the decade. However, the pace of consolidation has slowed down considerably and structural balances stopped to improve as of 1999 in several Member States. Public debt also declined in most countries, but in some of them very slowly.

[7] In interpreting the graph, it has to be considered that, while for the majority of EU countries the chosen periods correspond to the start of large-scale budgetary consolidation, a number of countries (for example, Ireland) had carried out the bulk of the budgetary retrenchment during previous years, thereby enjoying the fruit of their efforts - in terms of a declining debt ratio - during the subsequent period. Therefore, in these countries, only relatively minor adjustments were required in the nineties. See European Commission (2000).

Graph 1 Public finance convergence in the euro area: 1993-2000



Note: Countries in the top-left quadrant have a budget deficit below 3% of GDP and a public debt ratio below 60% of GDP. Belgium, Italy and Greece respect the debt criterion because their debt ratio, while being above the reference value, is considered to decrease at a sufficient speed.

Source: Commission Services

At national level, some spectacular turnarounds in fiscal performance occurred. Italy and Greece managed to reduce their budget deficits by 7 and 10 percentage points of GDP respectively between 1993 and 2000. Finland quickly regained control of its public finances after the recession of the early 1990s. In contrast, countries such as Germany and France, traditional bastions of fiscal prudence, have struggled to keep control of budget deficits and debt which were fuelled, respectively, by the costs of unification and subdued economic performance in the first part of the period.

In a recent study, von Hagen, Hughes Hallet and Strauch (2001) examine whether this consolidation was resulting from a specific Maastricht effect, i.e. whether the convergence process created its own political dynamic helping the governments achieve fiscal adjustments. Analysing the probabilities of starting fiscal consolidation, the authors find that most of the consolidations that began before 1995 in the euro area are not predicted by a model of budgetary behaviour estimated over past data. This suggests that the Maastricht process did create some political pressure of its own on the governments to undertake fiscal consolidations, and this pressure was effective mainly in the first half of the 1990s.

The sheer size of the budgetary adjustment may have induced favourable non-Keynesian effects in some countries, thereby helping to sustain the retrenchment efforts. As argued first by Giavazzi and Pagano (1990), there is a non-linearity between budgetary adjustment and economic activity: while in the event of small cuts traditional Keynesian effects dominate, confidence and crowding-in effects may help in offsetting the direct reduction in demand in response to larger adjustment packages. [8]

[8] European Commission (1999) finds evidence of non-Keynesian effects in the case of Italy in the 1990's consolidation.

The fiscal retrenchment of the 1990s cannot be assessed without considering the broader picture of nominal convergence. This requires bringing monetary policy into the picture. As reported by the European Commission (2000), while basically cautious because of the need to bring down inflation, monetary policy on average played a supportive role in the public finance consolidation of the 1990s.[9] Monetary policy seems to have facilitated fiscal adjustment, although this was not true for all countries. In particular, this may not have been the case in countries combining strong consolidation needs on the fiscal side and high inflation, such as Italy (European Commission, 1999).

3.2 *Composition*

The composition of budgetary consolidation appears to play an important role in determining its success. There is increasing evidence in the literature that deficit reductions that take place through expenditure cuts, rather than tax increases, have a much higher probability of reducing the stock of debt and permanently reduce the deficit.[10]

In order to capture in a synthetic manner the composition of the budgetary adjustment over the period 1993-2000, Graph 2 decomposes the discretionary policy changes for individual EU countries over the period 1993-2000 into changes in total revenue and in primary expenditure. The diagonal from top right to bottom left indicates the direction of the budgetary adjustment: the area above it marks a deterioration in the cyclically-adjusted primary balance, while the area indicates a structural consolidation. The diagonal from top left to bottom right marks the composition of the adjustment: the combinations where revenue changes or expenditure changes dominate are shown in the figure.

As shown in the graph, practically all countries lie below the top right - bottom left diagonal meaning that their cyclically-adjusted primary balance improved during the period. As to composition, only Portugal and Greece – the two countries starting from a low level of total revenue - pursued a revenue-based retrenchment and several countries combined discretionary cuts in spending with a reduction in tax revenue, thus reducing the overall size of the public sector.

In sum, one may conclude that the fiscal adjustment appeared to be of good quality. This conclusion is strengthened by the observation that, during the consolidation process, the

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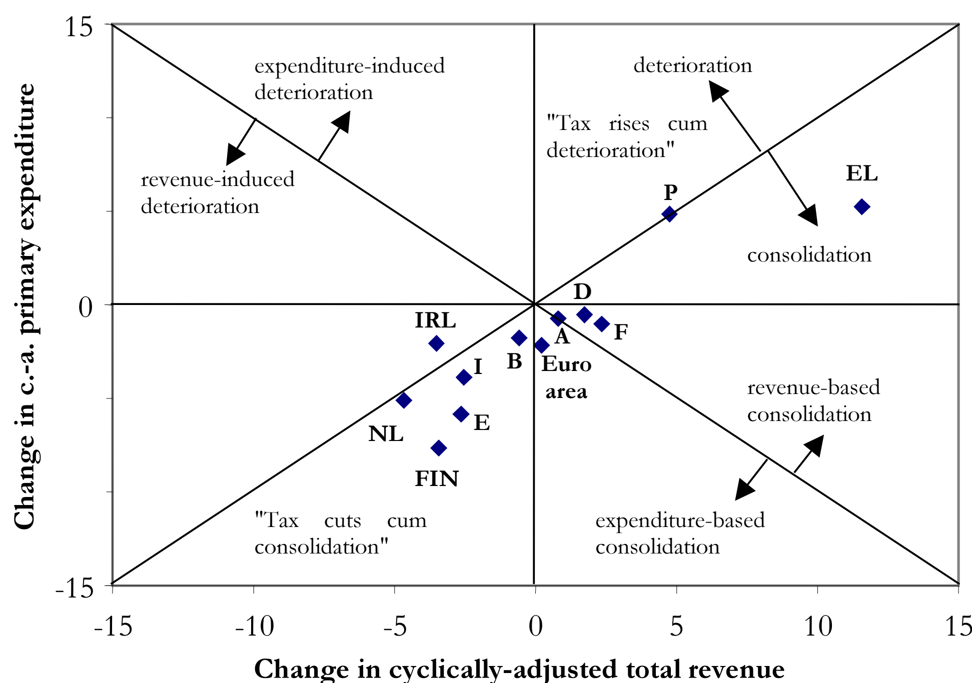
[9] Evidence of a coordinated behaviour of monetary and fiscal authorities is also found in other studies. Wyplosz (1999) finds that the policy-mix in EU countries since 1980 has tended to be of the ‘substitutability’ type: fiscal relaxation is accompanied by monetary tightening and vice-versa. These results correspond closely to those obtained by Mélitz (1997 and 2002).

[10] See, i.a. Alesina and Perotti (1996a and 1996b), Perotti (1996), Perotti (1999).

composition of the adjustment tended to improve as in a number of countries where initially the adjustment was revenue-based, it later became expenditure-based.[11]

Graph 2 Composition of the fiscal adjustment, 1993-2000, in points of GDP.



Source: Commission services

4. Beyond Maastricht: the Stability and Growth Pact

While the Maastricht Treaty establishes the entry conditions for Member States to join the single currency, the SGP aims at making budgetary discipline a permanent feature of EMU. After the initial proposal by the German Government in November 1995, negotiations on the Pact were conducted during 1996 and the first half of 1997. The most difficult political issues were settled at the European Council in Dublin in December 1996 and the final package was adopted by the European Council in Amsterdam in June 1997.[12]

The SGP consists of a preventive arm, Regulation (EC) No 1466/97, which aims to strengthen the surveillance of budgetary positions and the surveillance and co-ordination of economic policies, and a dissuasive arm, Regulation (EC) No 1467/97, which aims to

[11] European Commission (2000) suggest that a sort of switching strategy occurred in these countries. Von Hagen et al. (2001) conclude that this was not a deliberate strategy as countries were forced to move to an expenditure-based retrenchment by the failure to reduce substantially the fiscal imbalances in the early phase of revenue-based retrenchment.

[12] For an historical perspective in the negotiations leading to the SGP, see Costello (2001) and Stark (2001).

accelerate and clarify the excessive deficit procedure of the Treaty. It also includes a Resolution of the European Council of 17 June 1997, which issues firm political guidelines in order to implement the SGP in a strict and timely manner, spelling out the responsibilities of the institutional actors involved (the Council, the Commission and the Member States).[13]

4.1 *Prevention*

While the Treaty strongly emphasised the punishment in case of failure to respect the criteria the Pact elaborated mechanisms to prevent the occurrence of excessive deficits in order to avoid having to recur to such sanctions.

The most important innovation of the Pact is that it states that the medium-term budgetary position must be of "close to balance or in surplus": this would allow the full operation of automatic stabilisers in recessions without exceeding the 3% of GDP reference value for the deficit. This is an important novelty because it clearly establishes the 3% of GDP deficit not as a target, but as a ceiling.[14]

To facilitate the monitoring of national budgetary developments and make possible an early identification and assessment of risks, Member States having adopted the single currency submit "stability programmes" while Member States not having adopted the single currency submit "convergence programmes". Programmes, which are made public, include the indication of the medium-term objective for the budgetary balance, the adjustment path and the budgetary and other economic policy measures to attain it. This information covers the current and preceding year and at least the following three years. In the latest updates, long-term sustainability issues are also covered. The Council is committed to carry out the examination and may deliver an opinion on the programmes and their updates - on a recommendation from the Commission - within at most two months of their submission.

These programmes represent the key element of the enhanced surveillance procedure introduced with the Pact (Fischer and Giudice, 2001). They provide a transparent frame of reference for fiscal monitoring at EU level - in the peer review setting of the ECOFIN Council – and as such allow for a consistent cross-country assessment of budgetary developments and policies. In this context, particular attention is given to possible "significant divergences" of budgetary positions from the medium term budgetary objectives. Should significant slippage from the targets set in the programmes be

[13] For a detailed account of the legal aspects of the SGP, see Cabral (2001). For a thorough review of the debate on the SGP, see various chapters in Brunila, Buti and Franco (2001).

[14] Although the Treaty is clear in setting the 3% of GDP deficit as an upper threshold, before the Pact it was considered by most commentators as a target. Such interpretation is consistent with the observation that such value corresponded to the average level of public investment over the previous two decades in the EU. It underlined also the internal consistency between the deficit and the debt reference values under the assumption of a 5% rate of growth of nominal GDP. See Gros and Thygesen (1998).

identified, the Council can issue an "early warning" recommendation under Article 99(4) of the Treaty urging the Member State concerned to take adjustment measures. When monitoring the programmes, the Council should take into account the relevant cyclical and structural characteristics of the economy of each Member State.

4.2 *Dissuasion*

Regulation 1467/97 sets out the provisions to speed up and clarify the excessive deficit procedure of the Treaty, having as its objective to deter excessive general government deficits and, if they occur, to further their prompt correction. Above all, it specifies when a deficit above 3% of GDP is not considered excessive and the extent of the sanctions in case of persistent excessive deficits.

As recalled above, according to the Treaty, a deficit is excessive if it is higher than the reference value of 3% of GDP "unless the excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value." The SGP clarifies the concepts of exceptional and temporary situations. The *exceptionality* clause can be called upon when the excess of the deficit over the reference value results from:

- An unusual event outside the control of the Member State in question and which has a major impact on the financial position of the general government.
- A severe economic downturn. As a rule, a downturn is considered exceptional only if there is an annual fall of real GDP of at least 2%. An annual fall of GDP of less than 2% could nevertheless be considered exceptional in the light of further supporting evidence, such as the abruptness of the downturn or the accumulated loss of output relative to past trends. In its Resolution on the Pact, the European Council however agreed that, in any event, in evaluating whether the economic downturn is severe, the Member States will, as a rule, take an annual fall in real GDP of at least 0.75% as a reference point and that Member States committed themselves not to invoke the benefit of this clause unless they are in severe recession.

An excess of the deficit over 3% of GDP is considered *temporary* if budgetary forecasts as provided by the Commission indicate that the deficit will fall below the reference value following the end of the unusual event or the severe economic downturn. This means that this clause applies only insofar as the "exceptional" conditions mentioned above persist.

The *closeness* to the 3% of GDP threshold has not been defined in the SGP, presumably, the reason being that no Member State wanted to pre-judge at the time the level of the deficit which would be acceptable for qualifying for euro area membership.

Regulation 1467/97 sets up also a tight timetable for the Excessive Deficit Procedure so as to arrive at a speedy decision on the existence of an excessive deficit. Finally, the SGP

spells out the type and scale of sanctions in the event of persistent excessive deficit of euro-area members.[15] So far the implementation of the Pact has never arrived at the sanctions stage.

5. Combining discipline and flexibility: a simple model of national fiscal policy under the SGP

The SGP aims at maintaining fiscal discipline while creating the necessary room for manoeuvre to allow fiscal policy to pursue cyclical stabilisation – a role that has become more prominent as countries in EMU have lost national monetary independence. Indeed, some have interpreted the Pact as a commitment technology to free national fiscal policies from the burden of high deficits and debt which hampered their use for stabilisation purposes (Buti, Franco and Ongena, 1998).

We pointed out in the previous section that a novelty of the SGP is the introduction of an objective of medium-term budgetary position of "close-to-balance or in surplus" which clearly establishes the 3% of GDP deficit not as a target but as a hard ceiling. In order to illustrate how fiscal policy can achieve these goals under the Pact, this section lays out a simple model of an economy where output is subject to transitory shocks and can deviate temporarily from a fixed potential level, and the government cares about both output and deficit stabilisation.[16]

Aggregate demand and supply respectively are written as follows:

(1) $$y = \phi_1 d - \phi_2 (i - \pi^e) + \varepsilon$$

(2) $$\pi = \pi^e + \omega y$$

where y is output, d is the budget deficit (% of GDP), i is the interest rate, π is inflation, π^e is expected inflation and ε is a transitory demand shock. The suffix "e" indicates expected value. All variables are expressed as changes from baseline.

The budget deficit is split into a structural component, d_s, and a cyclical component that depends on y and a parameter α capturing the automatic stabilisers:

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[15] In the first year of application of the sanctions, the country in question is required to make a non-interest bearing deposit composed of a fixed component equal to 0.2% of GDP and a variable component equal to one tenth of the difference between the deficit and the 3% of GDP reference value. A ceiling of 0.5% of GDP is set. The fixed component aims at providing an incentive not to incur an excessive deficit, while the variable component represents an incentive to limit the excess over the 3% of GDP threshold. In each subsequent year, until the excessive deficit decision is abrogated, only the variable component will be applied. As a rule, a deposit is to be converted into a fine after two years if the excessive deficit persists.

[16] For the sake of simplicity, foreign trade is disregarded. We also ignore supply shocks. The model is a modified version of that of by Buti, Roeger and in't Veld (2001) who analyse a more complex set of interactions between demand and supply, and monetary and fiscal behaviour.

(3) $$d = d_s - \alpha y$$

We replace (3) in (1) to find:

(4) $$y = \frac{1}{1+\alpha\phi_1}\left[\phi_1 d_s - \phi_2 (i - \pi^e) + \varepsilon\right]$$

The next step is to describe the policy behaviour. Since we are interested in fiscal policy, we choose the simplest possible behavioural rule for the central bank. It is assumed that monetary authorities set the interest rate so as to ensure price stability in the medium-run, i.e. in the absence of shocks. By setting $\varepsilon = 0$, under $\pi^e = 0$, a level of output equal to potential (that is $y = 0$ in equation 2) is consistent with price stability. Hence, in equilibrium, the value of the interest rate is simply:

(5) $$i = \frac{\phi_1}{\phi_2} d_s$$

This implies that in the medium-run monetary policy will offset any effect of fiscal policy on output and prices via an appropriate level of the interest rate, but, in the short run, the central bank does not react to shocks. This may be rationalised by positing high interest rate smoothing by the central bank.

Our assumption on fiscal policy attempts to proxy the basic features of EMU's budgetary constraints on the behaviour of individual countries. It is assumed that the government cares about deficit as well as output stabilisation.[17] In order to examine the largest possible spectrum of policy options, we write a fairly general expression of the loss function of fiscal authorities:

(6) $$L = \frac{1}{2}\left[\bar{d}^2 + \lambda (y - y^*)^2\right]$$

where $\bar{d} = d_s - \eta \alpha y$ is the weighted average of structural and nominal deficit with the coefficient η varying between 0 (fiscal authorities focus on the structural deficit) and 1 (fiscal authorities care about nominal deficits). λ captures the relative preference for deficit and output stabilisation. If the government wants to stabilise output around its potential level, then $y^* = 0$. However, if for electoral or other political economy reasons, it attempts to push output beyond its potential, then $y^* > 0$.

This expression of the fiscal authorities' loss function allows us to rationalise, in a very simple setting, the current debate on fiscal behaviour in EMU. First of all, there is still a discussion in Europe of whether governments should be concerned with actual or structural (that is cyclically-adjusted) budget balances. The SGP states that the budgets

[17] In this simple framework, since we disregard supply shocks, stabilising output is tantamount to stabilising inflation. Hence adding an inflation term in the loss function would not change the results.

should be close to balance or in surplus "over the cycle". This would imply considering the medium term budgetary targets in structural terms (hence in our model $\eta = 0$). However, given the legacy of the convergence process where it was necessary to satisfy the deficit criterion in actual terms, there may still be a tendency to focus on actual balances. This may be even more the case in the early years of EMU when the deficit may still be relatively close to the 3% of GDP ceiling. If so, η may be set at or close to 1.

Second, one can imagine different scenarios on the government's preference for output stabilisation. In what can be dubbed the "true spirit" of the SGP, countries keep a structural budget position at around close to balance and simply let automatic stabilisers work freely.[18] In our model, this boils down to setting $\eta = \lambda = 0$. The economic philosophy behind this prescription is tax-smoothing (Barro, 1979). It also reflects a mistrust of fiscal fine tuning, a view that is largely consensual in the economic literature (European Commission, 2001). Alternatively, one can envisage a more active government which, having lost national monetary independence, may feel that the shock-absorption ensured by automatic stabilisers is not sufficient. Then the weight of output in the loss function, λ, can be positive. Finally, as argued by Buti and Sapir (2002a), the SGP, by widening the budgetary room for manoeuvre, may also re-create the incentives for "politically-motivated" fiscal policy. In this case, we would have $\lambda > 0$ and $y^* > 0$.

By minimising (6) with respect to d_s after substituting from previous equations, we find:[19]

$$d_s = \frac{\lambda\phi_1}{1+\alpha\phi_1(1-\eta)} y^* + \frac{\eta\alpha[1+\alpha\phi_1(1-\eta)]-\lambda\phi_1}{[1+\alpha\phi_1(1-\eta)]^2+\lambda\phi_1^2}\varepsilon \quad (7)$$

Interestingly, as already shown in Buti, Roeger and in't Veld (2001), if the government attempts to push output beyond potential (i.e. $y^* > 0$), it ends up with a deficit bias in equilibrium (i.e. when $\varepsilon = 0$). Fiscal authorities stimulate the economy and will do so until a further increase in the deficit away from the preferred level will be too costly. However, in equilibrium they will always be frustrated as the output will be equal to potential. In addition, this will imply a sub-optimal policy-mix with higher interest rates and deficit levels.[20]

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[18] Analyses show that the working of automatic stabilisers provide a cushion of some 20 to 30% in large euro-area countries in the event of demand shocks (European Commission, 2001).

[19] We assume that the operational variable of fiscal policy is the interest-inclusive structural deficit. Given our monetary rule (that keeps interest rates unchanged in the short run) choosing the primary balance would have not changed the qualitative conclusions.

[20] This is the equivalent of the Barro-Gordon inflation bias in monetary policy (Barro and Gordon, 1983). In this model, the only way to have supply higher than potential is to generate an inflation surprise. While this is engineered by the central bank in the Barro-Gordon model, it is fiscal policy which does that in our model. However, while in Barro-Gordon, it is inflation expectations which adjust upwards in equilibrium, in our model, economic agents anticipate the reaction of the central bank, which will raise interest rates to bring inflation back under control. Hence we do not end up with an inflation bias, but with both higher deficits and interest rates, a sub-optimal combination which in the long run will affect negatively the rate of potential growth.

As expected, the larger the preference for output stabilisation (that is, the larger λ), the higher the deficit bias. On the contrary, larger automatic stabilisers imply a lower inflation bias. Less evidently, a larger weight given to the stabilisation of actual deficit compared to the structural deficit (which implies a larger η), the larger the deficit bias. The reason for this result is that a government that cares mainly about the stabilisation of actual deficit is helped by the feedback effect arising from the automatic stabilisers which, following a fiscal stimulus, maintain the deficit closer to target. This effect provides a further incentive for the government to keep stimulating the economy and hence results, in equilibrium, into a larger deficit bias.

The degree of "policy activism" of the government, which is captured by the coefficient of ε in (7), is influenced by the preference for output stabilisation, λ. As expected, under $\eta = 0$ and λ=0, there is a counter-cyclical reaction to shocks which is larger the higher the preference for output stabilisation, λ. By contrast, $\eta > 0$ combined with a relatively low λ, gives rise to a pro-cyclical discretionary reaction to shocks.[21]

In order to obtain the degree of output stabilisation, we replace (7) into (4) and, taking into account (5) we obtain:

$$(8) \qquad y = \frac{1 + \alpha\phi_1(1-\eta)}{[1 + \alpha\phi_1(1-\eta)]^2 + \lambda\phi_1^2}\varepsilon$$

Under $\lambda = 0$, we find maximum stabilisation if $\eta = 0$, that is when the government keeps an unchanged structural balance and simply lets automatic stabilisers play freely. It is easy to show that for reasonable values of λ, the result that the highest stabilisation is attained when $\eta = 0$ is confirmed.[22]

In order to withstand "bad" shocks without exceeding a given deficit ceiling, the government has to select an appropriate baseline structural budget balance. This can be defined as follows:

$$(9) \qquad \hat{d}_s \le \hat{d} - d(\hat{\varepsilon})$$

where $\hat{d}$ is the deficit ceiling and $\hat{\varepsilon}$ is a large, negative shock. Equation (9) indicates that if fiscal authorities set a budgetary objective equal to $\hat{d}_s$ in "normal" times, then, under

[21] Clearly, if $\eta = 1$ and $\lambda = 0$, a pro-cyclical response occurs systematically because the policy-maker which cares about stabilising the actual deficit, always compensates the cyclical effect of the shock. If $\eta = 1$ but $\lambda > 0$ we have a pro-cyclical policy if $\alpha/\varphi_1 > \lambda$. It can be shown that, for most values of λ, this result still holds.

[22] For instance, this holds if output and deficit stabilisation have the same weight in the government preferences (i.e. $\lambda = 1$).

the current structural features of the economy and policy preferences, only for negative shocks larger than $\hat{\varepsilon}$ will the deficit exceed its upper ceiling.[23]

By replacing (7) and (8) in (9), under the assumption of "well behaved" government (i.e. $y^* = 0$), we obtain:

$$(10) \qquad \hat{d}_s \leq \hat{d} + \frac{\{\alpha[1+\alpha\phi_1(1-\eta)](1-\eta)+\lambda\phi_1\}\hat{\varepsilon}}{[1+\alpha\phi_1(1-\eta)]^2+\lambda\phi_1^2}$$

It is easy to show that, under normal values of the parameters, a lower η implies a lower $\hat{d}_s$: since the government pays less attention to the actual balance and is ready to accept larger fluctuations in the deficit, a more ambitions target is required in normal times in order to respect the deficit ceiling during recessions. Also a rise in the preference for output stabilisation, λ, entails larger fluctuations in the actual deficit, thereby entailing a lower $\hat{d}_s$. In other words, EMU countries with a preference for active fiscal management must create a larger safety margin under the deficit.

The impact of a rise in the size of automatic stabilisers α, depends on the value of η. Under $\eta = 0$, as the larger smoothing impact ensured by a higher α leads to a lower change in discretionary policy, the net effect is uncertain. Under $\eta = 1$, since the authorities do not distinguish between discretionary and cyclical changes in the budget, the value of α has no effect on the actual deficit and, hence, on $\hat{d}_s$.

The main results for output and deficit stabilisation in the event are depicted in Graph 3 which illustrates the case of a negative shock.

The upward sloping line illustrates the relationship between budget deficit and output in the demand function. In equilibrium, the system stands at the origin. A negative shock shifts that schedule downwards. If the government keeps the structural deficit unchanged and lets the automatic stabilisers work (which corresponds to $\lambda = \eta = 0$, implying that the loss function is aligned onto the Y axis), the new equilibrium is point A on the Y-axis. As shown in equation (4), the increase in the actual deficit provides a certain degree of cyclical smoothing. The new level of the actual deficit, d^A, depends on α which is the slope of the dotted line going through the origin.

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[23] Under the assumptions $\lambda = \eta = 0$, $\hat{d}_s$ corresponds to the so-called "minimal benchmarks". These are budget balance positions which would allow to accommodate "normal" cyclical fluctuations without breaching the 3% ceiling. They are computed on the basis of the past business cycle experience of EU countries. For detailed explanation and a critical assessment, see European Commission (2000) and Artis and Buti (2000).

Graph 3 *Stabilising output and deficit under different preferences*

If the government has a preference for output stabilisation ($\lambda > 0$ but still $\eta = 0$), it will choose a point like C which implies a larger output stabilisation (with output returning to E) and some deterioration in the structural deficit (now at d_s^C).

If, on the contrary, the government is mainly concerned with the stabilisation of the actual, rather than the structural, deficit, it may try to offset the impact of automatic stabilisers on the actual deficit. Point B in Graph 3 shows the limit case of perfect offsetting: here, the authorities enact a pro-cyclical fiscal tightening which compensates fully the effect of automatic stabilisers (d_s^B is reduced in order to keep d^B unchanged), thereby entailing a fall in output by the full extent of the shock ε (zero smoothing).

Given the simplicity of our analytical framework, these results should obviously not be overstated. Nevertheless, a powerful policy message underpinning the SGP framework emerges from the above analysis: if fiscal authorities want to achieve high output stabilisation while maintaining fiscal discipline, they have to focus on structural rather than actual deficits and avoid using fiscal policy to artificially boost output beyond potential.

6. Maastricht worked. Will the SGP?

We have shown that the Maastricht Treaty was successful in forcing countries to consolidate their public finances and that the SGP complemented the Treaty with new rules to ensure that fiscal discipline be maintained in EMU while creating room for the

work of automatic stabilisers. We argued in the previous section that this is indeed a reachable objective if governments focus on the stabilisation of structural balances. However, while Maastricht has worked in the run up to EMU, the question still subsists of whether the SGP will work too. In order to provide an answer, in this section we first look at how the EMU framework fares with respect to ideal rules standards, then at the political economy underpinning it. We will conclude with a discussion of a number open issues which will need to be tackled to ensure the success of the Pact.

6.1 *Maastricht and SGP: rating against desirable rules standards*

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.[24] In table 1 we provide a subjective judgement of the Maastricht convergence criteria and the SGP against the Kopits-Symansky *desiderata*.

Table 1 EMU's fiscal rules against ideal rules standards

Ideal fiscal rule	*Treaty*	*Treaty + SGP*
1. *Well-defined*	++	+++
2. *Transparent*	++	+++
3. *Simple*	+++	++
4. *Flexibility*	++	++
5. *Adequate relative to final goal*	++	+++
6. *Enforceable*	+	++
7. *Consistent with other policies*	+	++
8. *Underpinned by public finances reforms*	+	++

The first column lists the ideal standards to be met by a fiscal rule and in the second and third column we separate between the Treaty provisions and the "full" EMU rules made of the Treaty requirements and the SGP.

A *well-defined* fiscal rule is paramount to allow effective enforcement. The Treaty criteria is well-defined as to the indicators to be constrained and the institutional coverage. Additionally, the SGP specifies the escape clauses and the type of penalties to be applied in case of persistent excessive deficits. On *transparency*, the Treaty and the SGP obviously use the same accounting conventions, but the institutional arrangements of the SGP (especially its preventive harm) appear superior. Compared to the Treaty, *simplicity* has

[24] See also Kopits (2001).

been reduced by the more developed mechanisms and procedures of the SGP. However, compared to other fiscal rules, those of EMU remain simple, even in the SGP version.[25] As to *flexibility*, while the main rules are unchanged, the SGP includes a tighter specification of the escape clauses, thereby reducing the discretion of the Council. At the same time, by putting more emphasis on medium-term targets and by highlighting the implications of cyclical fluctuations, it reduces the pro-cyclical bias inherent in nominal targets. As to *adequacy* vis-à-vis the final goal – i.e. avoiding excessive deficits, and ensuring an appropriate fiscal policy framework in EMU -, complying with the close-to-balance rule and letting automatic stabilisers work is preferable to a simple deficit ceiling. The specification of the sanctions and the timetable of the Excessive Deficit Procedure are set to improve *enforceability*. The overall framework of the Pact appears also more suitable to ensure *consistency* of policies (e.g. by moving towards the integration of fiscal surveillance and broader economic policy coordination under the Broad Economic Policy Guidelines of article 99). 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.

In sum, the SGP put flesh to the bones of the Treaty, leading to better rules and procedures, although at the cost of somewhat more complexity and lower flexibility. It remains, however, to be seen whether the SGP will prove as successful as Maastricht undoubtedly was. A political economy perspective helps elucidate this issue.

6.2 *Maastricht versus SGP: the political economy of fiscal rules*

As argued in section 3, Maastricht set off a genuine budgetary retrenchment which brought back public finances in the EU from the brink of unsustainability to more manageable conditions. Although the fiscal adjustment cannot be attributed exclusively to the Maastricht rules, the latter undoubtedly played a major role in the fiscal turnaround in the 1990s and they came to be regarded as a binding constraint in the public opinion in many EU countries.

While a full interpretation of the success of Maastricht is beyond the scope of the present paper, a number of key factors which have characterised this process can be identified. In our view, the main ingredients of Maastricht's success were the following:

- *Public visibility*: The objective of meeting the Maastricht convergence criteria became the centrepiece of government strategies in many EU countries. Public visibility was

[25] Actually, erring on the side of simplicity is typical of fiscal rules which are to be applied in a multi-country context and monitored centrally. For instance, as argued by Balassone and Franco (2001b), given the uncertainty on the definition of public investment and the related moral hazard problems, application of the "golden rule" of deficit financing, which may be desirable at the national level, would have been highly problematic in the EU.

greatly facilitated by the simplicity of the 3% of GDP deficit criterion which provided a clear signpost for economic policies regardless of the government political colour, especially in countries which entered the 1990s with very high deficits and looming unsustainability threats. High visibility, together with easy monitoring, was also one of the reasons for preferring numerical targets over national procedural rules.[26]

- *Clear structure of incentives.* Reward and penalty linked with the Maastricht public finance requirements were very clearly laid out. Politically, meeting the convergence criteria would allow budgetary laggards to join the virtuous countries in the new policy regime. Conversely, failing to comply with the Maastricht public finance criteria carried the penalty of exclusion from the euro area. This was considered too hard a political sanction especially for countries traditionally at the forefront of the process of European integration. Market incentives were also crucial, notably because countries with high deficits and debt levels adopting a credible adjustment programme could enjoy - at a less costly and more rapid pace - a reduction of risk-premium in interest rates which would help lower public finance imbalances.

- *Political ownership.* The whole debate on fiscal requirements of EMU reflected Germany's concern with fiscal discipline: the public finance criteria of Maastricht, first, and the SGP, later, clearly bear Germany's fingerprints. The German priority of preserving price stability within overall macroeconomic stability led to the adoption of tight fiscal rules. Strong macroeconomic stability came to be regarded as an essential pre-condition for Germany to accept merging monetary sovereignty into a single currency.

- *Constraining calendar.* The Treaty sets very clear deadlines for moving to the final stage of EMU. Launching the single currency in 1997 required a majority of countries meeting the convergence criteria. In any event, whatever the number of participating countries, a single currency area would be established at the latest in 1999. Once the issue of postponement faded, countries willing to join with the first wave, had no choice but making the required consolidation effort to meet the convergence requirements.

- *Effective monitoring.* The simplicity and the (largely) unambiguous definition of the fiscal requirements – especially that concerning the budget deficit - allowed an effective monitoring on the part of the European Commission which played the role of external agent commonly entrusted with the correct interpretation and implementation of the Treaty criteria.

[26] This marks a difference between the fiscal and the monetary rules of the Treaty, because in the monetary domain, the mandate, institutional organisation and procedures of the European and national central banks are spelled out in detail. It thus appears numerical targets have been preferred in the fiscal domain, while in the monetary domain procedural rules have been imposed (Eichengreen, 1996).

- *Collegial culture*. The process of convergence allowed to build progressively a collegial culture of stability and a confidence climate through personal contact amongst policy-makers and national and EU officials. This new climate facilitated peer pressure between national authorities and enhanced the role and authority of the European institutions.

If our interpretation of the political economy of Maastricht is correct, one may ask how the SGP fares in relation with the above factors: to what extent have the ingredients which determined Maastricht's success been transferred to the SGP?

The elements that come out clearly strengthened in the Pact are the monitoring of budgetary policies and the collegial culture within the multilateral surveillance of economic policies. As to the other factors, some have changed nature and others are clearly less prominent under the SGP. The political ownership of the SGP seems to be shifting towards smaller countries with structural surpluses which, although numerous, have a relatively small weight in the euro area. Relative to a simple deficit ceiling, the close-to-balance rule enjoys lower political visibility. Similarly, and probably more importantly, the structure of incentives has changed with the move to a single currency: the market incentives have been reduced with the convergence of interest rates and the carrot of entry has been eaten while the stick of exclusion has been replaced by the threat of uncertain and delayed pecuniary sanctions.

While the jury is still out on the effectiveness of the Pact in securing fiscal discipline in EMU, the gloomy predictions that the consolidation of the 1990s was simply an opportunistic move to be admitted to the euro club have not materialised. The challenge for the SGP now is to govern fiscal policy in a currency union – necessarily a complex task in a regime of decentralised fiscal responsibility. The outcome will depend on how a number of open issues in the implementation of the Pact will be tackled.

6.3 *Open issues in the implementation of the SGP*

The experience of the early years of EMU points to a number of issues that will need to be addressed to enhance the effectiveness of the current set of rules.[27]

First, a major issue is related to *the definition of a medium term position of 'close to balance or in surplus'*. According to the logic of the Pact, this should be interpreted in cyclically-adjusted terms. As we argued before, this would provide a higher degree of output stabilisation while safeguarding the 3% of GDP deficit ceiling. However, focussing primarily on structural balances is difficult because measures of underlying budgetary positions depend on the method used in estimating budgetary elasticities to the cycle and,

[27] The discussion in this section is based on Buti and Martinot (2000), Fischer and Giudice (2001) and Brunila, Buti and Franco (2001). See also the chapters on fiscal policy in Buti, von Hagen and Martinez Mongay (2002) and Buti and Sapir (2002b).

especially, output gaps. Since the calculations are model-dependent, it may be politically difficult to point the finger at a country on this basis (Ross and Ubide, 2001). A key step in overcoming these difficulties lies in the agreement between the SGP actors on a common methodology for calculating output gap and structural balances.[28]

Second, a criticism frequently levied against the SGP is its *asymmetric working*: while an excess over the 3% of GDP deficit ceiling is sanctioned, there is no apparent reward for appropriate budgetary behaviour in good times. In other words, as pointed out by Bean (1998) the Pact is "all sticks and no carrots". The asymmetric nature of the SGP was apparent in 2000 when the buoyant economic conditions were not exploited to accelerate the fiscal consolidation, especially in Germany, France and Italy, which actually fell short of the planned fiscal efforts (Buti and Sapir, 2002a). A proposal that could be explored in order to this context is that of giving the possibility to euro area members of establishing, on a voluntary basis, buffer funds (as in some US States and Canadian provinces) which would be used in times of recession and replenished in upturns. The setting up of these funds is currently discouraged by the accounting rules (ESA 95) which imply that any transfer to the fund would not reduce the surplus in good times but lead to a higher deficit in bad times. According to these proposals, a more flexible interpretation of national accounts should ensure that a transfer or resources to the fund reduces the surplus and withdrawal from the fund are deficit-neutral. This would provide a clear incentive for governments not to "waste" the surpluses in good times while increasing the room for manoeuvre in bad times (the safety margin between close-to-balance and 3% ceiling plus the resources drawn from the fund).

Third, if countries abide by the SGP's fiscal philosophy, they will choose a broadly balanced budget in structural terms and let automatic stabilisers play freely over the cycle. Given the heterogeneous features of tax and welfare systems in the euro-area, countries will extract *different degrees of cyclical stabilisation*.[29] While a different size of automatic stabilisers may reflect heterogeneous social preferences on stabilisation in relation to other policy objectives, that degree of stabilisation may be considered too low in some countries given the loss of monetary independence. In order to attain an adequate degree of stabilisation, alternative options include a more active use of discretionary fiscal policy or public finance reforms that aim at increasing the smoothing power of automatic stabilisers. In both cases, a possible trade off between stabilisation and efficiency arises. [30]

[28] Major progress has been accomplished in such direction during the course of 2001 and 2002. It is now agreed that in the assessment of the 2002-2003 updates of the stability and convergence programmes, will switch from the traditional HP filter to a commonly designed production function in computing output gaps.

[29] See European Commission (2001a) and Brunila, Buti and in't Veld (2002) for simulations of the smoothing effectiveness of automatic stabilisers with the Commission model QUEST and comparisons with similar exercises in the recent literature.

[30] For an extension of the model in section 5 to encompass the choice of an optimum α under $\eta = 0$, see Brunila, Buti and in't Veld (2002). In a similar setting, Buti et al. (2002) show that the trade off between stabilisation and efficiency may be more apparent than real in countries characterised by high and distortionary taxes which affect the elasticity of output supply.

It remains to be seen how the current framework of the SGP would accommodate such developments. Recently, a number of authors (Wren-Lewis, 2000 and 2002, and Wyplosz, 2001), proposed to "externalise" the discretionary stabilisation function by separating it from the allocation and redistribution functions. Responsibility of implementing temporary changes in key tax rates to a committee of independent experts similar in spirit to institutions in the monetary area (such as the Monetary Policy Committee of the Bank of England). According to the proponents, this would avoid some of the typical pitfalls of active fiscal management, namely the implementation lags and the irreversibility of fiscal measures.[31] It goes without saying that such proposal – while intellectually seducing – would have major institutional implications for domestic budgetary arrangements. In any event, unless the current accounting rules are reformed, the room for manoeuvre for the discretionary stimulus would have to be created in order not to breach the 3% of GDP deficit ceiling when an active fiscal policy is enacted on top of the automatic stabilisers. For a number of countries, this would imply going beyond the close-to-balance rule of the Pact.

Fourth, the Treaty and the Pact leave to the Member States the internal organisation for the respect of the targets.[32] However, the financial relevance of regional governments and other sub-sectors of the government in the budget process in federal states (Germany, Spain, Belgium, Austria) and strongly regionalised states (Italy) has highlighted the necessity for Member States to find solutions to secure sustained discipline at all level of government (Fischer and Giudice, 2001). To solve this co-ordination problem, several Member States have already adopted special arrangements among government levels. The most evident example, as it is directly linked to the SGP process, is the introduction of a *internal stability pacts* by several Member States. A common characteristic of these pacts is the effort to clarify and share the responsibility for budget discipline among the different levels of government.[33] However, the jury is still out on the effectiveness and sustainability of these new institutional arrangements.

Finally, while the Pact has focussed so far mainly on creating a sufficient safety margin under the 3% of GDP deficit ceiling, *other priorities* are coming to the fore. Incorporating long-run sustainability concerns, especially in view of the expected budgetary implications of ageing populations, and improving the quality of public finances (reducing the tax burden, restructuring public spending) will be the next frontier in the implementation of the SGP. Kopits (1997) remarked that mere respect of the Maastricht guidelines did not necessarily ensure the long run sustainability of pension systems. A specific concern has been raised in relation to the close-to-balance rule: on the one hand,

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[31] A milder version of this proposal has been retained by the report of the Swedish Committee on stabilisation policy in case Sweden joins EMU.

[32] The Maastricht Treaty (in art. 3 of the Protocol on the Excessive Deficit Procedure) includes a specific provision requiring the governments of Member States to ensure that their national budgetary procedures and institutions enable them to fulfil their obligation to maintain sound and sustainable public finances

[33] See Balassone and Franco (2001a) and Balassone, Franco and Zotteri (2002).

maintaining a broadly balanced budget may deter the adoption of fundamental pension reforms (such as a greater role of funding) which enhance discipline in the longer run, but are costly in the short run; on the other hand, there are good arguments to move into surplus in the coming years so as to have more room for manoeuvre to accommodate the budgetary impact of ageing (see Buti and Martinot, 2000). As to composition, it is important to make sure that the balanced budget requirement does not result in a sub-optimal level of public investment which may be unduly squeezed under the current rules.[34] This question is crucial especially in the perspective of enlargement of the EU since the new members – most of which are still in a catching up phase – will have public investment needs difficult to square with the close-to-balance rule of the Pact.

7. Conclusions

This paper has analysed the design and rationale of EMU's fiscal rules, their implementation over the last ten years and likely future success. Our main conclusions are the following:

a) While a stark opposition between numerical and procedural rules is unwarranted, numerical targets appear more adequate to jump start the process of budgetary retrenchment.

b) The Maastricht convergence criteria allowed to achieve a genuine budgetary consolidation which, given its size and composition, is unlikely to be reversed in future years.

c) A number of political economy ingredients (public visibility, clear incentive structure, political ownership, constraining calendar, central monitoring, collegial culture) have played a key role in the Maastricht success.

d) Several open issues need to be addressed if the Pact is to become an effective framework for conducting fiscal policy in EMU: correct its asymmetric working, better define the medium term targets; foster coherent institutional reforms at the national level; factor in quality and sustainability of public finances in the multilateral surveillance.

[34] Balassone and Franco (2001b) notice that "the problems involved in the transition from deficit to tax financing of public investment are similar to those involved in the transition from pay-as-you-go to a funded pension scheme. In both cases the burden on current generations depends on the speed of transition and the stock of debt." (p. 376).

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