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with the Stability and Growth Pact

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The effects of uncertainty about countries' compliance with the Stability and Growth Pact

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Abstract:

The Stability and Growth Pact (SGP) was established to govern discretionary fiscal policy in the European Monetary Union. This article studies the effects created when there is uncertainty about the members' commitment to respecting the established deficit limits in the SGP. We will show that, even if countries respect the SGP deficit ceiling, the presence of uncertainty about their compliance will bring about higher volatility in key economic variables, which could, in turn, affect unemployment and growth negatively. This finding shows that it is important to reduce uncertainty about the members' commitment towards the SGP.

Keywords: fiscal policy rules, monetary union, Stability and Growth Pact, uncertainty, commitment.

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1. Introduction

Discretionary fiscal policy in the European Monetary Union (EMU) is restricted by the Stability and Growth Pact (SGP): member countries must, in theory, respect the ceiling for their budget deficits of 3% of GDP. Further, finance ministers from all European Union (EU) members pledged, at a meeting in Berlin in April 2007, to take advantage of the economic upswing at the time in order to balance their budgets by 2010. The month after, however, newly elected president Sarkozy of France stated that he might not be able to guarantee fulfilling that promise before 2012. Sarkozy was "urged by Europe's finance ministers to learn lessons from the past and not undermine EU budget discipline by backtracking on promises to balance his country's books".[1] Did such a development raise uncertainty about France's commitment to the SGP and in turn affect the behaviour of other Member States?

This article investigates the effects that the presence of doubts about one country's compliance with the SGP budgetary rules will have on the behaviour of the other Member States and on key EU economic variables. There are a series of factors that can affect a country's commitment to the SGP rules or disturb the outcome of its budgetary projections, introducing uncertainty about SGP compliance. For instance, the willingness of a country to comply with the SGP rules can be affected if the preventive and corrective arms of the SGP are perceived to be weak or lack credibility. Further, even if a country is willing to comply with the SGP, there may be other factors that might move its actual budgetary position away from its projected one, due to inaccurate economic forecasts or macroeconomic imbalances. Finally, there might just be uncertainty about a country's behaviour due to its condition as a new member of the monetary union that has not yet forged a reputation. These factors are presented in the next lines.

(i)   Weak credibility of the SGP

The two main instruments to encourage compliance with the SGP are peer pressure (under the preventive arm) and financial sanctions (under the corrective arm). These instruments of economic governance have not been sufficient to ensure compliance with the EU budgetary rules (see, among others, Eichengreen, 2005; Larch et al., 2010), and

therefore they may have affected countries' commitment towards such rules. For instance, Flores et al. (2005), in an evaluation of the first years of the SGP, criticise that Member States failed to play their role in exerting peer pressure on countries that miss budgetary targets. Further, there has been a reluctance to apply sanctions. When an excessive deficit was considered to exist in France and Germany in 2003, the de facto suspension of the excessive deficit procedure in these cases signalled "the amputation" of the corrective arm of the Pact (Buti and Sapir, 2006). Finally, the reform of the SGP introduced in 2005 attempted to introduce more flexibility, but was unanimously perceived as evidence that most European governments were not willing to comply with the severe fiscal discipline imposed by the original SGP (see, for instance, Bonatti and Cristini, 2008).

(ii)   Insufficient statistical quality

Economic forecasts are crucial for any budgetary projection and for determining budgetary goals. Inaccurate government projections about the economic future can lead to countries unexpectedly missing their targets. As pointed out by Jonung and Larch (2006), if a government builds its budget upon an optimistic (growth) outlook, it will project a higher budget than it would under a more cautious assessment. These authors examine the official growth forecasts used in the budgetary process of France, Germany and Italy and find that the forecasts used by these governments are biased, erring systematically on the side of optimism. More importantly, the coefficients of the fiscal rule followed by the authorities are also affected by this optimism –leading to smaller consolidations of the budget balance.

Further, the initial provisions on statistical reporting related to fiscal surveillance did not allow for effective and comprehensive auditing. The case of Greece highlighted the limits of a system that has been working on the trust of national authorities providing reliable information (see Larch et al., 2010).

(iii)   Other macroeconomic imbalances.

In the midst of the deepest recession since the 1930s, on April 27th, 2009, the Council of the European Union decided that an excessive deficit existed in –among other countries-

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[1] The Financial Times, 5th June 2007.

France, Spain, Ireland and Greece. Eight months later, on December 2nd, the Council decided that in Germany, the Netherlands, Italy and Austria, to cite a few, an excessive deficit existed too. Since then, the EMU in 2010 has experienced some dramatic events, as a consequence of excessive deficits and debt: a financial bail-out package was organised by the EU and the International Monetary Fund (IMF) to solve the debt crisis in Greece, the European Financial Stability Facility was designed to safeguard financial stability in the euro zone, and finally, Ireland had to seek financial help from the EU and the IMF at the end of November. Further, Portugal requested financial support in April 2011.

This crisis has demonstrated that there are other economic factors that can unexpectedly affect, in a dramatic way, the budgetary positions of countries: excessive credit creation, real estate price bubbles, overexpansion of the construction sector and strong real exchange rate appreciation (Calmfors, 2010). Governments and central banks all over the world had to rescue financial institutions and the sustainability of their public finances was, in some cases, severely affected. Some EMU countries witnessed their budget deficits rise beyond 10% of GDP by 2009 and 2010, and government debt also increased significantly.

(iv)   New members' behaviour
Another source of uncertainty about SGP compliance can arise with the entrance of new Member States in the EMU and their adoption of the SGP.[2] These newcomers will not have yet acquired a reputation for having kept their deficits below a target like the one in the SGP and therefore the remaining members will be faced with some uncertainty about their compliance. In this respect, the recent literature on the fiscal effects of EU membership for accession countries seems to agree that there will be a negative direct net effect during the first years of a new member joining, even though the effects are most likely to be positive in the medium-term. For instance, Kopits and Székely (2004) and Schadler et al. (2005) estimate the net direct budgetary effects for the first years of membership to range between -1 and -4.75 percent of GDP per year. Wagner (2006) and Orban and Szapáry (2004) point out that reducing the budget deficit to a sufficient extent and at the same time meeting the need for infrastructure investments to promote real

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[2] Bohn (2006) discusses the need to fulfill the Maastricht criteria before joining the EMU and adopting the SGP.

convergence may prove difficult. Hughes Hallet and Lewis (2007) argue that some of the accession countries may violate the SGP. Nonetheless, Orban and Szapáry (2004) argue that catching-up economies such as these could run higher deficits than more developed countries without jeopardising the long term sustainability of public finances. Similarly, Dabrowski et al. (2006) argue that a high rate of economic growth makes the fiscal situation of most new member states reasonably manageable in the short to medium-term.

In this article we will study the effects created when there is uncertainty about the EMU member's commitment to respecting the established SGP deficit ceiling. Further, we will show that, even if countries respect the SGP ceiling, the presence of uncertainty about their compliance will bring about higher volatility in key variables like the average deficit and the monetary union's interest rate. Given that there is empirical evidence that volatility does have a negative effect on output growth (see, among others, Ramey and Ramey, 1995, and Badinger, 2008), this result should not be underestimated.

The structure of this article is as follows. Section 2 will present the model of a monetary union together with the objectives of the monetary authority and the fiscal authorities. In section 3, the model will be solved and the results obtained in the analysis will be presented, along with a discussion of the legislative proposals for strengthening the economic governance in the European Union that are currently being discussed. Finally, section 4 concludes.

2. The model

Our model will represent a monetary union where countries share a common currency and a unique nominal interest rate. Given that the emphasis of the analysis is on stabilisation policies undertaken by the central bank and the fiscal authorities, our economy will present short-run (Keynesian) treats: goods and labour markets adjust sluggishly. Further, the economies of the countries will be connected by a number of channels: output fluctuations and fiscal policies are partly transmitted through the trade channel, and price fluctuations in the economies will affect intra-EU competitiveness.

The economy is represented as a one period, two goods and two country framework by the following set of semi-reduced form equations:

$$y^d = \phi d - \varphi(i - \Pi^e) - \delta(\Pi - \Pi^*) + vy^* + \varepsilon \tag{1}$$

$$y^{*d} = \phi d^* - \varphi(i - \Pi^{*e}) + \delta(\Pi - \Pi^*) + vy + \varepsilon^* \tag{2}$$

$$y^s = \omega(\Pi - \Pi^e) + \eta \tag{3}$$

$$y^{*s} = \omega(\Pi^* - \Pi^{*e}) + \eta^* \tag{4}$$

$$y \equiv y^d = y^s \tag{5}$$

$$y^* \equiv y^{*d} = y^{*s} \tag{6}$$

Non-starred variables represent the domestic economy, where y^d is aggregate demand, y^s is aggregate supply, d is the budget deficit, i is the nominal interest rate of the monetary union, Π is the inflation rate, Π^e is the expected inflation, ε is a demand shock and η is a supply shock. Starred variables represent the foreign economy, and for simplicity we assume that both countries are symmetric in their structure and identical in size, and we ignore interactions with the rest of the world. Further, countries observe these variables and the shocks, and try to stabilise the economy.

Equations (1) and (2) represent the aggregate demand function of the domestic and foreign economies, which depend on the budget deficit, the real interest rate, the real exchange rate or intra-EU competitiveness, the other country's income and a demand shock. Equations (3) and (4) are supply (Lucas) equations where output is affected by inflation surprises and supply shocks, and finally, equations (5) and (6) define the equilibrium in the domestic and foreign economies, respectively.

In a monetary union like the EMU, monetary policy is undertaken by the European Central Bank whereas discretionary fiscal policy is the prerogative of individual governments. The monetary authority will aim to maintain price stability and, in order to reflect the European Central bank (ECB) operating procedure, it will use the nominal interest rate as the instrument of monetary policy. Therefore, the monetary authority will seek to minimise the following objective quadratic loss function:

$$\min_{i} \frac{1}{2}\left\{\left(\frac{1}{2}\Pi + \frac{1}{2}\Pi^{*}\right)^{2}\right\} \tag{7}$$

which implies that the monetary authority has a zero average inflation target for the monetary union.

Traditionally, the literature on discretionary fiscal policy in the EMU studies optimal fiscal rules obtained from an optimization problem, where it is assumed that the fiscal authority cares about output stabilization and it also takes into account the SGP deficit objective. Buti et al. (2001), Uhlig (2003) and Ferré (2005), among others, have assumed that in a monetary union like the EMU with a SGP deficit rule in place, the fiscal authority would like to deviate as little as possible from a target value $\hat{d}$ for the budget deficit. Thus, the fiscal authority in the domestic economy will, by using the budget deficit d as an instrument, try to minimise an objective loss function as follows:

$$\min_{d} \frac{1}{2}\left\{y^{2} + \theta(d - \hat{d})^{2}\right\} \tag{8}$$

where θ represents the weight given by the domestic fiscal authority to the deficit objective. Notice that when $\theta < 1$, the fiscal authority is more concerned with output stabilisation than achieving the deficit target $\hat{d}$, and when $\theta > 1$, the opposite is true. If the authority does not respect the (SGP) deficit target, then $\theta = 0$. In this context, when the commitment of a fiscal authority to comply with the EU budgetary rules is not clear, the value of θ will be unknown. Similarly, the foreign fiscal authority will attempt to minimise: $\min_{d^{*}} \frac{1}{2}\left\{(y^{*})^{2} + \theta^{*}(d^{*} - \hat{d})^{2}\right\}$.

This article investigates the effects that the presence of doubts about one country's compliance with the SGP budgetary rules will have on the behaviour of the other member states and on key EU economic variables. In order to analyse the effect of uncertainty about the commitment to the SGP, we will consider that the weight given by the domestic authority, θ, is known to both authorities and that the weight given by the foreign authority, θ^{*}, is not known by the domestic authority. This could represent, for instance, the fact that the domestic country has been fulfilling the SGP criteria for some time and has gained a recognised

credibility, whereas the foreign country does not have a reputation because it did not respect it before or because it is a newcomer and still has to forge its reputation. In particular, to ease the analysis, we will assume that the foreign fiscal authority can behave in two ways: it respects the commitment to the SGP like the domestic authority ($\theta^* = \theta$) with probability α, or it ignores the deficit ceiling ($\theta^* = 0$) with probability *1-*α.

We are interested in the outcomes of stabilisation policies given by the reaction of authorities to shocks; therefore the authorities will observe the shocks before they choose their variables. As a consequence, the interaction between the monetary authority and the various fiscal authorities will be represented by a game following a sequential timing.[3] In the first place, the public will set its inflation expectations, which are set rationally. In the second place, demand and supply shocks will occur. In the third place, fiscal authorities will choose their budget deficit, and finally, the central bank will set the nominal interest rate *i*. Note that the central bank's intervention is the last one in the sequence and therefore it will be able to observe the foreign fiscal authority's degree of commitment to the SGP.

3. Monetary and fiscal policy rules.

We will now solve the model sequentially by proceeding backwards. This implies solving (7) and obtaining in the first place the monetary policy rule followed by the central bank:

$$i = \frac{\phi}{2\varphi}(d + d^*) + \frac{1}{2\varphi}(\varepsilon + \varepsilon^*) - \frac{1-v}{2\varphi}(\eta + \eta^*) \tag{9}$$

which shows that the central bank, in order to control inflation, increases the interest rate with the average budget deficit, with positive demand and negative supply (average) shocks. As a positive budget deficit raises output and inflation, the monetary authority will raise the interest rate to counterbalance the rise in inflation. Similarly, a positive demand shock will raise output and inflation and thus the monetary authority will raise the interest rate. Finally, a

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[3] This type of timing in the analysis of a monetary union with fiscal authorities (the fiscal leadership case) is now generally accepted in the literature (see, among others, Beetsma and Bovenberg (1998) and Dixit and Lambertini (2003)).

negative supply shock lowers output but raises inflation, so the monetary authority will, again, raise the interest rate.

Expression (9) illustrates one of the problems that brought the SGP into place. As fiscal policy is undertaken at the national level by national fiscal authorities, free riding problems can arise due to the fact that the national fiscal authority might not take into account its effects on the rest of the countries. This free rider problem becomes increasingly important as the number of countries in the EMU increases (see Feldstein, 2005). In support of this view, Faini (2006) finds that an expansionary fiscal policy in one member country will have an effect on the overall level of interest rates for the currency union as a whole, showing that there are substantial spillovers through the interest rate channel among fiscal policies of member countries.

The fiscal authorities of each country will anticipate the monetary policy rule (9), and will incorporate this knowledge into their optimizing problem. In the next lines we will study the effects of the presence of uncertainty about the commitment to the SGP by the foreign fiscal authority on the setting of optimal fiscal rules.

3.1. Uncertainty about SGP compliance by the foreign authority.

When there is uncertainty about the weight given by the foreign fiscal authority to the deviations from the deficit target, the expected objective loss function for the domestic authority is the probability that the foreign authority respects the commitment to the SGP (α) times the corresponding objective function (1) with $\theta^* = \theta$, plus the probability that the foreign authority does not respect the SGP ($1-\alpha$) times the corresponding objective function (1) with $\theta^* = 0$:

$$\min_{d} E(L) = \alpha \frac{1}{2} \left\{ y^2 + \theta(d - \hat{d})^2 \middle| \theta^* = \theta \right\} + (1-\alpha) \frac{1}{2} \left\{ y^2 + \theta(d - \hat{d})^2 \middle| \theta^* = 0 \right\} \tag{10}$$

In turn, if the foreign authority behaves like the domestic one, i.e. $\theta^* = \theta$, it will minimise:

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$$\min_{d^*} \frac{1}{2}\left\{ (y^*)^2 + \theta(d^* - \hat{d})^2 \right\}, \tag{11}$$

whereas if it does not respect the SGP, i.e. $\theta^* = 0$, it will minimise:

$$\min_{d^*} \frac{1}{2}\left\{ (y^*)^2 \right\}. \tag{12}$$

The resulting optimal fiscal policy rules are, for the domestic authority:[4]

$$d = \hat{d} + \frac{\omega^2 \phi \alpha}{\xi}(\varepsilon^* - \varepsilon) - \frac{\omega \phi \eta}{2\theta_1 \mu \xi}\eta - \frac{\omega \phi(\eta - 8\theta_1 \mu \delta \alpha)}{2\theta_1 \mu \xi}\eta^* \tag{13}$$

and for the foreign one, if $\theta^* = \theta$:

$$d^*_{\theta^* = \theta} = \hat{d} + \frac{\omega^2 \phi}{\xi}(\varepsilon - \varepsilon^*) - \frac{\omega^2 \phi \gamma}{2\theta_1 \mu \xi}\eta - \frac{\omega \phi \psi}{2\theta_1 \mu \xi}\eta^* \tag{14}$$

and if $\theta^* = 0$:

$$d^*_{\theta^* = 0} = \hat{d} + \frac{\omega^2 \phi + (4\theta_1 \mu^2 / \phi)}{\xi}(\varepsilon - \varepsilon^*) - \frac{\omega^2 \phi \gamma + (4\theta_1 \mu^2 \gamma / \phi)}{2\theta_1 \mu \xi}\eta - \frac{\omega \phi \psi + (4\theta_1 \mu^2 \psi / \phi \omega)}{2\theta_1 \mu \xi}\eta^* \tag{15}$$

According to these equations, both domestic and foreign fiscal authorities use discretionary fiscal policy in a countercyclical way: when supply shocks and domestic demand shocks are favourable (in the sense that the output gap rises) fiscal policy becomes more restrictive and so the deficit is lowered. This is in accordance with the empirical evidence provided by Gali and Perotti (2003), who find that fiscal policy has become countercyclical in the EMU countries since 1992. It is also worth noticing that both fiscal authorities react in the same

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[4] Where $\mu = 2\delta + \omega + \nu\omega$, $\xi = 4\theta_1 \mu^2 + \phi^2 \omega^2 (1+\alpha)$, $\eta = 2\theta_1 \mu(2\mu - \alpha\omega(1+\nu)) + \phi^2 \omega^2$,

$\rho = 4\delta + \omega + \nu\omega$, $\gamma = 2\theta_1 \mu(1+\nu) + \phi^2 \omega$ and $\psi = 2\theta_1 \mu\rho + \phi^2 \omega^2$.

way against foreign demand shocks, i.e., both try to compensate for being worse off than the other authority.

It is worth pointing out that the SGP does not require the weighted average euro zone fiscal deficit to stay below 3% of GDP, even though from the point of view of macroeconomic stability it could be argued that this is what matters for the monetary union. This disregard of the aggregate fiscal stance of the euro area has been criticised by, among others, Orbán and Szapáry (2004) and Brück and Zwiener (2006). For instance, Orbán and Szapáry point that the fiscal policies of large countries have a greater impact on the fiscal stance of the union than the fiscal policies of smaller countries. Brück and Zwiener, on the other hand, wonder whether a SGP aimed at the aggregate euro zone mirroring the ECB's concern with aggregate price stability might have been more effective, or, at least, less prone to mistakes.

We will now look at the effects on the average deficit[5] when there is uncertainty about one country's commitment with the SGP. It is interesting to note that the terms that affect the shocks, which indicate the degree of reaction of the fiscal rule towards a shock, are always bigger for the foreign fiscal authority if $\theta^* = 0$ -see expressions (14) and (15). This implies that if the foreign country does not respect the SGP, the fiscal rule will be more reactive to shocks. This has an implication for the average deficit of the monetary union which is shown in the next result:

Result 1 *When there is uncertainty about the foreign country complying with the SGP deficit rule, the average deficit of the monetary union is always more volatile in the case where $\theta^* = 0$ than when $\theta^* = \theta$, that is, when the foreign country does not respect the SGP.*

From this point of view, when there are conditions leading to uncertainty about the countries commitment to the SGP, the introduction of credible measures to comply with a deficit ceiling like the SGP could reduce the volatility of the average deficit of the monetary union.

3.2. Certainty about SGP compliance by the foreign authority.

Certainty about the behaviour of the foreign country can be analysed as a special case when the probability α is either 1 or zero. When $\alpha = 1$ this is equivalent to the case where the foreign country sets $\theta^* = \theta$ with certainty. In this case, the fiscal policy rule followed by the domestic authority and the foreign one will be (13) and (14) with $\alpha = 1$.

On the other hand, when $\alpha = 0$, that is, when the foreign fiscal authority does not respect the SGP ($\theta^* = 0$), then the fiscal rule for the domestic authority becomes:

$$d = \hat{d} - \frac{\omega\phi}{2\theta\mu\eta}(\eta + \eta^*) \tag{16}$$

And for the foreign one:

$$d^*_{\theta^*=0} = \hat{d} + \frac{1}{\phi}(\varepsilon^* - \varepsilon) - \frac{\gamma}{2\theta\mu\phi}\eta - \frac{\psi}{2\theta\mu\omega\phi}\eta^* \tag{17}$$

Now, the domestic authority only reacts to supply shocks, and its reaction is larger than under uncertainty. Hence, in the case where the foreign authority does not respect the SGP and the domestic authority knows it, the latter only reacts to supply shocks –there is no need to compensate for asymmetric demand shocks now because the foreign authority will vary the deficit enough as to annul the effects of asymmetric demand shocks. [6]

We have already seen, in result 1, that under uncertainty the average deficit of the union is always more volatile when the foreign country does not respect the SGP. Similarly, we obtain the same result when there is certainty that the foreign country will not respect the SGP:

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[5] In this model, both countries are identical in size and therefore the average deficit coincides with the weighted average deficit.

[6] Note that when $\alpha = 0$ the foreign authority manages to completely offset the effects of demand shocks on its output gap –remember that in this case its objective function is (12) and thus the domestic authority does not need to counteract those shocks at all (16).

Result 2 *When there is no uncertainty about countries complying with the SGP, the average deficit of the monetary union is always more volatile in the case where $\theta^* = 0$ than when $\theta^* = \theta$, that is, when the foreign country does not respect the SGP.*

The outcomes of Results 1 and 2 are due to the fact that, either under certainty or uncertainty, if one of the countries does not respect the target established by the SGP, it will set up a deficit that is more reactive to shocks than if it complies with the SGP. Similarly, under certainty, the deficit of the domestic country is more reactive to shocks when the foreign country does not respect the SGP. As a consequence, the average deficit of the monetary union will be more volatile when the foreign country does not respect the SGP. As will be shown in the next lines, a higher volatility of the average deficit could have a negative effect on other variables of the monetary union. This result provides a rationale for the introduction of credible ceilings in a monetary union that are respected by Member States.

3.3. The effect of uncertainty when both countries comply with the SGP.

As a next step, we will analyse the effects of uncertainty about one country's compliance when both countries actually comply with the deficit ceiling established by the SGP. Thus, if we compare the fiscal rules of the foreign authority under certainty and under uncertainty when it complies, it can be seen that the reaction to all type of shocks is larger under uncertainty.[7] Therefore, we obtain the following result:

Result 3 *If the foreign authority actually respects the SGP deficit rule, the volatility of the average deficit of the monetary union is higher when there is uncertainty about its compliance with the SGP.*

Result 3 indicates that the presence of uncertainty, when both countries respect the SGP, increases the volatility of the fiscal rules and, thus, of the average deficit of the monetary union. There are two important effects to consider from a higher volatility of the deficit. The first is its effect on growth, and there is empirical evidence of a negative effect. Ramey and Ramey (1995) investigate government spending as a source of volatility and find empirical

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[7] Note how ξ is bigger under certainty.

evidence in a sample of 24 OECD countries of a negative impact of government spending volatility on growth. Further, Badinger (2008), in a sample of 88 countries over the period 1960 to 2004, finds that discretionary fiscal policy amplifies output volatility, and output volatility is negatively associated with economic growth.

The second effect from higher volatility of the average deficit is, in turn, its impact on other variables of the union. As seen before, the interest rate rule fixed by the monetary authority (9) depends on the average deficit. When the average deficit is more volatile, the interest rate set by the central bank will also be more volatile. This link is shown (for the USA) by Laubach (2009), who estimates that one percentage point increase in the projected deficit to GDP ratio raises long term interest rates by about 25 to 30 basis points. Therefore, uncertainty about the degree of commitment of one fiscal authority to the SGP can bring higher volatility of interest rates, with all the negative implications that more volatile interest rates can have on the economy, e.g., higher unemployment (Dutkowsky (1987)) and lower output (Evans (1984)).

3.4. The need for reform.

Given the above, reduction of the uncertainty about countries' compliance with the SGP rules thus becomes crucial for the evolution of key economic variables of the EMU, particularly when countries actually respect the SGP. It therefore becomes essential that efforts are geared toward reducing such uncertainty. In this sense, and against the background of the recent economic crisis, there has been an academic and policy debate about how to improve economic governance in the EU. The European Commission issued two communications presenting proposals in May and June of 2010, and adopted six legislative proposals on 29 September 2010 that were scheduled to be approved during 2011. Some of these proposals deal with the factors that can affect a country's fulfilment of the SGP rules reviewed at the beginning of this article and are discussed in the next lines.

The Commission proposes to reform the preventive arm of the SGP under the principle of "prudent fiscal policy making", giving greater attention to expenditure and debt developments. Given that apparently sound budgetary positions before the crisis turned into soaring budget deficits and debt, the objective is to ensure that revenue windfalls are not spent

but instead are allocated to debt reduction. For this reason, it is proposed (COM(2010) 526) that the annual increase of government expenditure (and revenue) should not exceed a prudent medium term rate of economic growth, and failure to respect this principle will make the Member State liable to warning and even corrective action. Further, the debt criterion is made more operational (COM(2010) 522) through the adoption of a numerical benchmark to gauge whether the debt ratio is sufficiently diminishing toward the 60% of GDP threshold[8] and failure to do so might place the country under the Excessive Deficit Procedure (EDP).

The legislative proposals also aim to reform the corrective arm of the SGP (COM(2010) 524). The main innovations on this front try to strengthen the enforcement mechanisms of the EDP process through:

(a) a series of graduated sanctions/disincentives that start earlier in the EDP process. For instance, a non-interest bearing deposit of 0,2% of GDP would apply upon a decision to place a country under EDP.

(b) The "reverse voting" whereby at each step of the EDP, the Commission will make a proposal for the relevant sanction and this will be considered adopted unless the Council decides to the contrary by qualified majority within 10 days.[9]

One of the main challenges for the compliance of the SGP lies in the fact that fiscal policy is a prerogative of each Member State and, therefore, they ultimately decide whether to implement the Pact or not. In this sense, the Commission's legislative proposal COM(2010) 523 defines the concept of a domestic "budgetary framework", which each Member State is expected to adopt through appropriate national legislative or administrative procedures. The objective is to reflect the EMU budgetary framework in the national budgetary frameworks and create a domestic system of accounting and statistics that guarantees comprehensive, consistent and timely reporting in the area of government finances.[10]

The recent economic crisis has highlighted the need to adopt a more comprehensive approach to economic governance. In this sense, the Commission has proposed to adopt broader

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[8] It is to be considered sufficiently diminishing if its distance with respect to the 60% of GDP reference value has reduced over the previous three years at a rate of the order of one-twentieth per year.
[9] At the moment it requires a qualified majority in favour.

macroeconomic surveillance in COM (2010) 527 to prevent, detect and correct macroeconomic imbalances and divergences in competitiveness. It will create a "scoreboard" that will include a broad set of macroeconomic and financial indicators.

Further, the need to reinforce economic policy coordination has been continuously acknowledged by the Commission and, under the new growth strategy known as Europe 2020,[11] it established the "European semester", which will align the timing of surveillance of fiscal and other macroeconomic policies. In this way, fiscal policy is expected to deliver fiscal consolidation and improve the quality of public finances, improving the efficiency and effectiveness of government activities, prioritising growth enhancing spending.

How will these measures, if adopted, help in increasing the credibility of the SGP? As sanctions have never been imposed, it remains to be seen what the reaction is of Member States when facing a sanction. Some authors recognise that earlier and more gradual sanctions would be likely to increase the probability that they are used, but argue that they are complex and involve many systems. For instance, Calmfors (2010) argues that the non-interest bearing deposit in the first year is generally larger than in subsequent years and this "frontloading" might work as a disincentive to use sanctions because once applied they become very harsh. Other authors[12] question the imposition of a fine upon a sovereign state with a democratically elected government and fear that it can unleash anti-European sentiment.

Similarly, more focus on expenditures and debt is welcome as the 3% of GDP deficit threshold has been nearly the exclusive focus so far, and the proposal on national budgetary frameworks is also positively viewed as it addresses an underlying problem with fiscal outcomes, by giving explicit responsibility for such outcomes to national governments. Finally, the reverse voting can introduce stricter enforcement of the SGP, particularly as the Council has routinely weakened the text of the Commission's recommendations (Hallerberg, 2010). In fact, this seems to be the main point of discussion in the approval process of the so-called "six-pack", as some countries favour a more automatic system but others demand that

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[10] In this respect, cash-based fiscal data at a monthly frequency shall be published by Member States, as proposed in Onorante et al. (2010), where they show that cash deficit figures anticipate the deficit in ESA95 terms. See Article 3 in COM(2010) 523.

[11] http://ec.europa.eu/europe2020/index_en.htm

[12] Wyplosz, C. (2010). Eurozone reform: Not yet fiscal discipline, but a good start. VoxEU.org, 4 October 2010.

governments should give approval before disciplinary proceedings start. Furher, some doubts have arisen as to whether the "reverse voting" procedure might require Treaty changes.

Reinforcement of the preventive arm of the SGP and at the same time reducing uncertainty about each country's resolve to respect the EU budgetary rules could additionally be promoted through an effective exchange of views amongst finance ministers and other mechanisms of exchanging information and exerting peer pressure, besides multilateral surveillance. Eichengreen (2005) proposes to capitalize upon the precious opportunity offered by the Eurozone finance ministers meetings in order to develop a common resolve and use the resulting solidarity to encourage good behaviour.

The legislative proposals currently under negotiation might be approved in the fall of 2011.[13] By recognising the need to strengthen the EU fiscal rules, to adopt a more comprehensive system of macroeconomic surveillance and to improve the interaction between fiscal policy at the country level and the EU level, they could turn into crucial steps for the reduction of uncertainty about countries' compliance with the SGP. The reduction of such uncertainty would reinforce the role of the SGP as a means of strengthening the conditions for strong sustainable growth.

It is worth emphasising that fiscal surveillance needs to rely on clear and reliable information. For instance, Buti and Sapir (2006) state that "under the current system of national accounts, monitoring is hampered by delays in data provision and it allows some manipulation of statistics". Thus, efforts must be made to ensure good standards in the collection of national statistics and projections elaborated by statistical authorities. In this respect, it is worth emphasising the adoption by the Council of a regulation in 2010[14] on the quality of statistical data in the context of the EDP, giving to Eurostat the right to access public national accounts for the needs of the data quality assessment.

At the end of 2010, O. Blanchard (Chief economist at the IMF) and C. Cottarelli (director of the IMF´s Fiscal Affairs department) publicly criticised[15] the fact that the majority of countries did not produce fiscal statistics covering the whole public sector and they advocated

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[13] The Polish Presidency has made the adoption of the "six-pack" one of its priorities.
[14] Council Regulation 679/2010.
[15] http://blog-imfdirect.imf.org/2010/11/04/how-to-bake-a-credible-medium-term-fiscal-pie/

for a politically-independent fiscal agent to monitor fiscal policy making. A series of authors (see, among others, Calmfors, 2003; Wyplosz, 2008 and Lane, 2010) support the introduction of independent fiscal agencies or councils with an active role in the EU fiscal policy process. Several countries have recently setup independent fiscal policy councils: Sweden, Canada, Hungary, Slovenia and the UK, whereas other countries, like the Netherlands, the US, Belgium and Austria already had them (see Calmfors, 2010). In this respect, the findings of Jonung and Larch (2006) that the forecasts used by some EMU governments are biased, erring systematically on the side of optimism, are somewhat worrying. Thus, their proposal of assigning the task of forecasting to an independent authority, insulated from the pressure of the budgetary authority, is particularly relevant. Only a few EU Member States use economic forecasts for budgetary framing produced by independent authorities.

4. Conclusion

The analysis carried out in this article has shown that uncertainty about the commitment of countries towards the SGP does matter. We have shown that the average deficit of the monetary union is more volatile (under both certainty and uncertainty about countries' SGP compliance) when one of the countries does not respect the deficit ceiling established by the SGP. This result, given the negative effects that a more volatile average deficit can exert on the monetary union, provides a rationale for a stricter application of the SGP.

We have also shown that, when countries actually respect the SGP limits, the presence of uncertainty about their compliance brings about higher volatility of the average deficit. This volatility of the average deficit, in turn, affects the volatility of the interest rate of the monetary union and has a potential negative effect on growth, as pointed out by Ramey and Ramey (1995). This finding sends a clear message that it is important to reduce uncertainty about the commitment towards the SGP by member countries. Thus, the recent legislative process started at the EU level regarding the strengthening of economic governance might be a step forward in reinforcing the credibility of the SGP and contribute to the compliance of the EU budgetary rules. The acknowledgement of the necessity to strengthen the SGP and its compliance by the member states of the EMU is vital.

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