

UNDERSTANDING THE RATIONALE OF THE STABILITY AND GROWTH PACT

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Abstract

This paper investigates the rationales for fiscal rules in a monetary union, such as the Stability and Growth Pact (SGP), which has been adopted in the European Union (EU). Rationales for rules in fiscal policy have been found linked to the existence of externalities in a monetary union, which affect the common monetary policy and thus other countries in the currency union, as well as to the problems emerging from the political nature of the framework in which fiscal policy needs to be decided. Together, these comprise solid reasons for the creation of a fiscal rule in a monetary union. The main inconvenience of creating such a rule is, however, the loss of an independent fiscal policy for any individual economy within a currency union. Even taking this drawback into account, a crucial argument for the creation of the SGP regards the benefits and effectiveness of automatic stabilization and currency strength. On this point, a consensus has been reached, but scholars have not yet achieved wide agreement on the Pact's effectiveness when economies face different types of shocks.

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1. Introduction

This paper analyzes the rationales for fiscal rules in monetary unions, such as the Stability and Growth Pact (SGP) adopted for the European Union (EU). The relevance of the SGP and the new fiscal framework of the European Monetary Union (EMU) are enormous, as they have significantly changed the way fiscal policy can be conducted, particularly because it has limited the fiscal independence for any single country. In fact, the SGP has generated heated debate, with numerous fervent defendants but also many critics. The defendants are nearly united on the need to constrain fiscal policy, particularly in a monetary union. The critics come from very different perspectives but focus mainly on the Pact's rigidity and its negative impact on short-term adjustment possibilities. It is important to understand the relevant rationale for and against a fiscal rule in a monetary union to understand more about this crucial debate.

The structure of this paper is divided as follows. The first two sections analyze the theory behind the advantages or disadvantages of rules versus discretion in fiscal policy from both an economic theory and a political economy perspective. This part of the paper assesses the theoretical foundations of the debate and, at the same time, reviews the main literature on the theory underlying particular fiscal rules, such as the Stability and Growth Pact. The fourth section analyses the desirability of automatic stabilization as one argument in this debate in favor of fiscal rules. Finally, the paper ends with brief concluding remarks.

2. The rationale for the adoption the Stability and Growth Pact: rules rather than discretion.

2.1 General rationale for fiscal rules

The real effects and effectiveness of fiscal policy are more controversial than what is the case for monetary policy. Fiscal policy is still regarded with some skepticism because of political economy reasons. This section analyses these reasons and why it might make sense to constrain fiscal policy, for example, with a rule.

First, the main economic argument regards negative externalities associated with interest rates. Economic theory suggests that an increase of deficits will lead to higher inflation and thus higher interest rates in an economy. Several explanations exist for this increase. One of the most plausible explanations is provided by portfolio management theory, which posits a “crowding-out” effect: if a government needs to finance a higher deficit, it must issue more public bonds and in order to induce financial investors to hold more of them, it must offer a higher yield on bonds. This puts pressure on the rest of financial assets, pushing for higher yields on these assets and therefore for higher interest rates. (The process described above explains how public needs for financing results in the government crowding out what would otherwise be investment on private financial assets.)

A second economic argument relates to how large deficits may potentially crowd-out private investment, at least partially (Allen, 1973; Branson, 1989). This argument claims that an increase in government deficit will create a greater need for financing and thus a larger issue of bonds in the financial markets. If this issue is sufficiently attractive, it will generate funds, which otherwise would have been invested in other financial assets. This effect may crowd out investment by making credit more expensive; or at the very least, it would render the issue of debt instruments in stock markets more expensive. Two empirical studies, Blanchard and Perotti

(2002) and Mountford and Uhlig (2005), find that government spending crowds out investment but does not reduce consumption.

Third, excessive deficits might endanger the financial sustainability of the government, particularly in the context of pressure stemming from future demographic shocks and uncertainty over pensions. There is an obvious link between deficits and debt, so limiting deficits would contribute to ensuring future fiscal sustainability. This is particularly important in a context of uncertainty over future demographic shocks and pensions. A commitment towards fiscal consolidation could help countries face the demographic shock with a lower stock of public debt and therefore provide some space for maneuver (Artis and Buti, 2000; Thygesen, 2002).

Linked to the issue of sustainability is also the fear that large deficits can also lead to credit crunches due to potentially excessive future costs associated with debt repayment. The possibility of credit crunches in these circumstances may be very unlikely, but it could be a risk, particularly for regional fiscal authorities with limited tax-raising powers. In fact, the possibility of precipitating a credit crunch is not just a theoretical prospect since it has already happened in some of the most developed economies, such as in the United States, affecting both New York and California.

Furthermore, the political process through which these economic policies become adopted creates its own cause for concern. One of the main reason for the scepticism over the use of fiscal policy to stabilise the economy and the need to restrict this policy is linked to the potential distortions the political process itself may create in fiscal policy decisions (EEAG, 2003). This

has several important implications. One implication may concern decision-making lags (inside lags) associated with fiscal policy changes. These inside lags are typically long, because taxes and expenditure budgets are usually changed only annually, after lengthy discussions and voting procedures on the part of national parliaments and other law-making bodies.

The second implication is that finance ministers responsible for fiscal policy may adopt a short-term view in their budgets (spend now and sort out afterwards), due to political needs; thus the risk of an expansionary bias in fiscal policy is greater than what is normally associated with monetary policy (EEAG, 2003). This tendency is exemplified by the temptation to manipulate the economy for political/electoral benefits, known in political economy theory as the political business cycle (Alesina and Tabellini, 1987; Alesina and Tabellini, 1990; Demeretzis et al., 1999; Hall, 1986; Nordhaus, 1975; Tufte, 1978). This theory suggests that political parties in government are especially willing to increase spending before elections in order to keep the electorate happy and get re-elected. Diverse authors have found evidence of this political business cycle in Europe both since the start of EMU (Buti and van den Noord, 2003; Buti and van den Noord, 2004), and before monetary union (Hallerberg and Strauch, 2002; Hughes Hallett et al., 2001). The danger of short-term vision is often exacerbated by the aforementioned problem of “time inconsistency.” A longer-term and more consistent policy may also be impeded by the likelihood of abrupt policy shifts following, for example, a change in political leadership.

Moreover, there is certain mistrust in government capacity to use discretionary fiscal policy reasonably. A moderate and judicious use of fiscal discretion is key because discretionary policy

can be beneficial, but when applied excessively, it may produce negative economic effects. The latter is illustrated by For example, Fatas and Mihov (2001), who find that the aggressive use of discretionary fiscal policy amplifies business cycle fluctuations and hampers economic growth, and therefore, they argue that fiscal policy should not be left to the discretion of politicians and should be restricted. The empirical study of Eichengreen and Wyplosz (1998) seems to suggest discretionary policies also negatively impact volatility. They find that an increase of the cyclically adjusted surplus by 1 percent of GDP would have produced a reduction in the output gap of roughly 0.5 percent (a little less when the figures are adjusted using the actual debt and interest-rate levels), assuming that the four largest European economies had implemented the SGP for thirty years (between 1974-1995). Over this period of 22 years, this translates into output losses ranging from approximately 5 percent in both France and in the UK to 9 percent in Italy. However, Germany (West Germany) would not have suffered much from this imposition (Eichengreen and Wyplosz, 1998).

The last main problem related to the political process is known as “fiscal illusion,” and it is particularly relevant for economies experiencing a slowdown. Many voters do not understand inter-temporal budget constraints, and politicians take advantage of voter unawareness to raise spending, and thus, budget deficits also increase. This scenario leads to asymmetric stabilization efforts, with deficits in slowdowns but no surpluses in booms (Buchanan and Wagner, 1977).

For all of the reasons cited, longer decision-making lags (inside lags), political business cycles and the lack of long-term consistent policies, governments may fail to conduct optimal fiscal policies. These reasons seem to argue strongly against the adoption of discretionary fiscal

policies. The natural alternative to discretionary powers is policymaking by rule, i.e. an *ex-ante* commitment that predetermines the policy to follow.

2.2 Further rationales for fiscal rules in a monetary union: changes under EMU.

The use of fiscal policy to adjust an economy is even more complicated under monetary union because of the collective effects of economic externalities deriving from large deficits (higher interest rates). The mechanism through which large deficits ultimately lead to higher interest rates is the same as in the single, independent economy, but under monetary union, this negative externality is suffered collectively. If one country generates substantial deficits, this creates inflationary pressures in this country, raising the average Eurozone inflation (in relation to the size of the economy) and potentially triggering a response from the European Central Bank (ECB), which would raise interest rates to stop those inflationary pressures. However, as there is a single interest rate, the ECB thereby raises rates for all members in the Eurozone; in principle, this would be an undesirable outcome for all member-states concerned.

The existence of this common externality may also precipitate collective action problems in a monetary union (Gatti and Wijnbergen, 2003: 15). That is, due to negative externalities, if countries suspect that any other member state may not conduct sound policies, the incentive for these countries to cooperate will probably be reduced.

A common fiscal rule, if enforced properly, can help coordination of fiscal policies among countries in a monetary union. This coordination is necessary for economic policy to function properly in the union. In fact, coordination must be explicit because there are incentives not to

cooperate and to move away from sound fiscal policies. Fully centralized monetary and exchange-rate policies, coupled with nationally-based fiscal policies requires that divergent fiscal behavior of member states and free riding to be prevented (Thygesen, 2002: 1). The need for coordination is explored by Fitoussi and Padoa-Schioppa (2005) in the context of game theory, known as the “the prisoner’s dilemma.”

The Logic of Collective Action (Olson, 1982) argues that collective action problems can be solved only in two different ways. Selective benefits provide one solution, but they are difficult to deliver in EMU since benefits, such as low inflation or low interest rates, are collectively experienced. Thus, collective (as opposed to selective) benefits cannot prevent free-riding behavior¹, which in this situation, can be achieved only through fiscal coordination. Another solution would potentially be the allocation of “benefits” by capital markets through lower risk premiums. However, there are at least two different problems related to this solution. First, problems associated with asymmetric information would develop because financial markets rely on information from the past to lend money for the future. Second, a problem of moral hazard could arise since capital markets focus exclusively on profits to be made. Therefore, financial institutions may continue lending money to a country with a huge deficit as long as profits are being made, because financial institutions normally understand that in case a country goes bankrupt, the others may bail it out (despite the no bail-out clause). Hence the problem of moral hazard.

¹ Within independent countries, the national government can normally prevent free-riding behaviour. Even in the United States, the federal government wields sufficient power to control any free riding of this sort at the state level.

The second way to solve these collective action problems is via a set of strict rules to prevent countries from fiscal profligacy. The SGP was introduced mainly for this reason. In fact, the pact's "excessive deficit procedure" entails an 'ex-ante' agreement on fiscal discipline to prevent fiscal misbehavior of member states join (Frieden et al., 1998). A fair amount of consensus about this being the best option for EMU had been achieved before its enactment. The preference of rules over discretion was also the main conclusion extracted from the theory of time inconsistency in economic policy, to which Kydland and Prescott (Kydland, 2004; Kydland and Prescott, 1977; Prescott, 2004) have made the greatest contributions. These authors received a Nobel Prize of economics in 2004 partly for their theory of time inconsistency in economic policy. Kydland and Prescott applied their conclusion more to monetary than to fiscal policy, however, the time inconsistency problem exists not only in monetary policy but also in fiscal policy in the monetary union (Agell et al., 1996).

A common fiscal rule enables coordination between fiscal policies among countries in a monetary union, which is necessary for the proper functioning of union-wide economic policy. The coordination contributes towards solving the collective action problems and consequences explained in this section. However, there are also reasons why it might be better not to constrain fiscal policy with a rule, and these arguments are studied in the following section.

3. Discretion rather than rules: Fiscal policy management and the theoretical rationale for more fiscal discretion.

3.1 General rationale for more fiscal discretion: the possibility of fiscal adjustment.

Economic theory suggests that one of the main roles of public finance is to tax and spend for stabilization purposes. For instance, when an economy is in a slowdown or a recession, the government can apply an expansive fiscal policy (increase government spending or reduce taxes). Alternately, when the economy is growing, the government may adopt a restrictive fiscal policy (reduce government spending or increase taxes) to prevent the economy from overheating. Here, the former case is analyzed.

As noted, a recession could be addressed by an expansive fiscal policy. The expected outcome will be an increase in output. When a country runs an expansive fiscal policy (e.g. an increase in government spending or a decrease in taxes), then output (Y) is stimulated. In the short term, the equilibrium will shift and output will increase and so will interest rates. In this new equilibrium, the fact that the interest rate has increased may generate further consequences, which differ for countries with a floating exchange rate, compared with those having a fixed exchange rate (e.g., countries in a monetary union, such as EMU). These consequences will be dealt in the next subsection that is devoted to fiscal policy changes occurring in a monetary union. First, we consider the direct effect on output.

Despite the aforementioned disadvantages in comparison to monetary policy, fiscal policy can also stabilize the economy (Allsopp and Vines, 2005: 488-90). Fatás and Mihov (2001) have found empirical evidence among diverse OECD countries, including different US states and European countries, suggesting that fiscal policy does effect output and that the fiscal stimulus can therefore work as an effective stabilizer. In fact, these authors find a multiplier) greater than

one, showing the effectiveness of fiscal policy to stabilize the economy. A multiplier of one indicates that fiscal policy is indeed effective (Haavelmo theorem²).

In their study of post-war United States, Blanchard and Perotti (2002) find strong, but not overwhelming, evidence that fiscal policy affects output with a multiplier of around one. This result is very similar to the findings of a more recent study by Gali, Lopez-Salido and Valles (Galí et al., 2004). Others have found lower, but still significant, multipliers associated with fiscal policy for the case of Europe (EC, 2002; Wijkander and Roeger, 2002; Wren-Lewis, 2000). These effects on output are found to be stronger, the better the “quality” of public finances (Afonso et al., 2005), including in particular a well-defined institutional.

Other than the direct effects on output, most of those studies have found that fiscal expansion positively affects consumption, but only insignificantly affects investment (Blanchard and Perotti, 2002; Fatás and Mihov, 2001; Galí et al., 2004). The positive relationship of government spending to consumption has been confirmed by studies focusing on non-Keynesian effects, such as the work of Perotti (1999), although this study also finds a negative relationship between spending and consumption that occurs in exceptional circumstances. These circumstances that the author terms “fiscal stress” can occur in conjunction with unusually high debt/GDP ratios.

The great advantage of exercising fiscal discretion is the greater scope it provides for adjustment (stabilization) when the economy requires it. Active stabilization can still take place under a fiscal rule, but it is obviously limited by the thresholds imposed by the rule and requires very

² More details about the Haavelmo theorem can be found in his seminal contribution, Trygve Haavelmo (1945) Multiplier Effects of a Balanced Budget, *Econometrica*, Vol. 13, No. 4, 311-318.

sound budgetary positions. Policy-makers can alter their decisions at any time if circumstances change requiring new policies, which is essential for a quick adjustment of the economy in a recession. Moreover, fiscal discretion allows greater political legitimacy (Alesina, 1988), as national governments directly elected by the population are those, who decide on which fiscal policy to implement.

3.2. Rationale of fiscal policy as an adjustment tool in a monetary union: changes of fiscal policy under EMU.

A solution to the loss of monetary policy in a monetary union may thus be the stabilization of the economy via fiscal policy. In fact, a consensus has been reached that, within a monetary union, monetary policy should deal with symmetric shocks whereas fiscal policy should address asymmetric shocks (Alesina et al., 2001). When an economy enters a slowdown, fiscal adjustment may occur in two ways. The first occurs through automatic stabilizers, while the second needs government intervention. The former (analyzed in the following section) does not require the government's fiscal discretion, whereas the latter would need this discretion in order to face shocks, that is, government spending would have to be increased to compensate for the lack of private spending during a slowdown.

The European Commission, even before the Maastricht Treaty was signed, acknowledged the importance of using fiscal policy to stabilize the economy, arguing that enhanced fiscal autonomy and flexibility needed to compensate the loss of monetary and exchange-rate instruments for individual countries. In this sense, the Commission had already forecast that

EMU would place new demands on national fiscal policies over the short- to medium-term in the event of country-specific disturbances (EC, 1990).

A second theoretical argument supports the use of fiscal policy as an adjustment tool. This argument suggests that national fiscal policy is a more powerful policy instrument within a single currency area (or a fixed-exchange-rate arrangement) than when nations have floating exchange rates. This outcome is due to the close links between fiscal policy and exchange-rate fluctuations. For example, we know that the effect of fiscal expansion is an increase of aggregate demand. However, if a country is not a member in a currency union and maintains a floating exchange rate, fiscal expansion will cause the exchange rate to appreciate, which reduces aggregate demand, partially offsetting the effects of fiscal expansion. In sum, fiscal expansion raises aggregate demand, leading to increased income, which in turn, raises money demand, raising interest rates. This increase in interest rates causes the exchange rate to appreciate, reducing ultimately aggregate demand.

This effect of an increase in interest rates should be analyzed in greater detail. Let us think about two countries in a monetary union. This has been often analyzed formally in Mundell-Fleming frameworks. For countries that participate in a monetary union, the nominal exchange rate is fixed with fellow members of the currency union and interest rates will be the same.

As pointed out, when a country runs an expansive fiscal policy, output is stimulated. During the short term, equilibrium will shift with output and interest rates increasing accordingly. If the country is not a member of a monetary union (or a fixed-exchange-rate-mechanism), the nominal

exchange rate would be flexible, and in the aforementioned scenario when the new equilibrium is reached, the demand for money will exceed supply and nominal interest rates will increase. Given the uncovered interest rate parity, as interest rates are now higher than the international rate, the nominal exchange rate falls, that is the currency of the country appreciates uncovered interest rate parity $E_t = \frac{E_t^e}{1 + i_t - i_t^*}$). In this situation, the goods of the country concerned will become less competitive, and exports will decrease, causing a contraction of demand. Therefore, fiscal policy becomes less effective. This scenario does not take place for countries in a monetary union because the nominal exchange rate is fixed with other members of the currency union and interest rates will be the same.³ This analysis concludes that in a monetary union, fiscal policy can be implemented more effectively than in a system of floating exchange rates, as fiscal policy results in monetary accommodation by the central bank.

Furthermore, fiscal policy can also contribute to the adjustment of an economy in a different way, depending on whether or not a centralized budget exists. Assuming the existence of a centralized budget, the easiest way to counter an asymmetric shock in one region of the monetary area is through fiscal transfer. The OCA theory, in fact, states that a monetary union needs a fiscal transfer mechanism (Kenen, 1969), supporting some form of fiscal federalism, especially in the absence of the exchange rate as an adjustment tool.

However, this stabilizing role that can be carried out theoretically through a centralized budget cannot be used in the case of the European Union. The EU budget is excessively small, representing hardly 1 percent of the EU's GDP. Moreover, the budget has to be balanced

³ This effect is analyzed in more detail for instance by Baldwin and Wyplosz (2004).

annually, allowing very little room for stabilization transfers. In fact, stabilizing fiscal transfers are explicitly ruled out in the Eurozone (e.g. no bail-out mechanism allowed). The only fiscal transfers that are allowed are redistributive transfers, such as the Structural and Cohesion Funds, and these are transfers of a different nature. Whereas stabilizing fiscal transfers intend to reduce volatility around the growth trend, redistributive transfers aim to change the actual trend.

EU fiscal coordination, based on rule enforcement, aims to ensure long-term sustainability, but it is not designed to support counter-cyclical policies due to several political economy reasons. The main reason is that the EU is an incomplete political union, and further fiscal competencies probably first need to be legitimized at a political level (“no taxation without representation”). Therefore, if fiscal competencies are to be broadened at a European level, either the European Parliament would be called to play a bigger role or some form of economic government would have to be created at the EU level. In the absence of a strong, centralized EU budget or monetary policy as adjustment mechanisms, national budgets continue to play the main role as economic stabilizers.

Finally, another reason why discretionary policies are sometimes preferred over a rule concerns the difficulty of establishing a viable rule of enforcement to constrain fiscal policy. Moreover, it is hard, politically speaking, to impose any penalties that are sufficiently large to restrain governments. Hence, there is a need to de-politicize the enforcement of a fiscal rule. De-politicization of the rule would be particularly important to prevent large countries from using their influence either to disregard the rules or to obtain privileged treatment. For the EU, the

achievement of this goal would imply limiting the role of the Economic and Financial Affairs Council of the European Union (ECOFIN) in rule enforcement.

3. The rationale for automatic fiscal stabilization in the SGP

The last section discussed the circumstances under which countries exercising fiscal policy may not be able to make effective and necessary adjustments. In this section, the issue will be analyzed in greater detail as background to the creation of the SGP.

To begin with, active stabilization can take place under a fiscal rule, but its scope is limited by the thresholds imposed by the rule therefore, the capacity for automatic stabilization becomes essential for the adjustment of individual economies in a monetary union. In fact, one of the main rationales for a commitment to the EU fiscal rule, the Stability and Growth Pact (SGP) is that the budgetary positions achieved through it would allow built-in stabilizers to function fully (Artis and Buti, 2000; Brunila et al., 2001; EC, 2002). The basic functioning of these automatic stabilizers can be summed up as follows. First, tax receipts decline when the economy slows down because of lower individual incomes, profits and private spending and this has a negative impact on income taxes, profit taxes and VAT. At the same time, welfare spending rises when the economy slows down due to greater unemployment and other welfare benefits that are demanded in these circumstances. Therefore, fiscal policy becomes automatically expansionary and, therefore, counter-cyclical. The opposite occurs in the event of an economic upturn⁴.

The advantage is that while stabilization may still take place, fiscal policy is no longer subject to problems linked to discretionary fiscal policy, as explained in the first section. Automatic

⁴ For further details of the precise mechanisms of action of counter-cyclical policy see Seidman (2003).

stabilizers are nicely counter-cyclical, which is what any stabilizing policy needs to achieve and, as no decision needs to be taken for its implementation, no lag follows. The European Commission and many authors have placed emphasis on the benefits of automatic fiscal stabilization, which does not threaten fiscal consolidation. Hence, the pitfalls of discretionary fiscal policy are avoided. Based on these advantages, Olivier Blanchard has proposed to strengthen automatic stabilizers, leaving more room for counter-cyclical policy, which is especially important in a monetary union (Blanchard, 2003). Indeed, a wide consensus has been reached on the benefits of automatic stabilization for the adjustment of individual economies, which participate in a monetary union.

Stabilization may therefore occur naturally if appropriate mechanisms are secured in place. This faith in the efficacy of automatic stabilizers is based on empirical evidence suggesting that fiscal automatic stabilizers reduce the volatility of output and consumption levels (Barrell and Pina, 2004; Blanchard, 2000; Cohen and Follete, 2000; Eichengreen and Wyplosz, 1998; Galí, 1994; Galí and Perotti, 2003; Niepelt, 2004). For the European Union, Buti et al. (1997) found that budget balances to be negatively correlated with growth, estimating that a 1 percent change in GDP growth causes a 0.5 percent change in the same direction of the fiscal position at the EU level (Buti et al., 1997). This estimate has become the rule of thumb. This result has been replicated in a second study of OECD countries focusing on the impact of automatic stabilization on growth. The Eurozone shows the same relationship between sensitivity of government balances and economic growth (i.e., a decline of 0.5 percent matched by a 1 percent decline, respectively).

Table 1: Automatic stabilizers (*)			
Germany	-0.5	Ireland	-0.4
France	-0.5	Finland	-0.5
Italy	-0.4	Greece	-0.6
Austria	-0.5	Portugal	-0.5
Belgium	-0.5	Spain	-0.5
Netherlands	-0.6	Eurozone average (**)	-0.5

* Sensitivity (are these percentages? State units(%))of government budget balances (%) to a 1 percent decline in economic growth

** Average of the 11 Eurozone countries included in the table

Source: OECD (1997) and Baldwin and Wyplosz (2004)

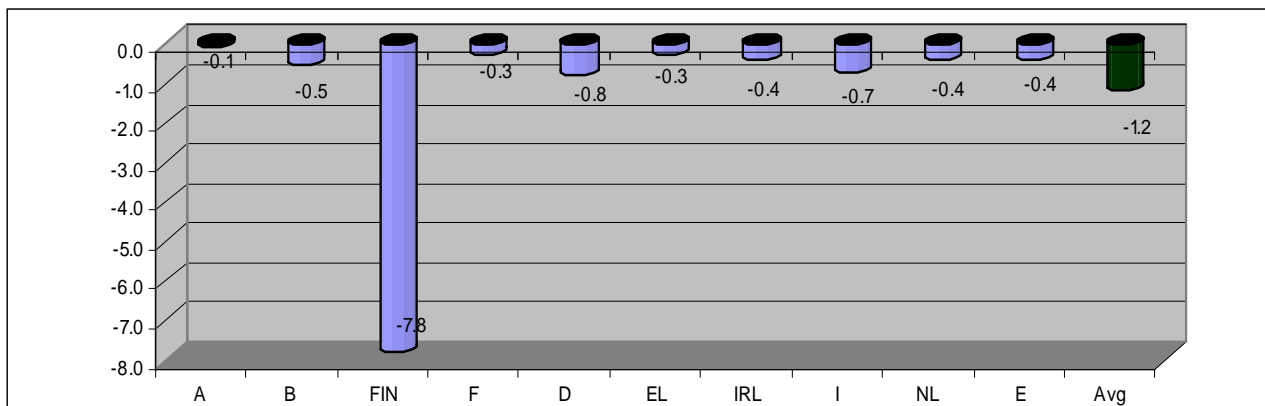
This index of automatic stabilizers reflects the sensitivity of government budget balance to a 1 percent decline in economic growth, measuring therefore the difference between the actual and the cyclically-adjusted budget balance. This cyclically-adjusted balance is an estimate of the balance, assuming the output gap⁵ is zero. In the euro area automatic stabilizers are fairly strong in comparison to other OECD economies and this index shows little inter-country variability among Eurozone economies.

In a study about the operation of automatic stabilizers in the Eurozone, Barrell and Pina (2004) assess their impact using stochastic simulations in a forward-looking multi-country macroeconomic model of ten Eurozone countries. The authors find that automatic stabilizers reduce output volatility by 11 percent for the euro area as a whole. In another study, Van den Noord (2002) carries out simulations to assess the impact of automatic stabilizers on the cyclical

⁵ Output gap can be defined as a measure of the country's cyclical position, or, the percentage difference between actual and potential GDP.

volatility of GDP,⁶ measuring the increase or decrease attributable to the automatic stabilizers during the 1990s. His findings are summarized in the figure below.

Figure 1: The impact of automatic stabilization on the cyclical volatility of GDP in Eurozone countries during the 1990s



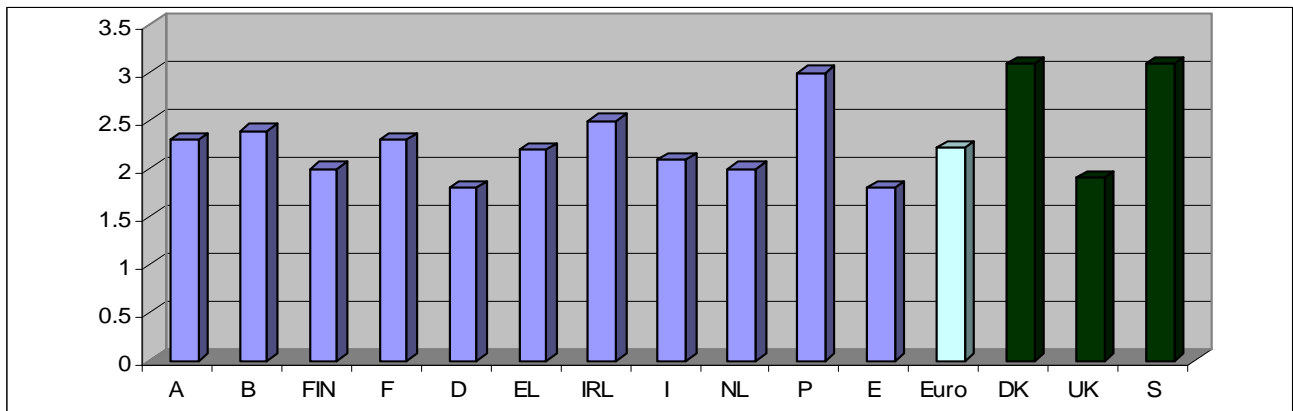
Source: van den Noord (2002)

According to these results, the average impact of automatic stabilization on the cyclical volatility of GDP in the Eurozone during the 1990s reached –1.2 percent. Nonetheless, the average is distorted by the extraordinary results for Finland. . Leaving Finland out of the calculation reduces the average to –0.8 percent.

Other estimates measure automatic stabilization for specific shocks, as its stabilization power may change depending on the type of shock. The figure below presents an index measuring automatic stabilization for a consumption shock.

⁶ Van den Noord (2002) estimates the simulated impact of fiscal policy on the cyclical volatility of GDP by calculating the mean square of the output gap for the 1990s, following the formula: $\sqrt{1/9} \times \sum_{t=1991}^{1999} gap_t^2$ where the $gap_t = (y - y^*)/y^*$: y^* : potential GDP.

Figure 2: Index of automatic stabilization (*)



* Stabilization effect of the budget (MEANING WHAT? THIS IS FAIRLY STANDARD TERMINOLOGY IN THIS FIELD) for a consumption shock amounting to 1 percent of GDP

Source: European Commission (EC, 2002)

This index elaborated by the European Commission shows how the whole Eurozone exhibits a fairly strong stabilization effect in the presence of a consumption shock. This effect is also observed in other EU member states that are not part of the monetary union, such as the UK, Denmark and Sweden.

Automatic stabilizers can therefore be considered quite large in EMU according to a variety of measures. This is somehow expected, as they depend to a good extent on how generous the welfare state is (Blanchard, 2003; EC, 2001), and these protection systems are well developed in Western Europe. Automatic stabilization is strong in euro area thanks to high taxation rates and fairly progressive taxation systems among the countries participating in the Economic and Monetary Union (Gatti and Wijnbergen, 2003: 4). It is, nonetheless, probably necessary to look at specific variables for a closer analysis of the determinants of these automatic stabilizers.

Automatic stabilization is strengthened through the design of an optimal tax and transfers system over the short run. Over the long run, an effective system of income taxes, the unemployment insurance and strong welfare provision, generally, contribute to strengthening the automatic stabilizers (Blanchard, 2003). In particular, the size of automatic stabilizers seems to be positively correlated with the share of government expenditure in GDP, the generosity of unemployment compensation and the degree of tax progressivity.⁷

Doubts also exist about the effectiveness of these different parameters to stabilize the economy appropriately. For one, the effectiveness of automatic stabilizers depends on the kind of shock, being higher for demand shocks and lower for supply disturbances (Cohen and Follete, 2000; EC, 2001; Flores et al., 2005: 15-16). The effectiveness of automatic stabilizers also depends on the persistence of the shock. Stabilizers are found to be effective for short-term shocks, but in the presence of permanent shocks, automatic stabilizers may be even counter-productive since they tend to lengthen the adjustment process (EEAG, 2003). Therefore, the extent to which automatic stabilization will be effective depends on various factors, and their proper functioning may not be taken for granted in all circumstances. Blanchard agrees that currently used automatic stabilizers exist more by accident than by design. There is no reason that the amount of stabilization they deliver is either best, or targeted at the appropriate components of the demand (Blanchard, 2001: 18). Calmfors et al. (EEAG, 2003) claim that over the short term, aspects concerning stabilization and adjustment do not influence decisions that may determine automatic stabilizers. Moreover, they argue that empirical studies have found that automatic stabilisers can

⁷ For further details on the determinants of the size of automatic stabilizers see for instance Mabbett and Schelkle (2007: 89).

at best only mitigate the effect of macroeconomic shocks, but they are not able to fully offset them (EEAG, 2003).

To sum up, faith in the effectiveness of automatic stabilizers comprised a key rationale for the creation of the Stability and Growth Pact: with effective stabilizers in place, the loss of active fiscal stabilization could not overly disrupt national economies participating in the Eurozone. A wide consensus seems to have been achieved on the desirability of automatic stabilization to face short-term shocks, but less agreement has been reached on how to strengthen automatic stabilizers, or even the extent to which they are fully effective.

5. Conclusion

This paper investigates the rationale behind a fiscal rule, such as the Stability and Growth Pact (SGP). Theoretical and empirical debates have been presented in the literature concerning the need to restrict fiscal policy through the adoption of a rule such as the SGP. In this paper, a theoretical approach has been used to study if an optimal fiscal policy can be best achieved with a rule or with greater discretion, explaining the main economic and political economy arguments covering both sides of this debate.

On the one hand, there are major reasons to maintain sound fiscal policies and to restrict discretion in the governments' use of these policies. These reasons relate to problems of time inconsistency, the political business cycle and longer inside (decision-making) lags, which are mostly due to the political nature of the framework in which fiscal policy needs to be decided. Furthermore, in a monetary union, additional reasons exist to constrain fiscal policy for

participating countries. This is due to the fact that For one, high deficits could lead to negative externalities, mainly in the form of higher interest rates for all members in the monetary union. Therefore, the costs of fiscal indiscipline become collective in a monetary union. The numerous pitfalls associated with unrestricted fiscal policy may be addressed through rules (i.e. an *ex-ante* commitment to limit deficits and debt levels) rather than through discretionary fiscal policies. . In the Economic and Monetary Union this has been precisely the option chosen with the creation of the famous Stability and Growth Pact.

On the other hand, many empirical studies seem to show the effectiveness of active fiscal policy to stabilize the economy. Moreover, in a monetary union there are additional reasons to use fiscal policy, as economic theory teaches us that fiscal policy is more effective in a fixed exchange-rate system, such as a monetary union. These reasons indicate that greater fiscal discretion could facilitate quicker adjustment to asymmetric shocks in a currency area, which is constrained by common monetary policy. Such would argue against a fiscal rule, or at least against a very constraining rule.

One key issue remains whether individual economies can adjust appropriately in the absence of active fiscal policy, which highlights the importance of the debate about brings effectiveness of automatic stabilization. This paper argues that the confidence in automatic stabilizers was indeed one of the key rationales for the creation of the Stability and Growth Pact. A consensus seems to have been established on the benefits of automatic stabilization, particularly in the face of short-term demand shocks. There is also wide agreement that automatic stabilizers are generally quite strong in the Euro area, thanks to a relatively high taxation rate and fairly progressive taxation

systems in the countries participating in the Economic and Monetary Union. However, some doubts remain about how to strengthen these stabilizers and particularly about their real effectiveness, which varies depending on the type and duration of the shock. Further research on this area is therefore required.

A compromise solution, which would take into account the relevant arguments on both sides of this debate, would be to adopt a fiscal rule in a monetary union, but not a very constraining one. This solution would help avoid the shortcomings of discretionary fiscal policy and ensure fiscal consolidation, but it would also allow appropriate active fiscal adjustment of individual economies within the limits of the rule and beyond the possibilities of automatic stabilization. Regardless of the solution chosen, automatic stabilization might be an additional inter-country adjustment mechanism in the euro area and therefore could be reinforced, although the effectiveness of these stabilizers in different scenarios and how automatic stabilization can be strengthened further in a monetary union requires further research.

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