# On Constraining Fiscal Policy Discretion in EMU


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## 1. INTRODUCTION

The creation of a single currency in Europe has a major impact on the conduct of fiscal policy in the EMU countries. Initially, the run up to the launch of the euro – largely defined by the Maastricht Treaty criteria – imposed significant fiscal adjustments in all countries throughout the 1990s, but the principles of fiscal policy in a monetary union were discussed mainly at an abstract level. With the introduction of the euro in January 1999 and the replacement of the Maastricht Treaty criteria by the rules of the Stability and Growth Pact (SGP) the issues of fiscal policy in a monetary union were transformed from a matter of academic debate to a real-time challenge for policy-makers. Within the first years of the EMU, the framework for fiscal policy embedded in the Stability and Growth Pact has been subjected to continuous criticism – although the Pact was intended to be conducive to an environment of discipline, coordination, and stability, its constraints became binding for several countries and presented challenges to macroeconomic stability and to the credibility of the Pact at the very early years of the EMU.

In this paper we consider several arguments in the debate on constraining fiscal policy discretion. Most of the arguments do not apply exclusively to monetary unions, but in our opinion they become more relevant when a country loses its monetary autonomy. The arguments against discretion are based on the observation that there are at least three types of policy abuse by governments: (a) excessive deficits; (b) unwarranted increase in policy volatility; and (c) procyclicality of fiscal policy. Does the Stability and Growth Pact provide any protection against these undesirable consequences of policy discretion? In our view the answer is a qualified 'yes'.

Beyond the limits that they set on 'bad' fiscal policy, the rules of the SGP are also seen as a tool to coordinate fiscal policies among members of the monetary union. While the need for such coordination is highly debatable from an academic point of view, this is one of the arguments used by policy makers to justify the principles of the SGP.

The obvious problem with any restriction on fiscal policy is such that mechanistically they constrain also the functioning of the automatic stabilizers. This is even more dangerous in a monetary union: In the absence of monetary instruments to smooth national idiosyncratic fluctuations, the only tool in the hands of the government is fiscal policy. [1]

To understand the tensions between the two sides in the debate, we base our analysis on a large body of theoretical literature on the effects of institutions on policy making and on

[1] Of course, a counterargument is that the smoothing of business cycle fluctuations should be relegated to the automatic stabilizers and not to discretionary policy. Then to guarantee discipline while keeping stabilizers functioning requires that the SGP be re-focused from the overall balance to the cyclically-adjusted balance.

the empirical record of the EMU countries in the first three years of the functioning of the union. We consider the strengths and weaknesses of these arguments based on the observed behavior of fiscal policy in the 1990s. The environment in which fiscal policy operated during those years can be characterized by the following trends:

- After a persistent and significant effort to reduce budget deficits in 1991-1999, the trend towards fiscal consolidation stopped or at least slowed down after the launch of the euro. This shift took place in an environment characterized by an economic slowdown that put additional strain the budget and brought some countries close to the 3% limit imposed by the Stability and Growth Pact.

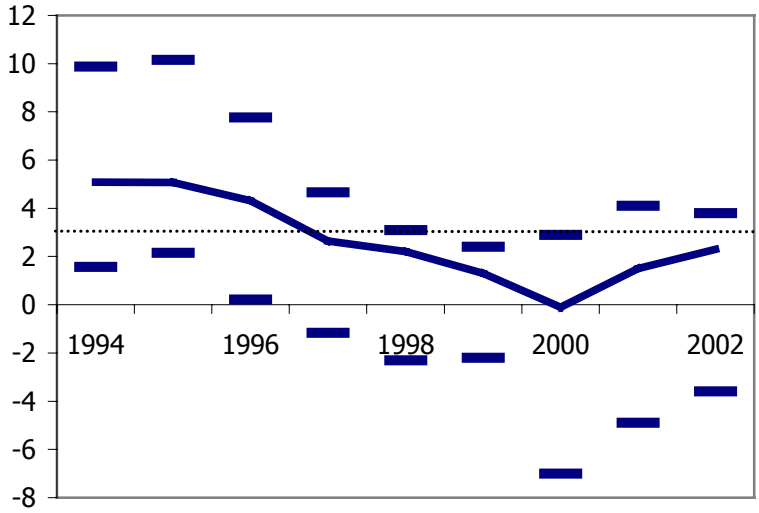



**Figure 1. Budget deficit Euro countries (overall, maximum and minimum)**

- The adverse cyclical development that led to the deterioration of budget balances raised serious questions concerning the interpretation and implementation of the 3% limit on budget deficits. What is the right measure of the budget deficit to be used? Although the 3% limit applies in principle to the actual financial balance, a new code of conduct associated to the SGP and approved in July 2001 allows for a more flexible interpretation when assessing medium-term budgetary plans.[2] While this flexibility in the interpretation of the some dimensions of the Pact is welcome, these changes are subject to interpretation and open the door for political manipulations – in contrast to the intentions of the founders of the Pact manifested by the desire to implement a simple and transparent rule like the 3% limit on deficits.

[2] However, the 3% limit still applies to the financial balance. See European Economy 3/2002 for a detailed explanation of the changes introduced by the July 2001 code of conduct.

- Medium-term developments have complicated the assessment of the sustainability of fiscal policy. The Stability and Growth Pact and the implementation of early warnings are supposed to ensure the long-term sustainability of budget plans. However, the Pact is built around a very simple rule that sets a limit on the current budget deficit without taking (explicitly) into consideration medium-term developments that can seriously affect the feasibility of fiscal policy plans. As an example, recent tax reforms introduced by countries such as France or Germany are judged within the straightjacket of the SGP without taking into consideration initial conditions or possible medium-term consequences of those tax reforms. More importantly, the pressures that demographic changes will bring to government budgets in coming years are slowly being incorporated into the statements on sustainability of individual members' budget plans without a clear and agreed upon framework. Although the new code of conduct addresses some of these issues by introducing targets that go beyond the minimal benchmarks it still leaves many questions unanswered about the calculation and enforcement of those plans.

Based on these issues we formulate two sets of questions. First, how should fiscal policy be conducted in a monetary union? Second, are the principles of coordination and discipline stressed in the SGP and the implementation of the Broad Economic Policy Guidelines (BEPGs) the best way of conducting fiscal policy in EMU? How can the current system be improved? Our analysis will be kept at an abstract level, understanding the principles of the SGP and how they compare with what we believe should be the guiding principles of fiscal policy restrictions.[3]

The paper is organized as follows. In the next section we start with a brief outline of the key issues that arise in the conduct of national fiscal policy in a monetary union. In Section 3 we provide a more detailed analysis of the dangers with fiscal policy discretion. Section 4 discusses the case for coordination of nation fiscal policy with the common monetary policy and with the fiscal policies of the other members of the union. Section 5 concludes.

## 2. FISCAL POLICY IN A MONETARY UNION

Fiscal policy and monetary policy are the basic economic policy tools to smooth out business cycles. In a monetary union monetary policy is centralized while national fiscal policies remain independent. This asymmetry in the delegation of policies between national and supranational authorities, combined with the natural interactions that exist between monetary and fiscal policies raises a broad set of issues about the practical implementation of fiscal policy in this environment.

In the case of EMU, the debate on the conduct of fiscal policy has focused on the constraints imposed on governments by the convergence criteria of the Maastricht Treaty

[3] See Buiter (2002) or Blanchard and Giavazzi (2002) for a detailed analysis of the mechanics of the SGP and how it compares to alternative rules to constrain fiscal policy behavior.

and the SGP. In this context, the policy debate has been around the optimality of restricting fiscal policy. The benefits of setting restrictions or guidelines to the behavior of fiscal policy have been addressed many times before in the academic literature. The arguments evolve around two main themes: discipline (good behavior) and coordination.

Let's summarize the main arguments before we develop them in detail in the next two sections. The first set of arguments (discipline) applies to situations where restrictions on governments' behavior can eliminate 'bad' fiscal policy. For example, the large accumulation of public debt in most industrial countries since mid-1970's led to the common perception that, if left unsupervised, governments produce excessive deficits and accumulate too much debt. This observation has been behind debates on the possible adoption of a balance budget amendment in the U.S. and it is part of the rationale of the restrictions of fiscal policy in EMU. There are also other forms of 'bad' fiscal policy. Large swings in fiscal variables (taxes or government expenditures) add volatility to the economy. Related to this, procyclical fiscal policy can also exacerbate business cycles.

The second type of arguments (coordination) refers to situations where setting guidelines for fiscal policy might be optimal due to spillovers and the need for coordinating fiscal policy. These spillovers can take place between the central bank and the fiscal authority or, in an international context, among a group of countries that have strong economic ties. This is precisely the definition of coordination used in the academic literature. For example, when we think about coordination of fiscal policy among countries, it refers to circumstances where domestic fiscal policy takes into consideration foreign economic conditions, either because of macroeconomic spillovers or strategic interactions with foreign fiscal authorities. This form of coordination is very different from what, many times, European policy makers have in mind when they refer to the need to coordinate fiscal policy across EMU countries. In most cases, coordination in this context is understood as 'coherence', as the notion of using a common framework to set fiscal policy, a common framework that refines the rules of good behavior. In Section 4 we will elaborate on the differences between coordination and coherence.

An important issue that arises when discussing the rationale for fiscal policy restrictions is the extent to which they only apply to monetary unions. So far, most of the arguments apply to any country regardless of its exchange rate regime Is there anything special about EMU that makes these restrictions or guidelines more beneficial? The answer is yes. Some of the arguments above become stronger in the case of countries that are very integrated or share a common currency because of the strength of spillovers. There are two types of spillovers, direct macroeconomic spillovers associated to economic linkages and confidence spillovers associated to sharing a central bank. By macroeconomic spillovers we mean that, in an integrated economic area, business cycles get propagated through trade and capital flows or financial linkages. As a result, changes in fiscal policy have effects on other countries' economies. By credibility spillovers we refer to those associated to the possibility of bailouts (either by governments or the common central bank) of governments that follow unsustainable budgetary plans.

What we refer to as direct macroeconomic spillovers are not strictly associated to countries that share a common currency. We could therefore say that they are relevant for European countries regardless of whether or not they share a currency as they are only related to the degree of economic integration and trade and financial linkages. This is correct but, in practical terms, the process of trade and monetary integration and the setting of institutions to manage fiscal policy in Europe cannot be seen as independent. As an example, the rules of the SGP apply to Sweden (not a current member of EMU) and the requirement to keep budget balances close to balance or surplus in the medium term applies to all current and future EU members (including the U.K.). As a result, in our analysis we will not simply look at arguments that are only relevant to currency areas but we will look at a broad set of issues regarding fiscal policy in the context of an integrated economic area. [4]

# 3. FISCAL POLICY BIASES AND THE NEED FOR RESTRICTIONS

## 3.1 The arguments

Although there are many ways in which fiscal policy can go wrong, it seems appropriate to group these policy outcomes into three categories. For each of these categories we look at both the theoretical arguments and the supporting empirical evidence. When discussing the empirical evidence we pay special attention to how different institutional settings lead to different outcomes.

*a. Excessive deficits.*

The build up of public debt in most industrial countries after the mid 70's led to a large literature on the bias towards large deficits and excessive debt. This bias is a result of the fact that governments do not internalize the cost of additional debt. Persson and Tabellini (2000) summarize some of the main theoretical arguments of this literature. Most of these arguments are indeed related to the 'dynamic common-pool problem' where different groups (parties in a coalition, or spending ministers) decide on part of public spending. This decentralized process often leads to excessive spending.

Another reason for a transitory accumulation of debt is the postponement of fiscal adjustment after a cyclical downturn. From a theoretical point of view this delay is longer for governments with weak and decentralized budgetary procedures as well as for coalition governments (see Alesina and Drazen, 1991).

A large part of the empirical evidence and analysis is about the large deficits following the oil shocks of the 1970's. In the interpretation of these events, this literature has analyzed how different political institutions lead to higher or lower deficits. From a theoretical point of view, the excessive-deficits bias is linked to the degree of decentralization or to the

[4] We are aware that even if the arguments to justify fiscal policy restrictions extend across all forms of exchange rate regimes, the exact form of the optimal rules of coordination will be generally different depending on the monetary policy regime. As it will become clear in the coming sections, our analysis is confined to the principles of restrictions and not to the exact form of optimal restrictions.

concentration of power in the budgetary institutions. This theoretical claim is corroborated by many empirical studies. There is evidence that weak budgetary procedures and dispersion of power can lead to high deficits, as documented in Von Hagen and Harden (1995), Kontopoulos and Perotti (2002), Alesina and Perotti (1995), Poterba (1994) and Poterba and von Hagen (1999).

*b. Volatile fiscal policy.*

Discretionary fiscal policy can bring undesirable volatility to the economy. By discretionary fiscal policy we mean changes in fiscal variables that are unrelated to economic conditions (i.e. they cannot be attributed to the normal functioning of automatic stabilizers). Examples of discretionary fiscal policy changes can be changes in taxes around election times (either for reelection purposes or because of ideological changes in the government).[5] They can also be the result of other political events that lead to a demand for different levels of government spending or taxation (e.g. the increase in government spending around the process of German unification). Furthermore, as Stokey (2002) argues, not all governments are "as benevolent and clever as a Ramsey government". Incompetent or greedy politicians can generate substantial volatility in fiscal policy instruments.

The theoretical literature on political budget cycles has identified two types of political motives for discretionary changes in fiscal policy. The first --- called opportunistic --- states that in order to maximize its chances for re-election, the incumbent party runs larger-than-usual budget deficits in election years. Alternatively, discretionary changes in fiscal policy may also arise from changes in the preferences of the political party in power, as in Alesina (1987) --- the partisan cycle. [6]

The empirical evidence leads to three main conclusions about discretionary fiscal policy: first, there are significant politically-motivated changes in fiscal policy; second, the welfare costs associated to these changes are large and, third, the use of discretionary fiscal policy is affected by institutional constraints.[7] By using data for a large sample of countries recent works by Persson (2001) and Shi and Svensson (2001) present convincing evidence in favor of an opportunistic political business cycle. In terms of the costs of these policies, Fatás and Mihov (2002) present evidence that in a large sample of countries the use of discretionary fiscal policy is an important source of volatility and leads to lower growth in the long run.

Finally, there is evidence that the use of discretionary fiscal policy --- due to political budget cycles or idiosyncratic changes --- is certainly affected by the political regime or

[5] There are obviously many examples of changes in fiscal policy around elections. The recent changes in fiscal policy after the presidential elections in France (criticized by the European Commission) are a good example.

[6] For a thorough analysis of the theoretical foundations and the empirical validity of the electoral cycle we refer the reader to the excellent summaries in Alesina, Roubini and Cohen (1997) and Drazen (2000).

[7] The recent work of Persson (2001) summarizes some of the arguments developed in this literature to justify why political institutions matter for economic policy. A comprehensive treatment of these issues can be found in Persson and Tabellini (2000).

the institutional environment in each country. Prime candidates for explaining the cross-country variation in the use of policy discretion are the political and electoral systems. The effects of the electoral system on fiscal policy are discussed in Persson (2001) and Milesi-Ferretti, Perotti and Rostagno (2002). Persson, Roland, and Tabellini (1997) show that separation of powers combined with appropriate agenda-setting rules can lead to a significant improvement in equilibrium outcomes by reducing the rents extracted by politicians. In general, the theoretical literature in this area focuses on the composition and size of government spending, but it is safe to argue that countries with more constrained governments should also experience less volatility in discretionary policy. There is a large body of empirical evidence in favor of the idea that constraints matter for fiscal policy. Roubini and Sachs (1989) present evidence for OECD economies that governments where power is more concentrated create an excessive response of fiscal policy to economic shocks. Similar evidence exists for US states. Both Poterba (1994) and Alt and Lowry (1994) show that divided state governments display a less reactive fiscal policy to changing economic conditions. Fatás and Mihov (2002) show that the use of discretionary fiscal policy is restricted by the political constraints of the institutional setting. Their measure of political constraints captures the extent of checks and balances in the budgetary process (e.g. the existence of veto points) or a dispersion of preferences over fiscal policy among the parties involved in the budgetary process (government, parliament).[8]

*c. Procyclical fiscal policy.*

The last type of bad policy that can be harmful for the economy is the procyclical fiscal policy. In response to economic fluctuations, one expects fiscal policy to be countercyclical, i.e. budget balances to increase in booms and decrease in recession in order to smooth out fluctuations in income. There is however evidence that in many cases fiscal policy behaves in a procyclical manner. The argument is that in good times spending increases in excess of the increase in taxes. The evidence for European economies is mixed. While there is not much evidence of strong procyclical behavior, in some countries policy is either acyclical or only slightly countercyclical. This conduct of fiscal policy reduces the effectiveness of automatic stabilizers as argued by Melitz (2000). Lane (2002) and Wyplosz (2002) also present evidence on the cyclical properties of fiscal policy.

As it is the case with the other two biases, budgetary procedures and political constraints also affect procyclical fiscal policy. In some sense the evidence presented by Lane (2002) is comparable to the one we discussed before on discretionary fiscal policy. Political constraints (measured by the same index as in Fatás and Mihov (2002)) help mitigate this bias as well. Countries that face more political constraints display less procyclical fiscal policy.

## 3.2. Summary: Biases in fiscal policy

In summary, there is evidence that the three biases described above are relevant from an empirical point of view. They describe fiscal policy in many industrial economies and,

[8] See Henisz (2001) for a detailed description of the construction of this index of political constraints.

more importantly, the evidence also shows that this behavior has negative effects on the economy in terms of additional volatility and lower growth.

The second insight from the theoretical and empirical literature is that constraints in the budgetary process alleviates some of the undesirable biases. Although in the case of excessive deficits the results is mixed and in some cases point in the opposite direction, in the case of excessive volatility and procyclical fiscal policy there is sufficient evidence that constraints in the political and budgetary processes mitigate the magnitude of the bias. Notice that these constraints, as documented by the empirical evidence, are not numerical but institutional.

These conclusions have to be taken with great care as, so far, we have ignored the possible costs of adding restrictions to fiscal policy. The most obvious one is the negative impact that they might have on the working of automatic stabilizers. Although the evidence is mixed, recent studies have shown that automatic stabilizers are an effective tool to reduce the volatility of output fluctuations. Setting limits to fiscal policy can inhibit the functioning of automatic stabilizers. The challenge is to introduce mechanisms that reduce the size of the biases mentioned above but do not create a straightjacket on all types of fiscal policy. Some of the evidence above offers some hope. Restricting discretion can indeed help automatic stabilizers because it limits discretionary changes in fiscal policy that make the overall fiscal stance procyclical (Wyplosz (2002), Fatás and Mihov (2002)). As long as these restrictions are not a simple numerical rule but built as checks and balances in the budgetary process, they can prevent policy-makers from incurring in large and frequent politically-motivated discretionary changes in fiscal policy without preventing the proper functioning of automatic stabilizers.[9]

### 3.3 Does the SGP avoid biases in fiscal policy?

Even if one agrees with that some restrictions on fiscal policy can be desirable there is still the need to resolve the question of what type of institutional arrangement is the most appropriate one and how far the current system is from addressing the three biases listed above.

The SGP is built around numerical limits on the budget deficit. The 3% limit and the close to balance or in surplus rules seem to be designed to address the first of the three biases: that of excessive deficits and not so much the other two. Despite this, there are clearly some general positive effects of limiting budget deficits that can also deal with the excessive volatility bias. If enforced, they avoid large discretionary changes in fiscal policy whenever the starting position is close enough to the 3% limit. Clearly they are not perfect as one can imagine a government that starts with a positive surplus and reduces taxes dramatically (the case of Ireland in 2001) without approaching the 3% limit.

[9] One could even argue that in the event of a large economic downturn, these constraints will not impede discretionary changes in fiscal policy to address the worsening of economic conditions. The reasons is that it is likely that, in such situations, a consensus between all parties involved in the budgetary process, an agreement that will avoid the possibility of a gridlock in decision process.

A second benefit is that it provides a framework of discussion that can indeed serve as a constraint on the discretion of fiscal policy. If this is true, it can help reducing the volatility of fiscal policy. In some sense, this solution is not far from recent proposals to introduce fiscal policy committees (Wyplosz (2002)). Although clearly fiscal policy decisions are still made at the national level, the fact that they are being analyzed and subject to surveillance (and some times criticisms) by supranational institutions (the European Commission) adds constraints to the budgetary process. Related to this, national governments can use the supranational institutions as political weapons in the domestic political debate to justify budgetary discipline. The large reduction in budget deficits in the 90's probably owes much of its success to the existence of a policy justification outside national governments, i.e. the Maastricht Treaty criteria.

Despite these benefits the current system of restrictions on fiscal policy in EMU has many drawbacks. One of the main problems is its simplicity. Indeed, the strong criticisms against the absurdity of simplistic numerical rules has led to political interpretations of the numerical values when it came to enforce them. These interpretations have certainly undermined the credibility of the rules. Starting with the decision to "relax" the 60% limit on government debt to allow a large number of countries to enter EMU in 1999, and followed by the recent controversial extensions of medium-term targets for some of the large countries, the rules of the SGP are becoming more and more subject to discretionary interpretations. Some of the changes introduced are welcome. For example, the current interpretation of budget deficits as cyclically adjusted budget deficits (when assessing medium-term budgetary positions) is addressing one of the main concerns of the original strict interpretation of the 3% deficit but it raises questions on the process of calculating cyclically adjusted balances and producing early warnings. The fact that the analysis of fiscal policy considers also medium-term challenges and looks at minimal benchmarks is certainly a good refinement but, once again, it does add discretion to the process and goes against the simplicity of the rules.

Finally, the main criticism of the 3% limit on budget deficits is that it can impede the working of automatic stabilizers if a country starts close to the reference value and goes through a large recession (assuming the recession is not strong enough to qualify for the exemptions of the SGP). Some analysts go even further and criticize these fiscal constraints as being an impediment to growth. Although there is no doubt that a limit on deficits will always impose some restrictions on fiscal policy, it is hard to accept that this is the main weakness of the SGP. First of all, if the issue is one of allowing automatic stabilizers to operate fully, the problem could be fixed by changing the ceiling to a higher number or making sure that it only applies to cyclically-adjusted budget balances. We think it is naïve to believe that a larger ceiling (say 4% or 5%) will not lead to similar political tensions around the costs of limiting the flexibility of fiscal authorities. The discussion is deeper than a technical discussion on what the right value for this limit should be to make sure that automatic stabilizers are effective. Finally, if the argument is more about the need to introduce structural reforms that require a reduction in current tax rates and might lead to transitory budget deficits beyond 3%, there is strong evidence that successful fiscal policy consolidations require commitment to immediate reductions in

government spending (Alesina and Perotti (1995)). Therefore, successful fiscal consolidations are generally achieved without requiring large initial budget deficits.

Overall, we see the SGP as suffering from a poor initial design based on the notion that a simple rule could provide a rich-enough environment to deal with many of the biases in fiscal policy. It turned out that reality is much more complex: obvious and correct criticisms of the simplicity of the SGP have led to additional refinements. These refinements go in many cases against the notion of a strict fiscal rule, but it seems that the outcome might not be necessarily as undesirable as it is often argued. We see as one of the positive characteristics of the Pact the existence of a supranational layer of discussion and surveillance to national governments provides a constraint that limits discretionary behavior. At this point the tension is between the formal rule, which loses its central position in defining fiscal policy, and the actual goals as implicitly embedded in the BEPG's.

### 3.4 Biases in fiscal policy: the EMU record.

In this section we look at the biases in fiscal policy described in the previous pages in the context of the run-up to EMU and the first three years of the Euro. Clearly the limitations of the data do not allow us to measure the size, relevance or change over time of these biases. Our goal is to look at the behavior of fiscal policy through the eyes of these biases and assess whether the years that preceded the launch of the Euro plus the first three years of its history offer any clue on how fiscal policy will develop in the Euro zone.

*A methodological discussion on assessing fiscal policy stance*

When measuring changes in fiscal policy a distinction needs to be made between the response of fiscal policy to cyclical conditions and changes in fiscal policy that are unrelated to the business cycle. Most of the arguments we have made before are about changes in fiscal policy beyond the cyclical changes that take place through automatic stabilizers. Therefore, in our analysis, we need to distinguish between the two. This task is both conceptually and empirically, very difficult. The most obvious solution is to construct a cyclically adjusted budget deficit; a current practice at the European Commission, the IMF and the OECD. The adjustment is carried out by establishing a benchmark cyclical indicator (an output gap, for example) and relating the deficit to the state of the cycle relative to the benchmark.[10] In the previous section we have made use of the cyclically adjusted measure of fiscal policy produced by the European Commission.

An important contribution to this literature is provided in Blanchard (1993) who proposes to start with a pre-specified benchmark and estimate elasticities of the different components of the budget with respect to a representative set of macroeconomic variables. The response of the budget deficit to current economic conditions is then constructed by using the estimated elasticities. The difference between this value and the actual budget deficit is a measure of discretionary fiscal policy. Indeed, a version of this

[10] See Alesina and Perotti (1995) for a discussion of these measures. Recently the European Commission has changed their way of constructing cyclically-adjusted fiscal measures by moving from an HP-detrending method to a production-function method.

indicator has been used in Alesina and Perotti (1995). In their study of fiscal consolidations in OECD countries they construct an indicator of fiscal policy by using the current rate of unemployment as the driving variable for transfers and taxes. Here we extend their work by taking a slightly agnostic but more general approach. We use gross domestic product (GDP) instead of unemployment and we include a measure of the price level and interest rates. We use GDP because it is a more comprehensive measure of the state of the economy. Inflation and interest rates are also included because the budget does depend on the current rate of inflation – possibly via delays in tax collection or indexation of some spending items – and on real interest rates via their direct effect on interest payments or on the decision to invest in public infrastructure.

Our methodology requires estimation of a regression of the primary deficit on various macroeconomic variables. The baseline regression contains as explanatory variables the growth rate of real GDP, inflation, and the real short-term interest rate. This composition of the vector of explanatory variables must be regarded as the minimal set of macroeconomic variables necessary for the construction of an indicator of fiscal policy. The estimated equation is the following:

$$\mathrm{PB}_t = \alpha + \beta_1 \Delta \mathrm{GDP}_t + \beta_2 \Delta PGDP_t + \beta_3 r_t + v_t^p \qquad (1)$$

The indicator of discretionary fiscal policy is the residual denoted by $v_t^p$ - this indicator is orthogonal to the state of the economy, and thus it corresponds to the notion of discretionary, as opposed to reactive, policy.[11] To understand the correct meaning of this measure, it is useful to describe fiscal policy as consisting of three instruments: (a) automatic stabilizers like taxes and transfers – these are instruments that are structurally embedded in the budget and are difficult to change with a simple discretion of the executive branch; (b) reactive discretionary policy – these are usually spending items that are used to smooth business cycle fluctuations on *ad hoc* basis; their use can be detected as systematic correlation between output fluctuations and fiscal policy; and (c) non-reactive discretionary fiscal policy – these are programs which are implemented for reasons other than smoothing business cycle fluctuations. Our measure is using the definition in (c) to evaluate fiscal policy stance.

Our main data set that includes all Euro countries with the exception of Luxembourg. For each country we have constructed an indicator of fiscal policy by running the regressions described by equation (1). We refer to this indicator as the constructed measure of the fiscal stance.

*The data: the first three years of EMU*

In the last ten years, European countries have experienced large budgetary adjustments as the result of the conditions set by the Maastricht treaty. Most of the adjustment took in

[11] In Fatás and Mihov (2001a) we offer an extensive discussion of the fiscal policy indicator. In the same paper we also show how the economy reacts to shifts in discretionary fiscal policy.

the period 1993-1999. Figure 2 shows the evolution of the budget deficit in the period 1990-2002.[12]

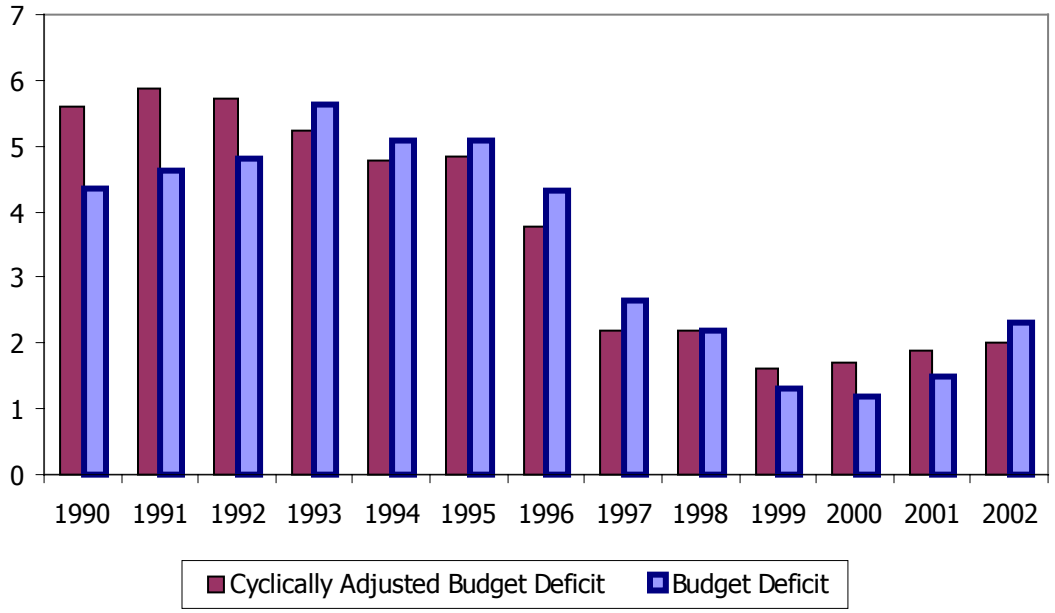



**Figure 2. Fiscal Adjustment. Euro Countries.**

The evolution of budget deficits is marked by a strong downward trend in the period 1993-1999 followed by a sudden stop in 1999. In the last four years (including the projection for 2002), the budget deficit has increased. This reversal of the trend cannot simply be justified by the slowdown in economic activity of 2001 given that even after adjusting for the cycle, the same trend is observed. There are therefore two insights from Figure 2: first, the limits on budget deficits set as convergence criteria in the Maastricht Treaty had a large impact on the behavior of fiscal policy. This behavior is not simply driven by the exceptional circumstances of 1996 and 1997 where there was a large incentive to live by the rules –i.e. entry in EMU. It is important to note that once the decision on the entry to the EMU was made in 1998, we did not observe a *strong* reversal of the trend even in the case of countries that displayed deficits much smaller than the 3% ceiling. While we can guess the positive effects of these restrictions it is impossible to know how these countries would have behaved if they had not been part of this process. One can argue that countries that were not part of EMU displayed identical behavior. For example, Canada or the U.S. had a larger reduction in budget deficits during the same period of time. On the other hand, by the standards of some of the Euro countries, the adjustment of the 1990's was quite impressive.

[12] Data for 2002 is a forecast. Data for 2000 excludes revenues from UMTS auctions,

The second insight is that there is evidence of fatigue in the process of fiscal adjustment. Once countries have moved into the safe area below the 3% limit, the pressure to continue towards the goal of close to balance or surplus is much weaker and it shows in the data. While it is clear that the trend of the 90's could not have continued for a long time as countries approached steady-state values of their budget balances, it seems that, at least for some countries, the trend has stopped too soon at levels that do not guarantee a quick approach to reasonable medium-term balances.

To understand better why the fiscal adjustment of the 90's stopped in 1999 it is useful to look at the composition of the adjustment. Most of the effort in reduction of budget deficits took place through tax increases in the years 1993-1997 and a reduction in expenditures that started later (in 1996). In both cases, there seems to be a sudden stop or even reversal to the trend in 1999. There is even a reversal in the trend of taxes with some decreases in the post-1999 period. In the case of expenditures there is a stronger reversal of the trend as they increase as a % of GDP in the last 3 years. All these figures are cyclically adjusted so the reversal in the trend cannot simply be attributed to the working of automatic stabilizers.[13]

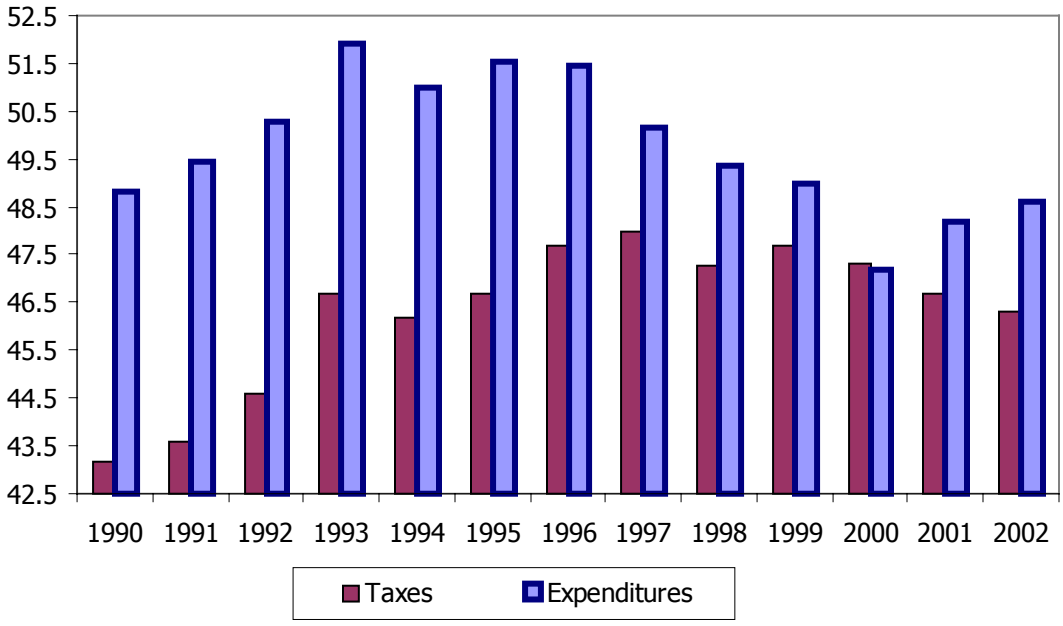



**Figure 3. Composition of the Fiscal Adjustment. Euro Countries.**

From Figure 3 we can see that in terms of timing, the adjustment has been uneven. While most of the fall in government expenditures took part in the second half of the 90's, the

[13] The data are from the European Commission that now publishes fiscal data that have been cyclically adjusted using the same method for all EU countries.

increase in taxes was more pronounced in the first 5 years. For example, during the first years (until 1993) government expenditures increased and peaked at a level of around 52% to come down to about 47% by the end of the decade.[14] Taxes, on the other hand, increased rapidly in the years 1992-1997, reaching a level of 47.5% of GDP and have remained stable since then.[15] One of the reasons for the uneven adjustment of government expenditures is the evolution of financial expenditures associated to the interest payments on the government debt. While interest payments increased from 4.8% to 5.5% in the period 1990-1993, after 1995 the reduction in interest rates brought this burden down to 4.3% by 1999. This means that about half of the reduction in government expenditures during the period 1995-1999 is due to a reduction in interest payments.

The behavior in the average hides interesting differences across countries. A country like Greece adjusted mainly through an increase in taxes. On the other extreme, a country like Finland was able to reduce its budget deficit mainly through a large decrease in expenditures (about 12% in the period 1993-1997).[16]

Figure 2 and Figure 3 show clearly that after 1999 the efforts to reduce budget deficits have slowed down. This fact relates to the behavior described by the first of the fiscal policy biases we had defined, that of excessive deficits. What about the other two biases? Have we seen a change in behavior regarding discretionary fiscal policy? We now look at *changes* in the cyclically-adjusted budget balance as a measure of discretionary changes in fiscal policy. Figure 4 calculates the average (across the Euro countries) of the *absolute change* in the cyclically-adjusted balance. This average gives an indication of the typical change in fiscal policy among Euro countries during this period.[17] There is a trend towards smaller changes in discretionary fiscal policy with the exception of 1996-1997 where several countries had to speed up the process of fiscal adjustment in order to meet the 3% criteria of the Maastricht Treaty. There is also some evidence that after 1999 this measure of discretionary fiscal policy is picking up again. In other words, in 2000 and 2001 governments deviated more from their cyclically-adjusted budget positions than in previous years.

[14] All the figures are adjusted for the effects of the business cycle.
[15] The most recent estimates for 2000 show a decrease of about 1 percentage point of GDP.
[16] There was also a decrease in taxes, mainly in the second half of the decade.
[17] Later we will also look at the sign of these changes and how they have evolved over time.

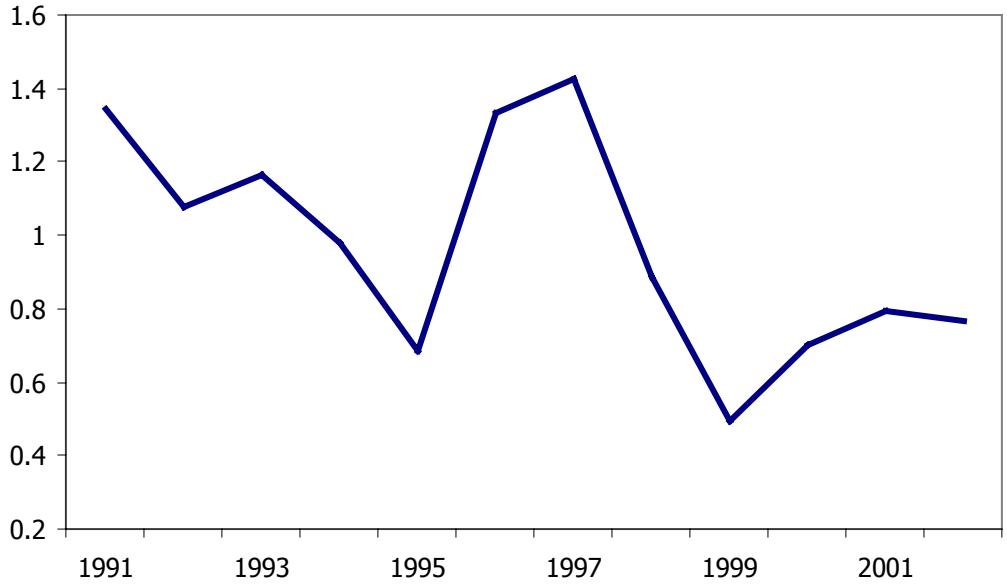



**Figure 4. Average Absolute Value of Change in CAB**

We now turn to the regression-based measure of fiscal policy described above. We take regression (1) and use the residuals as a measure of fiscal policy that is not explained by cyclical conditions. We interpret a change in these residuals as changes in discretionary fiscal policy.[18] By looking at this alternative measure of fiscal policy stance we provide not only a robustness test to our previous conclusion but we also make use of a longer sample and can compare with the behavior in the 80's. The overall message from the constructed measure of fiscal policy stance in Figure 5 is consistent with Figure 4. The 90's represented a period where governments reduced the size of the changes in discretionary fiscal policy (i.e. changes in the fiscal stance). This is even clearer when we put it in the perspective of a longer time series. The big difference between the two figures is that in the years that follow 1999, the regression picks up larger changes in the fiscal policy stance than the estimates of the cyclically-adjusted budget balance.

[18] An alternative would be to add lags of the budget balance to the regression and simply look at the level of the residuals. We have done those calculations without any significant change to our conclusions.

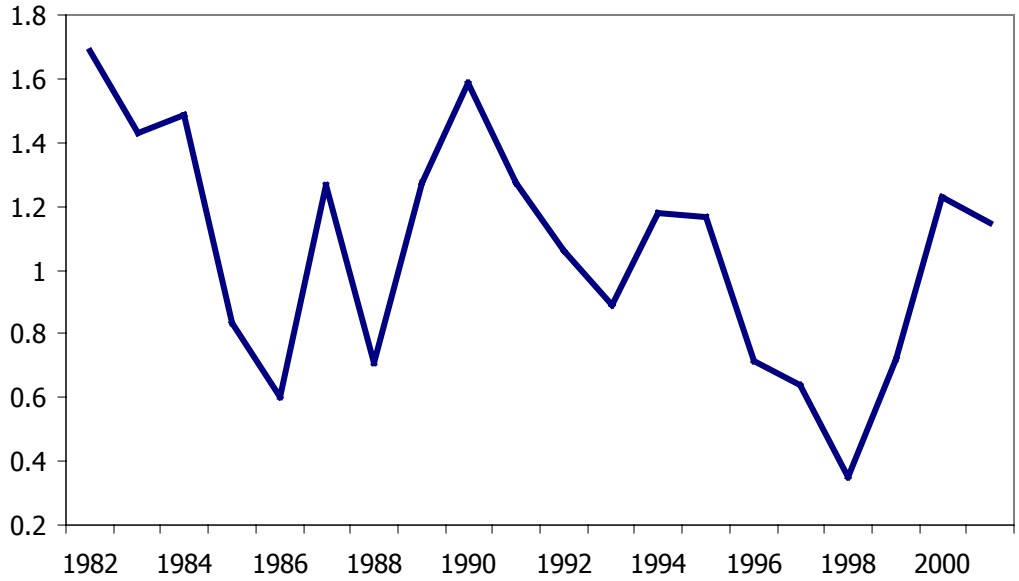
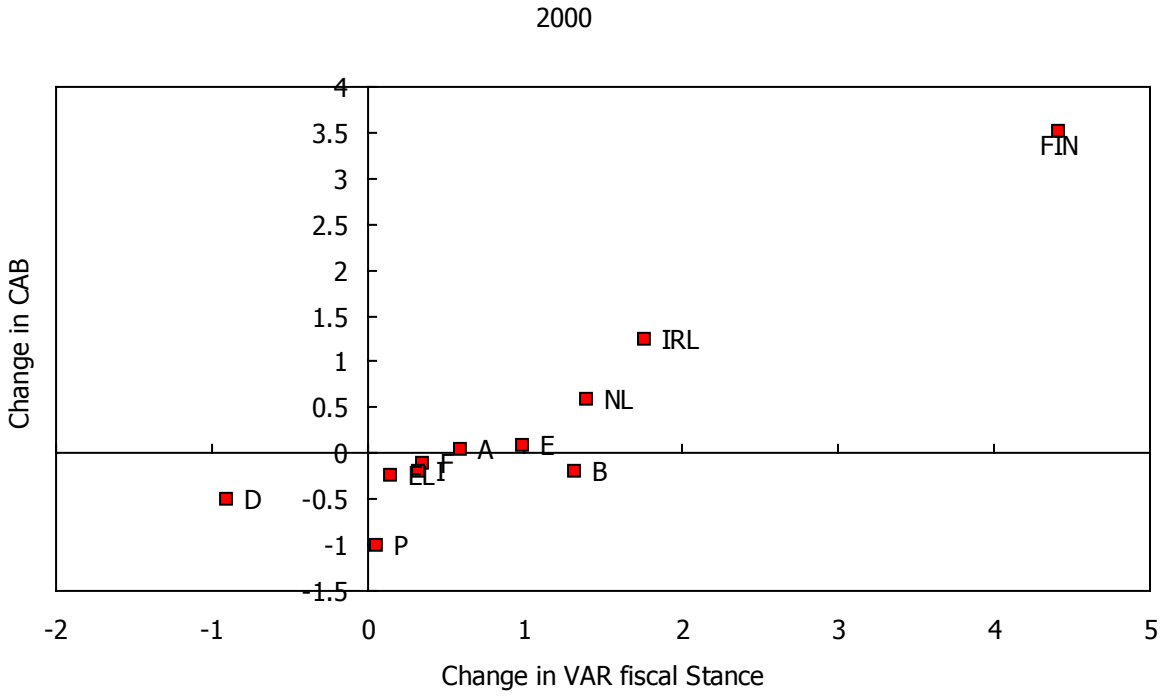



**Figure 5. Average of the absolute value of constructed measure of change in fiscal stance**

To illustrate the difference between the two methodologies we plot the values for both of the measures of changes in the fiscal stance for 2000 and 2001 in Figure 6. The first thing to notice is that, as it is expected, the two methodologies deliver similar results when we look country by country. We also see that overall, 2000 was a year with positive changes in the fiscal stance. On the other hand, in 2001, many of the countries kept their fiscal stance constant and two or three outliers drive the behavior of the aggregate.



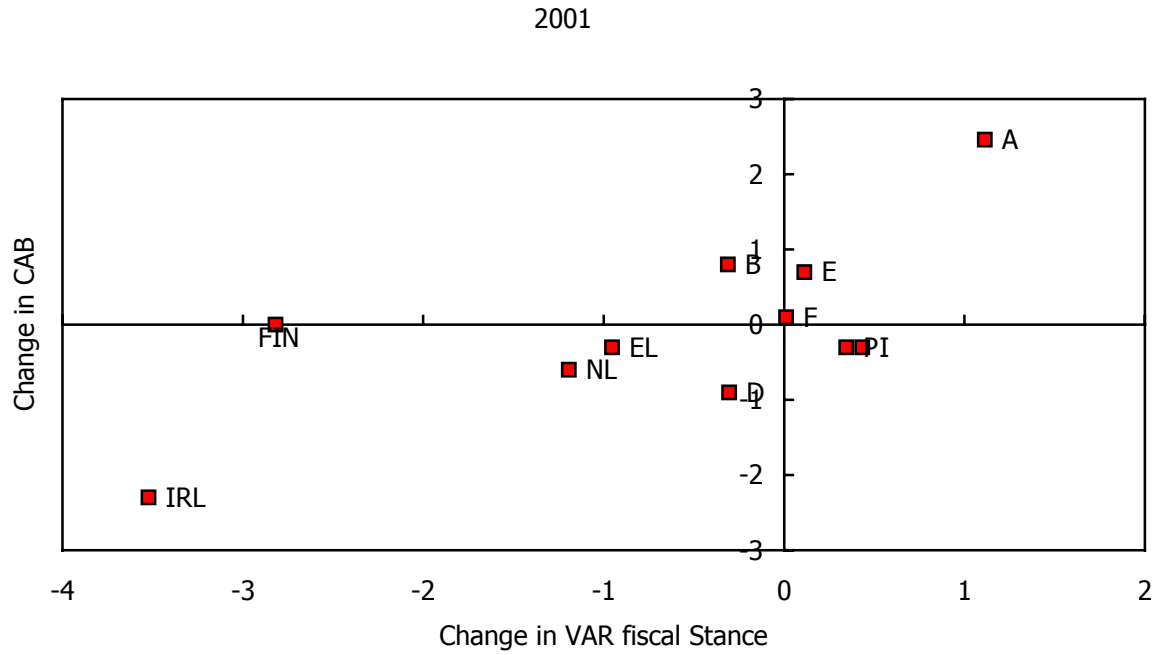




**Figure 6. Comparison of the two measures of discretionary fiscal policy.**

The empirical analysis of Figures 2 to 6 allows us to reach the following conclusions: it is clear that the Maastricht Treaty restrictions as well as the SGP have provided an environment where we have seen not only an increase in fiscal discipline (as summarized by decreases in budget deficits) but also a tendency to make less use of discretionary changes in fiscal policy. In that sense, and only judged by the biases described in the previous section, the 90's has represented a decade of clear improvements in the conduct of fiscal policy. What is worrisome is the fatigue observed (in all dimensions) since 1999. This fatigue goes beyond the tensions introduced by a worsening economic climate and it reveals the deficiencies of the mechanisms of enforcement once countries have been allowed to enter the monetary union.

## 4. BEYOND BAD FISCAL POLICY: IS THERE A NEED FOR A UNIFYING FRAMEWORK? COORDINATION AND COHERENCE

In this section we go beyond our previous discussion on the biases of fiscal policy to introduce additional arguments that support the existence of restrictions or guidelines to fiscal policy. These arguments are based on the idea that in a monetary union there must be a common framework for fiscal policy. The arguments can be put into two separate groups. First, there is an extensive academic literature on the need to coordinate fiscal and monetary policy as well as fiscal policy across countries. The reasons are the existence of international spillovers or strategic interactions between different decision makers. In this literature the word coordination is used with a very precise meaning. For example, when referring to coordination across countries, coordination means that domestic fiscal policy is responsive to foreign economic variables (in order to internalize externalities). Most of this literature starts with the assumption that national fiscal policies are run optimally taking into consideration domestic conditions but they fail to internalize the externalities they impose on other countries.

The term coordination is also used in the current policy debate on the SGP to refer loosely to the need to have a common fiscal policy across European countries. By common it does not mean that the stance of fiscal policy has to be the same everywhere but that fiscal policy is run according to some common principles. The theoretical justification for this second line of reasoning is not as clear as in the first case. One can argue that a unifying framework for fiscal policy is required to properly define fiscal policy at the EMU level and that this definition is required to achieve a proper policy mix between fiscal and monetary policy. In practice, it seems that some of the calls for a coherent fiscal policy across EMU countries are based predominantly on the notion of peer pressure towards 'good' fiscal policy under the implicit assumption that there are some spillovers that extend the damage of bad fiscal policy beyond national borders. Although this view on coordination shares some of the arguments from the more academic debate (e.g. the existence of spillovers across countries) it relies on a much broader definition of coordination where the goal is to stop any form of irresponsible fiscal policy at the national level because of its impact on neighboring countries. This perspective (that one could attribute to the European Commission) is better summarized by a quote from Buti and Sapir (1998): "there is a need for coordinating budgetary policies towards sound medium-term

objectives". In other words, all countries should be doing good fiscal policy, which implicitly means that they are all doing the same type of policy.[19]

Our approach is first to present the theoretical arguments for the case of coordination (as defined in the academic literature). Later, when taking those arguments to the data, the analysis will be limited and much closer to the notion of coherence as defined by the current debate among policy makers around the SGP.

## 4.1 The Arguments

*Coordination between monetary policy and fiscal policy*

Should fiscal and monetary policies be coordinated in a monetary union? Most of the literature concludes that there is no case for coordination of fiscal and monetary policies or across fiscal authorities in the member states. The case for international policy cooperation rests on the assumption that policy spillovers transmitted via the exchange rate can lead to sub-optimal resource allocation. Recent studies on policy coordination conclude that there is very little theoretical evidence in support of coordination (e.g. Obstfeld and Rogoff, 2002). To put it differently if both monetary and fiscal policies are run optimally, then coordination does not lead to a sizable welfare improvement. Furthermore, once political economy arguments are taken into account or the possibility for strategic games between fiscal and monetary authorities is recognized, then most of the arguments turn against coordination across policies or across countries.

Coordination with monetary policy is also usually considered infeasible and counter-productive (Alesina et al (2001)). As Canzoneri et al. (2002) argue there is too long a delay in discretionary fiscal policy to leave any room for productive coordination with monetary policy. If the discretionary policy cannot react to changes in the macroeconomic environment relatively quickly, then maybe one can make a case for planning joint policy interventions? But "planned coordination" – i.e. a situation in which the government commits to implement a certain policy stance in the future while the monetary authority commits to a certain interest rate setting – is not feasible. It is reasonable to assume that when time arrives, optimal monetary policy may dictate a different interest rate rather than the one, which was 'promised' to the fiscal authority. Hence the incentive to deviate could be quite strong. More importantly, the government might find it optimal to deviate given the interest rate setting.

In essence the problem is that monetary policy aggregates all current information to set the interest rate today with a view of how the interest rate influences the targets, while fiscal policy can only aggregate information today to set optimal policy with a long (and variable) delay. This mismatch of timing is one of the most serious reasons for the absence of coordination.

[19] To put it differently, tt is very difficult to find in the discussions of the BEPGs any recommendation to change the fiscal stance of a country to address economic conditions in other countries. This would be the type of fiscal policy coordination that would resemble the coordination discussed in the academic literature.

But the fact that monetary and fiscal policies must be run independently does not imply that the monetary authority should not be concerned about what fiscal policy does. The central bank should be concerned about fiscal policy for at least three reasons: First, volatile fiscal policy can lead to output and inflation volatility and the ensuing increase in uncertainty can make it more difficult for the central bank to hit its target (Pisany-Ferry, 2002). In a nutshell, this argument simply recognizes that fiscal policy can be itself a source of asymmetric shocks, which complicates the conduct of common monetary policy.

Second, as Dixit and Lambertini (2002) argue fiscal irresponsibility can destroy monetary policy commitment. One can argue that the credibility of the monetary policy authority is at stake when the macroeconomic environment is unstable.

*Coordination of fiscal policy among governments*

The argument against coordination of fiscal policy across countries is even more powerful – with the delegation of monetary policy to a single supranational authority, the member states are left only with fiscal instruments for smoothing idiosyncratic business cycle fluctuations. To the extent that coordination will reduce the ability to respond to national shocks, it will be detrimental for macroeconomic stability. Furthermore, even when coordination can be judged as beneficial on ex ante grounds, i.e. as a rule that maximizes total expected welfare function, it is very likely that ex post each individual country may have a strong incentive to deviate, i.e. coordination is not a Nash equilibrium.

An interesting argument in favor of cooperation is provided by Allsopp, McKibbin and Vines (1999). Their line of reasoning is the following – if one country goes through a process of fiscal consolidation (potentially recessionary), while the others follow their usual policy, then the ECB will not react to the fiscal tightening. But if there is a joint effort to tighten fiscal policy, then the area-wide aggregates will be affected and the monetary authority will react to the contraction. This is certainly a plausible and valid point. However it seems more appropriate to argue that this is a case for an *ad hoc* joint effort, rather than a policy prescription for coordination. If all countries must go through a process of consolidation, then they should do it jointly. The scenario under which all countries are at the same state of the cycle and with the same needs to adjust their budgets is rather unlikely, albeit it is a theoretical possibility.

If the previous arguments against coordination are so strong, why does the European Commission insist on the need to coordinate fiscal policy across countries? In their view coordination of fiscal policy must be understood as an agreement to enforce fiscal discipline among members of EMU to avoid any spillovers caused by irresponsible policies. This scenario is very different from the one discussed in the academic debate, which is one where policies are optimal from a national point of view but can be suboptimal when the effects on other economies are taken into consideration. Coordination in the current EMU debate is simply about restricting 'bad' fiscal policy under the assumption that governments cannot be disciplined enough without these additional constraints. In that sense, the enforcement of coordination is more about restricting the use of fiscal policy discretion, and in this sense it is more of a commitment for institutional change, which is

conducive to discipline. The desirability of such change, or agreement, is not necessarily an implication of the union – as Fatás and Mihov (2002) show that policy restrictions are desirable even in countries with independent monetary policies. But in a monetary union the volatility induced by one country's discretionary fiscal policy may influence the instrument setting by the central bank and thus have implications for the whole union. The reduction in the use of discretionary fiscal policy (for purposes unrelated to the state of the economy) will eventually manifest itself in a smaller deviations from cyclically determined policy settings and therefore in a smaller cross-country variation in discretionary policy. We call this reduction in dispersion *coherence* of fiscal policies.

### 4.2 Does the SGP help coordination or coherence?

Does the Stability and Growth Pact provide any form of coordination in fiscal policy? The answer is a clear no. Regarding coordination between monetary and fiscal policy, the SGP and its current implementation, ignore the stance of monetary policy or even the cyclical position of the Eurozone. In fact, it is designed to do so. Most of the principles of the SGP are based on the idea that discretionary fiscal policy should be reduced to a minimum and automatic stabilizers should be the ones in charge of aggregate demand management. In that context it makes no sense to talk about coordination between monetary and fiscal policy

What about coordination across countries? It is true that the SGP provides a common framework for fiscal policy for all Euro countries and we have referred to this symmetry as *coherence* of fiscal policy. But there is no attempt to coordinate the actual behavior of fiscal policy to internalize possible externalities associated to having multiple decision makers. In other words, the only spillovers that are being avoided are those of *irresponsible* fiscal policy. But avoiding irresponsible fiscal policy is an objective in itself for the SGP regardless of whether coordination is important.

### 4.3 Coordination and coherence of fiscal policy under EMU: the data

In this section we take a look at data from the last 10 years to assess how the symmetry and the coherence of fiscal policy has evolved in the Euro countries. Our goal is modest. We will not be able to say much about coordination as understood by the academic literature. Assessing whether domestic fiscal policy reacts to cyclical conditions in other countries would require more data and a much more structural analysis. Our goal is to look at the symmetry and coherence of fiscal policy as described before. We look for similarities in fiscal policy defined by either raw fiscal variables or our measures of the fiscal stance.

Figure 7 displays the standard deviation (for the Euro countries) of the budget balance, taxes and government expenditures, all as a % of GDP.[20]

[20] Al figures are cyclically adjusted. Source: European Commission.

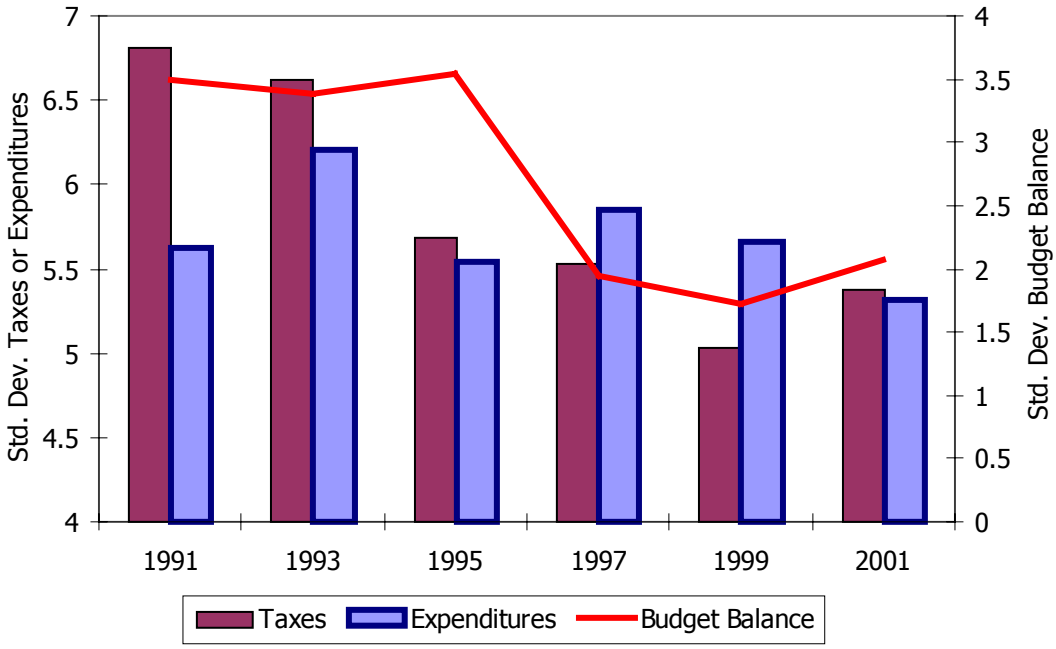



**Figure 7. Standard Deviation Across Euro Countries of Fiscal Variables.**

In all three cases, the pattern is towards convergence until 1999, as the standard deviation declines throughout the 1990s. There should be no surprise in the convergence of budget deficits, given that it was one of the goals of the Maastricht Treaty, but what is more interesting is the convergence in the size of the government (measured by either taxes or government expenditures). While in 1991 the standard deviation of the taxes-to-GDP ratio in the Euro countries was 6.81, it had gone down to 5.03 by 1999. This evolution of the taxes-to-GDP ratio suggests that behind the trend towards similar budget deficits, the last ten years have also witnessed a trend towards similar government size. This has been achieved largely through increases in taxes for the countries with the lowest tax burden but also through small decreases in some of the countries with the highest taxes-to-GDP ratio. Understanding this evolution is key to analyzing the prospects for further fiscal consolidation. As it has been the case with previous figures, the last two years display a reversal of this trend with the exception of government expenditures where the trend continues.

A second way of looking at the symmetry and coherence of fiscal policy is to look at changes in the fiscal policy stance and see how they vary across countries. Figure 8 shows the standard deviation across countries of the change in the cyclically-adjusted budget balance. There are two interesting observations. A general trend towards convergence in the discretionary changes in fiscal policy that is associated to the similar adjustment towards lower budget deficits in the period 1993-1999. This convergence is only broken in 1997 because of the remarkable efforts of those countries still far from the 3% limit to

move the deficit below that value (e.g. Italy). The second interesting feature of the data is that after 1999 the value increases again. This reflects a trend towards divergence in fiscal policy.

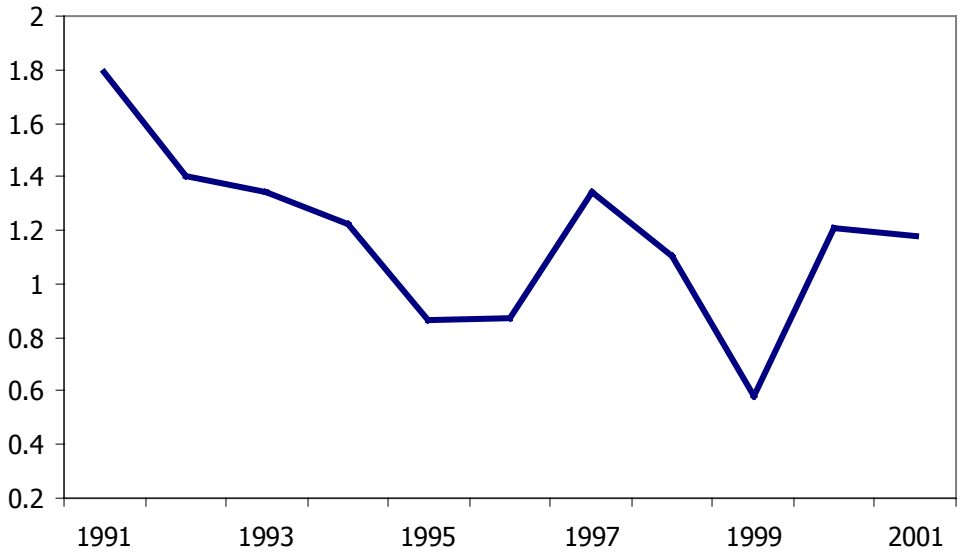



**Figure 8. Standard Deviation of Change in CAB**

Figure 8 together with Figure 4 summarize the behavior of discretionary fiscal policy across Euro countries. The 1990's were a period where not only the typical size of a change in the fiscal policy stance got smaller (Figure 4) but there was also a trend towards similarity in the size and direction of those changes (Figure 8). This is indeed the notion of coordination implied by the SGP: coordination towards sustainable fiscal policies. The last two years have seen not only larger deviations of the cyclically-adjusted balances (Figure 4) but also a dispersion in fiscal policy behavior across Euro countries (Figure 8). In other words, we have seen some countries moving fiscal policy away from what their cyclical conditions indicated and they have done so in different directions. That was indeed the message from Figure 6 where we can see that in 2001 a country like Austria had a large positive deviation from its cyclically adjusted fiscal position while Ireland had a large negative deviation. It is this type of behavior that drives the increased dispersion of fiscal policy in the last two years.

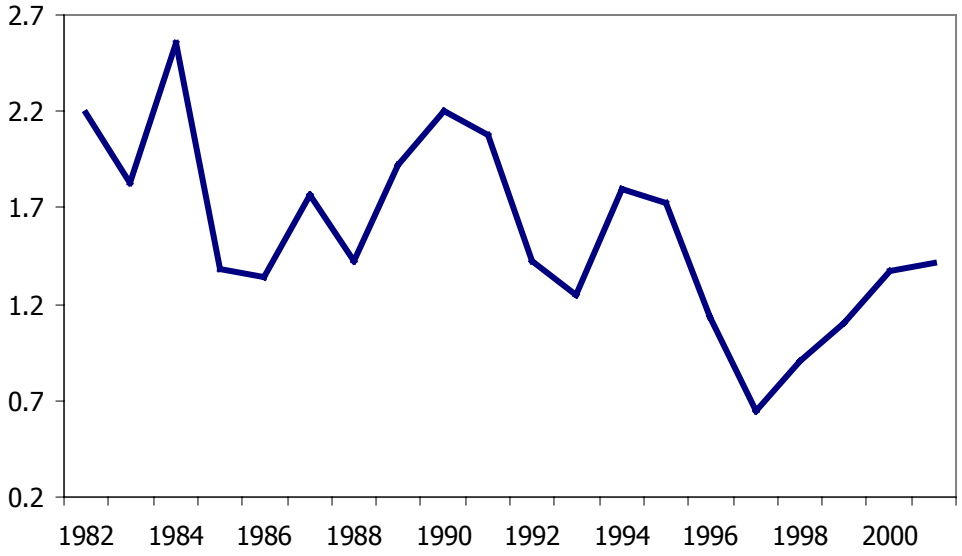



**Figure 9. Standard Deviation of change in constructed fiscal stance**

Figure 9 repeats the above exercise but using the constructed measure of the fiscal stance. Once again, by having the 1980's in the sample we can see even better the trend towards increased fiscal policy coherence of the decade of the 1990's. Also, the reversal of the trend since 1999 is evident.

## 5. CONCLUSIONS

There are many economic arguments why restricting the power of governments in policy-making decisions can be desirable. In the case of monetary policy this debate has led to granting independence to central banks or to the establishment of strong systems of fixed exchange rates or currency boards. When it comes to fiscal policy, the debate is still open. Although the nature of fiscal policy makes the adoption of restrictions or the removal of governments from the decision power difficult, some countries have established institutions or processes that constrain the ability of governments to change fiscal policy.

In the case of EMU, these concerns have been exacerbated by the need to establish a credible monetary policy not subject to influences from fiscal policy. Setting a supranational system of supervision of fiscal policies has been seen as a requirement to build the necessary credibility to the ECB.

The adopted solution is under increased criticism. The rules of the Growth and Stability Pact are considered too restrictive, too simplistic and not fitted to take into consideration national differences. Recent steps to address these concerns have led to a set of more

flexible guidelines. However, these more flexible guidelines fail to provide the simplicity of a rule and are subject to political manipulation.

Under the assumption that there is a need for restrictions or guidelines for fiscal policy, some of these criticisms are unavoidable regarding of the system adopted. There will always be a trade off between rules and flexibility. What can be debated is whether a different rule will be as effective and limit flexibility less than the current system. But whatever system is proposed it will have a cost in terms of flexibility and it will occasionally be against governments' interests (as it happens with the current institutional arrangements of monetary policy).

From the analysis of the theoretical and empirical literature on constraining fiscal policy we conclude that implicit constraints can be as effective as explicit constraints (i.e. rules). In fact, the current process of discussion, approval and surveillance of national budget plans by the European Commission falls in this category. It provides a new layer in the decision process that serves as an implicit constraint to fiscal policy behavior beyond the mechanistic application of the deficit limit. This type of constraint goes in the direction of recent proposals to create fiscal policy committees.

We have also looked at the question of whether coordination between fiscal policy and monetary policy and between the national fiscal policies should be encouraged. Our conclusion is that there are no obvious benefits to coordination. Moreover, our arguments in favor of instituting constrained discretion for fiscal policy already provide the level of fiscal policy *coherence* that is desirable across countries.

When we look at the behavior of fiscal policy since the adoption of the constraints of the Maastricht Treaty through the lenses of the above arguments we conclude that:

- ✓ We have seen a significant process of convergence in terms of fiscal policy in the Euro countries. This convergence goes beyond the well-documented convergence in budget deficits. In any dimension of fiscal policy, there is today much more symmetry in terms of fiscal policy than a decade ago. We refer to this symmetry as *coherence* in fiscal policy.
- ✓ At the same time that we have seen an increase in symmetries in fiscal policy, we have seen a reduction in the use of discretionary policy over the last two decades. The typical change in the fiscal policy stance (i.e. fiscal policy changes not related to the business cycle) has diminished over time (with the exception of the efforts of 1996 and 1997 to bring deficits below the 3% limit).
- ✓ There are signs of fatigue in this process. Although it is natural that the process slows down over time as targets are met, the behavior of the last three years reveals that some countries are deviating from their behavior of the previous years. Although this trend is not alarming, there are reasons to be alert.

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## 7. APPENDIX

DATA SOURCES. Cyclically adjusted figures for taxes, government expenditures and budget deficits are from the European Commission (different sources). Data to calculate the regression-based indicator of discretionary fiscal policy comes from the OECD economic outlook.