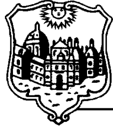

The Stability and Growth Pact: Past Performance and Future Reforms

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Abstract

The 'Stability and Growth Pact' aims to constrain excessive fiscal deficits by member countries in the European Monetary Union. It identifies and prescribes sanctions for countries that breach the Maastricht deficit and debt ceilings. Under strong criticism for its apparent favoritism of Germany and France, the SGP was reformed in 2005, after which its deficit procedures became more responsive to the economic climate and were individualized to the country's circumstances. This paper explores the reformed SGP's performance, especially in light of the recent Greek debt and global financial crises, and proposes further changes to the Pact, while paying special attention to political feasibility. In it we suggest reforms to the SGP that focus on national ownership of fiscal discipline and an extension of Medium Term Objectives to include a consideration of large external imbalances. We show that the latter can provide an early warning signal for potential future difficulties for public finances.

JEL Codes: F33, F55, H60

Keywords: European Monetary Union, fiscal adjustment, external imbalances, global financial crisis

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I. Introduction

The fiscal crisis in the European Monetary Union, particularly in Greece, during 2010 has led to a renewed focus on the long-term feasibility of this currency union, known as the Eurozone. In order to join the Eurozone, countries gave up independent monetary policy. As a result, fiscal policy became the sole tool of sovereign aggregate demand management. At the same time, it also became a potential source of negative externalities for the other member countries. The costs beyond the future repayment of expanding public deficits and debts as a percentage of GDP are well known.[1] They include rising interest rates, pressure on the exchange rate, potentially higher inflation, and an increased risk of eventual default, which oftentimes puts severe strains on financial markets in general. In the Eurozone, some of these costs will be borne by countries other than the one that is running the budget deficit. Political pressures may arise for the central bank to monetize parts of a member country's debt, jeopardizing the central bank's independence. As was the case for Greece in 2010, other countries may find it necessary to come to the aid of a member at the brink of default to fend off contagion and a larger crisis for the whole currency union.

How to deal with these problems going forward in the light of the 2010 crisis is the purpose of this paper. The Stability and Growth Pact (SGP) will likely remain a crucial component in any institutional set-up. This legislation was adopted by the members of the Eurozone in 1997 to ensure that fiscal crises, such as the one experienced by Greece in 2010, would not occur in the first place. To this day, it remains one of the most remarkable pieces of

[1] For an overview of emerging market crises and the role of fiscal policy see for example the survey provided in Roubini and Setser (2004). In addition, Reinhart and Rogoff (2009) present long time series of historical data on public debt and incidents of default.

policy coordination ever jointly-adopted by sovereign countries. As outlined in greater detail below, the SGP entails a set of common, compulsory rules in order to limit budget deficits and debt levels as a share of GDP. As the years prior to the 2010 crisis have shown, the current SGP's rules were unable to achieve its objective. Not only is it imperative for the Eurozone to address these failures, but whenever possible they must do so without amending the SGP because treaty changes are politically difficult and time consuming. We thus first outline briefly in the next section the debates that took place at the creation of the SGP and at its revision in 2005, and its performance before the global financial crisis starting in 2008. In section three we move to the events of the crisis and the effects on fiscal policy inside the Eurozone. In particular, we also focus on the role of current account balances within the currency union in the run-up to the crisis and after it. National Income Accounting identities show that borrowing by the government and the private sector has to be financed by foreign funds in case of insufficient domestic savings. The country then runs a current account deficit and imports capital. Indeed, there were and still are large "imbalances" within the Eurozone. Since capital and trade flows are jointly determined within the balance of payments, this also raises concerns about competitiveness inside the currency union, especially for countries on the periphery with high current account deficits. In section four we discuss how the SGP may be reformed and potentially expanded to include lessons from the previous decade. In particular, we argue that the deficit prescriptions and limits of the SGP should be adopted by member countries into national law, as is already the case for Germany, Spain, and the Netherlands; such a measure would increase political ownership and transparency. In addition, we propose a widening of the scope of the SGP's Medium Term Objectives (MTO) for member countries to also include external imbalances manifested in the current account. Based on empirical estimates of the

association between public and external debt, we propose that countries which experience large current account deficits should be required to aim for lower budget deficits in their MTOs than countries that experience a balance or surplus in their current account. These changes can potentially be done without changing the treaty, making them more politically feasible. While political appeal is not always a relevant concern in the theoretical discussion of fiscal policy for currency unions, we view it as a real-world issue that warrants consideration. Section five concludes.

II. The creation of the Stability and Growth Pact and later revisions

II. 1. Literature review of some fundamental debates

There is a general consensus among economists that given the loss of monetary independence, fiscal policy in the Eurozone must help to smooth the impact of asymmetric shocks on real output and inflation; however, there are disagreements about how this should best be accomplished. A critical debate is whether or not members of a monetary union experience a greater deficit bias than countries that do not share a currency. As shown by Velasco (1999), and more recently by Hallett (2008), all countries face a standard common pool problem: politicians who represent different interest groups or geographical regions have little incentive to constrain their spending demands because the costs are shared by the whole population. However, Poterba and von Hagen (1999), Beetsma and Uhlig (1999), and Eichengreen (2005) argue that every member of a currency union is also faced with the opportunity to free-ride on the sustainable fiscal policy of other members. The crucial difference is market efficiency. Velasco contends that bond markets are efficient even in currency unions because the interest rate investor demand

will differentiate between countries with strong and weak finances. On the other side, Poterba and von Hagen argue that markets will react to the sustainability of the currency, not the individual country. As a result, one country with threatening public finances raises bond yields for all member countries. More recently, Chari and Kehoe (2007) found that debt and deficit limits are only beneficial for a monetary union if the monetary authority cannot commit to its policies. Led by Germany, the SGP was a response to the widespread belief that members of the Eurozone face additional deficit biases.

Even among academics who agree that Eurozone members face additional deficit biases, there exists a separate debate on how it should be combated. Deficit bias is a domestic issue because it is the result of a democratic process that fails to impose discipline on current generations at the expense of future generations within the same country (Wyplosz, 1999). It can be corrected relatively easily at a national level by establishing democratic political institutions that would impose fiscal discipline; however, few countries in the EMU have done so. The literature, for example Alesina et al. (2008), Dyson (2000), and Wyplosz (1999), disagrees over whether or not the EU should step in and impose fiscal discipline on its members when their domestic electorates refuse to do so. Interfering would benefit the entire EMU as outlined in the introduction, but doing so infringes on national sovereignty. There might be political backlash; if the EU acts as a "benevolent dictator"—externally imposing constraints on domestic issues—electorates would grow angry and European integration could potentially be set back decades (Alesina et al., 2008). The SGP is politically contentious for this very reason: it externally imposes fiscal discipline at the expense of national sovereignty. Nonetheless, authors of more recent literature have even supported greater constraints on national sovereignty; von Hagen and

Wyplosz (2008) supported a collective insurance system that redistributes income among Eurozone countries in response to asymmetric cyclical shocks.

Opponents of fiscal discipline also argue that the SGP's budgetary rules are too constraining to allow adequate fiscal policy flexibility. Proponents of rule-based, disciplined fiscal policy, like Beetsma et al. (2001) and Artis and Buti (2000), insist that as long as the budget is in surplus or close to balance, automatic stabilizers are sufficient to deal with the most likely shocks, makeing discretionary government expenditure unnecessary. Others, such as Korkman (2001), favor additional rules to constrain pro-cyclical increases in expenditure during periods of strong growth. They contend that discretionary fiscal spending is outdated and should be avoided. Offering a counter opinion, Canzoneri and Diba (2001) argue that fiscal rules are a superfluous and costly "albatross" that hamper the effectiveness of counter-cycle stabilization policies and limit growth. Eichengreen and Wyplosz (1998) also caution against overly constraining fiscal rules, but for a different reason; they propose that a single-minded Eurozone focus on deficit reduction would divert attention from more pressing issues, namely labor market reform. The SGP was ultimately created because most EU economists favor disciplined fiscal policy in light of the externalities that result from being a part of a currency union; however, the 2008/09 recession and popular support for fiscal stimulus spending have been increasingly challenging this support for "discipline."

Another significant debate concerns the ideal long-run level of public debt. Some, like Rostagno et al. (2001), support a gradual long-run decrease in public debt levels to zero. They assert that while there is a short-run cost to reducing public debt, the long-term benefits would be substantial and allow for self-insurance against income shortfalls in times of economic stress. Others, like Missale (2001), question the benefits of zero debt and support a long-run constant

level of debt based on the individual country's financial system. Since national budgets under the SGP are always supposed to remain close to balance, the SGP promotes the gradual decrease of public debt; however, the true long-term benefits of a gradually decreasing debt level have been increasingly challenged as the EU's population ages. Any programs or reforms attempting to solve resulting entitlement problems would likely necessitate increased public debt, but many, like Beetsma and Debrun (2004) and Issing (2004), argue that the long run effects of not addressing this challenge could have far more devastating consequences.

II. 2. The original Stability and Growth Pact and its performance

The SGP was created in order to ensure that the spirit of fiscal discipline proposed by the Maastricht Treaty was followed even after countries adopted the euro. Consequently, much of the original SGP is a continuation of the procedures outlined in the 1992 Maastricht Treaty. Article 104 of the Treaty says that 'Member States shall avoid excessive deficits.' Budgetary discipline is judged based on two criterion, 'whether the ratio of the planned or actual government deficit to gross domestic product exceeds a reference value,' and 'whether the ratio of government debt to gross domestic product exceeds a reference value, unless the ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace.' These reference values were agreed to be 3 and 60 percent in the Maastricht Treaty and annexed to the European Community Treaty. Before adopting the euro, each member state shall achieve 'the sustainability of the government financial position; this will be apparent from having achieved a government budgetary position without a deficit that is excessive as determined in accordance

with Article 104c.’ The SGP has a twofold approach to limiting excessive deficits: it has a preventive arm and a corrective arm.

The preventive arm uses ‘soft’ tactics: it surveys member states budgetary positions and encourages peer pressure against poor performers. To this end, countries must annually submit their Stability and Convergence Programs, which detail their medium-term objective (MTO) for fiscal policy and how they will achieve it. Specifically, the SGP defines MTO to be a budget that is ‘close to balance or in surplus.’ The Commission and ECOFIN Council examine the stability programs and can choose to make their opinion public. More formally, there is also an ‘early warning device’ whereby the Council can recommend for a member state, who they believe is at risk of running an excessive deficit, to correct their precarious budgetary position. The SGP’s excessive deficit procedure does allow for exceptional circumstances if the country experiences a fall in real GDP of at least 2 percent; if the downturn is long lasting or abrupt, a fall in real GDP between .75 and 2 percent can also be considered exceptional.

In contrast, the corrective arm is strict, formal and designed to enforce fiscal discipline. Unless there are exceptional circumstances as outlined above, an excessive deficit must be corrected within ‘the year following its identification.’ If the Council believes the member state is not making satisfactory progress, they may give notice to the member state to take measures to reduce the deficit. In the event of continued noncompliance, the Council has ten months from when they first reported the excessive deficit to issue sanctions, which would require a non-interest-bearing deposit in the first year and a fine in the second. Critically, the procedures in the corrective arm are not automatic; any Council decisions must be adopted by a qualified majority on the basis of the Commission’s recommendation.

Table 1: Growth in real GDP, government deficit as a percentage of GDP, and public debt as a percentage of GDP 2000 – 2004 selected countries.

	2000			2001			2002			2003			2004		
Greece	4.5	-3.7	103.4	4.2	-4.5	103.7	3.4	-4.8	101.7	5.9	-5.6	97.4	4.6	-7.5*	98.6
Portugal	3.9	-2.9	50.5	2	-4.3	52.9	0.7	-2.8	55.6	-0.9	-2.9*	56.9	1.6	-3.4	58.3
Spain	5	-1	59.3	3.6	-0.6	55.5	2.7	-0.5	52.5	3.1	-0.2	48.7	3.3	-0.3	46.2
Ireland	9.4	4.8	37.8	5.7	0.9	35.6	6.5	-0.3	32.2	4.1	0.4	31	4.6	1.4	29.7
Italy	3.7	-0.8	109.2	1.8	-3.1	108.8	0.5	-2.9	105.7	0	-3.5	104.4	1.5	-3.5	103.8
Germany	3.2	1.3	59.7	1.2	-2.8	58.8	0	-3.7	62.9	-0.2	-4*	64.9	1.2	-3.8*	66.4
France	3.9	-1.5	57.3	1.9	-1.5	56.9	1	-3.1	58.8	1.1	-4.1*	62.9	2.5	-3.6*	64.9
Austria	3.7	-1.7	66.5	0.5	0	67.1	1.6	-0.7	66.5	0.8	-1.4	65.5	2.5	-4.4	64.8
Belgium	3.7	0	107.9	0.8	0.4	106.6	1.4	-0.1	103.5	0.8	-0.1	98.5	3.2	-0.3	94.2
Finland	5.3	6.8	43.8	2.3	5	42.5	1.8	4	41.5	2	2.4	44.5	4.1	2.3	44.4
Luxembourg	8.4	6	6.2	2.5	6.1	6.3	4.1	2.1	6.3	1.5	0.5	6.1	4.4	-1.1	6.3
Netherlands	3.9	2	53.8	1.9	-0.2	50.7	0.1	-2.1	50.5	0.3	-3.1	52	2.2	-1.7*	52.4

Notes: The first column for each year is growth in real GDP, the second government deficit as a percentage of GDP, and the final column is public debt as a percentage of GDP. The * represents that the country was in Excessive Deficit Procedure (EDP) that year. The ˜ represents that the EDP procedure was abrogated that same year. Source: Eurostat.

While the SGP was successful at first, criticism mounted as the number of countries maintaining budgets with excessive deficits grew every year (see table 1). The SGP also lost substantial credibility in 2003. On November 25, 2003, the Council recognized that France and Germany were running excessive deficits, but then suspended the Excessive Deficit Procedure (EDP) by refusing to issue a recommendation with a deadline. If the Council had given notice and issued a recommendation, Germany and France would have undergone sanctions if they failed to meet the deadline. In their decision, the Council argued that because Germany and France had promised to correct their deficit, further EDP formalities were unnecessary. Germany, France, Italy, and Portugal, all large countries with deficits, voted against continuing EDP, leading some, like Cartenaro and Morris (2008), to speculate that the decision was purely political. The Commission immediately contested the Council's decision before the European Court of Justice. In the July 13 2004 ruling on the affair C-27/04 by the Commission of the

European Communities against the Council of the European Union, the court annulled the Council's conclusions in which they held the EDP in abeyance. However, this was only a minor victory for the Commission. In their ruling, the ECJ recognized the Council's ability to de facto suspend, or delay, the rules; they annulled the Council's decision because they had used the wrong procedure in making their decision. Thus, the SGP needed to be reformed in order to regain its political credibility.

II. 3. Reform of the Stability and Growth Pact in 2005

The SGP's early difficulties lead to a growing debate over potential reforms and improvements. Fischer, Jonoung, and Larch (2006) completed an exhaustive survey of 101 proposed reforms and found a few key trends; many authors argued that fiscal discipline alone cannot ensure "stability." Calmfors and Corsetti (2003) and Buti et al, (2003) point out that discipline should encourage procyclical behavior by providing incentives for saving during good times to make up for asymmetric shocks during bad times. Alesina et al. (2008) argues that the exponential upward trend of government spending is more worrisome than deficits alone. Tanzi (2004) stresses the importance of fiscal coordination between Eurozone countries. Fitoussi (2004) believes that creating an area-wide fiscal policy actor capable of interacting with the ECB is the most important SGP reform. Fischer et al. (2006) also found that many authors assert that the SGP's fiscal rules are sufficient, but need to be better enforced. Wyplosz (2002) addresses this with independent fiscal councils, although he admits they are unfeasible. Eichengreen (2003) proposes widening the scope of the SGP to include monitoring the quality of fiscal institutions. Casella (2001) favors creating a market for tradable deficits. Fitoussi (2002) and Pisani-Ferry (2002) propose to increase the focus on debt as opposed to deficits to give countries more

flexibility in the medium run, making enforcement less difficult. The role of debt in the SGP is also an important topic for other participants in the discussion. A few authors, like Balassone and Franco (2001), support adding a "golden rule" to enhance public investment and encourage growth. Beetsma and Debrun (2004) argue that the SGP must allow for structural reforms even with high start up costs, as long as they don't harm long-term sustainability. Calmfors and Corsetti (2003) propose making the deficit ceiling conditional on the debt level.

After over a year of intense debate within the Council and between member countries, the EU Council reformed the SGP in 2005. The reform didn't affect the fundamental structure of the Maastricht Treaty, such as the 3 percent deficit and 60 percent debt reference values. Instead, there were modifications to Regulation 1466/97 on the strengthening of budgetary surveillance and coordination of economic policies (the 'preventive arm' of the Pact) and Regulation 1467/97 on the excessive deficit procedure (the 'corrective arm'). However, even without amending the Treaty, several notable challenges were addressed.

A major critique of the original SGP was that the preventive arm placed too much emphasis on short-term formal compliance with rules and ignored the underlying economic conditions and the medium and long-term financial sustainability. In response to this criticism, the cyclically adjusted budget balance (CAB) gained greater prominence in evaluating a country's budgetary situation and determining whether to declare a country in excessive deficit. While difficult to calculate and often inaccurate, CAB is obtained by removing the cyclical component of the budget from the nominal fiscal balance; as a result, CAB does a much better job than a nominal target at ensuring an overall budget surplus in good times. Another key change was to the definition of the medium term objective. Prior to 2005 the 'close to balance or surplus' objective was required for all countries regardless of their individual economic situation

unless in exceptional circumstances as outlined above. After the reform, each country could present their own medium term objective in their stability and convergence programs, which would be assessed by the Council. Ideally this would allow member states to propose budgets that take into account their own long-term fiscal health in regards to issues like the cost of structural reforms, public investment, or entitlement guarantees. The reformed SGP also brings greater attention to fiscal sustainability by allowing countries to deviate from their Medium Term Objectives for 'reforms with a verifiable positive impact on long-term sustainability of public finances' through direct long-term cost-saving effects or by raising potential growth. The Council also recognized that the debt criterion was problematic. While the Maastricht Treaty had required countries to have less than 60 percent of debt, the original SGP poorly clarified how this Treaty criterion would be applied in the pact. Unfortunately, the Council could not agree on a new quantitative definition for 'sufficiently diminishing and approaching the reference value at a satisfactory pace,' making the debt ratio a loose requirement even after the 2005 reform.

Reforms to the corrective arm attempted to add greater flexibility to the EDP. The definition of a 'severe economic downturn' was loosened to negative real GDP growth or an accumulated loss of output during a protracted period of very low real GDP growth relative to potential growth. The definition of 'other relevant factors' that must be taken into account before initiating the excessive deficit procedure was also expanded. After the reform, these factors included the business cycle, potential growth, public investment, debt sustainability, quality of public finances, and the implementation of the Lisbon Treaty with its focus on long-term competitiveness and innovation. The mechanism for the EDP enforcement was affected minimally by the reforms. The deadline for correcting excessive deficits was changed from one year to whatever the Council decides fits the situation. Further, the EDP still relied upon peer

pressure and not automatic sanctions. In order to give the Council more options if another France and Germany mishap occurred, the reform enabled the Council to revise their recommendation or notice if ‘unexpected adverse economic events with major unfavorable consequences for government finances’ occur.

Outside of the official SGP reform, ECONFIN (2005) also issued a report on March 21, 2005 entitled "Improving the implementation of the Stability and Growth Pact.” It called for strengthened national ownership of the rules by national policy-makers, closer co-operation between members, and improved peer pressure. It also encouraged member states to adopt complementary national budgetary rules and national parliaments to adopt a greater role in the process. Further, the Council stressed the importance of accurate macroeconomic forecasts and budgetary statistics. The reactions to the reformed SGP greatly varied. For example, Alves and Afonso (2006) and Wyplosz (2006), welcomed the changes to the excessive deficit procedure, believing that the SGP has become “more flexible and less stupid,” while most others argued that the SGP has become so diluted that it has ceased to exist for all practical purposes (see for example Buti, 2006 and Calmfors, 2005). The European Central Bank initially expressed serious concern about the changes to the SGP and called for rigor and consistency in the implementation of the rules (ECB, 2005). For the most part, the Commission applauded the reforms in its communication to the Council and European Parliament, arguing that the Council had increased the economic rationale for the SGP; however, they did stress that the reform did not address all of the problems they had identified in 2005 (European Commission, 2006).

Until the global financial crisis started, the SGP reforms appeared to be successful. Countries were meeting their MTO and most had balanced budgets or even surpluses. In hindsight, much of this was due to windfall revenues resulting from their housing bubbles.

Significantly, all of the countries that ran large current account deficits prior to the financial crisis also experienced the most severe difficulties in the 2008-2009 financial markets.

III. The Eurozone in Crisis

III. 1. Deficits and debts

Table 2: Growth in real GDP, government deficit as a percentage of GDP, and public debt as a percentage of GDP for 2005 – 2009 in selected countries.

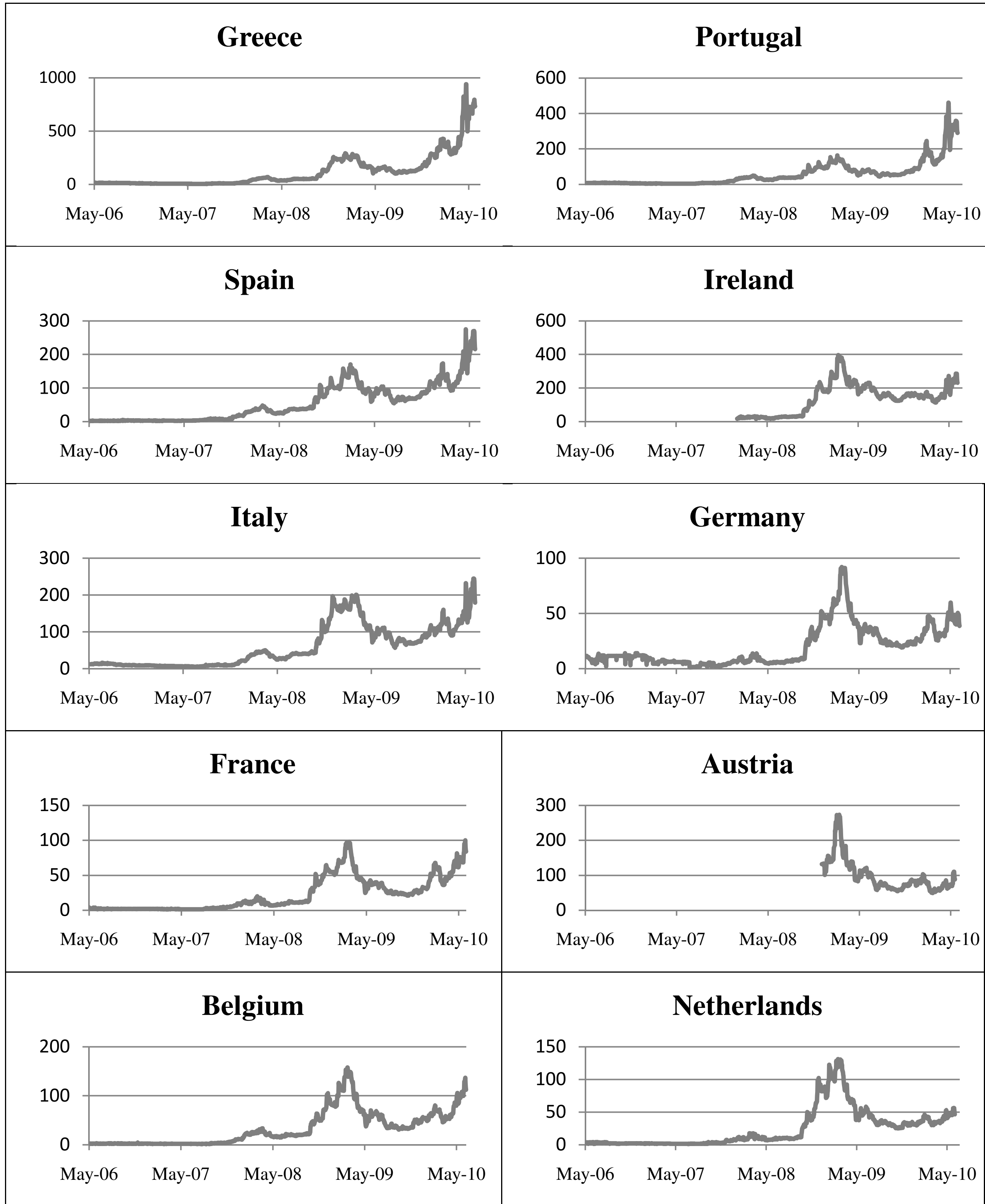
	2005			2006			2007			2008			2009		
Greece	2.2	-5.2*	100	4.5	-3.6*	97.8	4.5	-5.1˜	95.7	2	-7.7	99.2	-2	-13.6*	115.1
Portugal	0.8	-6.1*	63.6	1.4	-3.9*	64.7	2.4	-2.6*	63.6	0	-2.8˜	66.3	-2.6	-9.4*	76.8
Spain	3.6	1	43	4	2	39.6	3.6	1.9	36.2	0.9	-4.1	39.7	-3.6	-11.2*	53.2
Ireland	6.2	1.6	27.4	5.4	3	25	6	0.1	25	-3	-7.3	43.9	-7.1	-14.3*	64
Italy	0.7	-4.3*	105.8	2	-3.3*	106.5	1.5	-1.5*	103.5	-1.3	-2.7˜	106.1	-5	-5.3*	115.8
Germany	0.8	-3.3*	68	3.2	-1.6*	67.6	2.5	0.2˜	65	1.3	0	66	-4.9	-3.3*	73.2
France	1.9	-2.9*	66.4	2.2	-2.3*	63.7	2.4	-2.7 ˜	63.8	0.2	-3.3	67.5	-2.6	-7.5*	77.6
Austria	2.5	-1.7	63.6	3.5	-1.5	62.2	3.5	-0.4	59.5	2	-0.4	62.6	-3.5	-3.4*	66.5
Belgium	1.8	-2.7	92.1	2.8	0.3	88.1	2.9	-0.2	84.2	1	-1.2	89.8	-3	-6*	96.7
Finland	2.9	2.7	41.7	4.4	4	39.7	4.9	5.2	35.2	1.2	4.2	34.2	-7.8	-2.2	44
Luxembourg	5.4	0	6.1	5.6	1.4	6.5	6.5	3.6	6.7	0	2.9	13.7	-3.5	-0.7	14.5
Netherlands	2	-0.3 ˜	51.8	3.4	0.5	47.4	3.6	0.2	45.5	2	0.7	58.2	-4	-5.3*	60.9

Notes: The first column for each year is growth in real GDP, the second government deficit as a percentage of GDP, and the final column is public debt as a percentage of GDP. The * represents that the country was in Excessive Deficit Procedure (EDP) that year. The ˜ represents that the EDP procedure was abrogated that same year. Source: Eurostat.

It is difficult to judge the performance of the SGP based on the government budget alone since most countries experienced exceptionally high growth from 2005-2007 and negative growth from 2008-2010. While not perfect, initially the SGP's performance was encouraging. The greatest improvement was to its credibility. Immediately following the reform, Excessive Deficit Procedures (EDP) were initiated for Germany, France, Italy, Greece and Portugal for their high deficits (see table 2). While it passed this first serious test, it has yet to impose sanctions or fines on recurring rule-breakers. Further, many of these countries made a serious

effort to lower their deficit following the SGP's reforms. By January 2008, all five of the countries in EDP had been abrogated by the Council, and no countries were undergoing EDP. Unfortunately, the financial crisis hit EU budgets hard later that year. By the end of 2009, France, Spain, Ireland and the United Kingdom, Belgium, the Czech Republic, Germany, Italy, Netherlands, Austria, Portugal, Slovenia and Slovakia were formally determined to have excessive deficits by the Council. Finland followed suite in the first quarter of 2010. Still, during the crisis there was great variation in countries' performances and how the market perceived their performances and sustainability, as demonstrated by diverging bond yields and credit default swap premiums. The latter factor gives an idea of market perception of default risk, and is thusly particularly useful for the discussion of the SGP. Figure 1 presents credit default swap premiums in basis points for selected members of the Eurozone.

Figure 1: Five year credit default swap premiums in basis points for 2005- 2010 in select countries. Source: Bloomberg.



Greece and Portugal are two of the countries most afflicted by the financial crisis, but even before the crisis, they had the highest average deficit of any member country. Public spending and wage growth have also far outpaced growth of productivity, leading to losses of competitiveness. Even worse, the Greek government had to revise upward official deficit statistics in 2009, which had been inaccurate before. Thus, it should be no surprise that when the global financial downturn hit, Greece and Portugal, in particular, had little room to maneuver; however, had the SGP been more forceful prior to the financial crisis, this could have been avoided. Even though Greece and Portugal exceeded the 3 and 60 percent deficit and debt reference values almost every year since adopting the euro, the Council has never imposed any fines or sanctions on them. They abrogated the EDP for Greece in 2007, even though deficits still exceeded the 3 percent limit, and they abrogated the EDP for Portugal in 2006, even though the deficit was high at 2.6 percent and debt far exceeded 60 percent.

Spain and Ireland have also been hard hit by the financial crisis, but in contrast to Greece and Portugal, their public finances prior to 2007 had been almost beyond reproach in terms of the SGP. Spain and Ireland had among the highest budget surpluses and among the lowest levels of public debt. They also enjoyed a GDP growth rate three times greater than the Eurozone average. In stark contrast, over the last two years the collapse of a decade-long construction boom has left Spain and Ireland's economy contracting with double-digit unemployment and deficits. Investor confidence is shaky so that they have been all but forced to enact austerity measures, despite being in the midst of a deep recession (see table 2 and figure 1). They followed the principles of the SGP, yet were hit harder by the financial crisis than some counties who have frequently been in the EDP.

France, Germany, and Italy fall somewhere in between these two extremes. While far from perfect, their public finances were in decent shape prior to the crisis. In 2007 they were abrogated from the EDP and continued to demonstrate progress. While France's deficit in 2008-2009 had been large, it did not cause concern in financial markets as was the case for Greece, Spain, Portugal, or Ireland (see figure 1). Risk premiums for France remained low. Its stimulus plan focused on investment in infrastructure, science and technology, and tax breaks for small businesses. France's stimulus package has also included structural reforms, notably to the pension system and government bureaucracy, which have the potential to cut public expenditures in the medium run. In hope of becoming better prepared for the next financial crisis, Germany has made commitments to balance its budget. It passed a constitutional amendment (*Schuldenbremse* or debt brake) that limits the federal government to structural deficits of no more than 0.35 percent of GDP per annum as of 2016. Even though Italy went into the crisis with one of the highest debt levels in the Eurozone, it saw one of the lowest deficit increases among the member states, sheltering its government from a severe market backlash.

Even though Austria and Belgium have consistently run deficits since 2005, they had never been in the EDP prior to 2009. Belgium is arguably in worse shape of the two. Belgian banks have been severely affected by the international financial crisis, with three major banks all receiving capital injections from the government. Its deficit is largely due to large-scale bail-outs in the financial sector. Most alarmingly, its public debt is nearly 100 percent of GDP. This limited Belgium's ability to implement stimulus spending. Austria's debt is much lower, at about 67 percent of GDP. This allowed it to take stabilization measures, which—when combined with the government's income tax reforms—pushed the budget deficit to about 4 percent of GDP in 2009, from only about 1.3 percent in 2008. Finland, Luxemburg, and the Netherlands were

fiscally responsible prior to the crisis. Finland in particular ran extremely counter-cyclical fiscal policy. In 2007, it ran a 5.2 percent surplus and had only 35.2 percent debt. Finland's automatic stabilizers were very effective. They allowed it to avoid EDP procedure until 2010 despite real GDP contracting by an amazing 7.8 percent in 2009. Luxemburg and the Netherlands were also behaving counter-cyclically and maintained a low level of public debt.

The reformed SGP has had a mixed performance and is hard to gauge in the aftermath of a severe financial crisis; however, a few straight-forward comparisons to the original SGP can be made. The SGP's political credibility has undoubtedly improved. Large and influential countries like Germany and France were subjected to the same EDP as peripheral countries. Nonetheless, the threat of fines and sanctions for recurring excessive deficits is still weak at best, since the Council has yet to impose either. The EDP has been sped up and become more flexible; however, it still takes an ex-post, as opposed to a preemptive approach, to deficits. Finally, the role of the debt ratio criterion is still uncertain. In the past five years, the EDP has continued to virtually ignore the debt ratio. For example, in 2008 the EDP for Italy was abrogated even though Italy's debt ratio had increased 3 percent to 106.1 percent of GDP. However, the debt criterion is given a more prominent role in determining countries' MTOs. Additionally, the deficit criterion is still rigid. It doesn't make much sense that a country with a 3.1 percent deficit must undergo the EDP, while a country with a 3 percent deficit does not. Of the reforms, perhaps most disappointedly was the performance of the CAB.

It is generally agreed that the strong budgetary performance of countries prior to the crisis was mainly the result of windfall revenue. Between 2005 and 2007, tax receipts unexpectedly rose robustly in most Eurozone countries. When the temporary nature of this revenue is taken into account, the structural budgets generally worsened. Lemmer and Stegarescu (2009) found

that when countries experienced unexpected revenue windfalls, their expenditure for that same period was above their original plan. While this pro-cyclical behavior is certainly part of the story, it alone cannot explain the variation. Greece and Portugal were two of the most flagrant offenders of the SGP, and also two of the countries in the direst shape after 2009; however, Ireland and Spain, two of the SGP's top performers prior to the crisis, are also experiencing substantial deficit issues and rising risk premiums. This suggests that seemingly sustainable public finances are not enough to promote the necessary level of economic health and stability in the currency union. Lane (2010) argued that this is in part because fiscal policy is an important potential source of external imbalances, which often prove destabilizing.

III. 2. The current account

Table 3: Select Current Account Balances in Eurozone in percentage of GDP.

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Greece	-2.7	-3.6	-7.7	-7.2	-6.5	-6.5	-5.8	-7.5	-11.3	-14.4	-14.6	-11.2
Portugal	-7.2	-8.5	-10.2	-9.8	-8.0	-6.0	-7.5	-9.4	-9.9	-9.4	-12.0	-10.1
Spain	-1.2	-2.9	-4.0	-3.9	-3.3	-3.5	-5.3	-7.4	-9.0	-10.0	-9.7	-5.1
Ireland	0.8	0.6	0.0	-0.6	-1.0	0.0	-0.6	-3.5	-3.6	-5.3	-5.2	-2.9
Italy	1.6	0.7	-0.5	-0.1	-0.8	-1.3	-0.9	-1.7	-2.6	-2.4	-3.4	-3.4
Germany	-0.7	-1.3	-1.7	0.0	2.0	1.9	4.7	5.1	6.5	7.6	6.7	4.8
France	2.8	2.6	1.2	1.7	1.0	0.4	0.6	-0.6	-0.5	-1.0	-2.3	-1.5
Austria	-1.6	-1.7	-0.7	-0.8	2.7	1.7	2.1	2.0	2.8	3.6	3.5	1.4
Belgium	5.2	7.9	4.0	3.4	4.6	7.1	6.6	2.6	2.0	2.2	-2.9	-0.3
Finland	5.7	6.2	8.1	8.6	8.8	5.2	6.6	3.6	4.6	4.3	3.1	1.3
Luxembourg	8.5	10.7	13.2	8.8	10.5	8.1	11.9	11.0	10.3	9.7	5.3	5.7
Netherlands	3.2	3.8	1.9	2.4	2.5	5.5	7.5	7.3	9.3	8.7	4.8	5.2
Eurozone	0.8	0.5	-0.6	0.1	0.7	0.5	1.2	0.4	0.4	0.4	-0.8	-0.4

Source: IMF.

By definition, the current account balance shows both real and financial flows. A deficit indicates, in most instances, a trade imbalance, where the total value of imported goods and services exceeds the values of exports, but it also shows a net capital inflow into the country,

with foreigners acquiring domestic assets. Lane (2006) points out that during the early years of the Eurozone, countries on its periphery (Greece, Spain, Portugal, Ireland in particular) saw greatly reduced borrowing costs, both for the public and the private sector. Jaumotte and Sodsriwiboon (2010) determined that the creation of a common Euro financial market generated a borrowing binge, fuelling a boom in housing, construction, financial services, and elsewhere in peripheral Eurozone countries. As domestic savings decreased—or at least did not match the increase in spending—foreign capital filled the void leading to increasing current account deficits (see table 3). At the same time, higher inflation rates in the peripheral countries led to real appreciations of their "currencies". This entailed a loss of competitiveness for the traded goods sector relative to other member countries, particularly Germany. A form of Dutch Disease (Corden and Neary, 1982) can be diagnosed, indeed, but this time not in the Netherlands. A country with eroded competitiveness needs its domestic goods to become cheaper, or to depreciate, relative to foreign goods so that exports increase and imports decrease. Thus, they must deflate their general price level in relative terms to regain competitiveness. Conversely, a competitive country should increase wages and appreciate the real price level in order to shrink the current account surplus. This would accelerate national inflation via higher costs and prices. However, the ability of the euro area to restore competitiveness is limited by the common monetary policy of the European Central Bank, which is required to maintain low inflation. This process is especially painful if labor markets are immobile and wages are rigid.

Credit default swap premiums can serve as a measure of market concern over the long-term sustainability of public finances in a country. According to changes in credit default swap premiums, the five countries most affected by the financial crisis are Greece, Portugal, Spain, Ireland, and Italy (see figure 1). It is evident from table 3 that common for all these countries

were large and persistent current account deficits in the years before the crisis. Countries with current account surpluses have come under far less strain from financial markets and have mostly seen decreasing borrowing costs.

How dangerous current account imbalances become depends largely on the response of the public sector. If the government is running budget deficits along with current account deficits during an investment boom, it increases the economy's vulnerability for three reasons. First, there may be a sovereign debt crisis after a sudden stop of capital inflows (Calvo, 1998). The government becomes unable to roll over maturing debt, as was the case for Greece in 2010, and necessitated assistance from other Eurozone and EU member countries, as well as the IMF. Second, an opportunity is wasted to put public finances and structural policy, particularly the burden from a bloated civil service as well as welfare and entitlement spending, on a sound footing when this is least painful. Many austerity programs, which had to be implemented in the Eurozone in 2010, included civil service pay cuts and cuts to welfare and pension payments during a recession (See IMF, 2010a, and IMF, 2010b, for examples of the challenges faced by Greece and Spain). Third, pro-cyclical government spending and revenues, which rely mostly on industries experiencing a boom, further reduces the room for fiscal maneuvering when the "good times" come to an end. After a financial crisis, government debt often skyrockets (Reinhart and Rogoff, 2009). If there is a systemic financial crisis, the size of contingent liabilities for the government—due to support for the banking system—can be very large (see ECB, 2010, in particular box 8). This was the case for Ireland, as outlined in OECD (2009). Ireland faced one of the biggest housing bubbles in the EU, which led to large price decreases for real estate after 2007. Tax revenue, which was built around real estate—started plummeting in 2008; in addition, the government guaranteed the banking sector's liabilities totaling about 200 percent of GDP in

2009. Not only did these factors heighten the crisis, but persistent divergences in competitiveness and macroeconomic imbalances are a cause for serious concern. They increase the economic and financial vulnerability of individual countries, may jeopardize confidence in the euro, and weigh on the cohesiveness of the Eurozone. The situation, if not addressed, will eventually lead to a correction that may be abrupt and potentially disruptive, both for the countries concerned and for the Eurozone as a whole. The events have shown that a serious SGP that aims to fulfill its mandate needs to include lessons from the crisis. In particular, it needs to incorporate the dangers from financial flows and changes in relative competitiveness within the currency union. Only then can it better ensure both stability and growth.

IV. A better Stability and Growth Pact

The international financial crisis has reminded the Eurozone why fiscal discipline is so important. It has also demonstrated that markets alone are insufficient to penalize for fiscal profligacy. As shown by figure 1 the market punished Greece for its growing deficit and debt in a discontinuous fashion, but only at a late stage. By the time credit default swap premiums rose to reflect Greece's precarious situation, debt levels were already unsustainable without outside help. While the memory of the Greek crisis is still potent, the SGP needs to be reformed again. In the interest of time and political feasibility, these reforms should ideally address the major weaknesses of the pact without requiring a change in the Treaty. As demonstrated earlier, the most significant limitations of the Pact are its continued inability to promote counter-cyclical behavior during boom times, and its propensity to focus entirely on public finances.

Procyclical fiscal policy is undesirable. It exacerbates business cycle volatility, which damages fiscal sustainability. Increased spending during booms might necessitate fiscal tightening during recessions, i.e. more procyclical behavior. The Eurozone in 2010 is a case in point. There is empirical evidence for an inverse relationship between volatility and growth. Fatas and Mihov (2003) estimate that a one percent reduction of policy volatility (the standard deviation of cyclically adjusted government expenditure) leads to a drop in output volatility of a similar magnitude. The literature suggests that by increasing uncertainty, high volatility reduces capital investment and human capital formation. Investment is discouraged because higher volatility can increase risk and risk aversion (Bernanke, 1983) According to Kose et al. (2005), this effect is significant: Kose et al, found that a one percent increase in output volatility can lower economic growth by the same amount.

While the evidence thus points to the detrimental effects of procyclical fiscal policy, there is disagreement on whether or not fiscal rules make a difference. Using cross-section regressions, von Hagen and Harden (1995) found that OECD member countries with tighter budget rules are associated with lower government deficits and borrowing. Their results were especially significant when the member country used procedures—as opposed to numerical targets—as their fiscal rule. Similarly, Gleich (2003) and Flic and Scartascini (2004) were able to conclude that the presence of fiscal rule and budget procedures affects fiscal outcomes. In particular, they found the existence of medium-term fiscal frameworks to be especially significant. Finally, Hameed (2005) concluded that countries with more transparent budget practices are less procyclical. However, this does not prove causality. Countries may adopt good budget institutions because of their cultural appreciation for fiscal discipline. This would create an endogeneity bias in empirical studies that try to relate fiscal outcomes to institutional factors.

Manasse (2005) found that fiscal rules tend to reduce the deficit bias on average only when the quality of institutions is not accounted for. Nonetheless, there is broad consensus that well designed fiscal rules have the potential to improve fiscal discipline.

Fiscal rules should attempt to maximize a government's credibility, while minimizing the resulting loss in flexibility. The two most important qualities of a desirable fiscal rule are first that it has an explicit and transparent optimal budget, and second that it enhances the government's cost of deviating from this ideal budgetary stance (von Hagen et al., 2001). There are two main methods for achieving this. The first method relies on numerical rules; the second favors procedural rules. Numerical rules establish some hard limit for government budget deficits. Unfortunately, they may tend to increase procyclical behavior by suggesting an acceptable deficit level during boom times and limit fiscal discretion during downturns. Procedural rules establish strict reporting and transparency requirements in order to maximize the reputation costs of deviating from the ideal budget. They have a minimal limit on discretionary spending, but their effectiveness greatly varies. Countries with a history of excessive deficits are often impacted very little by the additional reputational costs. The SGP is a mixture of the two. The deficit and debt reference values are numerical rules, while the enforcement almost relies entirely on political commitment and reputational costs. As shown by tables 1 and 2, the effectiveness of the reputational costs greatly varies across countries.

In Finland, the central government uses an expenditure ceiling that is determined annually for a period of four years. The ceilings are set with the view of obtaining a structural surplus. In order to accomplish this, the ceilings are specified in real terms, nominal terms, and in the context of each year's annual budget. Recently, interest and cyclically-sensitive items have been excluded from the budget. Similarly, the Netherlands also uses an expenditure ceiling that

specifies the ceiling in real terms net of nontax revenue for a four year period. Every year the ceiling is thusly converted into an annual budget using the projected GDP deflator. In the case of unexpected spending, the Netherlands has set up a reserve fund. Finally, Spain passed a Budget and Stability Law in 2001 that came into effect in 2003. Unless the parliament agrees there are 'exceptional circumstances', Spain must run a balanced or surplus budget. Fiscal targets are set for rolling three year periods. New debt can only be issued to finance capital spending. The law specifies that all surpluses must be used to reduce government debt; however, any surpluses from the social security budget must be accumulated in the reserves fund. Uniquely, this law includes all regional levels of government. If Spain is forced to pay a sanction or fine for violating the SGP, the region that ran a deficit must contribute to the payment of fines in proportion to their contribution to the overall deficit (IMF, 2005). Interestingly, Finland, the Netherlands, and Spain, three of the countries that demonstrated the most fiscal discipline from 2005-2007, have their own national fiscal rules in addition to the SGP.

Recognizing the importance of domestic budgetary rules, Germany passed a constitutional amendment requiring the central government to run deficits no greater than 0.35 percent by 2016. This commitment has calmed investors (see figure 1) and supported the safe haven status of Germany in the crisis. All Eurozone countries would be benefited by increasing domestic budget monitoring. The Council should issue a directive requiring countries to take greater ownership of the principles of fiscal discipline. This could be politically feasible; after all, during the crisis most countries have committed themselves to serious austerity measures already. Its infringement on national sovereignty is minimal because it would leave how this was to be achieved to each country. The Council should recommend a national commitment to cyclically adjusted fiscal balance for each member country. The focus needs to lie on the

medium-term stability of the structural component of the budget. In the first decade of its existence, the corrective arm of the SGP was not used to achieve this goal. Having a more credible commitment at the national level can help. With the memories of the global financial crisis still vivid—and its repercussions for public finances still being felt—a political spirit of "never again" should be harnessed for this goal.

While some type of sovereign balanced budget reform would undoubtedly help, it would be insufficient alone. Spain already has a balanced budget requirement. While this allowed it to run surpluses in 2005-2007, it is still facing one of the Eurozone's highest deficits and high Credit Default Swap premiums. Several scholars have come to argue that the SGP needs to take into account external imbalances (Holinshi, Kool, and Muysken, 2010). As of yet, there are few suggestions for this. Dullien and Schwarzer (2009) proposed a new "External Stability Pact", similar to the SGP except that it focuses on the current account instead of the deficit-to-GDP ratio, to work alongside the SGP. While this would ensure that countries maintain sustainable levels of current account balances, there are clear limitations to such a pact. It would be politically unrealistic to expect the Pact to incorporate a hard reference value, like 5 percent, for current account surpluses or deficits. Not only would this infringement on national sovereignty require a change in the Treaty, but it would be almost impossible to expect countries to be able to comply. Unlike government debt or deficit levels, the current account is determined mostly by private sector decisions, and the government has very limited control over it. While reforms of labor and product markets can help, they may take years to affect the current account (Zemanek et al., 2010). Even if a government is doing everything in its power to meet the deficit limit, at best it won't be able to comply with the reference value until the medium term. Thus, external

imbalances should be incorporated into the SGP in a more flexible way compared to public finances.

Current account imbalances are an immediate concern of the Eurozone and should be addressed as soon as possible. By making countries' Medium Term Objectives (MTO) depend on their current account balance, countries would have an incentive to improve their external imbalances without reforming the Treaty. Currently, MTOs are tailored to countries depending on their current debt ratio and potential growth rate. This varies from negative one percent of GDP for low debt/high potential growth countries to balance or surplus for high debt/low growth countries. The existing MTO is sufficient when looking at countries' sustainable public finances in isolation, but to promote overall economic stability, this target value should take into account all relevant factors, most notably external imbalances. Thus, the MTO should be calculated in two parts: the original plus a correction for significant external imbalances.

One possibility could build on the empirical evidence of pass-through from external debt to public debt by Lane and Milesi-Ferretti (2002) and Benetrix and Lane (2010). Since there is no buffer from a flexible exchange rate inside the Eurozone, the sensible estimate for the association of public debt and external debt here is likely on the higher end of the estimated range of 0.1 to 0.7. A simple rule of thumb could then incorporate this finding into a reform of the SGP. Member countries which have sizeable current account deficits, say in excess of three or four percent of GDP, will have lower limits for government borrowing. Among the Eurozone countries, this would have suggested the need for governments to step on the fiscal brake in Ireland, Greece, Portugal, Spain, and Slovakia (particularly the latter four countries). For example, a country with a MTO of a balanced budget under the current SGP that maintains an 8 percent current account deficit could have a new MTO of one or two percent of GDP higher

budget surpluses, rather than a balanced budget. By making the current account a consideration in the preventive arm of the SGP, countries with unsustainable current accounts would be less vulnerable to economic recessions.

This reform would also indirectly influence the corrective arm of the SGP. While this addition to the SGP would not affect the three percent short-run reference value for the deficit, it would still require governments of countries with large current accounts to acquire greater national savings, whether by the government or the private sector. Under the existing SGP, countries that have not met their MTO are required to pursue an annual improvement of 0.5 percent of GDP as a benchmark of their cyclically-adjusted balance, net of one-off measures. Further, if the Council identifies significant divergence of the budgetary position from the MTO, it shall issue a public recommendation to the country, which they are expected to heed. Additionally, the corrective arm of the pact considers the MTO as a "relevant factor" when deciding which steps to take in the Excessive Deficit Procedure. Even though countries could not be fined for running current account deficits, this reform would make it harder for the Council to abrogate the procedures for countries running sizeable current account deficits. Under this reform, Greece and Portugal would not have been abrogated in 2007. Their large current account deficits would have served as a warning.

V. Conclusion

We have outlined the brief history of the Stability and Growth Pac, starting with its creation and including subsequent reform measures. The crucial problem was uneven fiscal policy discipline in the Eurozone before the global financial crisis. This reduced the room for

budgetary maneuvering by Eurozone governments to deal with sharply reduced revenue, large needs for public support of the financial sector, and sizeable stimulus spending simultaneously after 2008. In formulating our recommendations, we dismissed radical changes to the institutional environment of the Eurozone, as we consider them to be of little feasibility and political appeal. Instead, we suggest changes to the SGP that focus on national ownership of fiscal discipline and an extension of Medium Term Objectives to include a consideration of large external imbalances. Our data shows that countries that saw the largest increases in borrowing costs after 2008 had large current account deficits in the years before. Ultimately, there also needs to be room to use the sanctions of the corrective arm of the SGP in the future. The crisis has shown that countries in the Eurozone that violate the SGP and face a liquidity or solvency crisis can rely on external funds from other members. A better SGP will thus need to use its preventive arm early and forcefully and then not shy away from using the "stick" of the corrective arm to avoid future reliance on austerity measures during recessions and prolonged slumps in parts of the Eurozone.

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