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### Burying the Stability Pact: The Reanimation of Default Risk in the Euro Area Roman Goldbach/ Christian Fahrholz

### GLOBAL FINANCIAL Markets

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### Abstract

After neutering the Stability and Growth Pact (SGP) in 2005, recent developments pinpoint that financial markets considerably discriminate between qualities of European governmental borrowers.

In this article we inquire whether and to what extent political statements and decisions within the realm of the European Union (EU) have deteriorated the effectiveness of the SGP from financial markets' perspective. The SGP may represent a focal point in financial market actors' calculus regarding long-term public debt formation. Accordingly, any news – such as political rhetoric in context of the SGP – affects financial market actors' evaluation concerning governmental creditworthiness.

We use financial market data to measure the influence that political events exert on governmental default risks. Using daily data for the EMU member states from 2002 to 2005 the analysis reveals that political rhetoric has considerably undermined the efficacy of the SGP. In turn, market forces have regained some more momentum. According policy implications are outlined.

### I. Introduction

With the commencement of the global financial crisis in 2007 institutional weaknesses of European fiscal affairs, manifesting in the Stability and Growth Pact (SGP), are getting to the forefront: Increasing debt levels and dispersing interest rates within the Euro area reveal that the SGP has lost its last spark of momentum. The decease of the SGP may eventually put the entire European Monetary Union (EMU) at risk. The reason is that corresponding adverse effects on the credibility of the euro will probably cast doubts on the long-term sustainability of soaring public debt levels within the euro area. In this regard, recent developments pinpoint that financial markets considerably discriminate between qualities of European governmental borrowers.

In this article we highlight how a subliminal politicization process of European fiscal affairs has undermined the effectiveness of SGP prior to its factual demise in 2005. We accordingly investigate whether and to what extent political statements and decisions within the realm of the EU have deteriorated the effectiveness of the SGP from financial markets' perspective. While there already exists a vast literature studying the influence that political events may exert on financial market performance (see e.g. Bernhard and Leblang, 2004; Block and Vaaler, 2004; Vaaler et al., 2005; Leblang and Mukherjee, 2005; Freeman et al., 2000; McGillivray, 2003), the purpose of the following discussion is not only to illustrate the link between both political and economic sphere, but to draw attention to essential features of a politicized fiscal regime within EU. For this reason, we determine to what extent political action in terms of decisions, and particularly rhetoric, i.e. statements by national politicians and European bureaucrats, has contributed to the demise of the SGP during the years from 2002-2005.

The SGP has represented a focal point in financial market actors' calculus regarding long-term public debt formation (see e.g. Faini, 2006; Bernoth et al., 2004, and Mosley, 2004). Accordingly, any news – such as political rhetoric in context of the SGP – affects financial market actors' evaluation concerning governmental creditworthiness. Increasing interest rate differentials indicating divergence in default risk premia within the Euro area thus reflect shifts in member countries' creditworthiness, due to the loss of credibility of the SGP. However, simply relying on private market solutions apt to constrain fiscal profligacy is obviously inappropriate as national defaults create spill-overs. Such negative externalities are politically not feasible thus ensuing in moral hazard behaviour among Euro area members. Hence, we particularly stress the importance of specific characteristics of any such political solution to such spill-overs within governmental bond markets, i.e. we emphasize the need for dismantling current European fiscal policy scheme from political fluctuations.

The empirical research design employs both a level and volatility study framework. In particular, we scrutinize the effects of political debates surrounding the SGP's applicability on the costs of refinancing public expenditures. This is to say that we investigate whether destabilising political decisions and politicians' statements have an impact on financial market evaluations of default risk inherent in Euro area government bonds. Our method to isolate the governmental default risk component is the usage of interest swap spreads. This is applied to an indicator depicting an average for the entire Euro area. The impact of political decisions and statements is measured by content analyses of official Economic and Financial Affairs Council (EcoFin) decisions as well as selected newspaper reporting of politicians' rhetoric and empirically analysed as binary variables in GARCH models.

We show that financial investors' reactions are quite sensitive to mere rhetorical signals of politicians. This is to say that 'words' – apart from political decisions – have contributed to 'burying' the SGP. By the same token, the disciplining effect on national fiscal behaviour by financial markets is seemingly gaining more importance. At this stage, however the problem of negative externalities ensues in the form of a potential default that may have spill-over effects on other EMU-members.

The remainder of the discussion is organised as follows: The next section surveys the relevant literature and sets forth crucial junctures of our analysis. The theoretical foundations on the impact of political rhetoric on governmental

creditworthiness are subsequently developed. We then describe the design of the empirical analysis and discuss the results. Finally, we summarise the study and highlight policy implications for fiscal policy schemes within Europe.

#### II. Survey of the Literature

The recent increase of treasury yield spreads across the Euro area reveals the 'de facto' of the SGP, and further exposes the vulnerability of the Euro area that lacks a clearly regulated fiscal policy framework (see Haugh et al. (2009) for a related recent contribution). It reverses the convergence trends of government debt interest rates associated with the process of the EMU (see e.g. Mosley 2004). Variation across yield spreads also validates studies that have found empirical evidence for the prevalence of political budget cycles even after introducing the Euro as common currency (see e.g. Hallerberg and Wolff, 2008; Mink and De Haan, 2006,). Giuliodori and Beetsma (2007) as well as Debrun et al. (2008) show to what extent fiscal policy frameworks shape fiscal policy behaviour within the European context (further, also Ferré 2007).

The SGP, constantly weakened by politicians in the years from 2002 to 2005, can be depicted as a pledge for future solid fiscal policies of the EMU members towards financial markets. Taking this view, the literature examining how fiscal policies affect government bond interest rates could lead to the conclusion that a regulatory framework constraining fiscal profligacy causes reduced costs of public borrowing. Some evidence supports this claim of a positive relationship, where fiscal profligacy raises interest rates on government bonds, particularly along the default risk channel (Gale and Orszag, 2003 and 2004). Johnson and Kriz (2005) also demonstrate that financial institutions such as debt limitations, balanced budget rules, tax policies, revenues and expenditure limitations exert influence on default risk, credit ratings and thus borrowing costs.

Within the European context the relationship between national budgetary policies and default risk premia on treasury bonds has found first support from recent research in the field: While Lønning (2000: 27) as well as Giovannini and Piga (1992) deliver support for the existence of a 'small, but significant' default risk component within European government bonds, evaluations of the connection between fiscal policies and default risk were long omitted (Faini, 2006: 446). One exception was Lemmen and Goodhart (1999: 77), who found that fiscal policy variables exert a significant influence on the default risk component inherent in EMU government bonds. It is only due to research on the monetary union and its effects on sovereign fiscal policies and vice versa, that the considerable lack of knowledge about linkages between fiscal policy and interest rates within the European framework has been partly resolved (see e.g. Bernoth et al., 2004; Codogno et al., 2003; Heinmann and Winschel, 2001). Mounting evi-

dence supports the claim of a positive relationship, where fiscal profligacy raises interest rates on government bonds by less than ten basis points per 1% increase in the deficit/GDP ratio (Bernoth et al., 2004; Heppke-Falk and Hüfner, 2004; Faini, 2006). As Faini (2006: 446) states, this is substantially smaller as compared to the effect estimated in the US literature, but finds significant support throughout all cited studies. To interpret these results, it seems obvious that fiscal policies play a substantial role in determining the default risk component of European treasury interest rates.

This 'small, but significant' effect of fiscal policy appears to remain true after the onset of EMU, where the regime shift is suggested to have altered the relationship between national fiscal policies and financial markets (Mosley, 2004). Two clear patterns arising from the EMU regime shift are found in the empirical literature. First, most studies have found a structural break after the onset of EMU, which is identified with a higher market scrutiny (due to the enhanced monitoring mechanism of the SGP framework) and an increasing importance of default risk, after national governments have lost monetary sovereignty and consequently the possibility to monetise debt (leading to higher demanded risk premiums). Hence, while liquidity and exchange rate risks, strongly associated with pre-EMU government bonds, largely diminished, default risk has become particularly pronounced after the onset of EMU (see Schuknecht et al., 2008 for a recent study). While the default risk component became more important for the valuation of sovereign liabilities, its magnitude seems to have been lowered at first after the inception of EMU. Bernoth et al. (2004: 18-9) find significant support for the claim of lowered default risk premia for all EMU members after the introduction of the euro: "The default risk premium is positively affected by the debt and debt service ratios of the issuer country. This is consistent with the notion that credit markets monitor fiscal performance and exert disciplinary pressure on governments" (Bernoth et al., 2004: 26).

The effect of diminishing liquidity and exchange rate risks, combined with lower credit risk is frequently referred to as the 'convergence hypothesis' (e.g. Mosley, 2004). From this reasoning consequently follows the question, whether there exists an at least partially integrated European government bond market. EMU's integrative effect on sovereign debt markets is the second trend, which is found across empirical investigations on the subject. Support for a Pan-European bond market is found by Antzoulatos and Klinaki (2002: 160-2) with regard to Spain, Portugal, and Italy. Bernoth et al. (2004: 18) are able to demonstrate, how EMU membership reduces the linear effect of debt on default risk premia, but increases the non-linear, marginal effect. Accordingly, EMU members enjoy a lower risk premium than before, but this benefit declines with the size of public debt. In other words, while all Euro area member states benefit from their membership in form of reduced interest rate payments and particularly reduced default risk, they are subject to heightened market scrutiny, which might lead to soaring debt financing costs, if fiscal profligacy prevails. The latter argument is actually of key importance to our investigation: We argue that establishing the currency union generated a new risk element within EMU government bonds, namely a common risk of heightened default probability if the pact would be violated. In other words, while the currency union leads to a decreased state-individual default risk due to the SGP-commitments, it simultaneously creates a new risk category of the SGP-credibility and common fiscal prudence respectively. This does *not* imply that national differences between member states' debt titles diminish entirely, but that the general difference becomes smaller and is complemented by a shared component of default risk.

Under the scenario of an at least partially integrated Pan-European bond market, where sovereign debt of Euro area members is priced according to the same - i.e. 'European' - factors, spill-over effects in the EMU would become of decisive importance: unbalanced fiscal policies in one country might lead to soaring interest rates in the entire Euro area bond market and thereby affect other member states. These effects have so far been ignored by empirical analyses. Faini (2006), who offered evidence for this relationship, is the only exception. This author delivers substantial support for the claim that expansionary fiscal policies in one EMU member state will not only increase its own interest rate, but will also influence the overall level for the currency union as a whole. Furthermore, "the second effect, however, being quantitatively much more significant, [indicating] that there are indeed substantial spill-overs, through the interest rate channel, among fiscal policies of member countries" (Faini, 2006: 444). Moreover, Wyplosz (2006), for example, shows that when in spring 2005 an Italian minister publicly called for his country to abandon the euro and relaunch the Lira as legal tender, the average spread of the Euro area member states bonds more than doubled. These insights suggest the existence of a partially integrated 'European bond market' after the onset of the common currency, in which different government bonds are influenced simultaneously by common factors.

Whether Euro area member states' government debt is subject to common factors could be of decisive importance to the EMU framework: the very moment that Euro area government bonds are affected by political incidents on a supranational scale, the SGP and its strict application becomes a decisive instrument of control and discipline (see e.g. Schuknecht, 2004). Without a functioning SGP – as, in fact, since 2005 – Euro area countries will suffer from fiscal profligacy in other member states (Faini, 2006).

To the authors' knowledge this common component of default risk within Euro area government bonds has not been subject to empirical investigation. In line with research on the influence of political events on financial markets (see Schneider et al., 2009 as well as Bernhard and Leblang, 2006 for an overview), we do not rely solely on traditional evaluation on the connection between the static data of current deficits and treasury yields. Instead, we focus on the direct impact of political decisions, and moreover politicians' statements – thereby

recognising the decisiveness of the political discussions about the SGP in the years from 2002 to 2005 and how these debates influenced financial market actors on a daily basis. This policy-related research has so far been largely omitted, with few exceptions. In the context of forward looking financial markets, investors are predominantly interested in the medium- to long-term outlook of fiscal policies and try to forecast the future developments. Therefore the relationship between current budget deficit data and financial market valuations of national creditworthiness is rather unlikely to find a connection. However, if new and forward looking information on fiscal policies are used as predictors, as in studies using projected budget deficits (Heppke-Falk and Hüfner, 2004; Canzoneri et al., 2002), considerable empirical support for the fiscal policy – interest rate nexus is found.

In principle, financial markets in their attempt to forecast economic developments and consequently to anticipate any relevant information should be interested into the earliest information available. Concerning policy events information is diffuse and frequently available in advance to actual decisions. Therefore, decision makers could provide decisive information on a political decision before the actual decision. It is for this reason, that politicians' statements become particularly appealing. Nonetheless, empirical analyses are rather rare, although there exist a few exceptions: Prast and De Vor (2005), for instance, investigate the effects of surprising (i.e. not expected) political statements from members of European and international institutions on the Euro-Dollar exchange rate; they find, that investors focus on political news and central bank statements as far as the Euro area is concerned, whereas they pay less attention to economic news. Jansen and De Haan (2005) study the effects of central bankers' statements on the Euro-Dollar exchange rate and find limited support for an asymmetric influence on volatility, where bad news typically result in stronger market reactions, as compared to good news. Similar analyses concerning the formation of monetary policy indicate that central bankers' communication may effectively move financial markets, though there is yet no such thing like an optimal communication strategy (Blinder et al., 2008). Closely related to our discussion is the study by Afonso and Strauch (2007), which test whether the credibility of the SGP - as perceived by investors - is influenced by political violations of the SGP. This relationship is measured via the default risk premia inherent in selected Euro area government bonds. No reliable evidence is found, which is mainly due to crude and unreliable categorisation and measurement of the independent variable such as political events. In contrast, Schneider et al. (2009) use more sophisticated methods and categorisations in various research fields – they are able to establish a profound link between politicians' signals (i.e. statements) and investors' reactions. Our analysis aims at strengthening such arguments.

### III. Theoretical Model

### Setting the Stage

Prior to EMU, many current members of the EU had a record of highly unsustainable fiscal policies (Annett et al., 2005: 5). Persistent and unsustainable deficits fed through to rapid public debt accumulation above 100 percent of GDP during the 1980s and early 1990s with budget deficits hovering around 10 percent of GDP in many years. Long-term welfare state promises combined with typical business-cycle electoral considerations affected fiscal policy outcomes across European democracies (Alesina et al., 1999). In a monetary union such fiscal profligacy could have severe spill-over effects as monetary policy is only concerned with the Euro area wide economic formation. Hence, if a country's budgetary policy is over-stretched, this could necessitate the centralised central bank to intervene, which would be at the costs of all members. As Annett et al. (2005: 7) clarify, there are three most commonly raised issues with regard to the Euro area: price stability, potential bail-outs of defaulting member states, and the interest rate spill-over effects. The SGP is designed to put the chains on these negative externalities. In this regard it holds true that as long as the SGP and its corresponding criteria are commonly accepted as a benchmark measure and its mechanisms are implemented as provided by the legal framework, it delivers a high degree of predictability and efficacy (Mosley, 2004). However, whenever the applicability of the SGP is questioned this may eventually lead to increased uncertainty about the future of fiscal policies in EMU member states.

Basically, the legal framework of the SGP consists of a set of benchmark criteria (commonly referred to as Stability or Maastricht criteria), which set maximum levels for current deficits as well as accumulated debt stocks (3% and 60% of GDP). The obligations to meet these criteria are monitored by the European Commission under the Excessive Deficit Procedure (EDP) and the Early Warning Mechanism (EWM). The EcoFin Council approached by the Commission in the case of an existing or a very likely future infringement of these criteria is the single decision making institution.

It follows, that the governments, which shall be constrained by the SGP, are at the same time the authority deciding on the appliance of the procedures and rules, and therefore cannot be expected to employ the criterions of the SGP objectively. Hence, the so-called Maastricht Criteria and its concomitant monitoring mechanisms are political, rather than technical measures, and are consequently connected with uncertainty due to opportunistic behaviour of national politicians and corresponding problems of moral hazard. It is the legal status of the SGP as international soft law, with an inherent contracting problem, which leaves much uncertainty about its future enforceability (Schuknecht, 2004: 12-16). This clearly prepares the ground for considerable room for political manoeuvre, hence inducing uncertainty about the future scope of the SGP. The reason is basically that decisions in context of the SGP will be dependent on the current political agenda and the incumbents' interests.

Experiences since the first EDP in 2002 have highlighted that such deficiencies of the legal framework translate directly into reality. The preventive arm of the SGP failed, stability criteria have been breached frequently, proper dissuasion and punishment components of the SGP have been hardly applied (Annett et al., 2005). Most notably, the complete legal structure has been severely weakened, when the adjustments in March, June, and October 2005 allowed for more flexibility in the application of the SGP's rules: In March 2005 EU finance ministers reached a deal on reforms to the SGP at an extraordinary meeting in advance of the EU summit in June 2005, at which these reforms were endorsed. At that stage, the European Council decided on the amendments of regulations 1466 and 1467/97, which clarify the procedural application of the SGP. Besides these legal documents, the new code of conduct on the content and format of the stability and convergence programmes was endorsed by the EcoFin Council on 11 October 2005.<sup>1</sup>

It is obvious, however, given qualified majority voting with weighted votes in the EcoFin Council and log-rolling opportunities, only gross policy errors are likely to be sanctioned (Schuknecht, 2004: 15). Therefore, moral hazard considerations are relevant and political opportunism becomes likely, and – what is even more important – will probably be not sanctioned. If the SGP works only to a limited degree, it will probably provoke national fiscal profligacy and thus deteriorate economic performance within the entire Euro area.

As the SGP is not a completely stable and (legally) predictable institution, the political sphere may have a significant impact on its procedures. Following our line of argument – i.e. where an ineffective SGP ensues fiscal profligacy deteriorates price stability of the Euro and accordingly hampers economic performance – we may bring political action back into the economic sphere. This is to say that political news such as decisions and rhetoric may have a bearing on saving and investment decisions within the Euro area. The reason is that corresponding political action points at the probable future path of economic formation within the Euro area. From the viewpoint of individual EMU members, weakening and flogging the SGP to death may provoke shifts in country creditworthiness. In this respect, it is valid that the weaker the SGP, the more the importance financial markets as credit suppliers attach to national and supranational fiscal policy formation. With a weakened SGP the 'natural' disciplinary function of financial markets might get resurrected. Accordingly, governmental fiscal policies are gradually but increasingly drawing more attention from investor evaluation get-

<sup>&</sup>lt;sup>1</sup> The new code of conduct incorporates the essential elements of Council Regulation 1466/97 into guidelines to assist the member states in drawing up their programmes. It was this code of conduct, which allowed the countries to adhere to 'special circumstances' (for instance, the costs stemming from German reunification) as an excuse for failing to comply.

ting more connected with the evaluation by investors, i.e. providers of financial resources for carrying out public expenditures.

### Bringing Politics back in to Financial Markets

Among financial markets' functions is the task of pricing different investments in relation to their expected future returns. In other words, investors evaluate financial assets according to their net present value. Therefore obtaining the appropriate, timely information is decisive. According to the efficient market hypothesis (EMH), investors indeed do react to information if these change the expected return and the net present value of financial assets respectively (Fama et al., 1969). Referring to this conventional assumption for financial market behaviour, investors may readjust the financial asset prices according to the arrival of new information, i.e. such actors factor in the probable change in future prices in current prices.<sup>2</sup> Apart from the question whether efficient market hypothesis (due to Fama et al., 1969) or the behavioural finances school (e.g. Shleifer, 2000) is closer to reality, financial markets are considered as very (though not completely) efficient in the processing of information, and quite accurate in their predictive evaluations with regard to the future economic equilibrium (e.g. Fama, 1970). Hence, financial markets are considered to deliver quite reliable measurements of the future economic development. Therefore, measuring policies' impact on financial assets has become increasingly popular. This is more than an academic exercise: In times where policy choices are partly driven by considerations of international competitiveness, the approval of certain policies by international investors has become an ever more important yardstick for the evaluation of national policies. The political sphere has been proven to be highly influential on investor evaluation of financial assets. In accordance with these findings, we consider political events as crucial information for the evaluation of the future economic development by financial markets, since different sets of policies cause economic (re)distributions as well as macroeconomic consequences with regard to the general future economic track. Important events in politics or policies should be reflected in financial market reactions, if these events are perceived as bearing on future economic performance. Policyrelated events have been shown to influence investors' evaluations in a twofold manner: in a direct, improving or deteriorating change of an assets value and in an increase of financial market uncertainty regarding future economic path depicted in volatility changes. There is evidence that political events are a key determinant of uncertainty and consequently financial market volatility: For example, Freeman et al. (2000) deliver empirical evidence for this relationship particularly that political events are a more important factor in determining finan-

<sup>&</sup>lt;sup>2</sup> Empirical evidence for the revaluation of financial assets due to the arrival of new information is found by several studies: Regarding bond markets see for instance, Balduzzi et al. (2001) as well as Hotchkiss and Ronen (2002).

cial market uncertainty when compared to pure economic news, as the latter information are relatively easy to predict for investors.

It is at this point, that the SGP becomes crucial. EMU members, as any other country in the world, in their need to obtain credit to finance their public deficits, hinge on the evaluation of financial markets which affects the cost of borrowing. With the commencement of EMU financial market evaluation of the member states' government bonds has substantially changed: Vanished currency risk and reduced liquidity risk have lead to converging interest rates. Most notably, it has changed the relationship between national governments and financial markets, as it provides a new framework for evaluating governments' fiscal policies. The new benchmark measures and the new monitoring procedures have created new focal points for investors calculating and evaluating national creditworthiness (Mosley, 2004). Moreover, the SGP is a commitment, a pledge by all EMU members to obey to the rules of balanced fiscal policies. As Mosley (2004) argued, the SGP as a binding commitment could result in a general trust by financial markets into balanced future fiscal policies of the EMU members and lowered risk premia. As the SGP was evaluated with trust in advance, the bond prices already reflect this in lower default risk premia demanded, due to expectations of investors since 1998. Therefore, it has considerable influence on the investors' evaluation of the future economic performance of EMU and its member countries. This means that all member states could borrow at (almost) the same costs, as financial markets have evaluated the SGP as a trustworthy commitment towards balanced fiscal policies (see also Annett et al, 2005, as well as Afonso and Strauch, 2007). Due to the SGP, default risk premia decreased on the one hand, but became a (relatively) more important *common* risk component in the evaluation of government bonds across EMU on the other hand.

We have already outlined the substantial influence that the political sphere may exert on the application of SGP's procedures. The potential drawbacks of the according uncertainty about future fiscal and economic track within EMU policies transpose into price changes in financial markets. This is to say that, because of an unreliable institutional setting, financial markets will carefully listen to actors who might alter the SGP, i.e. national politicians and European bureaucrats.

### Financial Markets evaluating the Political Formation of the Stability and Growth Pact

The upshot of our arguments is that financial markets should punish governments within the Euro area, if they do not adhere to the SGP's rules: if an ineffective SGP leads to the increased peril of fiscal profligacy in the Euro area and consequently to the upsurge of debt accumulation, as well as the concomitant dangers for the entire Euro, the raising probability of high government debt and unsustainable public finances should be reflected in prices for government securities (Afonso and Strauch, 2007). This is to say that an unreliable SGP will probably force financial markets to adjust their evaluation of sovereign debt. Because of perceived differences in country-specific creditworthiness investors will then demand different and possibly even on average higher default risk premia.

In this study, we argue that political events matter as information for financial markets. We focus on the influence of directly observable political events on financial asset evaluation and the allocation of investments, i.e. demanding governmental bonds (as opposed to the measurement of policies via indirectly observable sole debt measures or other macroeconomic data). Consequently, it is news on these political events, which are considered as being decisive information to the analysis by financial market agents. For at least two reasons this approach is particularly well suited for analysing the events surrounding the SGP's viability:

The first concerns fiscal policies in general: with regard to sustainable fiscal policies the medium- to long-term-perspective is decisive (see e.g. Heppke-Falk and Hüfner, 2004: 4). Such an outlook is heavily dependent on the responsible decision makers, who determine the future key principles leading any budget; investors therefore are expected – in line with the arguments of efficient information processing and anticipation behaviour – to give substantial weight to the responsible politicians directly observable behaviour, as this already indicates what the figures later on will only confirm.

The second reasoning is related to the nature of information concerning the SGP: the information necessary to assess the SGP's viability as an effective binding commitment towards balanced fiscal policies are not directly observable using economic data. If the necessary information could be extracted from such data, then only in economic statistics of the far future – hence investors are expected to search for more timely available information. Embracing this connection between qualitative political causes and quantitative economic consequences, we make use of an interdisciplinary research design which will be outlined in the subsequent section.

### IV. Empirical Model

Political events in this study's context are political activities that influence the future stability and viability of the SGP and the strict appliance of its rules, or, in other words, the extent to which the SGP is received as trustworthy binding commitment of the EMU member states. As long as financial markets expect the strict application of the simple rules and benchmark measures in the future, they may perceive a high degree of certainty regarding the member states balancing of fiscal expenditures and build up of public debt. However, in times, in which the adherence to the SGP's rules is doubted by investors, the result will probably be an average increase of the Euro area interest rates, due to demanded

higher risk premia. We will not only gauge the influence of political decision making, but also analyse whether statements from particular decision makers have an impact on the Euro area creditworthiness. In line with the anticipation argument concerning financial market information processing, news signalling a political decision before it is actually taken should be very valuable to investors. Therefore, we expect holders of sovereign Euro area bonds to react to statements of those politicians which play a relevant role within the legal framework of the SGP as these statements could depict valuable information ahead of the actual decisions. Moreover, statements on policy issues can have a very pronounced surprise factor since these information usually cannot be anticipated, and hence depict decisive new information. There exists some evidence in favour of the effects from politicians' rhetoric, but studies so far are rare. Consequently, two main categories of political events are considered to be of significance:

- (1) Actual political decisions within the legal framework of the SGP, by the European Commission, the EcoFin Council, or the European Council;
- (2) Statements of relevant politicians signalling future political events concerning the SGP and the fiscal policies of the EMU member states.

Both categories of events (in the following "events" is used as verbal frame for political decisions and statements) are concerned as potentially delivering valuable information for investors and thereby causing financial market fluctuations.

### Definition of destabilising events

For the empirical analysis a clear-cut definition of a political behaviour that disobeys to the SGP's rules is needed. For this aim the category of *'destabilising political events'* is applied:

A political activity, more precisely a political decision and/ or a politician's statement, that is incongruent with the currently legally binding rules encompassed by the legal documents constituting the SGP is understood to destabilise the latter framework. Consequently, events are categorised as destabilising when the SGP is (a) violated which refers to all 'technical' violations of the SGP's legally binding benchmark values, i.e. when a member state does not comply with the stability criteria, (b) flexibly interpreted which describes the political behaviour where an infringement of the SGP is not appropriately punished, hence the SGP is disregarded or (c) adjusted, which in all cases entails a weakening and loosening of the SGP and the application of its rules.

To clarify, political destabilisation simply describes any behaviour of the relevant politicians that actually violates, flexibly interprets, or adjusts the SGP, or signals such behaviour. The term destabilising was found to deliver the most appropriate frame to verbally encompass all theoretically relevant actions, namely such that are not in line with the current legal framework. This specification does not make any conclusion about its immediate or long-term economic consequences.

### Hypotheses

The SGP is considered as an institutionalised mechanism, which improves investors' monitoring possibilities, ensures sustainable fiscal policies and reduces uncertainty with regard to the future economic equilibrium. As long as financial market actors do believe in the SGP as 'binding commitment' and hence are able to predict the future economic development with a high degree of security, they will continue to see Euro area treasuries as a secure financial asset and demand low risk premia. However, as destabilising political events increase uncertainty about the SGP's future role as a 'binding commitment', the doubt about balanced fiscal policies leads to higher perceived credit risk and consequently to higher default risk premia. Building on this theoretical framework, the following hypotheses will be analysed:

Hypothesis 1: With intensifying political destabilisation of the SGP the average default risk in Euro area government bonds will increase.

Moreover, in periods of uncertainty, investors doubting the SGP's future will focus on this topic and the relevant information and are expected to react intensely to any piece of information, which is evaluated as important 'news'. Therefore volatility should be significantly higher in periods of destabilising political events as compared to episodes of less uncertainty:

Hypothesis 2: With intensifying political destabilisation of the SGP the volatility of the average default risk component in Euro area government bonds will increase.

### Research Design

The specific questions we evaluate necessitate us to apply a mixed methods research design, relying on econometric modelling of the dependent variable process while at the same time utilising a qualitative content analysis approach in order to capture the independent variable phenomenon.

However, our study can be characterised as an event study in 'parameterising' form. While the underlying research question and the principal method belong into the category of event studies, it deviates in several aspects from the classical framework, introduced by Fama et al. (1969). The design chosen here consists of estimating a regression model in which the effects of events on asset returns are represented by dummy variables. The dummy variable coefficient, then, measures the average abnormal return across all the event periods.<sup>3</sup> In this spe-

<sup>&</sup>lt;sup>3</sup> In contrast within the traditional event study framework the systematic differences between estimation and event window are estimated and the windows do not overlap.

cific version, rather than modelling abnormal returns as prediction errors from the market model equation, the sample period is extended to contain the event period. Binder (1998: 123-5), called this binary variable approach 'parameterising form of an event study', which can have several advantages depending on research question and data. It is chosen here, since this method is particularly compatible with an analysis of multiple events (Binder, 1998: 124); furthermore, the complete dataset sample is used within the final analysis. Contrary to the classical application, therefore, the information loss due to event and estimation window coding is circumvented.

For the purpose of capturing the explanatory political variables we command a content analysis of a) EU Commission documentation regarding any official decision taking and b) reporting of political statements by two newspapers with international investor relevance, i.e. namely the Financial Times and the Frankfurter Allgemeine Zeitung. The resulting binary variables were coded as event on days of relevant decisions of the EU institutions (see definition above), and on days on which both newspapers accordingly reported a destabilising event. To avoid data-loss due to blurred information processing, the event windows for decisions was extended by one day prior and one day past the actual event, and solely by the subsequent day for statements.<sup>4</sup> Related studies typically follow such a measurement approach, since the problems from diffuse information processing can be circumvented with comparatively smaller costs of data dilution (for instance, MacKinlay, 1997: 14; Ball and Torous, 1988).<sup>5</sup>

Moreover, we will investigate whether investors differ between sources of words and actions: On the one hand we inquire if investors evaluate decisions taken by the Commission and the Council differently. From a political viewpoint this is of particular interest, since financial markets might consider the Commission, the guardian of the SGP and the EcoFin Council as being different in importance, power, and/or trustworthiness. The statement analysis distinguishes between Commission members and staff, politicians of the member states, staff of the ECB, and other EU and member states politicians.<sup>6</sup> Concerning national politicians, we will additionally distinguish between the head of state and/or government, the finance minister, and all other government politicians so as to grasp the relative importance of the ministers of finance and the heads of state/government.

<sup>&</sup>lt;sup>4</sup> Diffuse information processing can occur in two forms: Either prior to the actual event, due to the investors' incentives in forecasting news, or after that event, because the information related to the event arrives after the markets daily closing. Since statements occur rather surprisingly, a coding of the prior day would make less sense – this was confirmed by the test of different window definitions.

<sup>&</sup>lt;sup>5</sup> Further lag- and lead-structures were tested (-2/+2, -2/+1), but the theoretical most appealing -1/+1 (+1 for statements respectively) choice delivered the most convincing results, as concerns significance levels.

<sup>&</sup>lt;sup>6</sup> The ECB statements also include statements made by members of the national central banks, which belong to the European System of Central Banks (ESCB).

Whether these politicians deteriorate sovereign creditworthiness by decisions and/or statements needs to be gauged by separating the default risk component inherent in long-term government debt. While several indicators for this purpose have been tested in different studies, we follow a strand of literature estimating the dependent variable 'EU sovereign default risk' by utilising interest rate swap spreads (IRSS) (see, Lemmen and Goodhart, 1999; Heppke-Falk and Hüfner, 2004; Afonso and Strauch, 2007). The IRSS is calculated by the difference between the swap rate of an interest rate swap (IRS) and the government bond yield of the same maturity, which is ten years here.

Choosing this indicator among several possibilities is due to two factors: first, the underlying markets of the indicator offer particularly suitable characteristics, as both, bonds and swaps, offer high and robust liquidity levels and swaps were among the first financial markets integrated after EMU, thereby eliminating measurement errors due to different transaction costs in EMU countries (Remolona and Wooldridge, 2003: 47-8). The second reason is model precision and parsimony, as the indicator is well suited to "extract the market's perceptions of government default risk" (Lemmen and Goodhart, 1999: 80).<sup>7</sup> By comparing the relative funding costs of the government with those of the private sector it makes the inclusion of further control variables into the model specification obsolete (see e.g. Heppke-Falk and Hüfner, 2004: 6, as well as Afonso and Strauch, 2007).

Nonetheless, further factors might eventually have a systematic impact on the spread between government bonds and swaps. Since the seminal paper by Duffie and Singleton (1997) the results of empirical research on the factors driving swaps and swap spreads are diverse. Particularly for the European market the analysis of Remolona and Wooldridge (2003) illustrates that the measure of interest rate swap spreads is not systematically influenced either by liquidity in the swap market,<sup>8</sup> or by liquidity risks in the bond market.<sup>9</sup> Furthermore, default or counterparty risk inherent in swaps, which could also be an influential factor as the contracting parties are naturally subject to some degree of credit risk, is of minor relevance (see e.g. Lemmen and Goodhart, 1999: 82 for this rationale), and significantly lower as in the bond market (Apedjinou, 2003: 11). But, the

<sup>&</sup>lt;sup>7</sup> Further empirical support on interest rate swap spreads primarily reflecting credit risk premia is provided by Heppke-Falk and Hüfner (2004: 6), Remolona and Wooldridge (2003: 53), Favero et al. (2000: 22), as well as Geyer et al. (2004: 194-5).

<sup>&</sup>lt;sup>8</sup> While liquidity risk in the swap market might play a role in general, it is limited (Duffie and Singleton, 1997: 1318-9) and has been shown to be negligible in the European market (Remolona and Wooldridge, 2003: 47).

<sup>&</sup>lt;sup>9</sup> A frequently suggested potential driving factor of the ten year benchmark treasury market is the liquidity premium (see e.g. Codogno et al., 2003: 509). Codogno et al. (2003: 509-11) point out, that even though liquidity might play a role in EMU sovereign bond markets, it is only of minor importance, which is supported by the evidence of Afonso and Strauch (2007), who do not find any significant influence of their liquidity measure. Particularly strong empirical support for this claim is given by the contribution of Geyer et al. (2004: 194-5), who find that liquidity factors are no driving factor of European sovereign bonds. Consequently, a measure for bond market liquidity is not included into the model.

majority of empirical results (especially with regard to European markets) have been in favour of the null hypothesis (see e.g. Bomfim, 2002: 32-3; Cooper and Scholtes, 2001: 165; Heppke-Falk and Hüffner, 2004; Afonso and Strauch, 2007). Consequently, this variable is not included into the model. All control variables were empirically tested and excluded, since neither of these comprises a systematic influence on Euro area swap spreads. The swap spread then is defined as the difference between the interest rate of the fixed leg of the 10-year IRS (swap rate) and the 10-year government bond yield. A widening spread reflects an improvement of the relative financial standing of the government and vice versa. Thus, a higher perceived default risk is associated with a decreasing swap spread, reflecting a worsening of the relative solvency of the government versus private debtors.

The outlined framework is applied to a data set comprising all trading days from 2002, when the first Early Warning Procedures took place, until 2005, when the SGP was buried by flexibilisation of its legal framework.

An ubiquitous problem in dealing with high-frequency financial data series such as daily bond rates and country risk returns is that time series are often characterized by both serial correlation and heteroscedasticity, i.e. periods of lower variance alternate with periods of higher variance (see, for instance, Engle (2001) for an introduction, whereas Engle (1982) and Bollerslev (1986) are seminal contributions to this strand of econometric literature). It is inevitable to control for these factors, which leads to the application of regression models designed to explicitly model the variance process in addition to the estimation of the financial series' mean. Our research design puts particular emphasis on this phenomenon of volatility which - in the present context - indicates higher political uncertainty in EMU government bond markets. In accordance with the general philosophy of the GARCH model, we may explain the contemporary variance through past errors and the lagged variance in the conditional variance equation. In this context, the first ARCH-term points to spiky reactions of volatility to the arrival of news, whereas the second GARCH-term implies that volatility reactions are persistent.

Daily increments, i.e. differenced variable values, are employed in order to circumvent inherent trend problematic and to gauge the current change in default risk from the previous to the current day. Serial correlation, conditional non-normality as well as conditional heteroscedasticity are characteristic for the data set, and consequently lead to the choice of a further specification to a Generalized ARCH (GARCH).<sup>10</sup> Using the Bayesian Information Criterion (BIC) several ARCH- and GARCH-Models were tested. The comparison resulted in

<sup>&</sup>lt;sup>10</sup> We compared our tests on the basis of three different distributions, namely Gaussian, t-student, and generalized error distribution. T-student distribution proved to be best-suited, while the result patterns did not diverge substantially.

the choice of an ARMA(1,1)-GARCH(1,1)-procedure<sup>11</sup>. The model estimating default risk adjustments of Euro area government debt due to destabilising political events is described by the conditional mean equation:

$$y_t = \beta_0 + \Phi y_{t-1} + \theta \varepsilon_{t-1} + \gamma X_t + \varepsilon_t, \qquad \varepsilon_t \sim N(0, \sigma^2_t)$$

where  $y_t$  is the change in the interest rate swap spread measuring the change in default risk of EMU bonds,  $\beta_0$  is the constant,  $X_t$  is the set of endogenous variables,  $\gamma$  the corresponding parameter, and  $_t$  is a normally distributed error term with mean zero and unit variance;  $\Phi y_{t-1}$  and  $\theta \varepsilon_{t-1}$  are the AR(1) and MA(1) terms, which amplify the model to take time dependent return processes into account. Such combination is advisable, in order to account for the time dependent return processes of the explained variable. While the GARCH-specifications accounts for time-varying processes of the variance, the ARMA extensions are suited to model the dependent variable time-dependency in the mean equation.<sup>12</sup> This conditional mean equation depicts the average change in the swap spread indicator and is combined with the conditional variance equation, which models volatility or uncertainty:

$$\sigma^{2}_{t} = \omega + \alpha_{1}\varepsilon^{2}_{t-1} + \beta_{1}\sigma^{2}_{t-1} + \gamma X_{t}, \quad \omega > 0, \ \alpha_{1}, \beta_{1} \ge 0$$

where  $\omega$  is the long term mean of the variance (the GARCH-constant),  $\alpha_1$  is the coefficient of the historic error term  $\varepsilon^2_{t-1}$  (ARCH term, or GARCH error coefficient), and  $\beta_1$  is the historic variance  $\sigma^2_{t-q}$  (GARCH term, or GARCH lag coefficient). We also included the set of independent variables  $\gamma X_t$  into the conditional variance equation, to test hypothesis 2, namely that the investigated political events raise uncertainty and hence volatility within financial markets.

### Impact Analysis

Table 1 illustrates the effects of destabilising political decisions and statements on average Euro area default risk. The results are presented for calculations with all statements (across all categories, in column 1) and for the different groups of politicians separately, while the decision variable is the same across all categories. The subsequent analysis consists of two discussions along the two hypotheses. The first part concerns the upper half of tables 1 and 2, where a sustained effect on the level of EMU default risk is investigated. The subsequent

<sup>&</sup>lt;sup>11</sup> Alternatives tested are generic GARCH, GARCH-in-Mean, and EGARCH-models; the ARMA-GARCH version was the sole model, which did not reveal heteroscedasticity in its residuals. Furthermore, both, the BIC as well as the Akaike Information Criterion, clearly indicated the supremacy of the ARMA-GARCH approach.

<sup>&</sup>lt;sup>12</sup> This is a common approach in econometric applications to daily financial series (see among others Curto et al., 2009, Neely et al., 1997, Sadique and Silvapulle, 2001).

part analyzes the effects on volatility (hypothesis 2). The corresponding empirical results can be found in the tables' lower sections.

| Conditional Mean Equation   |               |            |            |           |           |           |  |  |
|---|---------------|------------|------------|-----------|-----------|-----------|--|--|
|   | All relevant  | Commission | Head of    | Finance   | ECB       | National  |  |  |
|   | Politicians   |            | State/Gov. | Ministers |           | Govern-   |  |  |
|   |               |            |            |           |           | ment,     |  |  |
|   |               |            |            |           |           | All Pol.  |  |  |
| Destabilising   | -0,645***     | -0,667***  | -0,679***  | -0,724*** | -0,671*** | -0,693*** |  |  |
| decisions   | (0,1909)      | (0,1881)   | (0,1853)   | (0,1853)  | (0,1863)  | (0,1898)  |  |  |
| Destabilising   | 0,031         | 0,124      | -0,006     | 0,226     | 0,615     | 0,093     |  |  |
| statements  | (0,1227)      | (0,2878)   | (0,7818)   | (0,1738)  | (2,2164)  | (0,1695)  |  |  |
| Constant  | 0,016         | 0,019      | 0,257*     | 0,015     | 0,023     | 0,019     |  |  |
|   | (0,0175)      | (0,0148)   | (0,0155)   | (0,0158)  | (0,0143)  | (0,0168)  |  |  |
| ARMA  |               |            |            |           |           |           |  |  |
| AR(1)   | 0,601***      | 0,595***   | 0,599***   | 0,598***  | 0,599***  | 0,597***  |  |  |
|   | (0,0295)      | (0,0298)   | (0,0297)   | (0,0299)  | (0,0291)  | (0,0296)  |  |  |
| MA(1)   | -0,974***     | -0,974***  | -0,975***  | -0,976*** | -0,975*** | -0,975*** |  |  |
|   | (0,0044)      | (0,0046)   | (0,0049)   | (0,0043)  | (0,0046)  | (0,0045)  |  |  |
| Conditional Varia   | ance Equation |            |            |           |           |           |  |  |
|   | All relevant  | Commission | Head of    | Finance   | ECB       | National  |  |  |
|   | Politicians   |            | State/Gov. | Ministers |           | Govern-   |  |  |
|   |               |            |            |           |           | ment,     |  |  |
|   |               |            |            |           |           | All Pol.  |  |  |
| Destabilising   | -0,524        | -0,596     | -0,444     | -0,496    | -0,391    | -0,487    |  |  |
| decisions   | (0,5626)      | (0,6387)   | (0,7698)   | (0,7767)  | (0,6916)  | (0,8607)  |  |  |
| Destabilising   | 0,724**       | 0,913**    | -2,99      | -0,154    | 2,354**   | -0,39     |  |  |
| statements  | (0,3502)      | (0,4427)   | (35,1517)  | (0,6191)  | (1,1189)  | (0,7894)  |  |  |
| Constant  | 1,615***      | 1,73***    | 1,732***   | 1,75***   | 1,734***  | 1,736***  |  |  |
|   | (0,2232)      | (0,2408)   | (0,2518)   | (0,2482)  | (0,2256)  | (0,2486)  |  |  |
| GARCH   |               |            |            |           |           |           |  |  |
| ABCH(1)   | 0,318***      | 0,345***   | 0,334***   | 0,328***  | 0,325***  | 0,331***  |  |  |
| ARCH(I)   | (0,0627)      | (0,0722)   | (0,0774)   | 0,0691)   | (0,0638)  | (0,0698)  |  |  |
| GARCH(1)  | 0,463***      | 0,429***   | 0,451***   | 0,447***  | 0,447***  | 0,452***  |  |  |
|   | (0,0837)      | (0,1004)   | (0,1019)   | (0,1051)  | (0,0927)  | (0,1055)  |  |  |
| NT (1).   | 25            | 25         | 25         | 25        | 25        | 25        |  |  |
| No. of decisions  | 25            | 25         | 25         | 25        | 25        | 25        |  |  |
| No. of state-   | /1            | 18         | 12         | 35        | 1         | 46        |  |  |
| ments   | 50071/        | 5000 72    | 5000.0/    | 5000 (0   | 5001.00   | 5002 (/   |  |  |
| AIC   | 5987,14       | 5988,73    | 5992,84    | 5992,48   | 5991,09   | 5993,44   |  |  |
| BIC   | 6036,42       | 6038,02    | 6042,12    | 6041,77   | 6040,38   | 6042,73   |  |  |
| Coefficients with standard errors in brackets. ***, ** and * depicting significance on the 10-, 5- and 1- |               |            |            |           |           |           |  |  |
| percentage level. N = 1021. AIC/BIC = Akaike/Bayesian information criterion for goodness of fit.          |               |            |            |           |           |           |  |  |

Table 1: The effects of destabilising political decisions and statements on average Euro area default risk

Two distinctive findings can be identified. On the one hand destabilising decisions by the responsible European institutions have a negative impact on swap spreads. While significant at the 1% level, the results for the decisions of all relevant politicians strongly support the proposition that a decision, which constitutes an infringement to the SGP, will result in a decrease of creditworthiness (i.e., an increase of default risk). On the other hand, the second pattern contests the idea of politicians deteriorating sovereign creditworthiness by mere words, as results clearly support the null. This does not change for any of the specified politician categories: independent from the category of politician, statements do not change the average default risk of EMU government bonds. International investors seem to value the destabilisation of the SGP's framework as an event that increases the credit risk inherent in the sovereign debt. Consequently, higher risk premia are demanded.

Let us turn to the pivotal actors within the SGP-processes, and how their actions influence markets. The effects of decisions by the Commission and the EcoFin Council are analysed separately and presented in table 2. The estimations are based upon two different regression models: first, that solely includes the destabilising decisions by the Commission, and second, that includes only the Council's decisions. Furthermore, both decision categories were each regressed on two different measures of the statement variable: first, with all statements, and second, with statements by the decision taking politicians in order to observe whether investors differentiate in this manner.

|                        | Comm          | nission           | Council        |                   |  |
|------------------------|---------------|-------------------|----------------|-------------------|--|
|                        | Statements by | Statements by all | Statements by  | Statements by all |  |
|                        | Commission    | politicians       | Fin. Ministers | politicians       |  |
| Destabilising          | -0,462***     | -0,477***         | 0,434          | 0,390             |  |
| Decisions              | (0,178)       | (0,175)           | (0,311)        | (0,331)           |  |
| Destabilising          | -0,041        | -0,013            | -0,057         | -0,051            |  |
| Statements             | (0,128)       | (0,303)           | (0,123)        | (0,191)           |  |
| Constant               | 0,011         | 0,009             | -0,024         | -0,025            |  |
|                        | (0,019)       | (0,015)           | (0,018)        | (0,014)*          |  |
| ARMA                   |               |                   |                |                   |  |
| $\Delta \mathbf{P}(1)$ | 0,602***      | 0,594***          | 0,613***       | 0,610***          |  |
| $\operatorname{AR}(1)$ | (0,023)       | (0,030)           | (0,030)        | (0,031)           |  |
| $M\Lambda(1)$          | -0,972***     | -0,972***         | -0,975***      | -0,975***         |  |
|                        | (0,005)       | (0,005)           | (0,006)        | (0,006)           |  |

Table 2: Comparison of the effects of Commission and Council decisions on average Euro area default risk

#### Conditional Mean Equation

Conditional Variance Equation

|   | Commission    |                   | Council        |                 |  |  |
|---|---------------|-------------------|----------------|-----------------|--|--|
|   | Statements by | Statements by all | Statements by  | Statements by   |  |  |
|   | Commission    | politicians       | Fin. Ministers | all politicians |  |  |
| Destabilising   | -0,637        | -0,697            | -0,235         | -0,013          |  |  |
| Decisions   | (0,585)       | (0,594)           | (0,778)        | (0,740)         |  |  |
| Destabilising   | 0,745**       | 0,924**           | 0,784**        | 0,153           |  |  |
| Statements  | (0,327)       | (0,419)           | (0,324)        | (0,459)         |  |  |
| Constant  | 1,629***      | 1,763***          | 1,613***       | 1,774***        |  |  |
|   | (0,216)       | (0,240)           | (0,230)        | (0,246)         |  |  |
| GARCH   |               |                   |                |                 |  |  |
| ADCH(1)   | 0,310***      | 0,336***          | 0,316***       | 0,3208***       |  |  |
| ARCH(I)   | (0,061)       | (0,073)           | (0,063)        | (0,067)         |  |  |
| CADCH(1)  | 0,466***      | 0,429***          | 0,461***       | 0,441***        |  |  |
| GARCH(I)  | (0,081)       | (0,102)           | (0,083)        | (0,096)         |  |  |
| No. of decisions  | 18            | 18                | 7              | 7               |  |  |
| No. of statements   | 71            | 18                | 71             | 35              |  |  |
| AIC   | 5991,19       | 5993,24           | 5997,05        | 6005,60         |  |  |
| BIC   | 6040,47       | 6042,53           | 6046,33        | 6054,88         |  |  |
| Coefficients with standard errors in brackets. ***, ** and * depicting significance on the 10-, 5- and 1- |               |                   |                |                 |  |  |

percentage level. N = 1021. AIC/BIC = Akaike/Bayesian information criterion for goodness of fit.

The pattern concerning the statement variables remains unchanged in favour of the null. However, an interesting pattern evolves from the data: Decisions taken by the Commission differ strongly in their impact on investors' evaluation of Euro area sovereign creditworthiness compared to the influence of Council decisions. However, a judgment by the Council does not have a significant influence. A possible explanation is that decisions by the Council do not offer any 'news' content: it is reiterated that the measure for destabilising Council decisions include only decisions that diverge from the Commission's recommendations; therefore, the variable includes only six decisions by the EcoFin Council, which all – due to their high political and economic importance – were already discussed several weeks before the decision was made. Hence, in every case the final outcome was predictable long before the actual decision. As a consequence, decisions were probably anticipated by financial markets and already incorporated into the price prior to any official decision. As discussed above, this anticipating behaviour is a typical feature of financial market information processing.

The picture changes, if we observe the effects of decisions taken by the European Commission. These result in a highly significant decline of the swap spread. In this regard, it is important to keep in mind that destabilising decisions of the Commission are not violations of the SGP itself, but pinpoint to the detection of an infringement. This detection seems to be an important information and indeed decisive news to the financial market. The results give support for the argument that the Commission is perceived as the keeper of the SGP and therefore is expected to deliver more reliable economic information relative to member states. Moreover, these are some of the earlier information provided to market actors, therefore including a surprising element, which is why investors react intensely to these news. Financial markets react with an increasing demand for risk premia in sovereign Euro area bonds, when the Commission signals an infringement of the SGP.

The pattern evident in the data is of utmost interest from the viewpoint of EU politics because it indicates the considerable influence that EU-institutions exert on financial markets in their day-to-day decision-making process. Here, the data demonstrate the key role played by the European Commission as information provider for financial markets.

Recapitulating these results, hypothesis 1 can be confirmed: Political decisions, which destabilise or signal a destabilisation of the SGP, send shivers to financial markets and lead investors to demand a higher risk premium for holding Euro area government bonds. Moreover, it seems that the European Commission is an important provider of decisive information to financial markets. However, these results are limited to the effects of actual decisions. Regarding the statements by relevant politicians a significant effect cannot be observed. So far the results depict a clear-cut pattern: Apparently, destabilising decisions do raise the credit risk of sovereign debt within EMU.

When turning to the analysis of uncertainty about the SGP's future (hypothesis 2), the results differ from the previous level-effect analysis. Here the model reveals significant influence of political rhetoric, but no such influence for decisions (see table 1, lower part for conditional variance). The estimations for the explanatory variables exhibit a distinctive pattern along two lines. While decisions by European institutions lead to soaring default risk in Euro area bonds, the decline in the swap spread points to a decline in uncertainty due to a decision. However, these results do not reach significance and therefore cannot be considered as reliable. The second trend is the significant and high impact of politicians' rhetoric. Statements by one of the relevant politicians, signalling an

infringement or adjustment of the SGP, substantially raise the volatility of default risk evaluations by financial investors, which is particularly pronounced for statements from Commission members (or staff).<sup>13</sup> Results for statements by national government politicians never gain significance. Moreover, the separate analysis confirms the general tendency: Statements from politicians that indicate an infringement of the SGP's legal framework heighten financial market volatility, while destabilising decisions have a rather smoothing effect on volatility. The analysis of hypothesis 2 discloses three patterns: first, decisions by the Commission seem to have some decreasing impact on volatility – yet, the statistical significance casts doubt on these results. Second, the Council's influence stays somewhat unclear, although it appears – as before – that its decisions are anticipated by market actors. The third dominating pattern is the strong significant and robust influence which statements of the members (or the staff) of the European Commission have on volatility in swap spreads. This demonstrates the importance of mere political rhetoric. The data reveal that statements by the Commission, which point to violation of the SGP, cause investors to demand higher default risk premia for holding sovereign Euro area debt.

A clear pattern evolved so far, which demonstrates the different effects of decisions and statements, where decisions seem to smooth financial market volatility, while politicians' statements strongly increase the instability.

In sum, the results confirm the hypothesis of changing average default risks, when looking at the destabilising effects of political decisions particularly by the European Commission. However, this effect cannot be found when the politicians' statements are considered. The opposite is true with regard to hypothesis 2 that political destabilisations of the SGP will result in heightened uncertainty and consequently lead to soaring volatility in the market. In this respect, we have found empirical support for the claim that statements of politicians are an important source of information to traders and that the decision makers' rhetoric leads to increasing uncertainty. Across the different evaluations, it appears as though the European Commission is a key player with regard to the connection between political destabilisations of the SGP and its concomitant evaluation by financial markets. Investors react with a demand for higher risk premia for holding Euro area bonds when the Commission signals an infringement of the SGP, and react to information about potential SGP-related developments signalled by the pivotal institution.

<sup>&</sup>lt;sup>13</sup> The extreme value of the statements from ECB officials is due to only one observation. The extreme estimator values for the 'Head of State or Government' is due to only two observations, where one falls on the day with the by far strongest increase in the swap spread.

### V. Conclusion and Outlook

This study shows that political events infringing the 'spirit' of the original SGP have indeed affected governmental creditworthiness from onset until factual demise at SGP-reform in 2005. Investors have envisaged these challenges by listening carefully to politicians' rhetoric signalling future formation of public debt within Europe. Besides, the denigration of SGP may have prepared the ground for the presently observable centrifugal forces within the Euro area.

Results of the empirical analysis deliver support for this claim: Political events destabilising the SGP were demonstrated to systematically influence the default risk of Euro area government bonds. Empirical support has been found with regard to level effects as well as volatility of governmental default risk. Both destabilising political decisions and statements have been detected to deliver relevant information to investors.

The pattern evolving from the results consists of three major trends: first, the SGP seems to enter investors' evaluations of the creditworthiness of Euro area governments as an important framework which ensures sustainable fiscal policies. Financial markets punish Euro area governments with increasing default risk premia, i.e. rising debt financing costs, when the SGP's future viability is threatened by political events. Second, it appears that the Euro area as a whole is driven by *common* political factors, as the employed sovereign debt index is subject to systematic deteriorations in the creditworthiness due to political destabilisations of the SGP. Third, politicians as key fiscal policy makers are important information providers to investors. The mere rhetoric of relevant politicians increases the uncertainty of financial markets considerably. The soaring volatility due to destabilising political statements offers evidence in support of the hypothesis that investors – in their attempt to anticipate certain developments – react intensely to information which is considered to capture relevant news.

Considering the importance of different politicians and institutions an interesting and persistent pattern evolves from analysis. The European Commission appears to be an especially important source of new information to financial markets. Investors consider the Commission as provider of valuable information. Two reasons might account for this substantial impact of news supplied by such supranational political entity: On the one hand, the information of the Commission occurs rather surprising – as compared to the Council decisions and statements – and therefore depict 'news', which are incorporated into financial investor asset prices. On the other hand, the Commission might be understood as evaluating the countries' performance similar to financial markets – i.e. macroeconomic data are analysed with regard to the reference values of the SGP in a technical manner and appropriate actions are recommended to the Council. The member states and the Council, in contrast, can be expected to diverge from the technical applications, as their primary interest lies rather in domestic arena. It follows that investors differentiate between different categories of politicians: we have demonstrated that the Commission is typically the most relevant source for default risk revaluations of Euro area government debt.

In general, the SGP has appeared to be a vital institution with regard to the evaluation of the future economic formation from the viewpoint of financial markets. Having flogged the SGP to death has seemingly caused investors to revaluate Euro area debt thus demanding increasing default risk premia. Not surprisingly, investors seem to make their bond pricing for the Euro area countries contingent on the medium- to long-term fiscal policy outlook. However, having slacked and buried the SGP in 2005 country-specific default risks may edge ever closer to the spotlight within EMU. This is to say that the extent of debt financing costs within the Euro area does not that much hinge upon the SGP-framework anymore. Nevertheless, there is some kind of joint liability at work within the Euro area. In other words, each member country relies on sound fiscal policies by fellow Euro area members. Therefore, if a destabilisation of the SGP increases debt financing costs for the entire currency union, spill-over effects become an important issue, again.

The results of our analysis offer some key insights regarding policy implications in current debates. The SGP might once have been a decisive institutionalised mechanism, which induces lower debt financing costs for the entire Euro area. Besides, the SGP has hardly kept national policy makers from piling up ever increasing public debt levels. Most notably, however, discretionary behaviour by incumbent politicians has seriously weakened the SGP-framework and resulted in higher debt financing costs. Interestingly, not only 'substantial' politics (as constituted by hard fact decisions) matter, but financial markets also react quite intensely to politicians' rhetoric thus enforcing market discipline in fiscal affairs once again.

From an economic point of view the according reanimation of market-driven discrimination between governmental borrowers is certainly appreciated. However, at the heart of the institutional weaknesses of current European fiscal scheme is the discretionary political stance towards potential default externalities within EMU. Although there is a 'no-bail-out clause' for the European Central Bank (ECB), especially spill-overs in the course of possible defaults may leave their mark on other Euro area members. Hence, it seems to be desirable to enumerate procedures for orderly exiting EMU. Such a rule-based approach for European economic affairs, i.e. enfranchising fiscal policy from 'politics', may help mitigating uncertainty and according negative externalities, for instance, of Greek-type crises. Most notably, such politically dismantled 'rule' would represent a deterrent threat to national fiscal profligacy. It goes without saying that any reform attempt with regard to European fiscal affairs – such as, for example, proposals for setting up a European Monetary Fund - will certainly not clean recent Euro mess. Notwithstanding, the original meaning of 'crisis' implies that an awkward situation also prepares the ground for taking fundamental decisions. However, whether Europe is already prepared to make the Euro really work by

crafting consensus for a more rule-based functioning and exiting of EMU, remains an open question.

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