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Towards a Euro Fiscal Union: Reinforced Fiscal and Macroeconomic Coordination and Surveillance is Not Enough

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Summary: Taking a closer look at the EU's approach to enhanced surveillance, one finds that the approach of coordinated surveillance of autonomous fiscal policies of Euro member states is unlikely to deliver meaningful results. The widespread public perception that there is a general debt crisis in the euro area was inadequate before the 21st July 2011; it was only on that date that an EU summit in Brussels brought the doubtful decision on a 21% haircut on private creditors of Greece – a decision aimed at helping Greece, but as capital markets translated this as a model of how governments of the euro area would try to solve potential debt problems of other countries, e.g. Spain and Italy, the refinancing of these two countries was seriously undermined and interest rates for those countries sharply increased. The net welfare loss of the July 21 decision is close to €400 billion, a historical pitfall. The popular argument that the debt crisis in the Euro zone reflects decades of ill-designed fiscal policy is not convincing since the massive increase of the euro area debt-GDP ratio occurred only in 2007-2011 and thereafter contagion and policy pitfalls destabilized the euro area; however, as regards Greece the country stands for a doubtful policy record. The trigger for the crisis was political fraud in Greece where the government in 2009 adopted a budget, which would bring a deficit-GDP ratio of about 4% - as notified to the Commission - but in reality was 15%. Such a deficit implies that the debt-GDP ratio will increase within 5 years by at least 45% and it is clear that 2009 saw the irresponsible (and failed) attempt of the Greek government to get re-election on the back of a very sharp violation of the Stability and Growth Pact. The European Commission has not admonished Greece publicly for this breach of the Pact. It has also failed to bring Ireland before the European Court, despite the fact that Ireland's government ignored for many years the most basic requirements of EU directives dealing with prudential supervision. The Irish government has achieved a Guinness Book record for the deficit-GDP ratio, namely 32% in 2010, but this extreme deficit – largely reflecting on-off costs for nationalization of banks – also caused a mute response from Brussels.

Zusammenfassung: Wenn man den EU-Ansatz für eine strengere Politik-Überwachung näher betrachtet, sieht man, dass eine koordinierte Überwachung autonomer Fiskalpolitiken von Mitgliedsländern der Euro-Zone kaum sinnvolle Ergebnisse erbringen wird. Vor dem 21. Juli 2011 gab es keine plausible allgemeine Wahrnehmung einer verbreiteten Staatsschuldenkrise in der Euro-Zone. Erst an diesem Datum hat der EU-Gipfel von Brüssel die fragwürdige Entscheidung getroffen, einen 21%-igen Haarschnitt für private Gläubiger Griechenlands vorzunehmen. Die Entscheidung sollte Griechenland helfen, aber die Kapitalmärkte interpretierten dies als eine Entscheidung, wie Regierungen in der Euro-Zone künftig potenzielle Schuldenprobleme anderer Länder – zum Beispiel Spanien und Italien – behandeln würden. Die Refinanzierung dieser beiden Länder wurde daher ernstlich unterminiert bzw. die Zinssätze für beide Länder stiegen deutlich an: der implizierte Wohlfahrtsverlust vom 21. Juli ist von der nah bei 400 Milliarden Euro – ein historischer Fehler. Das populäre Argument, wonach die Schuldenkrise in der Euro-Zone Jahrzehnte verfehlter Fiskalpolitik reflektiert, ist nicht überzeugend, da der massive Anstieg der Schuldenquoten in der Euro-Zone erst im Zeitraum 2007-2011 auftrat. Seither haben Ansteckungseffekte und Politikirrtümer die Euro-Zone destabilisiert. Allerdings steht Griechenland eine sehr zweifelhafte Politikentwicklung: der Auslöser der Krise in Griechenland war ein politischer Defizit-Betrug. Während die Regierung der Kommission vier Prozent als Defizitquote gemeldet hatte, lag der Ist-Wert bei etwa 15%. Im Fall Irlands hat man es unterlassen, die Regierung vor dem europäischen Gerichtshof zu verklagen:

Irlands Regierung hatte über viele Jahre die Vorgaben aus EU-Direktiven ignoriert, die sich mit der Bankenüberwachung befassten. Irlands Regierung schaffte in 2010 mit einer Defizitquote von 32% einen Extremwert, der für das Guinness Book in Frage gekommen wäre. Ganz überwiegend war diese Defizitquote durch staatliche Banken – Rettungsaktionen bedingt. Aus Brüssel kam hierzu sonderbarerweise keine Reaktion.

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1. Introduction

The first decade of Euro integration was successful as low inflation rates, increasing financial market integration as well as higher employment was achieved, (EUROPEAN COMMISSION, 2008; ECB, 2008; DEUTSCHE BUNDESBANK, 2008); and there was interest rate convergence across countries, namely at the low level of German and French government bonds. While the ECB and European System of Central Banks (ESCB), respectively, conducted stability-oriented monetary policy, prudential supervision was largely fragmented as no common institution was responsible for macro-prudential supervision in the euro area until the European Systemic Risk Council started its work under the leadership of the ECB at the beginning of 2011– whether the quality of supervision can really be improved remains to be seen. Fiscal policy has remained a task assigned at the national level; the low expenditure-GDP ratio of about 1.2% at the Community level was rather insignificant against a typical ratio of government consumption (plus public investment) to GDP of 20% in most countries of the Euro area.

The spreads for sovereign debt of Belgium, Italy and Spain have sharply increased in late 2011 and this has added new concerns about the stability of the Euro Area in which Greece and Ireland had become the first two crisis countries in 2010, followed in spring 2011 by Portugal. In January 2012 the spreads for Portugal increased sharply and it seems that the country will need a second rescue package soon.

What initially looked like a crisis of three small euro countries, which should not be too difficult to solve, became a very serious challenge for the whole Euro Area. In late November 2011 the euro crisis has intensified in a dramatic way and the Euro Area was not far from a meltdown of government bonds markets:

- The Euro rescue fund EFSF was able to borrow from capital markets at 4.4% which was more than two percentage points above the interest rates on bonds of Germany which has AAA rating; since six countries, namely France, Germany, Finland, Austria, Netherland and Luxembourg have brought their AAA rating behind the EFSF the implication is that markets no longer had confidence in a stable AAA rating of the country group mentioned. This implies that the idea of leveraging the EFSF is unlikely to work and one may even draw the conclusion that the option of a joint sythetic euro bond – as has been discussed as a policy option in 2010/2011 – would not work: If investors are unwilling to lend to the EFSF with strong AAA backing by several euro member countries it is unlikely that capital markets will have much appetite to digest a joint euro bonds backed by a group of 17 countries. Rising prices of credit default swaps of almost all euro countries have indicated in late 2011 that the risk of default is obviously rising; it is, however, unclear, what a CDS really means if even a 50% “haircut on agreement” – as in the case of Greece – is not an event that triggers an official default. Thus the political management of the crisis has interesting redistribution effects in favor of those institutions, which have sold CDS.
- The euro crisis which became visible in 2011 has clearly exposed a key problem of confidence in the initial construction of the euro: The status of the ECB as a lender of last resort is quite unclear so that real interest rates on US government bonds or British government bonds are likely to remain lower – the US and the UK have a clear concept of a lender of last resort – than interest

rates in the Euro Area. In the period 2003-2007 there was nominal interest rate convergence in the euro area while real interest rates in catching-up countries were slightly lower then that of a leading euro countries: The Balassa Samuelson effect, namely that in relatively poor countries the price of non-tradable will increase faster than the price of tradable has stimulated the demand for loans in these countries. However, after the collapse of the Lehman Brothers Bank in September 2008 the world is different and risk premium have strongly increased in several euro countries; high spreads for several euro countries have emerged and in combination with a recession this means high real interest rates. With Greece facing bankruptcy in 2011, capital markets have started to wonder how strong the position of the ECB as a lender of last resort really is. The holder of a US bond will never fear that he/she does not receive interest payments and the principal since all domestic and all foreign US sovereign debt are in USD. Furthermore there is implicit consensus that the Federal Reserve System would do everything in a case of a serious crisis to provide enough liquidity so that payments on US government bonds are made. However, this does, not rule out inflation. Hence there is an effective policy option, namely that the real debt of the US will reduce via unanticipated inflation from strongly expansionary open market operations or Quantitative Easing. In late 2011 the Fed held about 20% of all US government bonds. Similarly, British government bonds are a safe investment, as there is only a small caveat with respect to foreign debt since the British pound's role as a reserve asset is smaller than that of the US dollar and indeed there is some foreign debt of the UK which is not in pounds. The situation in the Euro area is quite different. No investor is sure whether the European Central Bank is willing to buy large quantities of e.g. Italian, Spanish, French euro bonds. So what are missing in the Euro area are supranational euro bonds and the subsequent analysis will come back to this issue. As a matter of principle true euro bonds could be created as synthetic euro bond – backed by all member countries of the euro area – or by a newly created Euro Political Union or by the European Central Bank (the central banks of Korea and China have issued national bonds for open market operations); if the ECB buys e.g. Italian and Spanish bonds while selling ECB euro bonds this amounts to introducing euro bonds, and the ECB indeed could buy bonds of all euro member countries and effectively exchange these bonds through euro bonds – ideally without inflation effects. While creation of sythetic euro bonds is hardly possible after Germany's constitutional court has emphasized the non-bailout clause of the Maastricht Treaty – there should be no government action which amounts to a bailout of other countries - in a verdict in 2011 it is not forbidden that the ECB euro bonds and in doing so there is a signal that there is no lender of last resort problem: This indeed should be considered as a viable medium term policy option until a political union is established; the option of creating a Euro Political Union is discussed subsequently.

- The European Council has enormous responsibility in Euro crisis management and it has largely failed in this role as will be argued subsequently. The EU/Euro group summit have taken strange decision in 2011 which have undermined – mainly in the context of decisions on Greek haircuts on the debt of Greece – the confidence of markets. The joint German-French policy initiatives prior the summit often had no realistic agenda. E.g. in November there was a broad discussion between Berlin and Paris about implementation of

an “early” reform of the Stability and Growth Pact in spring 2012. Given the enormous nervousness of capital markets, this time horizon was much too distant to calm markets in the short run and the debate about a future revision of the Lisbon Treaty is also related to a project that is far away – this project could be useful but without a realistic short-term crisis management it is a doubtful exercise. There is a serious risk that falling prices of government bonds will translate into a European (and transatlantic) banking crisis – a banking crisis which is partly fuelled by stricter equity capital requirements for banks in the Euro Area (the basic idea was to strengthen banks in a way that a potential default of Greece could not strongly destabilize banks and the economic system, respectively). However, the main effect of the new equity capital requirement will be that banks facing problems in raising additional capital equity will reduce the loans given to firms and this in turn is likely to contribute to a recession which in turn will undermine the stability of banks and consolidation efforts of governments.

- The British Financial Services Authority has prepared in late November 2011 a warning to British banks that adequate risk management of banks should mean to take a closer look at unlikely but possibly important events, including euro member countries leaving the monetary union in a disorderly fashion. It is clear that many banks have started to consider the potential case of a break-up of the Euro Area already in late 2010, but it is a remarkable aspect that within the EU the national prudential supervisor points out that one should seriously consider the case of monetary integration in the euro area. All this does not contribute to restoring confidence in the euro area. Moreover, it shows how complex governance in the EU really is.

The EU integration faces a very critical juncture since the Euro crisis, initially only a Greek crisis and an Irish crisis (each based on serious breach of elementary EU rules), has undermined the reputation of the Euro and EU institutions. The poor role of the European Commission is one major problem, the other is the tragedy that the European Council has adopted quite doubtful haircuts for Greece that were designed to restore its fiscal stability, but there was no overall stabilization concept for the Euro area. It will subsequently be argued that the crisis management was largely ineffective and has generated dramatic contagion effects by undermining the confidence of market participants. The crisis of Greece, Ireland and Portugal was serious, but could have been solved rather easily, namely by sharp public criticism of the political frauds committed by Greece and Ireland - and putting these countries before the European Court of Justice - plus conditional support for Greece, requiring massive privatization in a country whose sovereign debt fell short of government assets (IMF 2010). Instead, the European Council has imposed a Greek haircut in 2011 – this has happened under the applause of many economists – which, however, has destroyed refinancing options for Italy and Spain. Indeed the ratio of the reduction of Greek debt via haircut to the induced wealth losses in asset markets was close to 1:10 (or worse, if one considers the first haircut decision of July 21, 2011, which brought a 21% haircut for Greece). Only the ECB remains an institution more or less willing to buy bonds from crisis countries: Those who have decided in favor of the Greek haircut decisions have more or less forced the ECB to take this strange position of a lender of last resort and many economists who had pushed for the haircut now criticize the ECB for buying Italian and Spanish bonds. Rarely has a contagion been organized in such an irresponsible way and a

rather small crisis of three small countries been blown up to a dramatic crisis of a whole currency union – the year following the contagious haircut decision may be expected to be the most dramatic and sudden problems with respect to capital inflows (known from the literature on developing countries and NICs) or even a full implosion of the euro zone can also be expected.

As it will be shown subsequently, the European Commission has reinforced the confidence problem by not implementing the existing set of rules in the EU and thus raising transaction costs and risk premiums in many markets. The Euro member countries stand for a group that has accepted the so-called Stability and Growth Pact, which calls for a maximum deficit-GDP ratio of 3% and a debt-GDP ratio of 60%. However, in the period of 2007-2011, the average debt-GDP ratio has increased very strongly; moreover, the Euro area has witnessed extreme deficit-GDP ratios, namely 15% in Greece in 2009 and 32% in 2010 in Ireland, which is shocking for capital markets – and taxpayers – where confidence is already at a premium since the collapse of Lehman Brothers. The European Commission has been unable to avoid the apparent blunt misconduct of two small countries and the question must arise how weak EU governance really is and what the implications of a critical analysis suggest as reforms. However, the European Commission delivers in certain policy field excellent work.

At the same time, it is true that the world economy after Lehman Brothers looks more complex and certainly less borrower friendly: The Transatlantic Banking Crisis has raised the debt-GDP ratio of OECD countries from 65% to about 90% and it is clear that the rise of the overall debt-GDP ratio requires higher real interest rates and more differentiated risk premiums across countries. However, the overall situation is still distorted by quantitative easing in the US and the UK, which keeps interest rates in these two countries and OECD-wide artificially low, creating its own problems. The fact that the overall deficit-GDP ratio and also the debt-GDP ratio of the euro area was in 2011 below the respective indicator of the US does not help the euro area because it is not a political union so far and the unsolved sovereign debt problem of some euro member countries can be taken as a signal that there is a lack of effective governance in the euro area. Hence the issues of reinforced surveillance and enhanced macroeconomic coordination come up – and a key question is whether the suggested modifications considered by the EU and the euro country group are adequate. Subsequently, the view is developed that many reform elements go into the right direction, but there are several key problems emphasized subsequently:

- There is a serious confidence crisis in capital markets and the measures adopted by the Commission and the European Council have not adequately dealt with the problems at hand – both institutions have effectively undermined confidence through certain steps.
- The atmosphere of European Council summits suggests that influential and important policy actors are taking the stage, however, often not much is really delivered in terms of effective and efficient problem solving and the series of inadequate rescue packages of 2010 and 2011 suggests that the analytical work prior to the summits is not optimal – this often concerns certain national governments.

- The visible conflicts within EU institutions undermine the confidence of markets; e.g. the majority decisions at the ECB, followed often by statements of various board members in newspapers, undermines the stability of the ECB and other institutions as well.
- The Euro area stands for a club of countries with considerable lack of discipline in the field of fiscal policy on the one hand, on the other hand the European Council's crisis management has not achieved much in terms of solid stabilization. Rather the Council's partly inconsistent decisions have contributed to undermine refinancing options for Italy and Spain.
- There is a serious risk that see sudden stop problems will be seen in the case of Italy and Spain plus other countries: Instead of continued capital inflows, there could be sudden massive outflows, which will further drive up interest rates, destabilize banks and directly lead to a recession.
- A new banking crisis in the euro area is likely since the European Council's decisions have made many decisions that undermine the value of assets held by banks and also destabilizes the expectation formation in markets by inconsistent decisions – ranging from an isolated haircut decision for Greece to the introduction of Collective Action Clauses in bonds of EU countries to the broader pitfall of not developing a concept to solve the Greek crisis and restore confidence in the euro area.
- Given these challenges it seems quite appropriate to improve surveillance, to enhance macroeconomic coordination and to improve fiscal policy coordination in particular: The European Commission, the European Parliament and the European Council have all made proposals – however, there is the question whether the key changes suggested will help to stabilize the euro area and to contribute to a better and more reliable economic policy pattern; the litmus test for the new rules concerns the question whether or not the new rules would have prevented a Greek crisis, an Irish crisis etc. Improved surveillance and coordination is insufficient to solve the crisis.
- The crisis of the euro area is reinforced by the political conflicts in the US political system, which makes it unlikely, that the US can stabilize the debt GDP ratio quickly. Furthermore, the US is the global benchmark in capital markets and if the rating for US government debt declines further, the spreads in European countries and worldwide is likely to increase. This holds despite the fact that the downgrading of the US by Standard and Poor's in 2011 is quite doubtful from an analytical point of view.
- The global system suffers from considerable analytical weaknesses in key institutions, as there are a lot of illusions in the western world about how good its institutions really are. For instance, while the IMF has been a very crucial and useful actor in the Subprime Crisis and the Transatlantic Banking Crisis, respectively, it has become obvious that its reports in the framework of Financial Sector Assessment Programs (FSAP) sometimes are totally beside the key points – reading the FSAP on Ireland of July 2006 with the general praise of Irish banks (in a point of time in which all Irish banks had grossly inadequate risk management) is

an example of total failure to understand what is going on in a small open economy and there are other examples as well. If the EU and private investors take such reports as received wisdom from the IMF it is clear that dangerous situations can worsen quickly as no adequate policy response is stated; but there is a question to which extent one should simply believe national reports since the Irish authorities' report on prudential supervision in the period 2005-2007 is also totally misleading.

- Monetary union started as a successful project but lack of political union creates serious problems of moral hazard in crisis periods: The euro area will have to move towards a true union if not it will fall apart as will be argued subsequently.
- Since Lehman Brothers there is a global lack of confidence and the world economy is perceived as more risky. One must raise the question whether the EU's plan for collective action clauses in all government bonds is a good idea – this proposal is discussed subsequently and is found to be grossly inadequate. At the same time one must raise the question why the role of the big rating agencies is largely considered inadequate in the EU but at the same time, with a €120 billion annual budget of the Community there apparently is no money (and no plan) for launching at least one new rating agency based on scientific principles.
- Debt stability issues cannot be discussed in a meaningful way without referring to long run growth perspectives and this naturally points to the need that a modern macroeconomic indicator system should take a look at the World Bank's concept of the genuine savings rate (see appendix) – a concept which will be presented in a slightly modified form and to recognize structural weaknesses clearly and timely.

According to traditional approaches of macroeconomic policy it would be necessary to have adequate combinations of monetary policy – in the hand of the ECB and ESCB, respectively – and fiscal policy, but there were only limited institutional elements of coordination and it was unclear how strong the risk of contagion and herding could be in periods of crisis:

- The ECOFIN as the meeting of EU finance ministers seemed to be a good starting point for fiscal policy coordination; the euro subgroup under the heading of an informally elected chairman was the natural actor for coordination within the euro area. However, the initial group of 11 countries grew over time as more EU countries joined the euro area. In accordance with the logic of collective action (OLSON, 1968; BUCHANAN/TULLOCK, 1972) the willingness of a relatively large group of country to cooperate effectively and to avoid free rider positions were rather limited. Only in a rather small group would each euro country have felt a strong sense of interdependence and/or responsibility.
- The fact that the euro group consists of a large group of countries reinforces both free rider problems and moral hazard problems. The idea that the deficit-GDP limit and the debt-GDP limit of the Stability and Growth Pact could be credible guiding principles of fiscal policy behavior in Euro countries has turned out to be quite misleading.
- The Stability and Growth Pact required that the two fiscal limits of the convergence criteria of Euro membership be respected also within the euro area, namely a

maximum deficit-GDP ratio of 3% and a maximum debt-GDP ratio of 60%; one problem concerning "sinners" was that countries exceeding the 3% ratio were not judged on a progressive scale of sanctioning for exceeding the 3% benchmark. Thus there was no incentive for achieving a surplus in boom periods.

- The European Commission could initiate an excessive deficit procedure but as long as there was no majority in the ECOFIN sanctions against "sinners" could not be implemented and consequently there were dozens of violations against the Pact in the first decade, but no serious sanctions. It is an open question whether or not the Stability and Growth Pact really can be improved in a way that it could be implemented.
- The idea that sanctions of violations of the Pact would come through market discipline and adequate rating signals has turned out to be doubtful, namely against the background of the leading rating agencies obviously doing a rather poor job in 2006-08 in the US – the USSEC published a very critical report on the work of the three leading rating agencies in 2008. The fact that rating agencies in certain periods obviously did a very poor job and that conflicts of interest undermined the consistency of rating decisions raises doubt about the quality of market signals and the fact that risk premiums were distorted over many years – risk premiums in 2003-07 certainly were too low – implies the limited role of market discipline.
- It seems that there was an implicit consensus in the euro area that the main focus of critical policy advice from the Commission should be directed to the big countries: As long as Germany, France, Italy and Spain – representing about 85% of the Euro area GDP – would stick to a consistent debt & deficit policy nobody should worry much about the smaller countries of the euro zone.
- It is also remarkable how strong interest convergence was in the period 2001-2008 during which most investors implicitly assumed that the non-bail out clause of the Maastricht Treaty was not meant to be serious or that euro countries with a high debt-GDP ratio would indeed stick to a consolidation path. After 2008 a new "expectation equilibrium" has emerged, namely one in which bail-out of countries is considered to be rather unlikely: In 2011 it was understood that the Euro area partner countries would let Greece step out of the Euro area if necessary (that is if Greece could not fulfill the promises given to the Euro partner countries and if emergency lending would no longer be forthcoming from the EU and the IMF. Hence the only way for Greece out of the mess would be bankruptcy and ultimately the reintroduction of the national currency plus an inflationary policy as a means to effectively cut the burden of the debt-GDP ratio).
- In a setting with hyper-nervous markets there were some risk of contagion (measured, say, but a sudden increase in correlations of interest movements) and herding behavior (the increase in the correlations of interest movements across countries is not only temporary - as in the case of contagion, rather this is a permanent phenomenon): In such a situation even debt refinancing problems in small countries could undermine the stability of partner countries in the euro area, even of big partner countries; the latter case should not be reality if one follows the standard small country assumption in Economics textbooks.

- It was not considered that a high share of foreign indebtedness would reinforce moral hazard problems. As JAMES (2011) has pointed out that there is always a relatively strong inclination of countries with high external indebtedness to default since those who bear the burden of haircuts and defaults, respectively, are foreign citizens. Thus the Maastricht Treaty should have provided for stricter debt-GDP ratios of countries with a high share of foreign indebtedness.

The European Council and the European Commission assume that better macroeconomic coordination is needed and could be achieved. Basically, fiscal policy coordination across countries – within an integration club - could be organized on the basis of various principles:

- Rules for the respective policymaker at the regional level, national level or supranational level, namely concerning expenditures rules, revenue rules, debt rules/requirements for balancing the budget.
- Creation of a common institution – a joint budget organization or a special commission - which is responsible for imposing guidelines that are expected to be observed by member countries of a given club; the Euro zone is largely following this approach.
- Creation of a political union which takes decisions on fiscal policy in all countries of the union; a supranational fiscal union would imply that both expenditures and revenues are largely determined at the supranational level.

Why would countries be interested in establishing fiscal policy rules or even a political fiscal union?

- Countries, which are members in an integration club –particularly in a monetary union –, will be afraid that there could be bail-in dynamics which would effectively force citizens in certain solid countries to pay for the highly indebted countries facing a liquidity crisis or a solvency crisis.
- In a monetary union certain European countries might have a joint interest, namely to send a signal of confidence to outsider countries whose investors are expected to invest in the EU.
- A rapid policy response – e.g. to fight a deepening of a beginning recession – could require that a joint fiscal expansion policy be adopted by member countries. If there is no coordinated fiscal policy the reaction from policymakers could be inconsistent and insufficient.
- Coordinated fiscal policy could be required to achieve an optimum policy mix, namely a well reflected mix between fiscal policy and monetary policy – a consistent, optimum policy mix requires, among other things, that the various member countries cooperate in the field of fiscal policy; timely sharing of information and plans could be helpful and a neutral coordination institution might be quite useful.

In the EU traditionally there was rather limited fiscal policy coordination and even during the Transatlantic Crisis there was no strong coordination since there is only the informal institution of the Council of Euro Finance Ministers, which could discuss the topic of

coordination. An implicit tool of fiscal policy coordination was the Stability and Growth Pact that was supposed to avoid countries' deficit-GDP ratios from exceeding 3% in the euro area (unless there was a severe recession) and also assumed that countries would engage in bringing excessive debt-GDP ratios towards the maximum of 60% in the long run.

2. The Background of the Euro Crisis

Belgium and Italy were starter countries with debt-GDP levels above 100% in 1999 and Greece also joined the euro club with more than 100% but these countries as well as Ireland showed considerable success in reducing debt GDP ratios in the period 2001-2007 (Italy and Belgium also in the run-up to the start of the euro), but after 2008 the situation deteriorated in many euro countries dramatically. The EUROPEAN COMMISSION (2011) in its report on public finances showed that the debt-GDP ratio increased by 22% for the euro area in the period 2007-2012; the rise of the EU is 24%. About ½ of the increase is due to automatic stabilizers. The debt-GDP ratio of the 17-euro countries is expected to reach 89% in 2012, which is about 5 percentage points higher than in the EU27 group. The main driver behind the rise of debt-GDP ratios is the Transatlantic Banking Crisis of 2007-09, not so much a special sovereign debt crisis or a general tendency towards excessive deficits. This holds despite the fact that many observers referred to the Greek debt crisis – which indeed is a special case of a national sovereign debt crisis – and concluded that together with the debt problems visible in Ireland and Portugal (and later in Spain and Italy) the Euro area is facing a general sovereign debt crisis. This, however, is an inadequate view of the problems; for most observers the debt dynamics of EU countries is rather opaque.

There is no doubt that Ireland's problems are almost only related to the Transatlantic Banking Crisis and the associated special Irish banking crisis whose dynamics are rooted mainly in Dublin, namely a government which failed for years to implement any decent standard of prudential supervision. Portugal fell victim to well known structural problems in improving its international competitiveness – years with high double deficits (in the current account and in the government budget constraint) implied that not only the debt-GDP ratio was increasing but the role of foreign indebtedness was growing over an extended period in a rather dangerous way.

In 2011 there emerged a growing perception of a rather general over indebtedness of countries in the Euro zone - sometimes even interpreted as a full fledge euro area crisis. This perception is not related to hard facts, but rather to a destabilizing crisis management, contagion and a Greek political crime, respectively:

- The EU/Euro summits have missed to push Greece towards broad privatization – a country where government assets according to the IMF (2010) exceeds government debts by at least € 30 billion has received from euro partner countries massive rescue loans (€110 bill. in May 2010, another €130 bill. in October 2011) and the

doubtful wisdom of the summits brought haircuts on private creditors of 21% during the Brussels meeting of July 21and even 50% in late October.

- The debt shock of Greece – a "political fraud" - took place in 2009 right before the elections when the conservative government made strange decisions which implied an incredible deficit-GDP ratio of 15% for that year: One should note that a 15% deficit-GDP ratio implies – given the fact that typically a reduction of only 3 percentage points per year is possible – that within five years the debt-GDP ratio will increase by about 45%; thus such an increase is totally irresponsible for a country whose debt-GDP ratio is already at 110%.
- At the same time one may argue that the intensity of contagion observed in the case of a small country such as an over indebted Greece is surprisingly strong (see the subsequent analysis). That a political crime such as a national deficit-GDP ratio of 15% neither triggered sharp public admonishment from the side of the European Commission or sharp sanction is quite disappointing and indeed very worrying; and given the very sobering experience of a non-functional Stability and Growth Pact one cannot hope to deter other potentially irresponsible government from exceeding strongly the maximum deficit-ratio of 3%.

When the risk premiums shot up after 2008 the failure of Lehman Brothers, respectively, it was clear that countries with high debt-GDP ratios and high external indebtedness were bound to face serious problems as this author wrote in a book whose manuscript finished in late October 2008 – the book was published in early 2009 (translated from WELFENS, 2009, p. 158-159): *"The Eurozone could face serious problems if the risk premiums for such countries as Greece, Italy, Spain or Portugal should increase. Considering that Greece and Italy face high debt-GDP ratios and high deficits plus high foreign indebtedness one cannot rule out that during a temporary accentuation of the global financial crisis it will no longer be possible for these countries to get refinancing from markets. In such a situation, the no-bail-out clause of the Maastricht Treaty should not be applied if indeed a country such as Greece should face serious problems in the aftermath of impulses from the US banking crisis. Rather, member countries of the Eurozone should support member countries with refinancing problems in the spirit of solidarity and responsibility. Similar to the massive guarantees of EU countries for their respective banks, they should come up with guarantee packages for countries with serious refinancing problems. It should also be considered that the European Investment Bank – a EU institution - also gives particular guarantees for several years. It would not be adequate during a global financial crisis to apply the rules of the Maastricht Treaty established for the case of a normal world. This, however, is not to say that EU countries should excuse lax fiscal policies and high deficit GDP ratios as a new loose fiscal framework. Given the fact that monetary integration and monetary union, respectively, have proven to be useful in the Transatlantic Crisis, it would be quite insensible to undermine the Economic and Monetary Union through an overly strict interpretation of the Maastricht Treaty"*

While the strong recession of 2008/09 could explain why euro countries resorted to expansionary fiscal policy in that period it is absolutely unclear why deficit-GDP ratios remained very high and above the 3% deficit-GDP ratio in Spain, France and Italy even in

2010 – as well as in the UK and in the US (with the latter two countries moving towards 10% of GDP).

The Greek crisis of 2010/2011 raised several issues:

- How could a government manage to deceive the European Commission so bluntly as in the case of Greece where the government under the Nea Dimocratia indicated in mid-2009 that the deficit-GDP ratio would be about 5% while in reality it turned out to be 15% as became clear in 2010? (The type of political fraud which has occurred in 2009 in Greece cannot be avoided by stricter deficit rules because once it has happened it is too late!).
- Why did the European Commission not immediately impose sanctions on Greece for failure to deliver correct data? Part of the answer is that imposing sanctions on a country that already is facing a 110% debt-GDP ratio is difficult, part of the answer is that the European Council could block sanctions for even extreme violations of the Pact.
- To which extent is there a problem of contagion or herding behavior in the Euro area – empirical analysis by MISSIO/WATZKA (2011) provide evidence for contagion and clearly indicates that Greek debt problems affect Belgium, Portugal, Spain and Italy and that downward rating of Greece also negatively affects Portugal and Spain; Greek and Spanish ratings depend on each other. Such contagion effects might then justify the use of a Euro rescue fund to stabilize Belgium, Portugal, Spain and Italy. Also ECB intervention could be justified with reference to serious contagion problems. CORSETTI ET AL. (2005; 2010) define contagion as a structural break in the transmission mechanism of shocks and MISSIO/WATZKA (2011) follow this approach. However, one may add with specific reference to Greece that part of contagion problems typically is also one of small crisis countries affecting relatively large economies which is counter to the implications of standard small country models in the literature (so there should be no effect of Greece on Italy or Spain; e.g. with respect to Italy trade and investment links are too small to explain that an economic crisis in Greece would affect Italy. Since contagion problems of Greece with respect to Italy, Portugal and Spain (plus Belgium) are obvious and significant it is clear that any haircut for Greece will negatively affect the valuation of Italian, Spanish and Portuguese bonds: rising interest rates in Italy, Spain and Portugal could be the immediate consequence of a haircut for private creditors of Greece. This systemic perspective of the topic of Euro area stabilization was, however, largely ignored by the European Council in 2011 which at first imposed a Greek haircut of 21% on July 2001, followed in October by 50% haircut. Policymakers were looking in October to find an answer to the irrelevant question about how strong a haircut for Greece should be if the country were to land on a stable debt path by 2020, namely a debt-GDP ratio of about 120%. Such isolated reasoning stood for very poor economic advice since the contagion effects on the rest of the euro area were enormous.
- A country not affected by contagion might face problems in attracting sufficient net capital inflows or a strong downgrading might occur; in this case financing problems reflect fundamental economic or fiscal problems of the respective country

and it will be necessary to impose structural reforms, to improve the macroeconomic indicators and to strengthen international competitiveness so that more long term (and short-term) capital could be attracted.

- Surveillance of economic policy should be a natural element of supranational policy in all euro countries and it is indeed part of the EU's policy approach; however, surveillance is to a large extent effectively delegated to the IMF which is responsible for its standard Article IV consultations every year and for reports on financial stability (Financial Sector Assessment Programme: FSAP). The EU comes up, however, with its own regular reporting, but few consequences are visible from even very critical reports – say on Italy with respect to low growth rates (the Commission/DG ECFIN has published lengthy reports on growth issues. Hence it is not true that there is a lack of analytical material on the weak points of Italy's growth performance)
- Fiscal policy coordination through the Stability and Growth Pact has turned out to be largely ineffective as the Pact has been breached by more than 60 times in the first decade and no country had ever to pay a fine despite several countries showing strong and sustained violations of the Pact. The Greek government was, however, able to get a first rescue package in May 2010 and a second one in autumn 2011 – each time with minimal promises in the field of privatization. The first rescue package was given without much consideration about the issue of privatization in Greece, the second rescue package brought a lukewarm promise of Greece of privatize €50 billion by 2015 which is less than 1/7 of overall government assets as estimated by the IMF (2010) in December 2010.

The Euro crisis started with an economic crisis in Greece in early 2010 when the country had to ask for a Euro rescue loan of €110 billion and Ireland followed in the same year with massive problems stemming from the need that government recapitalized or nationalized almost all banks so that the deficit-GDP ratio exceeded 30% (2/3 of which were accounted for by government's bank rescue operations and thus was largely a one-off effect). Portugal followed as a crisis country in early 2011 when the Lisbon government had to call for help through a euro rescue package; and Italy and Spain followed after July 21 (2011) when politicians more or less imposed a 21% haircut on the claims of private investors in Greek sovereign debt – later followed even by a 50% haircut solution suggested by the EU summit of October 26/27 in Brussels. Capital markets, of course, interpreted 21% private sector involvement in debt restructuring of Greece largely as a role model for other highly indebted countries and thus it is not surprising that the value of long-term Italian bonds strongly fell immediately after the decisions of July 21.

2.1 Stylized Theory of Haircut Contagion in a Monetary Union

From a theoretical point the debt-GDP ratio b is determined in an economy – the home country I - with price stability by two main components as one can write (with t denoting the time index, τ the income tax rate, γ the real government consumption-GDP ratio, g_Y the growth rate of real GDP and r the real interest rate):

$db/dt = [\gamma - \tau] + b[r(b) - g_Y]$

Hence the development of the debt-GDP ratio is determined by the primary deficit ratio ($\gamma - \tau$) on the one hand, on the other hand by the product of the debt-GDP ratio times the difference between the real interest rate and the growth of output. Assume for simplicity that a country in a crisis situation typically has zero growth of real output and a primary budget surplus of 2% of GDP; the debt GDP ratio will still increase if the debt-GDP ratio is at 100% and the real interest rate is above 2%. The real interest rate r typically is a positive function of the debt-GDP ratio. However, if there is contagion, the country would face the problem that the real interest rate is also influenced by the foreign debt-GDP ratio b* (e.g. the Greek debt-GDP ratio has a positive impact on the real interest rate paid by Italy + Spain) so that one can write:

$db/dt = [\gamma - \tau] + b[r(b^*, b, h^*) - g_{Y^*}]$

If the foreign country is big r* will dominate r hence it would not be surprising that b* has an impact on b and in the case of two big countries there would be a phenomenon of interdependence. A rather strange problem is that in a "regional club of countries" even the debt-GDP ratio of small open economy can have an impact on the real interest rate of a relatively large economy (again see the case of Greece and Italy and Spain) which is a specific small country paradox. The implicit assumption is that investors consider a critical size of b* to be a trigger for a policy response for country II which is expected to be applied later to countries whose debt-GDP ratio is within a critical range α; if b is in this critical range there will be contagion. It is Interesting that a haircut h* for private creditors of the small open economy II can raise the real interest rate to be paid by the big home country I. The formation of expectations is, of course, critical here and the key point is that anticipation of contagion will cause contagion. Contagion can reflect rational behavior in the sense that private investors try to anticipate policymakers' conditional strategy and if the reputation of policymakers is weak public denial that strategy X for country C (say, Greece) is an exception that will not be applied to other countries C', C" etc. investors will indeed anticipate that policymakers will apply X to other countries.

While the haircut ratio h* artificially reduces b* according to $b^*_t = b^*_{t-1}(1-h^*)$ and thus has a dampening impact on the expected real interest rate r' there is an offsetting effect from h* which directly could raise r as in a setup with contagion investors will fear that the haircut h* is a model for a future haircut of country I – here the home country. If in turn r affects r* country II will not enjoy the full benefit of the haircut. It is also noteworthy that the higher the haircut is, the weaker is the incentive for privatization and hence for restructuring and structural change necessary for higher economic growth. Also other countries with high debt-GDP ratios might then speculate on a future favorable haircut.

From this perspective the decision about a haircut is not designed to bring a country with solvency problems back on a track that is manageable. Thus the EU summit of July 21 in Brussels looks like a rather doubtful event:

- A 21% haircut for the private creditors of Greece implies that the burden of Greek debt would be reduced by €37 billion or about 11%. The promise of Greece to privatize assets of about €50 billion by 2015 is modest. The fact that the Greek government's real estate is difficult to sell because no reliable proof of property system is available actually points to a structural problem of EU projects. Several

years ago Greece received €120 million for a project designed to introduce such a system, however, government later indicated that it did not want to complete the project. The Commission reclaimed only €60 million while a rational rule would be rather that the respective country should repay the full sum received plus a penalty fee for all projects aborted.

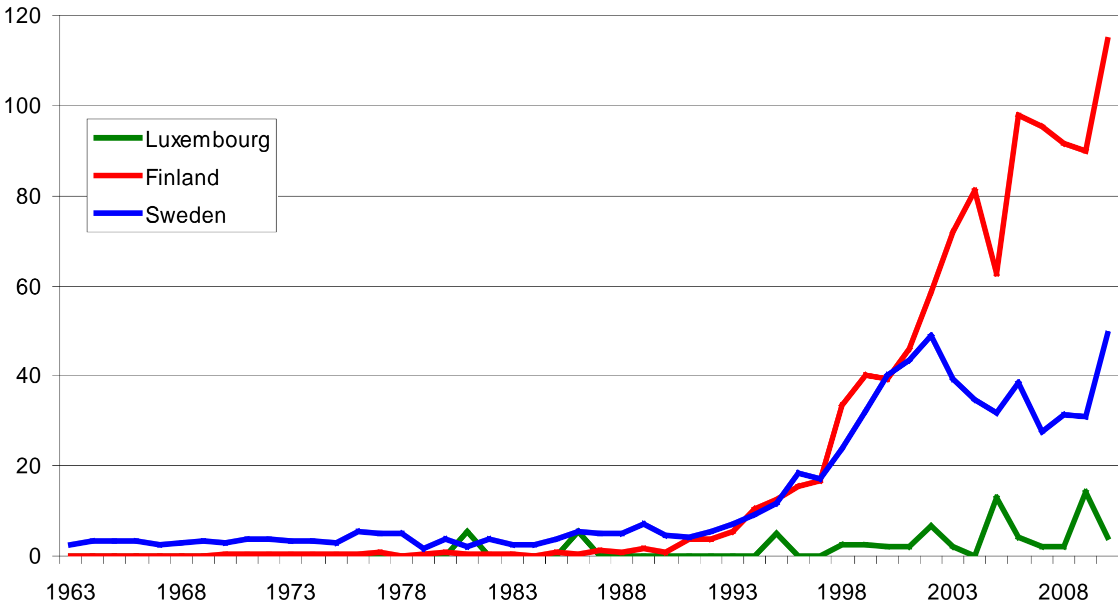
- An expected 20% haircut on Italian debt of €1800 implies a loss of €360 billion and a massive rise of the interest rate on Italian debt plus effectively denying Italy medium term access to sovereign debt refinancing from private sources so that almost only the ECB – and possibly later the rescue fund EFCF - would be left for buying large amounts of Italian debt (and if one adds the same expected haircut on Spain one would have to add another welfare loss of €120 bill.). Considering the side effects of the Greek haircut of 21% it is obvious that a net welfare loss of about € 400 bill. or € 1200 per capita in the euro area is striking disaster. Introducing a debt brake in Spain and Italy plus other EU countries prior to a decision on a Greek haircut could have helped to isolate the effects of the Greek haircut.
- A policy that saves Greece through a haircut for private creditors – while not imposing major privatization requirements – while destroying refinancing of Italian debt is very doubtful. The contagion effect on Italy and Spain could bring about a recession in these two countries that in turn undermines export prospects of Greece. One should, of course, consider negotiations in the London Club (for private creditors) and the Paris Club (for public creditors) as part of an overall package, but there was no broad package to which Greece had agreed. Moreover, the broader contagion effects are, the larger the risk is of a sudden stop of capital inflows into the euro area. Again, reducing the debt of Greece by a haircut on private investors while causing a tenfold loss of wealth for holders of Italian and Spanish bonds stands for a very poor strategy.
- An alternative policy would have been a group of Euro countries or all Euro countries or all EU countries create, along with the government of Greece, a Privatization Fund "HERCULES" which would have bought about one half of Greek government assets for a price of about € 190 bill; convertibles and hence deferred debt-equity swaps could play a role in this concept and Greece should, of course, have the main responsibility in the HERCULES privatization fund. This would have reduced Greek government debt by about 50% so that the debt-GDP ratio would have fallen to about 80%. At the same time EU countries should have given a boost to Greek growth by a mixture of a € 10 billion Marshall Plan for promoting investment and infrastructure expansion; moreover, the Greek government should consider the introduction of a flat rate tax which can be easily implemented. Such an approach would most probably have left the Italian bond market untouched or at least minimized the contagion problem.

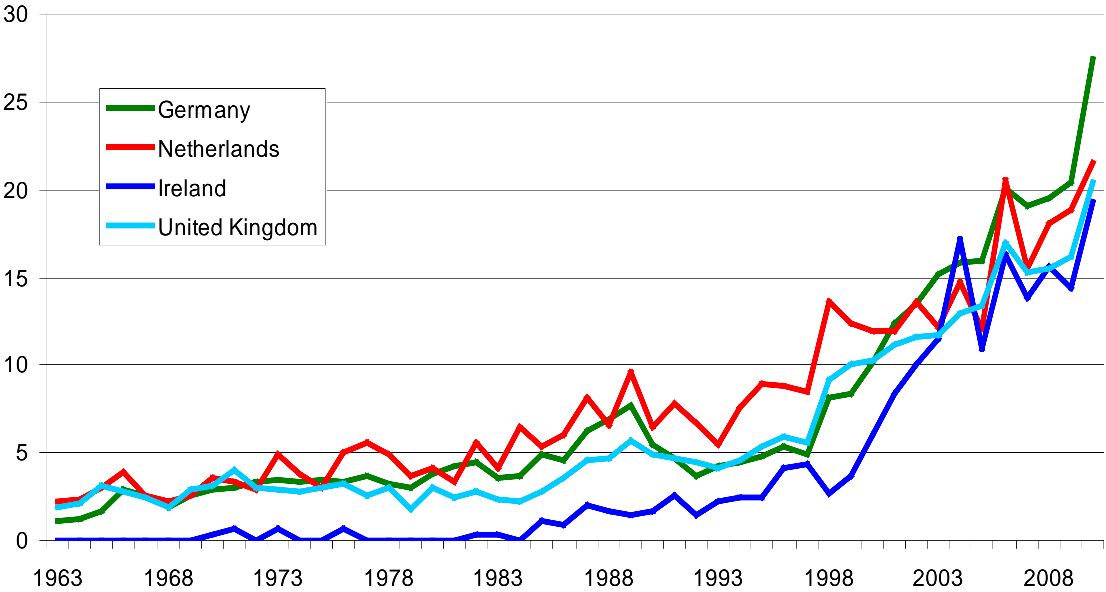
2.2 Macroeconomic Imbalances: Key Aspects

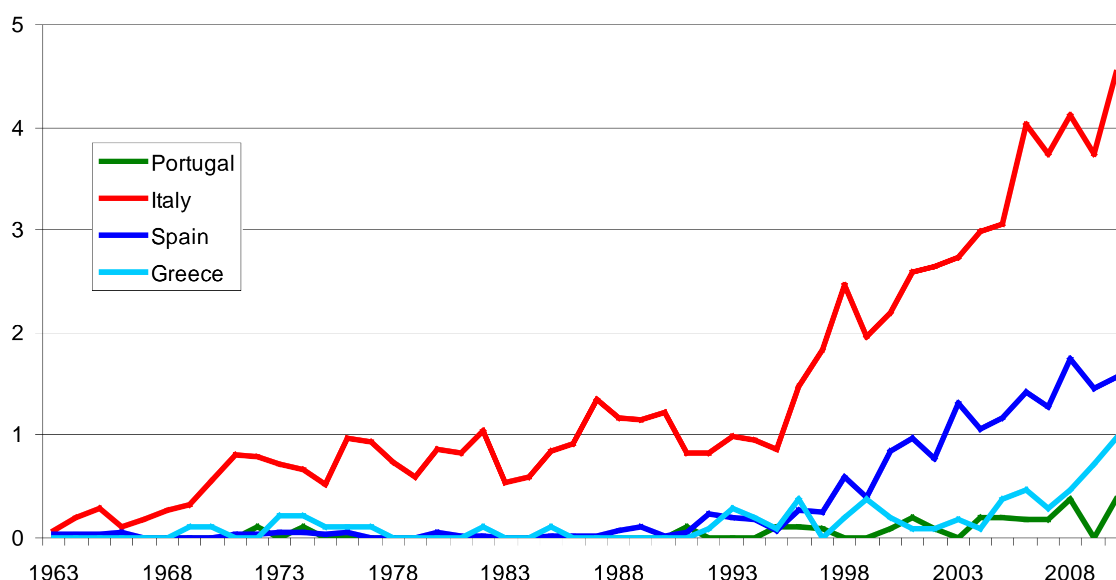
A sovereign debt crisis can largely reflect macroeconomic imbalances and structural political problems at the national or regional policy layer. A potential problem is high current account deficits because the vulnerability of a highly indebted country typically rises with the share of bonds, which is in the hand of foreign investors. There can be sudden stops in capital inflows, which is a problem that has been discussed for the case of developing countries and newly industrialized countries (e.g. CALVO/REINHART, 2000). If there is an international confidence crisis in capital markets there could be a serious problem, namely that capital inflows reduce sharply or even net capital outflows emerge which drive up real interest rates sharply and cause liquidity or solvency problems of banks plus a major recession. From a theoretical perspective the external vulnerability of a country is not simply covered by the current account GDP ratio as emphasized by the European Commission.

- Rather one should look at the current account plus foreign direct investment inflows since such inflows stand for long term financing of the current account. An underlying problem of persistent current account deficits could be an unfavorable real exchange rate development behind which unfavorable relative export unit position could stand. However, the internal exchange rate, namely the ratio of tradable to non-tradable prices could also play an important role (see e.g. the analysis for the USA by (OBSTFELD/ROGOFF, 2005). High government expenditures plus lack of competition and process innovations in the non-tradable sector could be reasons for a relatively high non-tradable price, which, of course, would distract resources from the tradable sector. Thus undermine net exports of goods and services. The role of the internal exchange rate has not been mentioned in the indicator-based approach of the Commission although it seems to be indeed a key problem in a country such as Greece whose export-GDP ratio of 35% is relatively low and points to such problems.
- As regards the size of government expenditures and productivity growth, respectively, one may assume that the Europe 2010 program – which emphasized the knowledge based network economy, innovation and information & communication technology – should have stimulated the expansion of ICT innovations in all EU countries. Looking at ICT patent per capita figures we see, however, that the development of Greece and Portugal has been particularly weak. As ICT is an important factor for productivity growth and innovation dynamics in all sectors, it is surprising that in the context of international competitiveness the indicator-based approach of the EU does not look at the relative ICT patent dynamics of EU countries. The subsequent graphs show a clear picture and the enormous increase of ICT investment in total investment in many countries indicates the strategic importance of ICT, which, of course, has been part of the Lisbon Agenda 2020 of the European Commission; however, strategies partly were rather poor at the national level.

Figure 1: Patents in Information and Communication Technology per 1 Million Inhabitants at the USPTO







Source: USPTO, Eurostat

Thus it is not clear whether the indicators chosen by the Commission are really useful for better macroeconomic coordination. A specific problem concerns Germany, which has a large internal trade (and current account surplus) within the euro area and thus becomes a benchmark within the euro area. It is not the task of Germany's firms to become less competitive as a means to reduce external imbalances within the Euro area, rather the partner countries have to carefully consider the supply-side and wage dynamics of Germany. Additionally it could be a task of the European Commission to enhance economic catching and productivity growth, in the poor EU countries. It is not clear if the EU structural funds have so far placed enough focus on the issue of productivity growth. Probably, one also has not focused enough on the transition dynamics created by Euro membership of some countries where a strong lowering of the real interest rate has not only brought higher investment-GDP ratios but also a strong increase in consumption GDP ratios which in certain countries have turned out to be not sustainable.

2.3 Euro Plus Pact

On April 20, 2011 the European Council has issued a statement on the Euro Plus Pact according to which Euro area member countries plus several other EU countries want to strengthen economic governance in order to achieve enhanced fiscal discipline and to avoid critical macroeconomic imbalances – this includes emphasis on a reform of the Stability and Growth Pact aiming at a better surveillance of fiscal policies. There is, however, a broad analytical lack with respect to the topic of macroeconomic imbalances. It is absolutely unclear which analytical basis is taken as the basis of selected indicators of macroeconomic imbalances.

Economic and monetary union is likely to fall apart if the key problems observed in the EU continue:

- As regards the Economic and Monetary Union and the functioning of global capital markets there is lack of understanding as to how the systems work – both on the side of the European Council and (it seems to a lesser degree) on the side of European Commission.
- There seems to be a broad political view according to which agreement of a large number of countries on certain measures implies that the measures chosen are adequate; this, however, is an irrational approach – the adequacy of any measures suggested and taken depends on a sound analysis of the problems at hand. Such analysis is missing e.g. in the case of the Greek debt crisis and this is the main reason why the Greek debt crisis remains unsolved two years after the outbreak in late 2009. Well-known economist have contributed with poor policy advice – calling for high haircuts and ignoring key contagion aspects - to a partly dangerous policy of the European Council in the field of the Greek debt crisis and the Euro crisis, respectively.
- If the Euro area's leaders should be unwilling to discuss critical analysis of their strategy and policy the EU will most likely fail its historical challenge.

The following statements are a quote from the relevant declaration of the European Council of April 20, 2011:

"Strengthening governance

…The package of six legislative proposals on economic governance is key to ensuring enhanced fiscal discipline and avoiding excessive macroeconomic imbalances. It includes a reform of the Stability and Growth Pact aimed at enhancing the surveillance of fiscal policies and applying enforcement measures more consistently and at an earlier stage, new provisions on national fiscal frameworks and a new surveillance of macroeconomic imbalances.

10. The European Council welcomes the general approach reached on the proposals in the Council, opening the way for negotiations with the European Parliament. It called for work to be taken forward with a view to their adoption in June 2011.

Conclusions – 24/25 March 2011

EUCO 10/1/11 REV 1 5.

Providing a new quality of economic policy coordination: the Euro Plus Pact

11. The Euro Plus Pact as agreed by the euro area Heads of State or government and joined by Bulgaria, Denmark, Latvia, Lithuania, Poland, Romania (see Annex I) will further strengthen the economic pillar of EMU and achieve a new quality of economic policy coordination, with the objective of improving competitiveness and thereby leading to a higher degree of convergence reinforcing our social market economy. The Pact remains open for other Member States to join. The Pact will fully respect the integrity of the Single Market.

12. The Member States that have signed up to the Pact are committed; on the basis of the indicators and principles it contains, to announce a set of concrete actions to be achieved

within the next twelve months. A number of Member States have already announced first commitments. All participating Member States will present their commitments as soon as possible and in any event in time for their inclusion in their Stability or Convergence Programmes and National Reform Programmes to be submitted in April and for their assessment at the June European Council."

The EU summit of December 2011 has suggested adopting a fiscal pact which basically wants to establish stricter deficit rules in order to avoid excessive indebtedness of Euro countries. Governments are expected to introduce national debt brakes which amount to ensuring that only a small structural deficit-GDP ratio of up to 0.5% of GDP will be allowed. Since the fiscal pact will be adopted outside the EU Lisbon Treaty – as the UK has blocked this option of reforming EU fiscal rules – it is unclear to which extent there are inconsistencies with the EU constitutional documents.

3. Economic and Monetary Union without Fiscal Union?

The EUROPEAN COMMISSION (2011) has been interested in national and regional fiscal rules applied in its member states and according to the Commission's report the number of countries applying rules in the area of fiscal policy has increased; obviously motivated by the desire to convince actors in the capital markets and EU partner countries that future fiscal policy would be better and more consistent, respectively. The EU has constructed a Fiscal-Rule-Index, which consists of various quantitative and qualitative elements covered in the index (EUROPEAN COMMISSION, 2006; 2008; it is noteworthy that the IMF computes a similar index, namely the Index of Strength of Fiscal Rules).

If a group of countries creates a monetary union that is largely in line with key requirements of the optimum currency area one still faces a few key problems, namely the following:

- If countries are rather different in terms of per capita income, economic size and external indebtedness (relative to GDP) it is unclear whether or not nominal interest rate convergence will occur. Such nominal interest rate convergence is a natural element of an effective monetary union in which fiscal debt rules are respected – or believe to be respected. Assuming that governments of member countries of EMU convey a credible message that fiscal debt rules and fiscal deficit rules – as fixed in the Stability and Growth Pact of the euro zone – will be obeyed in the medium to long run and if banking systems are considered to be stable there is every reason to assume that capital market participants will consider national government bonds as high-grade substitutes. Such convergence has occurred in the period 2003-2007 when capital market participants implicitly assumed that the non-bailout clause was not relevant because debt dynamics relative to GDP growth did not seem to stand for serious problems or because market participants assumed that governments were to bail out in a crisis for both big banks and small countries facing serious debt problems and that the non-bail-out clause of the Maastricht Treaty of 1993

would be ignored if. The result was a uniform low nominal and real interest rate in the euro area and a successful first decade of euro integration during which all countries in the monetary union could benefit from low interest rates as a basis of (windfall) gains in government budget constraints.

- However, after the collapse of the US investment bank Lehman Brothers on September 15, 2008, the world has changed dramatically. Big banks no longer trusted each other so that the interbank markets in the US and the EU collapsed and many ailing banks in the US and the EU – and in Switzerland UBS – had to be recapitalized. With rising risk premiums capital markets corrected the unnatural situation of very low risk premiums in the years before 2008 (GOODHART, 2007). With risk premiums increasing, countries with high-debt GDP ratios and countries with no-credible governments in the field of deficit policy and debt policy, respectively, came up on the newly calibrated radar screen of rating agencies. Greece was the first country to fail the test when it turned out that the outgoing conservative government had announced vis-à-vis the European Commission that the deficit-GDP ratio would be 4% in 2009 while the incoming socialist government under prime minister Papandreou told the Commission in late 2009 that the deficit-GDP was instead close to 12% (whilst in the end it turned out to be 15.4%) which would raise the highest debt-GDP ratio of 2008 in the EU: the figure for Greece stood at 110,7%. Typically, cutting a deficit by 3 points (or more) per year is difficult and so a deficit-GDP ratio of 15% in Athens in 2009 implied that the debt-GDP ratio in Greece was to increase by roughly 45 points over the period 2009-2014; even if such strong consolidation would be implemented. If Greece was to face a debt-GDP ratio of 156% in 2014 this would be a disaster and it was clear in 2009 that the country will face a very difficult adjustment period ahead. The treacherous hidden debt policy of Athens was bound to raise doubts about deficit figures of other euro area countries as well and since then one has witnessed – disregarding here the special case of Ireland for a moment – a period of rising spreads for many euro area countries.

The key question is how to restore confidence in the euro area and particularly in the field of fiscal policy, which largely is in the hands of the member states. Fiscal policy is defined by four categories:

(1) Expenditures of government

(2) Revenue sources of government

(3) Deficit-GDP ratio of government

(4) The long run debt-GDP ratio of government; this ratio however is determined in the model of DOMAR (1944) by the ratio of the trend deficit-GDP to the trend output growth rate so that with a given steady state growth rate of output and a given deficit-GDP ratio the long run debt-GDP ratio automatically is determined.

The Stability and Growth Pact required that the maximum deficit-GDP ratio should be 3% and the maximum debt-GDP ratio 60% and that – based on a proposal of the European Council of Ministers of Finance – the European Commission should impose sanctions on those countries that stubbornly exceed the required thresholds. Beyond "warning letters" from the Commission a member state would have to anticipate in the end of a progressive

procedure even a fine of 0.5% of GDP. However, the Stability and Growth Pact was violated in the first twelve years more than 60 times – without major sanctions for the "sinners" - and it was clear that the Pact enjoyed only weak credibility (SCHUKNECHT ET AL., 2010). The Pact was buried when France and Germany changed the Pact in 2003 in order to avoid that a critical Commission verdict would negatively affect Paris and Germany. There is indeed a triple hypothetical test for the Pact:

- Namely to which extent big countries will implement the Pact in a situation where one or several big countries are violating the maximum debt-GDP ratio or the maximum deficit-GDP ratio.
- To which extent sanctions will be applied if a majority of sinner countries is in breach of the criteria of the Stability and Growth Pact; if a majority of countries is in breach of the Pact it would be natural to allow only countries that are not violating the deficit-GDP criterion or the debt-GDP criterion to cast a vote on the others - alternatively one may refer the decision to an independent expert commission. The generalized wisdom would be that no country which is in breach of the deficit-GDP criterion or the debt-GDP criterion should be allowed to cast a vote on any questions of sanctions of countries violating the two key fiscal criteria.
- This logic associated with the latter point implies that Belgium, Italy and Greece would not have had any vote on matters of the Stability and Growth Pact since the start of the euro area: however, in reality this logic was not adopted and it is indeed difficult to imagine how the violations of fiscal rules can be avoided as long as member countries have not implemented a debt brake in the national constitution.

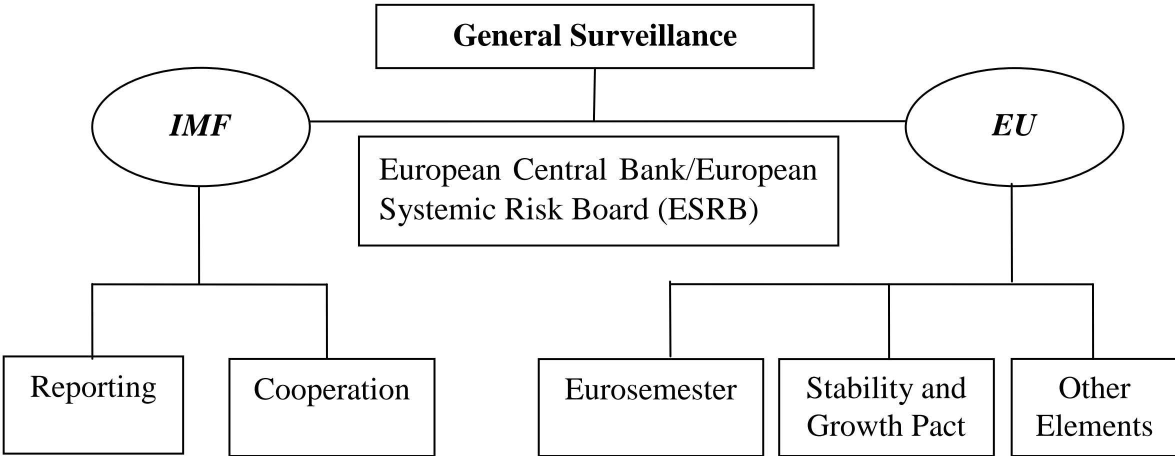
There are two critical aspects about an enhanced Stability and Growth Pact:

- Will any of the smaller countries be bold enough to raise their voice against France, Germany, Italy or Spain if one or several of the big countries should violate the Stability and Growth Pact? This may be quite unlikely; hence there is a need for the European Commission or a special scientific advisory committee to take this role instead.
- The second aspect concerns the question whether or not the enhanced Pact gives an incentive to generate a budget surplus in a boom period as shifting up the path of the deficit-GDP ratio is of key importance for sustainable public finance (e.g. Greece had high deficits even in boom periods). Here a rule is missing which says that countries that generate a surplus in a boom period get a reward – e.g. the respective country could get a top-up on innovation funding which should amount to at least 0.1% of the country's GDP. If all countries would achieve a budget surplus at the same time the implication then is that the European Parliament must have set aside 0.1% of Community GDP for paying the innovation premium. This amount is not big enough to reinforce an existing boom into a heated economic situation. Countries that fail to achieve a surplus in a boom of at least 0,5 percent of GDP should face a fine in the following year which should immediately be executed at the end of the year unless the forecast of the European Commission lets one expect a budget surplus of at least 0.5% of GDP. In principle the fine should be progressive. The critical question is, however, whether or not these rules can be implemented.

3.1 Macroeconomic Surveillance

Surveillance refers to an indicator-based/qualitative analysis of subsystems or the whole economic system of a country where the goal is to identify critical system dynamics that could cause serious or persistent problems in the country considered and other countries. In a European context one may point out that general surveillance is a more or less an orchestrated effort of the IMF, the European Systemic Risk Board (led by the ECB) and the EU – see the subsequent exhibit.

Figure 1: General Surveillance



In the field of surveillance one may e.g. rely on the IMF's Article IV Reports and the updates on the Financial Sector Assessment Program as well as specific cooperation between the IMF and a program country; that is a country getting funds from the IMF. The EU has so far relied on the Stability and Growth Pact and the excessive deficit procedure in the euro area. However, the Pact could not really be enforced. The idea to get earlier access to budget planning data, namely within the European Semester is a useful element. However, this does not help in the case of outright deficit fraud, e.g. the case of Greece in 2009.

Starting in 2011 the Commission's new macroeconomic surveillance approach is about a broad set of indicators. Basically the objectives are to look at:

- The financial stability of the economy where the European Systemic Risk Board is of key importance. The working of this new institution is still rather unclear, but the role of the ECB could become doubtful if the ECB's buying of government bonds of highly indebted countries cannot be explained within a consistent strategy: The ECB as part of the European Systemic Risk Board would have to critically assess its own interventions – and this is not a convincing role.
- Fiscal policy developments within the framework of the Stability and Growth Pact on the one hand and procedural development within the European semester. There is an unsolved key issue here, namely how governments could accept any public

criticism or even a fine. The only way to impose a fine would be an automatic mechanism, e.g. that a country which has not achieve at least of budget surplus of 0.5% of GDP automatically pays 0.25% of GDP to the European Investment Bank – each country would have to make an advance deposit so that no discussion could occur whether or not the country really wants to pay the fine or not. So far no real automatic regime has been installed and there are no sanctions considered for a country that is not achieving a surplus in a boom situation. This, however, is – according to the view adopted here – of paramount importance for shifting the deficit path upwards. From a political economy perspective one could expect that a fine in a surplus situation will be paid; to put it differently, the resistance will not be as strong as in a crisis situation in which a fine would raise any existing deficit.

- Excessive imbalance procedure, which means to look at the external imbalance and the internal imbalance. There is no consistent approach by the EU. From a theoretical perspective one may point out that a poor country normally has a current account deficit over many years since capital flows from rich countries to poor countries if catching-up it to be realized, but this deficit should be financed mainly by foreign direct investment inflows. The main problem of Greece has been that the country had only about 1% of GDP as FDI inflows in the long run and this is so low that it is an indicator that Greece has certain problems. Given the global expansion of China and other Asian countries one might want to take a critical look at the dynamics of the composition of trade: Poor countries which are catching up in terms of per capita income should raise export unit values over time as more high quality goods and services are exported; better quality of export products typically is associated with the production of more knowledge-intensive and capital-intensive goods. BORBELY (2006) has shown that Greece and Portugal faced considerable problems in the 1990s in certain industries when these countries were compared to Eastern European EU accession countries.
- The Europe 2020 Strategy, which puts the focus on sustainable growth and cohesion. Here the Commission has put a focus on green growth, innovation and cohesion. However, the results from the Lisbon Agenda 2010 were rather sobering (ECB, 2008) and there could be similar problems with the Europe 2020 Strategy. It is disappointing that the EU Lisbon Agenda 2010 place so much emphasis on improving international competitiveness while Greece and Portugal continued with a policy leading to sustained high current account deficits. In the case of Greece the very low foreign direct investment inflows should have been taken as a signal that such high deficits were not sustainable.

If one takes a look at the two crisis countries Greece and Ireland one should emphasize that neither of these two countries would have come out with very negative data under the above four points. Greek's problem is more in the field of high corruption and poor Doing Business Survey results (as obtained by the World Bank) on the one hand, on the other hand the switch to a hidden 15% deficit-GDP ratio as in 2009 is rather political fraud than anything else and so far the Commission has no tool against this. A useful tool here beyond a common budget software platform in the EU would be the rule that each country must deposit 1% of GDP in the form of gold reserves and that 1/10 of this gold deposit will automatically have to be paid as a fine once the deficit-GDP ratio exceeds 3% and once it

exceeds 5% the total deposit is taken as a fine which is distributed among those countries which have a deficit-GDP ratio below 3% in at least two consecutive years.

The Commission has proposed a seven-pronged approach to surveillance of macroeconomic stability:

- There are six indicators that should help to identify macroeconomic imbalances (corrective arm) and to improve macroeconomic coordination: (1) current account balance (2) net external position, (3) real effective exchange rate based on unit labor costs; (4) real house price increases; (5) public sector debt-GDP ratio; (6) private sector debt-GDP ratio.
- Taking into additional the employment ratio one has four key areas, which are on the radar of the countries, which have signed the Euro Plus Pact (all EU countries except the UK, Sweden, Czech Republic, Sweden): Competitiveness, Employment, Sustainable Government Financing and Financial Stability.
- The Stability and Growth Pact is to be improved: The debt-GDP ratio will get a stronger consideration and stricter standards for budget procedures at the level of member countries are to be established; at the same time sanctions should be applied more strictly. Ex ante the national budget procedures should be harmonized in a procedural form (European Semester).
- Improvement of macro-prudential supervision through the European Systemic Risk Council and other elements of common supervision (banks, securities and insurance)
- Continuing efforts for financial repair, namely stabilizing the balance sheets of banks.
- Economic policy coordination is to be reinforced; it is rather unclear how this should be achieved if one is not to assume that a high frequency of emergency meetings in Brussels is to be the key element of an approach, which has not much substance.
- The Annual Economic Growth Report will highlight impediments for growth. One should point out, however, that DG ECFIN has published several papers on related questions and that there was a Europe 2010 agenda, which also partly focused on growth and did not achieve strong results in Italy, Portugal and other countries.

Preventive budget policies as well as the corrective arm of the budget policy (looking more strictly into countries with high debt-GDP ratios) are to be reinforced. The speed of reducing the debt GDP ratio has to be maintained in a medium term perspective and the debt-GDP ratio can also trigger the excessive deficit procedure:

- The debt-GDP ratio should reduce by at least 1/20 per year over a three year period: The standard formula is (b -60) x 0.05 so that 100% deficit criterion requires that the debt-GDP ratio has to reduce by 2 percent per year.
- The excessive deficit procedure can be opened on the basis of a high debt-GDP ratio.

As regards the selected six macroeconomic indicators, it is absolutely unclear why the current account balance of a country should be a matter of concern unless there is a major

current account deficit of the euro area and this deficit could be traced back to a large extent to the country considered. However, the net external position could be a case for concern, namely to the extent that it is high relative to GDP and could trigger a wave of non-confidence by investors from abroad. The real effective exchange rate based on unit labor costs is of some interest in the case of a critically negative net external position. Also the public sector debt-GDP ratio is potentially a concern. Less convincing is that government should be much concerned about real house price increases unless they occur in a dramatic way in a short time period – this was the case in Ireland, but the main underlying problem of Ireland was that its government did not implement any serious prudential supervision since the beginning of the 21st century and as a consequence excessive lending in the real estate sector in Ireland occurred which in turn caused extreme relative price increases. It is also unclear why the private sector debt-GDP ratio should be a particular cause of concern since one should assume that private households themselves will know – along with advice from the respective banks – what is adequate borrowing. Rather one might consider that the European Systemic Risk Council should take a look at the ratio of private sector debt to GDP and this Council's report could feed into the decisions of the Commission.

From a theoretical point of view one may raise several questions:

- To which extent is the overall euro current account position relevant for assessing the vulnerability of individual countries debt-GDP position? The answer surprisingly is that as long as there are no supranational euro bonds the external aggregate euro area position is irrelevant – it almost only matters which positions individual member countries have. In a monetary union without fiscal union even a small member country can destabilize the whole monetary union, namely through contagion effects.
- If the Euro zone has no extreme sustained current account deficit intra-Euro area deficits should not matter unless the national debt-GDP ratio exceeds e.g. 80% (national current account deficits which are financed within the euro single market should not be of concern since an intra-euro area current account deficit simply means that people from euro area partner countries increase the share of real estate, stocks or bonds from the internal deficit country; if the debt-GDP ratio exceeds the assumed critical point of 80% there is some risk that with the debt-GDP ratio further increasing under adverse effects there could be an international confidence crisis which first drives up the interest rate of the respective country and which through contagion is undermining the overall stability of the Euro area and the EU, respectively. The intra-euro indebtedness would no longer matter much once there are supranational euro bonds.
- The emission of supranational euro bonds should be related to the creation of a Euro area government and a Euro Parliament which would elect the government; only this Euro government should be allowed to place euro bonds in the market and the ECB would intervene in the future only in supranational bonds markets.

3.2 Approach of the Commission

The European Commission apparently interprets the sovereign debt crisis of many Euro countries as largely standing for macroeconomic imbalances and thus has presented on the 29th September 2010 a proposal for a Regulation of the European Parliament and of the Council of the prevention and correction of macroeconomic imbalances (COM (2010) 527 final): The Commission writes (p.2):

"*The emergence of large macroeconomic imbalances, including wide and persistent divergences in competitiveness trends, proved highly damaging to the European Union, and in particular to the euro, when the crisis struck. In the years preceding the crisis, low financing costs fuelled misallocation of resources, often to less productive uses, feeding unsustainable levels of consumption, housing bubbles and accumulation of external and internal debt in some Member States. It is therefore important to develop a new structured procedure for prevention and correction of adverse macroeconomic imbalances in every Member State. In its communication and report on 'EMU@10: successes and challenges after 10 years of Economic and Monetary Union'1 the Commission proposed a broad policy agenda with the aim of improving the functioning of the EMU. It stressed, in particular, the need to broaden economic surveillance in order to detect and address macroeconomic imbalances at an early stage. Enhanced surveillance was seen as particularly warranted in the areas of external competitiveness and current account balances, where noticeable divergences between Member States had emerged since the launch of the euro. In order to address these challenges, in July 2008 the Euro Group agreed to initiate a regular review of developments in competitiveness within the euro area that has been fruitful.*

- *Europe 2020 sets out an ambitious and comprehensive strategy towards smart sustainable and inclusive growth for the EU economy. Against the background of the crisis it sets a new focus on addressing Europe's weaknesses in the surveillance of macro-financial and structural challenges. Taking account of the deep economic and financial inter-linkages within the euro area and their impact on the single currency, Europe 2020 calls for the development of a specific policy framework for the euro area to tackle broader macroeconomic imbalances2. A mechanism embedded in legislation monitoring sources of macroeconomic imbalances and ensuring appropriate corrective action when necessary is required from that perspective. The necessary linkage between preventive and corrective action is crucial to avoid painful economic adjustment when imbalances grow out of control."*

The Commission has developed a complex system for an excessive imbalance procedure (EIP), which is based on a scoreboard backed up by judgmental analysis. The European Commission has adopted a new set of complex criteria to implement better macroeconomic surveillance finally. While the Commission certainly has good intentions the proposed complex set of indicators is more confusing than helpful and some points emphasized by the Commission are difficult to understand:

- The first problem is that EU member countries can ignore the most basic rules and even EU legislation without any tough reaction from the side of the Commission; as regards Greece the Commission should have taken Greece to the European Court over the outrageous statistical cheating made by the outgoing conservative

government in Athens in the mid of 2009 when a budget deficit-GDP ratio of close to 5% was notified to Brussels while the true figure turned out in 2010 to be 15%.

- A deficit ratio of 15% in year t implies that the country's debt-GDP ratio would increase by 45% within five years if one assumes that the deficit-GDP ratio cannot be reduced by more than 3 percentage points per year so that the Greek debt-GDP ratio: From this perspective the Commission should have immediately stopped all disbursements of EU funds to Greece once the outrageous deficit ratio of the Greek government had been noticed. No rescue funds should have been offered to Greece in 2010 without sending an expert commission to Greece to find out how such massive deficit lies could have occurred.
- The second failure of the European Commission was not to take Ireland to the European Court although prudential supervision in Dublin had not been implemented in any meaningful sense over many years – it is not useful to look at a broad set of macroeconomic imbalance indicators if governments can cheat on the most basic EU rules without facing any consequences.

If surveillance is to be a useful element of EU economic policy it would be quite important that one takes a critical look at the leading global organization engaged in macroeconomic surveillance and this is the IMF which basically use two approaches at economic development and policy actions in member countries:

- Article IV consultation: This is done regularly in all member countries of the IMF; while many reports of the IMF in this context are excellent one has to point out that the 2008 report on Greece was quite misleading; in retrospect it was quite optimistic with respect to many macro indicators.
- Financial Sector Assessment Program (FSAP; with regular updates every few years): The 2008 FSAP on Ireland was totally beside the point as the report suggested that Ireland's banking system and banks in Ireland, respectively, was top (see the appendix). The FSAP on Switzerland also was quite misleading as UBS was considered a solid bank while Credit Suisse drew some criticism. The FSAP on the USA was published with many years of delay, namely in 2010 and when its content are a mild form of criticism for a rather inefficient banking system will enormous negative international external effects.

Before the EU is to consider great plans in economic policy surveillance it thus will be adequate that the EU member countries adopt at least two steps:

- EU countries should push the IMF for a much more solid reporting system on the financial sector; this must include identification of the analytical pitfalls and problems behinds such weak over long overdue reports as those on Ireland, Switzerland and the US;
- The EU countries should suggest random scientific evaluation of IMF reports, namely through external experts from the scientific community.

3.3 New Approach: European Semester and Scoreboard

The European Commission has suggested a new tool for the preventive monitoring of economic policies of EU member countries – particularly concerning fiscal policy. The so-called European Semester is assumed to bring enhanced policy coordination through the European Commission. The procedure of the European Semester can be summarized briefly as follows:

- In March of each year the European Council will identify the policy priorities, namely on the basis of a report from the European Commission, the Annual Growth Survey published in January. Based on this, recommendations will be derived for budgetary policy and economic policy of EU member states.
- In April the member states will submit their medium-term budgetary plans and economic policy strategy to the European Commission.
- In June and July the European Council and the Council of Ministers will issue country-specific proposals and recommendations on general economic policies and on budget policy. The European Commission's Annual Growth Survey for the subsequent year will assess the implementation progress of these recommendations.

The European Commission has prepared and published several proposals for a scoreboard in the field of macroeconomic policy. Of the indicators proposed for the macroeconomic scoreboard, only the current account balance is useful for covering the dynamics of external indebtedness and the government debt-GDP ratio as a sensitive indicator showing how sustainable current fiscal policies are. Real house price increases should always be monitored by economic policymakers but it is quite doubtful to assume that real house price increases stand for macroeconomic imbalances; possibly, if strong nominal (and real house) price increases should occur, regional governments as well as national government could try to encourage construction building by reducing transaction costs and selling part of government's land to prospective investors.

The surveillance mechanism consists of two key elements:

- The European Commission will monitor the scoreboard indicators: This is stage I of the new European Semester Approach. If specific threshold limits of the scoreboard indicators are reached – e.g. the upper quartile of the lower quartile of the statistical distribution of each variable are exceeded or not achieved -, closer analysis by national economic policymakers should clarify whether or not the macroeconomic imbalances are damaging.
- Stage II will start an Excessive Imbalance Procedure and this should stimulate countries to change their respective policies.

Based on this set of indicators the European Commission then wants to establish a multi-pronged surveillance mechanism:

- Preventive arm: surveillance through a European Semester and scoreboard: The scoreboard is use to define critical thresholds which should not be exceeded. The European Council will – based on recommendations of the European Commission – decide to start an Excessive Imbalance Procedure (EIP).

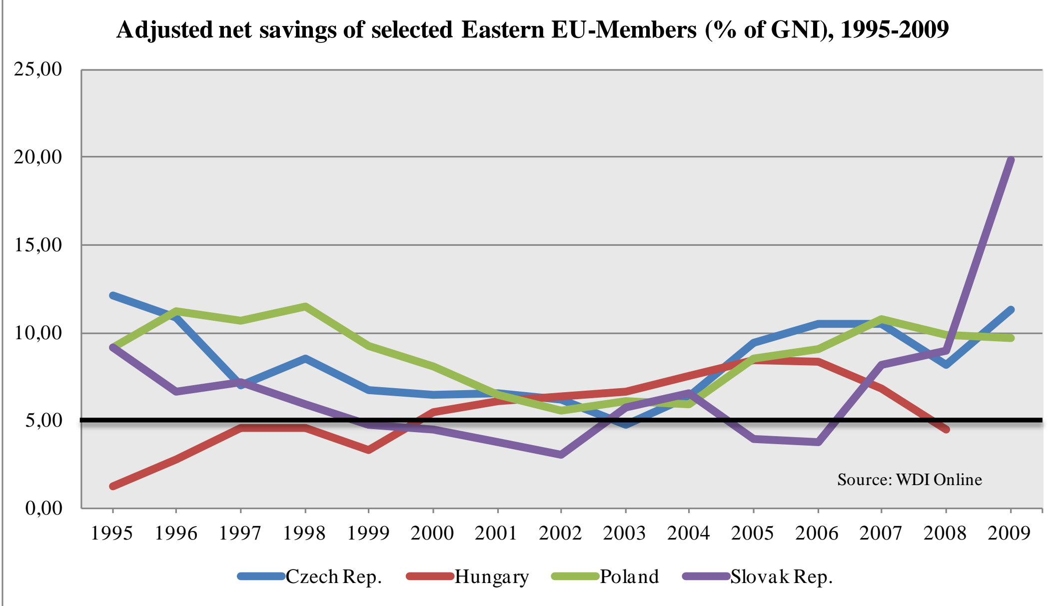
- Corrective arm: Punitive action with sanctions: There will be an Excessive Imbalance Procedure which is designed to stimulate member countries to correct current economic policies and thus to match the critical thresholds range defined by the scoreboard.

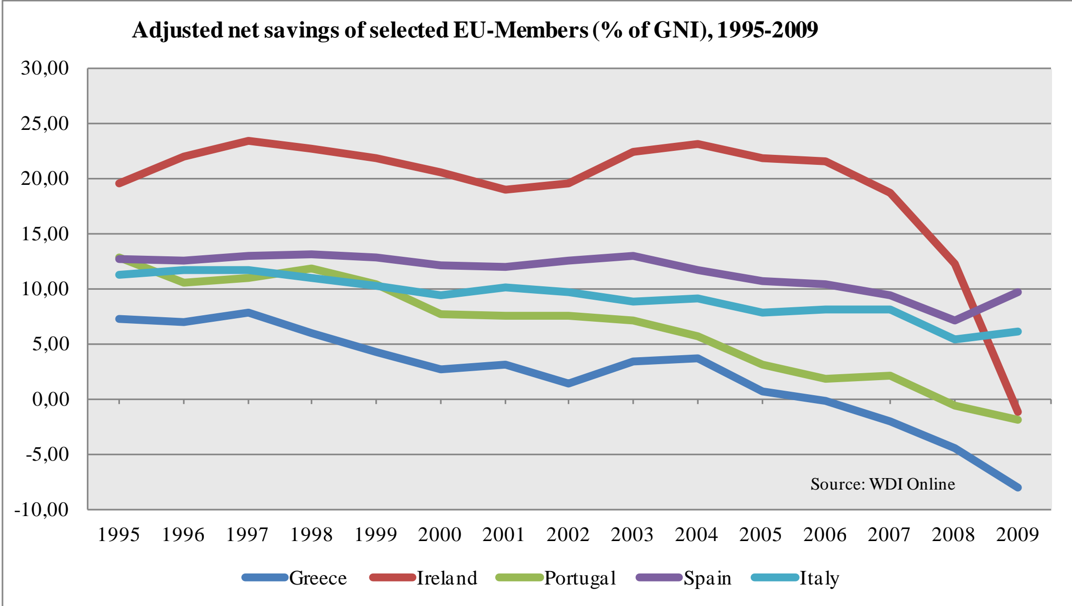
One can raise the question whether the right indicators were chosen. Here there are some doubts if one should consider a broad concept in the field of debt sustainability. It is well known from the DOMAR model that the debt-GDP ratio is determined by the ratio of the savings rate to the trend growth rate of output. In a modern interpretation it is quite important not to simply consider the savings-investment ratio but to focus on a broader concept which takes into account a long-term perspective and sustainability aspects:

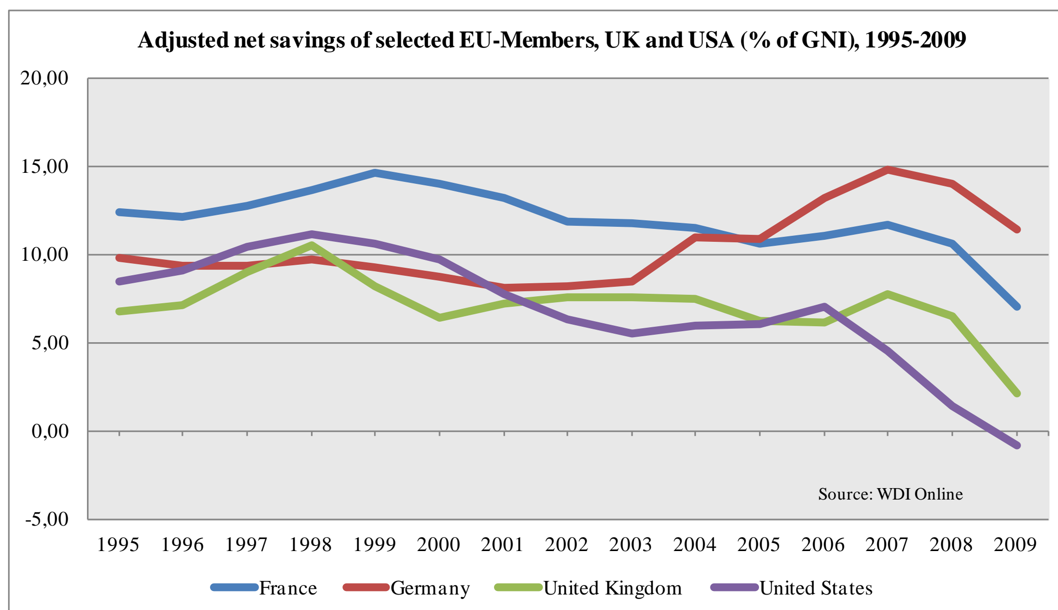
- There is a broader concept of the genuine savings rate developed by the World Bank; this savings rate is defined as the normal savings rate plus expenditures on education (relative to GDP) minus depletion of natural resources and environmental damages. Following criticism of BRETSCHGER/VALENTINI (2011) who have argued that the World Bank concept should be refined in a way that the uses side of revenues from natural resource depletion should be considered: Subsequently, this has been done in a rather simple way, namely by looking at the World Bank's savings rate adjusted for changes in official foreign reserves; as can be seen from the subsequent table there are some countries in which the change of foreign reserves indeed has a notable effect.

- Greece has particular problems, namely a very low and declining genuine savings rate and for Italy, Portugal and Spain one also finds declining figures over time – much earlier than the start of the crisis in the respective country. Hence it would be useful to more closely monitor the genuine savings rate which can be an early warning indicator for economic crisis. The genuine savings rate is defined in a way which defines savings in line with a broader understanding of sustainability: Expenditures on education are included in the broader savings rate and with respect to depreciations not only capital depreciations are considered but also depreciations on the stock of natural resources (in addition there are a few other aspects which are included as can be seen from the subsequent figure). Maintaining the stock of physical capital and natural capital thus is an implicit goal in the concept of the World Bank.

Figure 3: Adjusted net savings rate of selected countries







The European Commission has relied so far on traditional indicators and is now considering a scoreboard approach. Whatever the merits of a scoreboard approach may be, the weakening of the European Commission in the period 2010/2011 – during the Greek crisis and the Euro crisis, respectively – raises strong doubts whether the Commission will be able to play a strong role in surveillance. An institution like the Commission with its weakened reputation and a weakened visibility during the sovereign debt crisis will hardly be able to implement a comprehensive surveillance. There is too much room for individual member countries to pursue their own hidden agenda and as the president of the European Commission has not publicly defended the interests of the people in the Euro area and the common interest against Greek and Irish political fraud it is unclear how the European Commission could restore its traditionally strong role in European integration.

The governance problems in the Euro area and in the EU will get even worse in the medium term as the economic divergence associated with the Euro crisis will raise the variance of per capita income across countries and this in turn builds an expectation that economic interests will become more heterogeneous in the EU; and this makes building consensus more difficult. The marginal cost of consensus will increase, the average reaction speed of Commission decisions and decisions of the European Council will reduce; and all this is happening in a world economy in which economic dynamics at the global scale is increasing. This bodes ill for the prospects of better pursuing EU interests in a period of globalization. At the same time the complex rescuing operations organized in the Euro area undermine democracy as parliaments in many countries had to take express decisions and since the whole system has become unnecessary complex. The negative welfare effect of the euro crisis is enormous and could soon compensate the benefits from the first decade of euro integration. This, however, is not an argument to let the euro area disintegrate – the cost of such disintegration would be enormous. One should, however, not rule that countries, which have sharply violated the rules of the Euro area, could be pushed to leave the euro area.

4. Pitfalls in Surveillance

Surveillance is the regular analysis of macroeconomic variables and key policy measures in countries. How good is surveillance, which in practice consists of analytical papers written by teams from the IMF, the EU or other international organizations or a mixture of organizations (e.g. Troika group which consists of the IMF, the ECB and the EU). Surveillance is useful for creating more transparency and for generating pressure for timely economic reforms; however, a system of surveillance should be professionally organized and this means that there should be external random evaluation of reports of major international organizations. This however is not happening. Subsequently we take a brief look at some IMF surveillance activities, which are largely believed to be the cream of the analytical crop.

With respect to Greece it is noteworthy that the IMF's Article 4 consultation report of May 2008 was quite optimistic that the country could continue output growth and achieve a balanced budget in 2010 – the official goal of government. However, on hindsight it is well-known that Greek's deficit-GDP ratio already exploded in 2009. Footnote 10 of the IMF Article 4 report of 2007 noted (IMF, 2008, p.16): "As Figure 3 shows, if real GDP growth dropped to 2 percent on average, the public debt-to-GDP ratio would rise to 98 percent by 2013, compared with a decline to 72 percent under the baseline scenario." The expected debt-GDP ratio for 2013 is in 2011, however, close to 160%. It is surprising how fast the Greek debt-GDP developments got out of control. Moreover, it is also surprising that the IMF pointed to Greek problems with international competitiveness and the high current account-GDP ratio, however, the IMF did not call for major short-term or medium-term corrections – mainly since the report pointed out that Greece as a euro zone member country would not have problems in getting international financing of such high current account deficits; and one may add: The refinancing of the foreign debt, however the latter has become a serious problem once market confidence has been shaken.

The first conclusions to be drawn concern surveillance and are twofold:

- Surveillance by the IMF is sometimes totally misleading and consequently, the quality of surveillance should be improved by ex post outside scientific evaluation of a randomly drawn large sample of reports (FSAP and Article IV in particular); results should be published in the internet and gross errors in reports must have consequences for those who have written the report.
- The spirit of IMF surveillance, which has been so misleading in several cases, is also found in the new EU procedures adopted in 2011, which brings strong reliance on peer reviews of countries. However, as the IMF case has shown lack of ex post probing of reports implies a serious quality risk in surveillance and this typically comes at high costs for the taxpayers.

1. In the future surveillance of economic developments and economic policy are two partly separate fields that could be composed as follows:

Surveillance/Actor	IMF	EU	Private Sector
Financial Sector	Financial Sector Assessment Program (FSAP) Art. 4 consultation	Financial Sector Stability Report in the euro zone by the ECB; national central banks publish report on national economy	Country rating Corporate rating
Fiscal Policy	Fiscal Policy Report	Sustainability report	Country rating Scientific analysis (occasionally)

5. Solving the Key Challenges in the Euro Zone

Stabilizing the Euro area can be achieved only if better surveillance and better implementation are combined with other reform elements; upgrading the Stability and Growth Pact is an important element of the overall strategy. The Stability and Growth Pact has been reformed in 2011 as the European Parliament and the Council and the Council of Ministers have agreed on new key principles:

- The excessive deficit procedure still started with a majority vote of the ECFIN, but measures suggested by the European Commission against a country in this procedure can no longer be refuted by the ECFIN in a single majority voting; rather a qualified majority vote is necessary to stop a Commission suggestion on the start of an excessive deficit procedure and the imposition of sanctions, respectively.
- The new Stability and Growth Pact has seen some improvements over the dismal state of the previous version of the Pact, but it is still not credible.
- However, the most important element necessary for better fiscal performance in the long run is still missing: There is a need to impose a mandatory surplus requirement in boom periods where the definition of a boom period should rely on Commission analysis in order to avoid incentives for national manipulations of certain statistics – countries achieving less than 0.5% of GDP as a surplus in a boom will automatically pay a fine of 0.25% of GDP unless the surplus is achieved at least within a delay of one year after the boom period. The key idea of the mandatory surplus is to shift the time path of the deficit-GDP period upwards so that the more general historical tendency towards excessive deficits in normal stages of the business cycles and in recessions is avoided (in its first decade as a euro member country Greece had high deficits even in boom periods!).
- It is recommendable that countercyclical fiscal policy be assigned to the supranational policy layer. Following the example of the US. This means that there should be no more deficits at the level of the euro member countries. Moreover, to have a critical minimum of government expenditures it will be necessary to shift part of infrastructure expenditures, military expenditures and tertiary education

expenditures as well as expenditures on the promotion of high technology to the supranational policy layer.

Fiscal Policy Coordination

How much fiscal policy coordination is needed in the Euro Area (and less so in the EU), respectively, depends on two critical issues:

- If the national policy layer is responsible for counter-cyclical fiscal policy there is a very strong need for coordination among Euro member countries.
- If the task of counter-cyclical fiscal policy is assigned to the supranational policy layer there is mainly a need to impose rules on member countries of the Euro Area that no deficits occur at the national policy layer – except in periods of natural disasters.

If parliaments and politicians, decide in favor of option A) one has to take into account two critical dimensions in a hypothetical fiscal policy club:

- The number of member countries – the larger the number of member countries the more complex will be the task of coordination. With 17 countries the Euro Area already consists of many members and as more EU countries are expected to join the Euro Area in the future the size of the group is likely to increase over time.
- The heterogeneity of member countries – in a heterogeneous group of countries, it is more difficult to achieve a consensus view than a group of homogenous countries: indeed, the euro countries are rather heterogeneous in terms of the debt-GDP ratio and per capita income.
- A large group of relatively heterogeneous countries can be coordinated effectively only if the rules of coordination are simple and the incentives for coordination are strong: Judging by these two criteria one may argue that the introduction of a European Semester – approved by EU member countries on 7 September 2010 - is a doubtful exercise.

The EU Semester begins with the Annual Growth Survey which consists of the European Commission's analysis with a twin focus, namely on EU perspectives in the field of the Europe 2020 targets and on key elements of an EU macroeconomic report (plus the joint employment report) which is then broken down into country-specific performance analysis and the respective policy recommendations. Member countries are expected to use the European Semester as a tool for ex ante coordination of fiscal policy and economic policy, respectively. The European Semester which starts in January of every year leads to recommendations of the European Council – based on the analysis and assessment of the European Commission – which can give country-specific guidance to countries which have policies and budget plans that are not in line with standard policy requirements. The subsequent scheme shows the key elements of the European Semester. While this approach is full of good intentions it is hopelessly complicated and very unlikely to deliver meaningful results.

The following box indicates a set of measures that are adequate to sort out the mess created in the course of initial crisis in Greece, Ireland and Portugal and the following mismanagement of the European Council.

Table 1: Stabilizing the Euro Area and Long Term Constitutional Options

Privatization in Greece and overcoming the Euro Crisis: The Greek sovereign debt crisis is serious. This debt crisis potentially undermines the stability of the whole euro area; while Greece is a relatively small economy the internationalization of banks and financial markets in the EU and worldwide implies that Greek debt problems could destabilize the whole EU. It is the responsibility of the Greek authorities and the democratic political system to find a way out of the debt crisis; at the same time Euro partner countries have devoted political energy as well as guarantees to enhance the stabilization process of Greece. The European Commission is also supporting the stabilization in Greece. If a country has excessive gross debt there is a natural requirement that government considers to which extent selling government assets can be part and parcel of a solution. In a serious debt crisis anything less than 50% of a sale of government assets would be not acceptable, as the principle of fairness would be violated. Debt restructuring also cannot be expected on a broader scale – and certainly not negotiations in the Paris club – if there are not very broad and sustained efforts in privatization. The EU has a rich legacy of successful privatization, which includes projects not only in western European countries but also particularly in eastern European accession countries.	**Task: Organizing conditional debt relief for Greece and pushing for broad privatization of the Greek economy**. According to the IMF December 2010 report on Greece the government assets of Greece are close to € 370 bill. Which exceeds the gross debt of Greece. In order to avoid inadequate fire-sale price and to bring about a long term supply-side push for growth it will be necessary to set up an international privatization agency in which the European Investment Bank and the EBRD as well as the government of Greece are active – privatization can start on the basis of the HERCULES Privatization Fund that should issue convertibles which can be place in private capital markets and with governments of EU countries; in early 2012 this could mobilize about € 100 bill. The voluntary debt restructuring envisaged on the July 21 meeting in Brussels is already a sign of debt relief for Greece, however, one cannot overlook that a hair cut on Greek debt is considered by capital market participants as a model for future restructuring of sovereign debt of other countries; e.g. long run government bonds of Italy lost about 20% in the weeks after the meeting of July 21 (2011) and interest rates on Italian bonds strongly increased immediately after July 21 – and slightly declined only after intervention in markets by the ECB two weeks after the Brussels EU summit. Hence there is every reason to support privatization in Greece. There is a need to put up enough experts in the HERCULES Privatization Fund; based on Eastern European experiences with privatization at least 50 experts should work on privatization. In addition dozens of investment banks should be involved in the privatization program, which should include voucher privatization for part of government assets, particularly in the electricity sector and some other parts of infrastructure.
Government Net Asset Position: The Greek debt crisis has shown how important	Task: to be organized at the level of EU member countries (national governments

it is to get a clear picture of government assets; EU countries thus should draw up a list of government assets – to be published in the internet – so that actors in capital markets and rating agencies benefit from enhanced transparency about the net debt position of countries in the EU.	and other policy layers, depending on country) **Impact: Calming international capital markets and encouraging privatization as well as economic growth**
Rating agencies: The work of the leading rating agencies in the years prior to the US Subprime crisis has been sloppy as has been emphasized in a report by the USSEC. There are also serious doubts about the Standard & Poor's downgrading of the USA in 2011 as figures e.g. on Germany's net government asset position published by S&P are wrong (see appendix)	**Task: Create a European Foundation on Rating** (in 2011) – based on governments of EU countries willing to fund the EFR which in turn would tender the rating to a team of scientific think tanks in Europe. **Impact: Improved quality of rating in capital markets**
Adequate incentives in New Stability and Growth Pact: No reform of the Pact is adequate which creates complex rules and fails to provide incentives that are self-enforcing. There is a need for a simple rule which requires that governments must achieve a budget surplus in boom periods – and if not there is an automatic sanction of 0.1 % of GDP in the first year and another 0.3% in the next year unless a surplus of at least 0.5% of GDP is established in the next year	**Task: for each Euro member country** Impact: Upward shift of the deficit-GDP path which amounts to lower long term (expected) debt-GDP ratio and hence lower real interest rates
Constitutional Option I: Debt Brake Oldest debt brake in Europe is the state of St. Gallen (1929) in Switzerland; regional debt brakes as well as the national debt brake have helped Switzerland to achieve a low debt-GDP ratio and to enjoy low interest rates. Against this background Germany, Spain and Portugal have adopted a national debt brake on the basis of constitutional changes in 2010/2011 and other EU countries may be expected to follow this model; the credibility of a debt brake is strong only if the debt brake is enshrined in the constitution – a debt brake should focus both on the national and the regional policy level since otherwise a strong political pressure for shifting expenditures within the political system will take place	**Task: for several Euro member countries still to be considered** Impact: creating a favorable investment climate for government bonds in the euro area and hence generating low interest rates
Constitutional Option II: Euro Political	Task: Political dialogue in all EU member

Union and Supranational Euro Bonds The crisis management during the Greek debt crisis/euro crisis was very complex and given the fragility and speed of financial market no responsible politician is likely to repeat crisis management in the euro area on the basis of the existing institutions and rules. Historically the creation of the euro and the European Central Bank has been part of a broader debate about a future political union. A Euro Political Union (EPU) is necessary for the viability of economic and monetary union. EPU can be established by those countries of the Euro area that are willing to embark on a Euro Political Union, which would have a supranational government, based on Euro Community Parliament. EPU will place truly supranational Euro bonds in the market and thus give international investors the opportunity to effectively buy bonds of one of the most dynamic and prosperous areas in the world economy The European Central Bank should conduct open market operation exclusively on the basis of supranational Euro bonds. National governments should be allowed to shift national debt – 20% of GDP – to the supranational government layer along with government assets equivalent also to 20% of GDP: the national bonds shifted to the supranational level will be exchanged into supranational euro bonds. Thereby immediately a very liquid Euro bond market will be created. A debt brake at the national – and regional – policy layer should avoid that national debt-GDP ratios would increase any further.	countries. Convent of euro countries. Creation of a Euro Community Constitution.

6. Conclusions and Policy Innovations

The conclusions at the end of this analysis are straightforward. Enhanced surveillance and more coordination can be useful to stabilize the euro system. However, these two elements are insufficient to really achieve a sustainable monetary union. From a theoretical perspective one may point out that the Maastricht Treaty suffers from three shortcomings:

- The key elements of the optimum currency area are ignored. The convergence criteria do not consider the degree of labor mobility nor the degree of diversification of production nor the degree of openness (in the OCA literature the respective criteria are dubbed the Mundell criterion, the Kenen criterion and the McKinnon criterion). It is remarkable that the internal labor mobility in Japan, the USA and Canada is relatively high while it is low in the EU and the euro area, respectively.
- The Maastricht Treaty does not even require that the candidate country has achieved a surplus in the past decade - during at least one boom period - even once.
- The simplest sanction against excessive deficits has not been considered so far: It would be wise to adopt a formula according to which any excessive deficit ratio should cause a relatively high cut in the allocation of future EU structural funds: One may recommend a rule which says that EU funds earmarked for the country will be exactly be cut – on a present value basis – by the amount of the excessive deficit plus an additional cut which stands for an adequate fine. This rule along with a surplus requirement – along with automatic sanctions – would help to avoid the broad current tendency to excessive deficits.

Better surveillance and more coordination can be achieved on the basis of better governance structures in OECD countries and international institutions working more effectively:

- It may be emphasized that the IMF has one pillar whose analytical quality is apparently weak and dangerous, namely part of the work in the field of Financial Sector Assessment Programs. Random external quality checks should be applied in the future.
- An important short-term task for a fiscal transparency reform in the EU concerns a project in which all governments would put all key figures on government assets and the budget on the table – thereafter regularly update on the basis of common statistical principles and with a common software are. All EU member countries should use for national and regional budgets one common software and common categories in the field of expenditures and taxation; and the supranational authorities should have the right to fully access all budget data of EU member countries so that large forecasting errors in national (or supranational) deficit-GDP figures can no longer occur. This is the only way to avoid “deficit fraud” of the type, which has occurred in early 2009 in Greece.
- It also will be necessary to adjust the Target 2 system; SINN/WOLLMERSHÄUSER (2011) have pointed out that the Target 2 System of the ECB allows Euro countries to get implicit access to liquidity for intra-Euro Area imports of goods or financing of capital exports. The German Council of Economic Advisers has pointed out in the Report of 2011/2012 that the correlation between national current account deficits and the Target 2 System is rather weak. Nevertheless it seems that the ECB’s settlement system has to be adjusted in a way that no hidden loans can be obtained by any Euro member countries: The ECB rules should be modified and this would include a revision of the rules for the use of Target2 so that the Target2 system is no longer a source of a shadow

international debt machine for countries with high indebtedness and apparently urgent needs to investment massively abroad.

- The most important long run task is the creation of a political euro union with a Euro Parliament and a Euroland Government, which, of course, could place supranational government bonds in the market. This would be the exclusive right of supranational government except for a plafond of up to 30% of national GDP that comes from exchange of covered national bonds into supranational bonds. This process should start immediately on the basis of national bonds equivalent to 20% of national GDP and an equivalent value of government assets would back these bonds so that there is no bailout associated with creation of supranational euro bonds. Countries under the EFSF Rescue Umbrella can put not more than the equivalent of 20% of GDP, only once they come out from the EFSF umbrella (or successor institution) can they also take covered government bonds of an additional 10% of GDP for exchange into the supranational bonds. The maximum national debt-GDP ratio in the new Stability and Growth Pact will be 30%. S€Bs can be used for quantitative easing operations, while the ECB will buy national bonds only within a very specific framework.
- There is a need for a constitutional debt brake in every country of the Euro zone. No deficits should be possible which in the long run go beyond 30% of GDP.
- In the long run one should consider and establish a Euro Political Union with a Euroland government and a Euroland Parliament; this government should have the right to place uncovered supranational bonds in the market, namely up to 10% of GDP and it also would be responsible for countercyclical fiscal policy. The new EU would consist of the EPU and the remaining EU countries.

Thus one has a policy option that allows to quickly stabilizing financial markets. It remains, however, a task for the European Commission and the European Parliament to put Ireland and Greece before the European Court of Justice. Deficit speeding as political fraud is unacceptable in a Community, which is based on joint responsibilities, common rules, and the rule of law and common interests in key fields.

- The only two alternatives to stop countries from a devastating high deficit-GDP ratio is to introduce a general rule according to which deficits in member countries cannot be permanent and to thus follow the Swiss model of fiscal restraint and budget control through a so-called debt brake which was adopted in 2001 at the federal level; the oldest European debt brake was adopted at a regional level, namely in the Canton (region) St. Gallen in 1929; in addition there is a need to regularly generate a budget surplus and sanctions for not achieving a surplus have already been proposed (WELFENS, 2010; 2011).
- The second element for avoiding “deficit crimes” would be based on common software used in all EU member countries’ fiscal administration and then rely on standardized automatic fiscal information sharing among all member countries and the EU so that Commission Services definitely could avoid a political crime such as that which occurred in the deficit outbreak of Greece in 2009. A useful sanction against excessive deficits could be that at least half of all payments from EU funds

to the member country would be stopped within one year and at least for two years (contracts based on EU funds then would have to have a related clause).

- Additional sanctions in case of serious case of further exceeding of the 3% deficit-GDP ratio should come from putting 1% of GDP in the form of gold reserves into an escrow account of the European Investment Bank and this gold would be sold if no surplus would be achieved within two years. The proceeds would be invested in EU investment projects where funds, however, could not be spent in the sinner country.

The propensity of ignoring reality and an inability to adjust the economic system in a way that can be understood and controlled are two worrying aspects of western market economies at the beginning of the 21st century. As China becomes increasingly powerful, some leaders are seriously wondering how the western market economies could win the systemic competition against the socialist command economies of the Soviet Empire in the 1990s – only to face 20 years later a bitter taste of deep crisis.

The way forward and out from the Euro crisis is through two elements:

- Consistent crisis management and a broader role for the ECB. Under president Draghi the ECB has injected a three year liquidity package in December 2011 which has visibly helped to bring down interest rates for Spain and Italy as well as other countries.
- Building a political euro union in the long run.

The creation of a political euro union would bring also the creation of supranational euro bonds that in the long run would be the only bonds in which the ECB should intervene in secondary markets.

FINK/STRATMANN (2011) have shown that a large asymmetry of countries/political entities is bound to create relatively large problems in the field of excessive deficits and induced fiscal redistribution. The conclusion to be drawn for a stability-oriented Community is that one should try to make political actors in the European Council more homogenous, e.g. by encouraging several small countries to regularly get organized as an internal policy club.

The most important conclusion is that only a Euro Political Union – with a Euro Parliament and a Euro Government – lets expect clear responsibility and rapid crisis management. The current system of 17 countries meeting for “helicopter meetings” in Brussels is ineffective and inefficient; moreover, the decisions-making process is opaque and not really in line with principles of democratic responsibility. If the European Parliament does not become a stronger actor in the medium term it could easily fall victim to the Euro crisis; voter turnout in European elections have decreased dramatically, the role of the European Parliament is almost invisible in the crisis. It is necessary to shift infrastructure expenditures, military expenditures and some other elements to the supranational level so that counter-cyclical policy could be conducted exclusively at the supranational level in the future. The supranational level should have its own tax revenue sources where environmental taxes, a top-up on national income taxes and a tax on financial speculation could be elements of a distinct revenue mix of the supranational policy level.

The best way to achieve efficient fiscal policy and coordination would be a Euro Political Union that would, of course, include a fiscal union. The key elements are shown in the subsequent graph. A debt brake at the national level would be required, namely in the national constitution; only if the debt brake is an element of the constitution could individuals bring violations directly before the national court and this in turn will put strong pressure on political decisions-makers to stick to the rules of the debt brake.

Figure 4: Alternative Modes of Fiscal Centralization and Coordination

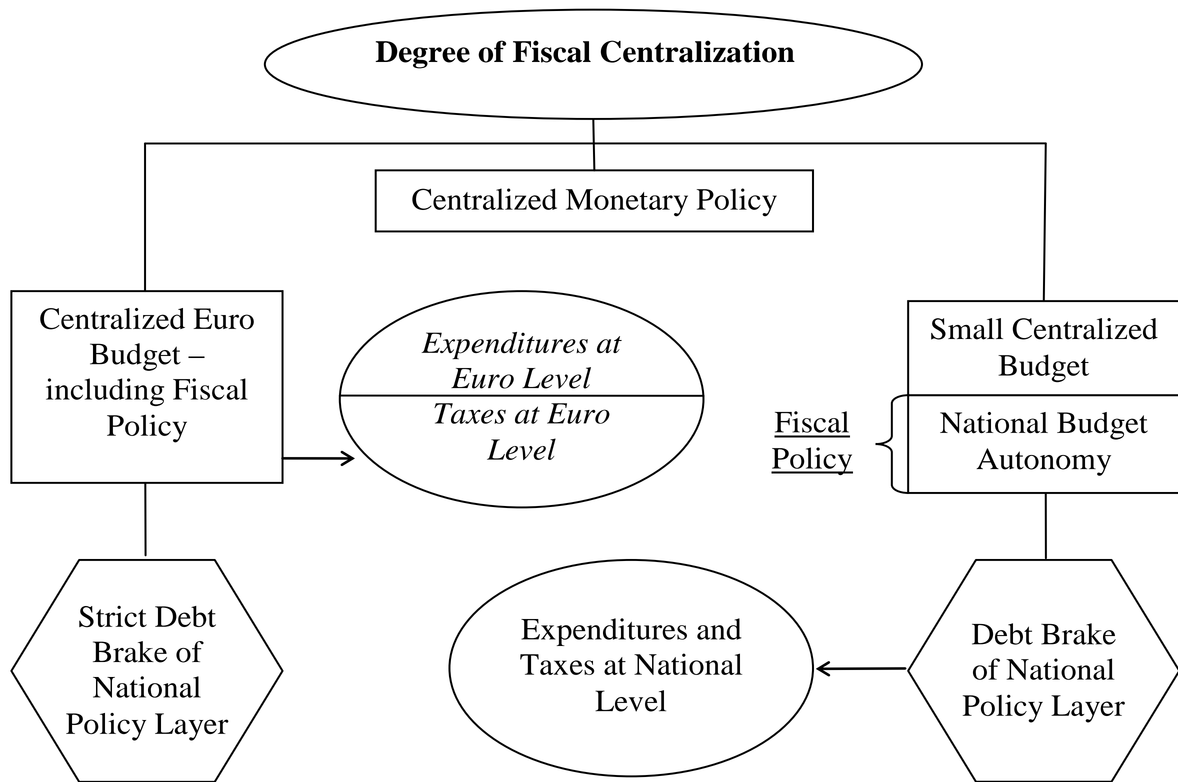
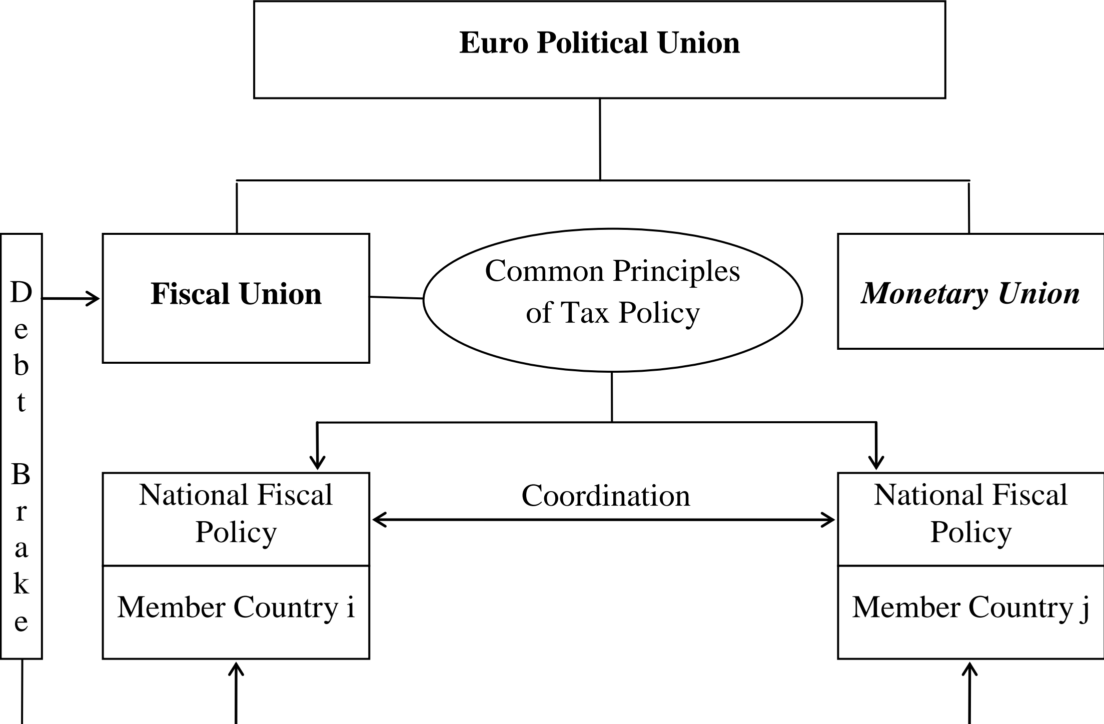


Figure 5: Coordination in Euro Political Union



The only way to avoid deficit shocks (of the type which Greece committed in 2009) is to introduce a common budgeting software in all EU member countries and in the EU itself and then allow the Commission to look into the digital budgeting process of member countries. Indeed, the digital age should allow all citizens in all countries to watch the key budget process and key fiscal items on the Internet. This can create the needed transparence to avoid any major fraud. Euro countries whose deficit forecasts are grossly inadequate should lose the vote in the ECB/ESCB for five years.

There is a considerable weakness of the government of the Euro zone, which has been obvious at least since the first problems in implementing the Stability, and Growth Pacts have emerged – that is around 2003/2004. The widespread view that there are severe macroeconomic imbalances between the Euro zone members concerns mainly, the current account-GDP ratio and debt or deficit ratios. As regards current account imbalances it is mainly the task of countries with non-sustainable deficits to improve the relative unit labor cost position: Adequate adjustments could concern both nominal wage growth and productivity increase. As regards productivity growth Eastern European countries have shown considerable progress in the 1990s; cohesion countries should be able to learn from some of the progress made in certain Eastern European EU countries.

The approach of the EU to reinforce fiscal and macroeconomic coordination and surveillance is useful in a basic perspective, however, there are inconsistencies and also one should not expect that implementation under the current institutional structures will be strong. One should be informed that the speed of reforms in the Euro zone is much too slow to really impress capital markets and lack of focus on clear reforms also undermines prospects for stabilization.

The measures introduced (European semester and the so called six package) are only a partially decisive step to narrowing the macroeconomic imbalances. The whole system is too complicated and a complicated system can, of course, neither easily be implemented nor will it give clear signals to the capital markets.

While it is necessary to convey clear signals for enhanced fiscal discipline to capital markets it will be doubtful if all EU countries would shift into a parallel consolidation program. The best signal for markets is the introduction of a debt brake in the national constitution. Euro countries also have a responsibility for taking into account the effects of policy intervention on other EU countries, including Eastern Europe – e.g. the Eastern European EU countries would face serious problems in the case of a Euro area recession.

7. Policy Innovations for Stabilizing the Euro Area

Improving the monitoring process in the EU is a challenge, however, the Euro crisis has revealed broader problems of monetary union. The crisis management of the European Council has not been effective; including the problem of haircuts for Greece in 2011 that was imposed against warning from the ECB – the risk that confidence in bonds markets would be undermined was not taken seriously. In late November 2011, the prices of credit default swaps have been rising for almost all Euro area countries and liquidity in the interbank markets had dried out in almost all Euro countries except for Germany. The Belgish-French-Luxumbourgian Dexia bank was the first big EU bank from those that had been rescued in the Transatlantic Banking Crisis that needed new rescue funding in late 2011. From an analytical perspective macroeconomic analysis should be refined and revised in several ways (Welfens, 2011).

The Greek haircut was taken by markets as a model for other high debt countries, therefore, the Greek debt reduction of €37 billion expected from the 21% haircut in July 21 went along with some expected €360 billion of wealth losses for Italian bond holders if a 20% haircut were to be applied (the haircut was increased to 50% in October 2011); this is a remarkable and strange benefit-cost ratio and this has destroyed much of the confidence in Euro capital markets. Moody’s wrote on May 2011 (Moody’s, 2011) in a publication: “On contagion to other sovereigns: Other distressed euro area sovereigns would face the prospect of a long-term denial of access to capital markets and, at the same time, lower expectations of support over the medium term from the rest of the euro area. (…) A confirmation that the euro area was willing to let one of its members default would inevitably cause investors to reassess the limits of the euro area support. That, together with the assumption that other weak euro area sovereigns might be more likely choose to take similar steps to Greece – particularly if a Greek restructuring were perceived as ‘orderly’ – could result in Ireland and Portugal, and perhaps stronger countries such as Spain and even Italy and Belgium, finding market access considerably more expensive.”

The temporary Euro rescue fund EFSF is running out of steam even before plans for leveraging the fund could be implemented: As the EFSF could issue bonds for 4.4% in late

November 2011, which was more than 2% above the interest rate for German Bunds, the capital markets are signaling that they do not have a lot of confidence in a stable AAA rating of the country group with top rating behind the EFSF: Finland, Luxembourg, the Netherlands, Germany, Austria and France – hence the EFSF is no vehicle for mobilizing big rescue sums, it has become an indicator of the growing lack of confidence in "Euro bonds markets".

Moody's had called the AAA rating of France into question in November 2011. Any multilateral rescue fund set up in the Euro area suffers from a double problem: The countries that have rallied behind the fund might suffer a considerable downgrading and there is no credible lender of last resort for an individual country or a country group in the Euro area. The only credible institution left in the EU – also bringing indefinite liquidity and strong solvency -is the European Central Bank; however it has not been very active so far.

The ECB feels at odds when intervening in the bonds market as this could be interpreted in a way that undermines its commitment to low inflation and its stability reputation, respectively. So far, there is a virtual Euro bonds market since governments of Euro member countries are placing national bonds onto the market on an individual basis. The switch to a truly integrated Euro bonds market with a uniform interest rate across countries could basically be achieved by establishing a Euro Political Union; but this will take time. The German government is trying with partner countries to change the key rules in the Euro Area, but again this will take time and one can only warn Berlin to rely too much on market forces – read: ever more increasing interest rates for Italy and Spain – as a means to stimulate policy reforms in countries facing a national debt crisis. The financial markets in late 2011 are extremely fragile and once strong momentum builds up in these markets to bet on a collapse of the Euro Area, policy makers will be totally unable to control the dynamics of the Tsunami emerging. The fact that the British supervisory authority FSA has called on British banks in November to consider extreme developments as an element of risk management reflects a quasi-official warning from the UK that time for political games in the Euro Area is running out.

The stabilization bridge necessary in the interim is to start an ECB program that would place supranational ECB Euro bonds on the market. There could be a program where the ECB acts as a true lender of last resort by buying national Euro bonds of all Euro countries in exchange for ECB Euro bonds. Each government could exchange debt of up to 50% of its GDP. Countries with a debt-GDP ratio below 60% could exchange even up to 60% of its GDP into ECB bonds which would have even higher liquidity than traditional Bunds of Germany since the ECB is a credible lender of last resort behind the new supranational "quasi Euro-federal" bonds. The abnormal situation that the average Euro interest rate exceeds that of the US or the UK – both having a lender of last resort, while so far the Euro Area has no such lender – would thus end and the Euro Area would be stabilized. At the same time, it is necessary that the European Council stops its dangerous interventionism, which was full of good intentions but has led to poor results; the Council is not effectively controlled by any parliament and the lack of timely discussion might partly explain the poor results.

Apparently no international treaty has to be changed if the ECB wants to place Euro bonds on the market, which might involve the EFSF in order to get explicit legitimacy. This

activity would come under the heading of the task that the ECB should contribute to the stability of the financial system. It should be noted that both the central bank in China and in Korea have issued their own bonds. Structural reforms in many Euro countries remain, of course, urgently necessary.

A potential problem of ECB Euro bonds is that interest payments have to be offered and it is not fully clear whether incoming interest payments on the stock of debt in ECB's books will be sufficient to cover the necessary interest payment. If the ECB buys roughly ½ of the existing Euro bonds, which it would exchange for supranational ECB bonds, the interest to be paid on about €4000 billion supranational debt would be about €120 billion (the expected interest rate on ECB Euro bonds is 2-3% while the interest rate on Euro bonds guaranteed and issued by Euro governments jointly would have to carry an interest rate of about 6 % if one considers the benchmark of the 4.4% the EFCF paid in November 2011; governments in the Euro Area have lost much credibility in capital markets in 2011 while the ECB has remained fully credible). This potential problem, however, could be solved in two ways: The ECB could get a guarantee from the EFSF, namely insurance against the case that insufficient interest payments are accruing – read: one of the Euro countries goes into partial default; and it could get reassurance from private reinsurance companies. The ultimate option is that the ECB acts as a lender of last resort that can print as much high powered money as needed to pay off the interest and principal on the ECB € bonds. Banks should get privileged exchange of Euro bonds so that new supranational risk-free ECB € bonds would be their preferred safe assets – with zero bank equity weight under prudential supervision rules. The ECB should start the new program quickly. The proposed asset swap is neither a bail-out nor is the ability of the ECB to control the money supply adequately undermined, rather the new truly common supranational interest rates will reinforce the ECB's ability to conduct monetary policy and use transmission mechanisms in a traditional and effective way.

It would be wise to carefully implement a program with ECB €bonds placement, while not distorting the yield curve in the Euro area. At the same time, adequate constitutional debt brakes should be adopted in all Euro countries. The Euro zone's unsolved stabilization problem is undermining recovery in the UK, the US and part of Eastern Europe. There is a high likelihood that unsolved government debt crises in Euro countries will lead to a new banking crisis and a massive recession. Governments in Europe and North America – some of which already seem to be 'over borrowed' – would not have much room to maneuver in fiscal policy and bank recapitalization. Hence the ECB should issue supranational Euro bonds on the basis of a broader agreement with national governments of the Euro Area, respectively.

Implications of Multiple Equilibriums for Adequate Stabilization Strategy

The Euro crisis management is rather confusing and the European Council – not controlled by a parliament or critical discussions – has made many doubtful and inconsistent decisions in 2011. The EU Council of December 8 made doubtful results because the move towards a fiscal union could not be implemented within the revision of the Lisbon Treaty – the UK did not want to participate in this whole project and demanded special derogations in the field of financial market regulation. As the EU partner countries did not want to yield to British pressure, the Euro 17 countries plus nine other countries decided that they

would embark upon a separate new treaty on the principles of a fiscal union. However, it is unclear which rules will be relevant for deficit control in the future as there should both be the Lisbon Treaty – with Article 126 and its focus on deficits and debts – and a new treaty on principles of a fiscal union. Another problem concerns the role of the IMF, whose capital basis EU countries want to reinforce while the US is apparently quite reluctant to give additional funds to the IMF.

As rating agencies, S&P and Moody's, have put Euro countries on watch in December 2011, the problem of high interest rates will play a critical role within the next few months. The high interest rates for Italy and Spain are largely due to the strange double Greek haircut decision for which the German government had pushed for unclear reasons. While the first haircut of July 21 might be defendable to some extent, the decision to adopt a 50% haircut in October 2011 is extremely doubtful as it suggests not only that the value of government bonds of EU countries could fall very strongly, it also makes clear that the decisions of the European Council cannot be trusted (in the form of the Euro group). Instead of making a clear and well-founded decision – in this case referring to private sector involvement and the Greek haircut– and sticking to it, the heads of the Euro member countries have revised decisions within a few months and one gets the impression that the Council's agenda and decisions were two steps behind instead of providing leadership with at least one step ahead. The Merkel government has emphasized that a strategy of making small steps would be the right way to make progress with respect to solutions of key problems. In Berlin, politicians initially had big plans for a very big rescue umbrella but government had weak analytical foundations right at the beginning in 2010 and would rather follow the advice of rating agencies that would pursue a distinct strategy based on its own thorough analysis.

At the end of 2011 it is clear that the rescue umbrella EFSF is too small to accommodate the potential needs of countries such as Italy and Spain. The latter has a debt-GDP ratio, which is below that of Germany, but the interest rate to be paid for long-term debt is much higher than that of German bonds. Interest rates of 6% forced Ireland and Portugal to go under the EFSF rescue umbrella; the 7% that had to be paid by Italy in late autumn is not sustainable for Italy in the long run and as soon as capital markets anticipate that Italy will be unable to get lower interest rates in the medium- and long term, the country will face default. This is a potential equilibrium towards which the German-Franco crisis management and Greek contagion effects are leading and in the end this could destroy the Euro zone. A second equilibrium solution is the setting of a low interest rate that can be brought about by ECB intervention. The ECB could guarantee all countries with a minimum primary surplus that it would buy at a maximum 5% interest rate despite the amount of bonds the respective countries are offered. This would stabilize Spain and Italy and the banking systems in the Euro Area; this strategy is adequate since Spain and Italy are not insolvent unless there is an overshooting of interest rates by 7% (or above) resulting in a vicious circle of downgrading certain countries takes place, higher CDS prices and rising interest rates are accepted by indifferent policy makers. To control a potentially strong liquidity expansion, the ECB should create its own ECB euro bonds that would require some backup by Euro countries. They would need to make sure that the ECB is able to pay both the required interest payments on these bonds and the principal.

The apparent approach of the German government in 2011 was to push Italy and Spain towards desirable reforms through the pressure of market forces and very high interest rates. However, this strategy is very risky amidst a very nervous market environment. The German government and its Euro partners might soon face a Tsunami in the financial markets, whose seed has been planted by certain governments in the monetary union. At the bottom line, it is clear that there are very few viable euro stabilization options and certainly short-term adjustment and crisis management should go along with a clear view on required long-term structural reforms in many EU countries.

The role of the ECB is to make sure that price stability is achieved and that economic policy of EU countries is broadly supported. While it might be unavoidable that the ECB intervenes in bonds markets this cannot be a general strategy because it would undermine the stability reputation of the ECB and contribute to higher inflation in the long run. A quantitative easing program could only be introduced on the basis of supranational Euro bonds. The ECB's policy stance should be more flexible, the more successful "financial repair" and the more credible fiscal consolidation policies are. In the long run – with a Euro political union some tax harmonization will be needed as well as own tax sources for the community. If Euro countries should not be able to develop greater willingness for policy cooperation, including the field of taxation, the Euro integration cannot make progress.

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