

From sovereign debt to sovereign default?
On the conditions of governmental (il)liquidity and the proposals for dealing with sovereign debt crises

Johannes Schmidt*

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Abstract

The increase of sovereign debt and the crisis in the Euro zone led to a public discussion about the possibility of a sovereign default. But it did not become clear when a government default happens and what are its causes. This paper shows why the criteria for a default in the private sector are not applicable to the government sector. Furthermore, by means of looking at the development in the Euro zone, it is shown that for a government defaulting on its debt the amount of sovereign debt is not crucial; the essential question is whether a government is able to borrow in its own currency and – if that is not the case – the amount of international debt of the whole country, that is, its net international investment position.

The crisis on the market for government bonds in the Euro zone hit primarily those countries with high negative international investment positions regardless their amount of government debt so that the events on the government debt market – especially the sharp increase in interest rates – can be seen as merely a symptom showing the general lower appraisal of debtors in countries with high negative international investment positions. This leads to important conclusions for European economic policy, especially on the reasons for introducing European bonds or introducing a European treasury.

These considerations shed also new light on the idea of a mechanism for sovereign debt crisis resolution which has been proposed at the beginning of the century for sovereign debt crises in emerging markets by the IMF and has been reconsidered in the midst of the European crisis. It is shown that these proposals are insufficient as they do not take into account the interplay between private and public indebtedness and are too narrowly focused on government debt.

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* Karlsruhe University of Applied Sciences
Department of Management of Engineering
Moltkestrasse 30
D-76133 Karlsruhe
phone: +49 (0)721 / 925-1981
fax: +49 (0)721 / 925-1947
e-mail: johannes.schmidt@hs-karlsruhe.de

1. Introduction

Due to the difficulties of the southern European countries (Greece, Italy, Portugal and Spain) and Ireland – the so-called GIIPS countries – the problem of sovereign default became a popular topic in politics and the press: during the negotiations about a “haircut” for Greece (or its creditors, respectively) many journalists wrote about a looming Greek bankruptcy (e. g. in Germany LACHMANN 2012). In that article, the author also talked about “established criteria of economics”; according to these, the Greek state is, in effect, bankrupt already. But he fails to say what these criteria are – and actually, there are no “established criteria” for the bankruptcy of a state.

Therefore, in this paper the phenomenon of a national bankruptcy or insolvency will be investigated more closely. The second section will take a brief look at the economic literature treating subjects related to national insolvency. The third section investigates the question whether the – more or less clear-cut – criteria for the bankruptcy of a company can be transferred to the state level. It will be shown that reasons for the bankruptcy of a company are not very useful when discussing national bankruptcy especially because many consequences of insolvency in business do not apply to states. Therefore, in the fourth section it will be shown – using the example of the countries of the Eurozone – that there are other conditions that make it possible or even probable that a state suspends serving its liabilities. The essential problem for countries in danger of being exposed to sovereign debt crises is their large negative net international investment position, not the level of government debt. The fifth section draws some conclusions for European economic policy especially concerning the reasons for introducing European bonds or introducing a European treasury. Furthermore, the sixth section looks at some recent proposals for resolving sovereign debt crises and shows that they are insufficient as they do not take into account the interplay between private and public indebtedness, are too narrowly focused on government debt and disregard the international indebtedness of a country.

2. Sovereign default in the economic literature

Looking at the literature about sovereign debt and sovereign default¹, one can see that criteria for deciding when a state is bankrupt or insolvent, are practically not discussed. The starting point of the literature is the problem that the possibilities of a (foreign) creditor of a sovereign state to enforce his or her claims (e. g. via courts) are limited. Therefore the authors try to answer the question why creditors are willing to lend to a sovereign state in the first place and why the state pays back or at least services its debt. EATON/GERSOWITZ (1981) use a model with reputation: assuming on the one hand that taking loans on the international capital mar-

¹ The paper by PANIZZA/STURZENEGGER/ZETTELMEYER (2006) gives an overview.

ket is the only way for a state to smooth output fluctuations, and on the other hand that a default of the state on its liabilities leads to a permanent exclusion from international capital markets there is an incentive for the state to pay back loans; knowing this, potential creditors are willing to lend to the state.

The restrictive assumptions of the models were relaxed in later papers; models were developed that pointed to other reasons why states are willing to pay back loans taken out: the possibility of “punishing” the defaulting state by confiscating goods outside the country or by refusing to grant loans for trade finance (SACHS/COHEN 1982; BULOW/ROGOFF 1989; FERNANDEZ/ROSENTHAL 1990). Recent models take into account the “collateral damage” that could result for the indebted country in case of a sovereign default (and so make sure the state’s willingness to pay): a default might signal that the state’s financial position is worse than previously thought or that future output is lower than expected; that could lead to an outflow of capital, lower investment, or financial crises (CATAO/KAPUR 2006, SANDLERIS 2008, CATAO/FOSTEL/KAPUR 2009).

Against the background of this literature, it might not be surprising that the question which criteria one can apply to decide whether a state is bankrupt does not play a prominent role. But it is instructive to take a closer look at that problem because in doing that one can show the conditions more clearly on which a sovereign default has probably to be faced.

3. Bankruptcy of a company vs. bankruptcy of a state

There are two more or less clear-cut criteria for the bankruptcy of a company: over-indebtedness and illiquidity. Over-indebtedness means that the value of the company’s liabilities is higher than that of its assets, so that it has a negative equity. Illiquidity means that the company cannot procure the needed means of payment so that it can no longer pay its bills. One has to keep in mind that both facts can exist independently of each other: on the one hand, it may be impossible for a company to sell its assets or borrow against them so that it runs out of means of payment and gets illiquid – even if the company’s equity is undoubtedly positive; on the other hand the company can be over-indebted and have a negative equity but it is nevertheless able to pay its bills, because somebody is – for whatever reason – willing to finance the payments (e.g. via loans).

Is it possible to confer these criteria to the state? And what would be the consequences if one (or both) of these criteria were fulfilled?

To avoid confusion, it is important to keep in mind the difference between “country” and “state”. A *state* consists of the government or administration (including all administrative units on all levels) of a country, whereas a *country* consists of private households, companies

and the state – the three macroeconomic sectors used in national accounting.² To avoid misunderstandings, the terms *government sector* or (*general*) *government* will be used.

A sovereign default shall be defined as situation, in which the government sector does no longer fulfill debt obligations. This situation is definitely on hand when due interest or redemption payments are no longer provided. Sometimes (REINHART/ROGOFF 2009, p. 61 ff.) the restructuring of existing debt (including changes of the terms of payment and of interest rates) is also called a sovereign default, but this is not a clear-cut judgment: in the private sector, it would certainly be incorrect to call a debt restructuring that is negotiated between creditor and debtor a default even if the restructuring is motivated by the fear of a possible future default. A government can also negotiate a restructuring; of course one has to admit that a government is able to enforce a change of conditions, because it can credibly threaten to suspend its obligations partially or completely – and it is unsure at best, if the creditors are able to take court action successfully against such a suspension. Nevertheless this paper confines a sovereign default to a partial or complete suspension of debt service – in which debt means an explicit debt obligation due to a bond emitted or a loan taken out by the government.

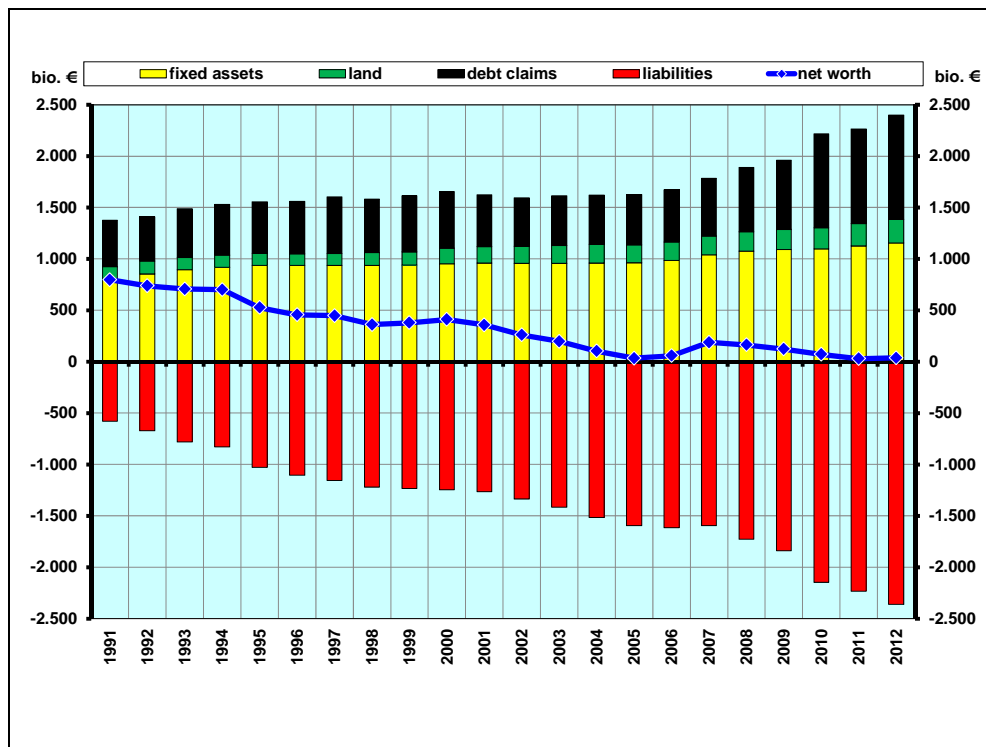
3.1 Over-indebtedness of the government sector?

To apply the criterion of over-indebtedness to the state a wealth account of this sector has to be compiled. Recently, such accounts for the three macroeconomic sectors have been made for Germany. In principle, these accounts list non-financial and financial assets on the one hand and liabilities on the other. Subtracting the liabilities from the assets brings about the sector's net worth. The non-financial assets include produced and non-produced assets. Produced assets consist mainly of tangible fixed assets (dwellings, other buildings and structures, machinery and equipment) as well as intangible fixed assets like patents. The non-produced assets include land and subsoil assets and water resources. The financial assets (and liabilities) mainly consist of currency and deposits, securities and loans.³

² „State“, „government“ and „administration“ will be used interchangeably in the text.

³ Finding the correct value of assets, especially if market prices are not available, can be a difficult undertaking. For details, see DEUTSCHE BUNDESBANK (2008), especially p. 33-37 and 42-43.

Figure 1: Balance sheet of the German state



Source: Statistisches Bundesamt/Deutsche Bundesbank (2013), p. 8f.

In 2012, the wealth account for the German general government looks like this (figure 1): the state's non-financial wealth adds up to just under 1.4 trillion Euro, mainly consisting of buildings (1.1 trillion Euro) and building land (over 200 billion Euro). The governments financial claims⁴ add up to 1 trillion Euro, whereas liabilities account for about 2.3 trillion Euro. Therefore, the state has a net financial wealth of about -1.3 trillion Euro. It follows that the state's net wealth is quite small, only about 37 billion Euro – and it has decreased over the past years: in 1991 it amounted to nearly 800 billion Euro. The increase in government debt was not matched by an equal increase in non-financial assets (via net investment). So in principle it cannot be excluded that one day the state's net wealth will be negative so that – just similarly to a company's insolvency – in that sense the state could be called over-indebted. But would that be a cause for concern?

In order to judge that problem, one has to look at the state's balance sheet a little bit more closely. On the one hand, the government's assets are understated: “owing to a lack of statistical data, a key part of non-financial assets, especially in the form of undeveloped land, which plays a major role in the government sector, has not been included in the calculations” (DEUTSCHE BUNDESBANK 2008, p. 39). On the other hand, “only the credit and capital market liabilities [...] are recorded on the liabilities side of the general government balance sheet” (DEUTSCHE BUNDESBANK 2008, p. 39); the so-called implicit government debt – especially

⁴ When talking about government debt, almost always only the gross liabilities are mentioned whereas the government also has financial claims.

the present value of entitlements in the statutory pension system – is not a part of the balance sheet. But if this “implicit debt” were included one should also include the present value of tax revenue on the asset side. However, both values depend largely on discretionary political decisions so that whatever net worth is favored could be generated; therefore it is reasonable not to include these items in a balance sheet.

But for the sake of the argument, let us assume that the problems in assessing the correct net worth of the government sector are solved and that a negative net worth has been assessed for the government sector with the same certainty as for a company: does this over-indebtedness mean that the government is bankrupt or insolvent? It becomes apparent that this is not a reasonable statement. For what would follow from that? Clearly not much: it is barely imaginable that a creditor of the government files for bankruptcy. And even if he does: what should happen in such a case? Should the government’s fixed assets be liquidated to satisfy the creditors (on a pro-rata basis)? Should the government itself be liquidated so that society lives on in a state of anarchy? All these consequences are blatantly absurd. But thereby, the stated over-indebtedness of the government sector would be a non-event: nothing could be constituted that is comparable to the insolvency of a private actor, if only for the reason that such an over-indebtedness *per se* calls into question neither the existence nor the ability to pay of the government.

3.2 Level of Debt and Ability to Pay

As the criterion of over-indebtedness is not very helpful the criterion of ability to pay or liquidity comes to the fore. On what condition is public debt too high so that the government is no longer able to pay the due sums of interest and amortization or that potential creditors – who know about that risk in advance – refuse to roll over existing debt or to grant additional loans? In order to judge the sustainability of public debt one does not look at the absolute level of debt, but debt in relation to a country’s annual economic performance, measured by GDP – as GDP is the government’s source of tax revenue that is needed for servicing its debt.

Since DOMAR did his numerical modelling (DOMAR 1944) it is well-known that even in case of a permanent annual deficit the debt-to-GDP ratio does not necessarily rise permanently, but reaches a boundary value (if certain conditions are met). However, DOMAR’s calculations do not answer the question which boundary value one should strive for to preserve the government’s ability to pay.⁵ But recent events in the Eurozone have shown that there is no clear-cut connection between the level of public debt (or the debt-to-GDP ratio) and financial difficulties.

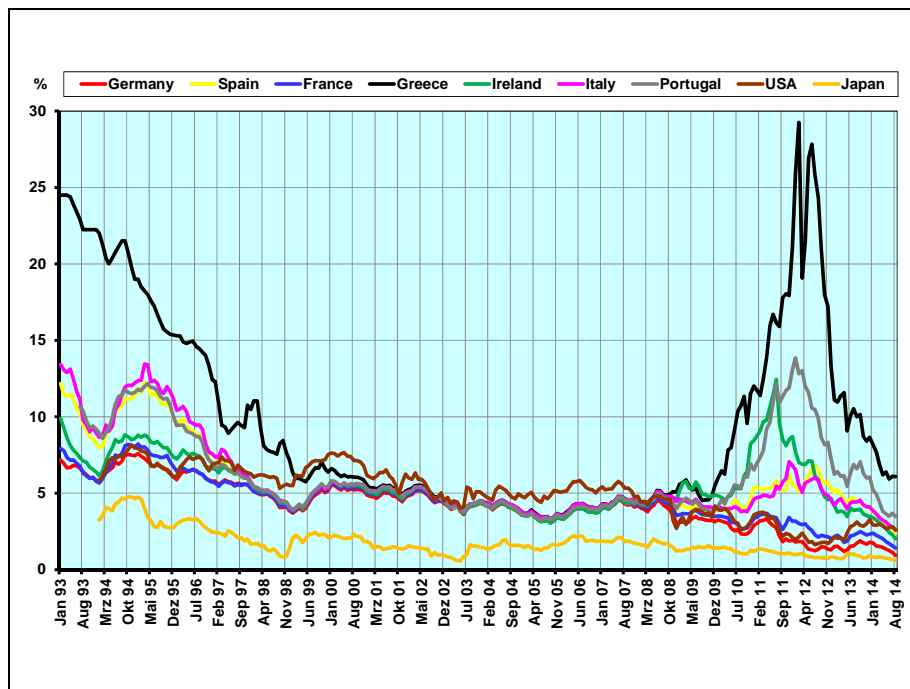
⁵ The research by REINHART/ROGOFF (2010) seemed to suggest a threshold value of 90%, beyond which GDP growth turns negative. ROGOFF/REINHART did not explicitly say that the causality runs from the debt-to-GDP ratio to growth but were frequently interpreted that way. HERNDON/ASH/POLLIN (2014) investigated the data used by REINHART/ROGOFF and showed that they left out the data of five countries (apparently by accident), left out certain data points willfully, and did not take into account the differing number of observations for each country when calculating average growth rates. Correcting these problems made the threshold value of 90% disappear.

4. Conditions for Governments' Ability to Pay Using the Example of the Eurozone

4.1 Public Debt and Interest Rates in the Eurozone

Figure 2 shows the current yields on ten-year government bonds of different countries: apart from the GIIPS countries the current yields in Germany and France are shown, furthermore the USA and Japan.

Figure 2: current yields on ten-year government bonds



Source: European Central Bank⁶

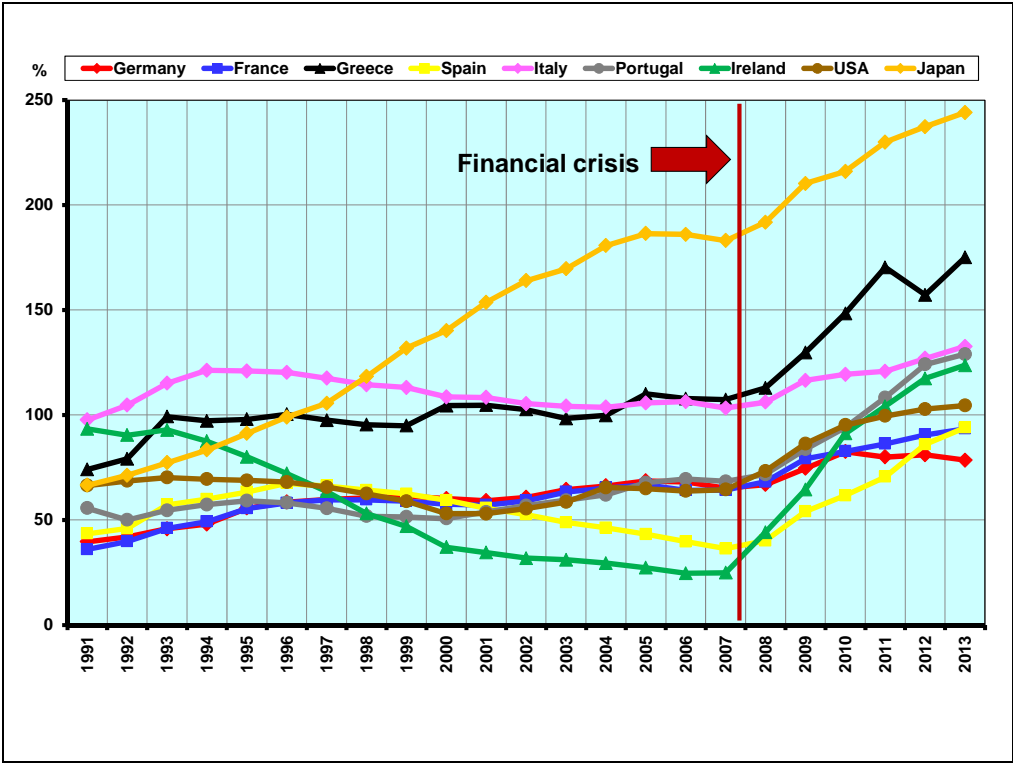
In the years before the start of the Euro it could be observed that the current yields on government bonds aligned to one another so that it didn't actually matter to an investor whether he/she bought a German, a French or a Greek bond. In the course of the financial crisis these yields grew apart again, in some cases dramatically: whereas the yield on German bonds decreased to a historically low level, the yields on bonds emitted by the governments of the GIIPS countries rose strongly; as the ability of these governments to service their debts seemed to be threatened by this development they had to revert to the help of the European Union. There is no doubt that this spread of yields was due to the fear of investors that a government default loomed so that they tried to reduce the share of such bonds in their portfolios.

But the crucial question is whether this fear of a government default (and the increase of yields caused by that) is simply due to a high level of government debt (or high debt-to-GDP

⁶ <http://www.ecb.europa.eu/stats/services/download/html/index.en.html>

ratio). Figure 3 shows the debt-to-GDP ratios for the same countries as in figure 2. On the one hand the general increase of government debt in the wake of the financial crisis is clearly visible: the measures for stabilizing the economy and the financial system that were financed by credit led to an increase in the absolute levels of debt and also of the debt-to-GDP ratio in nearly all Western countries. On the other hand it can be seen that there are countries where increasing levels of debt are accompanied by an increase in interest rates (e. g. Greece), but there are also countries with high debt-to-GDP ratios where interest rates did not react at all or even decreased despite the rise of the debt-to-GDP ratio (e.g. Germany or the United States). The most extreme example is Japan: despite a debt-to-GDP ratio of nearly 250% the current yield on government bonds is only about 1%; the Japanese government doesn't have any problems in finding creditors granting bargain loans, and the investors don't seem to fear a default. A comparison between Germany and Spain is also illuminating: whereas the Spanish debt-to-GDP ratio *decreased* between 1996 and 2007 and reached the same level as Germany's only in 2012, there were indeed worries that the Spanish government could default on its bonds, but such worries never existed in the case of Germany.

Figure 3: General government debt (% of GDP)



Source: AMECO database⁷, own calculations

⁷ http://ec.europa.eu/economy_finance/db_indicators/ameco/, version of 2014-05-05.

4.2 The Significance of Borrowing in Domestic Currency

As the level of debt (in absolute numbers or in relation to GDP) does not give a clear hint whether a government will get into financial difficulties, other factors have to be looked at. Especially two factors play an important role: first, can a government borrow in the domestic currency, and second, how large is the foreign indebtedness of the whole country (not only of the government of the country)?

To begin with, let us look at the possibility of borrowing in the domestic currency. In today's world economy all currencies are paper currencies, as obligations to convert a bank note into gold (or another valuable good) on demand do no longer exist. Without such obligations – and without a system of fixed exchange rates – central banks do not have any liquidity problems: they can create means of payment without any physical or technical restriction.⁸ To create means of payment a central bank either grants a credit to a commercial bank and receives collateral in return (primarily government bonds) or buys securities (again primarily government bonds) on the capital market directly. The means of payment the central banks hands over to the borrowing commercial bank or pays the purchased securities with, have been created out of nothing.

Furthermore, the central bank has another important task: it acts as the “lender of last resort”. In a financial panic mutual borrowing – especially between commercial banks – practically ceases. In such a situation, the central bank has to calm the panic by providing additional liquidity and granting credit amply to prevent liquidity crises and collapses of banks. As the central bank is the only institution on financial markets that does not have a liquidity problem it is also the only one that can take this task. As in normal times, the provision of additional liquidity means purchasing securities (or taking them as collateral for loans to commercial banks). The reason for using government bonds is this market's size and high liquidity; furthermore, interest on government bonds give an important benchmark for the general level of interest rates.

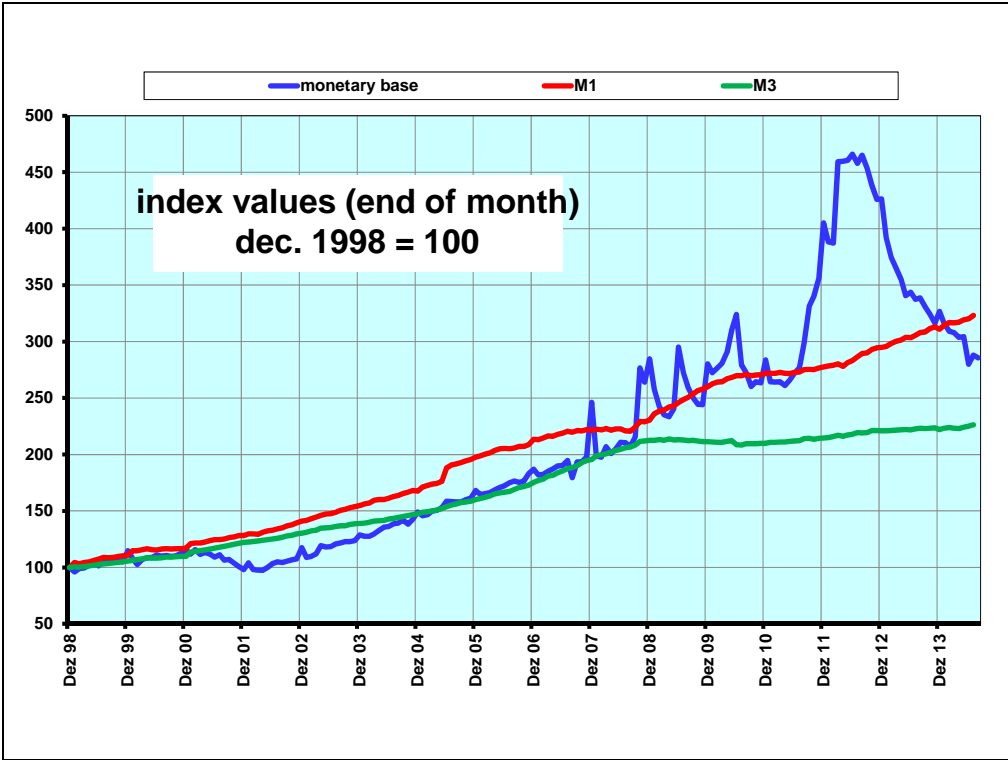
If a financial panic breaks out in a country whose government issues bonds in the domestic currency which induces investors to sell those bonds and leads to an increase in interest rates, the central bank will counteract this development – even if it is independent of directives from the government. Therefore, the governments of countries like the United States or the United Kingdom will never get into financial difficulties: every creditor of the American or the British government knows for sure that the respective central banks will stand by to purchase the bonds. Therefore, a financial crisis starting on the market for government bonds is all but impossible in these countries; the financial crisis of 2007 and afterwards started on the market for securitized subprime mortgage loans.⁹

⁸ The central bank has to make sure, that the creation of means of payment does not lead to inflation but this legal-economic requirement is not the same as a technical or physical restriction

⁹ BRUNNERMEIER (2009) overviews the events in the first months of the financial crisis.

Some people are worried that the intervention of the central bank might lead to inflation. This possibility cannot be ruled out, and Germany’s experience after World War I is the most prominent historical example of a large increase of the money supply leading to hyperinflation. But it has to be taken into account that, firstly, between 1919 and 1923 more than 50% of the German national budget was financed by borrowing (FELDMAN 1997, p. 578) and, secondly, there was full employment and full use of capacity at the beginning of the 1920s; the unemployment rate was at 1.6% at the end of 1921 (FELDMAN 1997, p. 218). In such a situation, a debt-financed increase of public expenditure can lead to inflation very easily. In contrast, when the central bank has to act as lender of last resort the economic situation is characterized by a decrease of aggregate demand and cuts on expenditures. As a rule, the central bank will not create additional money but will just substitute the missing creation of money and credit of the commercial banks and meet the higher demand for liquidity. This is confirmed by the development of monetary aggregates in the Eurozone during the financial crisis: whereas the monetary base increased heavily, M1 and M3 showed no exceptional developments – that is to say the additional liquidity stayed within the banking system.¹⁰

Figure 4: monetary aggregates in the Eurozone



Source: monthly report of the ECB, own calculations

¹⁰ DE GRAUWE (2011), p. 4-6, also covers the problem if a central bank can cause inflation by acting as a lender of last resort.

But if a government can borrow in a foreign currency only¹¹, liquidity problems can arise as the government has to procure the currency its debt is denominated in. In the end, this is only possible if the country obtains foreign exchange proceeds (via net exports); these enable the government to service its debt. Otherwise, the government will get into financial difficulties.

4.3 The Significance of Foreign Indebtedness

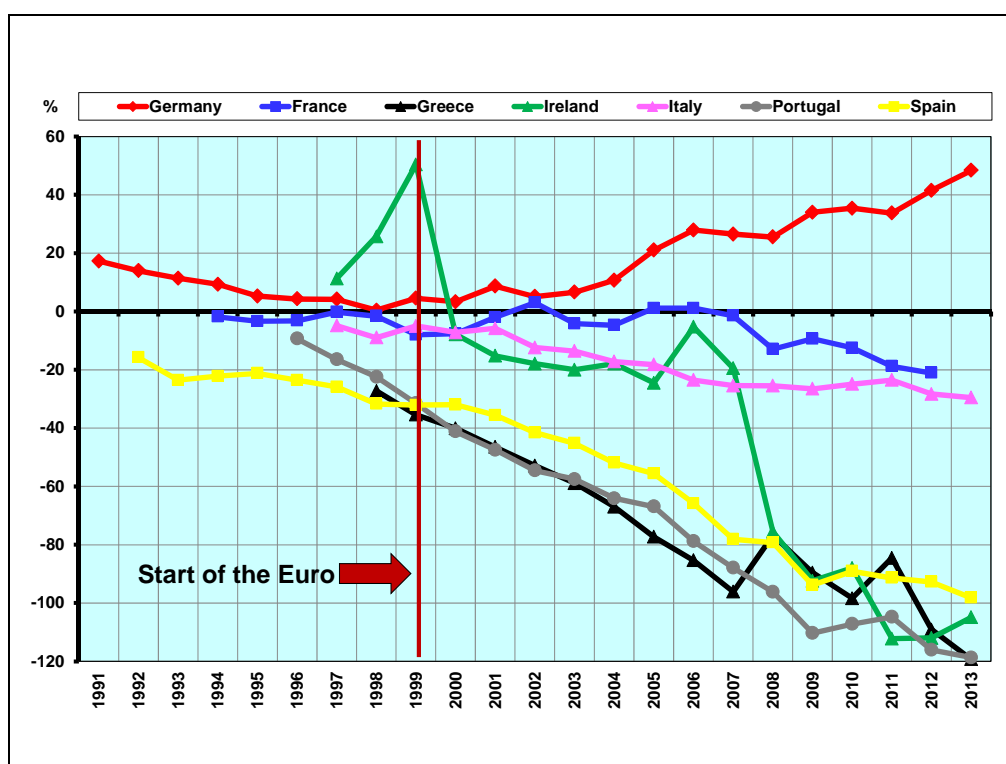
The role of foreign indebtedness can also be shown using the example of the Eurozone. From the point of view of any single country in the Eurozone, the Euro is a foreign currency: for the central bank of a country in the Eurozone does not have the authority to act as it sees fit in a (financial) crisis and – as lender of last resort – to create unlimited liquidity; decisions concerning this matter fall to the ECB.

But the fact that the Euro is a foreign currency for each member country of the Eurozone does not explain why the GIIPS countries were hit severely whereas other countries like Germany were not: the debt-to-GDP ratio cannot be the explaining factor as Germany should have been affected in a manner similar to Spain if this ratio had been decisive.

Here the (net) foreign indebtedness of the countries (not necessarily the foreign indebtedness of the respective governments) comes into play: it becomes apparent that the crisis on the government bonds market has hit the countries that have a high or recently heavily rising net foreign indebtedness. This can be seen by looking at the net international investment position to check whether a country as a whole is a net creditor or a net debtor vis-à-vis the rest of the world. Figure 5 shows the net international investment position of Germany, France, and the GIIPS countries.

¹¹ This can be due either to the fact that the country does not have a currency of its own, but uses the currency of another country as a means of payment or that the government does not have access to central bank credit – due to legal restrictions – and investors are willing to grant credit only in foreign currency as they distrust the domestic one.

Figure 5: Net international investment positions (% of GDP)



Source: Eurostat¹²

Germany has enlarged its position as a net creditor in the past 10 to 15 years: in 2004 it amounted to only about 10% of GDP; in 2013 it reached nearly 50%. In contrast, the position of the GIIPS countries has deteriorated steadily, primarily due to current account deficits.¹³ To avoid misunderstandings it has to be stated clearly that, in principle, a country can have current account deficits permanently (and therefore spend more than it earns); but a net debtor position that steadily rises (as a proportion of GDP) will become problematic, as at some point markets will – for whatever reason – start to doubt that the country will be still able to service its foreign debt. Historic experiences show that this will not happen in a continuous and steady process (with smoothly and stepwise increasing interest rates that enable the country to adapt), but via abrupt reversals of market valuations leading to sudden increases of interest rates and an equally abrupt deterioration of financial conditions or even the impossibility to roll over existing debt. And yet, the net indebtedness vis-à-vis other countries does not need to be caused by the general government, but it can also be the result of the private sector borrowing heavily – a point emphasized by KOO (2014).

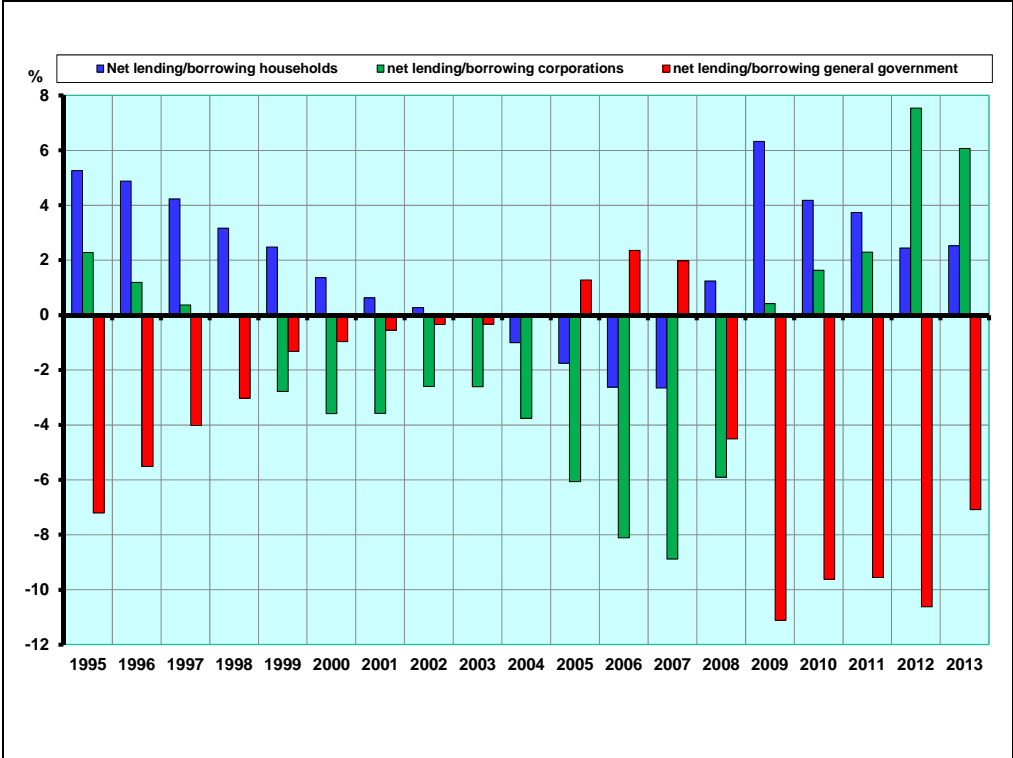
In the Eurozone, the most telling example for such a development is Spain. Figure 8 shows that the net financial balance of the Spanish national budget improved steadily until the outbreak of the financial crisis; in 2005-2007 the balance was even positive. On the other hand,

¹² <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&plugin=0&language=en&pcode=tipsii10>

¹³ In the case of Ireland, (book) losses on foreign wealth might be the dominating reason.

the net financial balances of private households and corporations were negative since 2003 and 1999, respectively. In sum, this resulted in a permanently negative current account balance since 1999. When the financial crisis broke out in Europe in 2008, the private sector reduced its demand and also tried to reduce its liabilities; in this situation, the government stepped into the breach leading to a large negative financial balance of this sector.

Figure 6: Net financial balances in Spain (% of GDP)



Source: AMECO database, own calculations

But the so-called public debt crisis and the disparate development of interest rates only began in 2009: the financial crisis induced investors to check the risks in their portfolios and to change their composition; additionally in 2009, the Greek government stated to have used wrong data about the public deficit. As the investors were not sure whether the ECB would act as a lender of last resort, they reduced their engagements in countries considered as risky and problematic and also sold government bonds of these countries leading to a heavy increase in current yields. This increase, in turn, nourished further doubts about the ability of governments to service their debts in the future, leading to further bond sales and a further increase of interest rates. Even if governments are willing to service their debts they can lose their ability to pay simply because investors believe they do, so that the governments are no longer able to roll over existing debt or only by accepting exorbitantly high interest rates, that

cannot be summoned up in the longer run.¹⁴ Therefore, the development on the market for government bonds is not primarily caused by a high government debt – it was not very high in Spain at the onset of the financial crisis – but it is virtually the symptom showing the overall deteriorated assessment of Spanish debtors, including the Spanish government. The rational core – if one is willing to assume that such a core exists – of this deteriorated assessment is the high net foreign indebtedness; for this is the common ground of the countries in the European Monetary Union that were confronted with rapidly deteriorating financial conditions and were forced to revert to emergency measures of the European Union. On the other hand, Germany’s government was assessed to be a risk-free debtor despite a debt-to-GDP ratio similar to Spain’s – and this can be accounted for by Germany’s large net creditor position.¹⁵

5. The further development in the Eurozone

On July 26, 2012, MARIO DRAGHI said in a speech that the ECB is willing “to do whatever it takes to preserve the Euro” (DRAGHI 2012). That speech was interpreted as a signal that the ECB is willing to act as a lender of last resort on the government bond market. Subsequently, the current yields of government bonds of the GIIPS countries decreased substantially.

As already shown in section 4.2, there is no need to worry about inflation due to the intervention of the central bank. Even a loss of the central bank resulting from its engagement is much less problematic than is often assumed: on the one hand, a central bank cannot avoid making profits in its normal day-to-day business so that losses in one or more years can be (more than) compensated by profits in other periods; on the other hand, even in case of continued losses and even in case of a negative equity caused by these losses the central bank would still be capable of acting as it cannot be illiquid in its own currency. Therefore, there is no need to compensate a central bank’s loss by payments from the national budget that would burden the tax payer (JORDAN 2011, p. 5-11).

Moreover, a central bank can avoid an illiquidity of an affected government and, with it, a loss of the central bank just by intervening. It is often argued that a central bank should only intervene in case of a liquidity crisis, but not in case of a solvency crisis, but this distinction is practically impossible; one can even argue that the practical impossibility of this distinction necessitates the intervention of the central bank: if one could easily distinguish between illiquidity and insolvency it could be left to the financial markets to finance the illiquid but solvent actors (DE GRAUWE 2011, p. 9 f.). Furthermore, the differing debt-to-GDP ratios and the possibility of a government to increase its revenues by increasing taxes show that it is practically impossible to determine a level of debt that is objectively unsustainable.

¹⁴ DE GRAUWE (2011a) analyses this mechanism and the importance of expectations in detail. Furthermore, the role of Credit Default Swaps (CDS) must also be taken into account as they allow to speculate actively for a government default – and make it more likely. Cf. SCHULMEISTER (2012), p. 390-393.

¹⁵ This still leaves open the question why this change in assessments happened suddenly and was not the result of a gradual process. But this leads to the problem of (ir-)rationality of financial markets that is not treated here.

The intervention of central banks on the market for government bonds also makes sure that there is a security that does not generate high returns but is considered as safe by investors: government bonds, at least bonds issued by the governments of countries with the most important world currencies, were considered as riskless assets that generated a moderate return only. G. L. S. SHACKLE said about these assets (SHACKLE 1966, p. 268): “[T]he practical necessities of life drive us to accept some things as unquestionable: sunrise and sunset, eventual personal dissolution and the payment of due interest by the British government.” The existence of a riskless asset seems to be an important condition for a smooth working of the capital market (INTERNATIONAL MONETARY FUND 2012). After the Greek haircut in 2012 this certainty vanished, and only MARIO DRAGHI’s aforementioned speech more or less established it again.

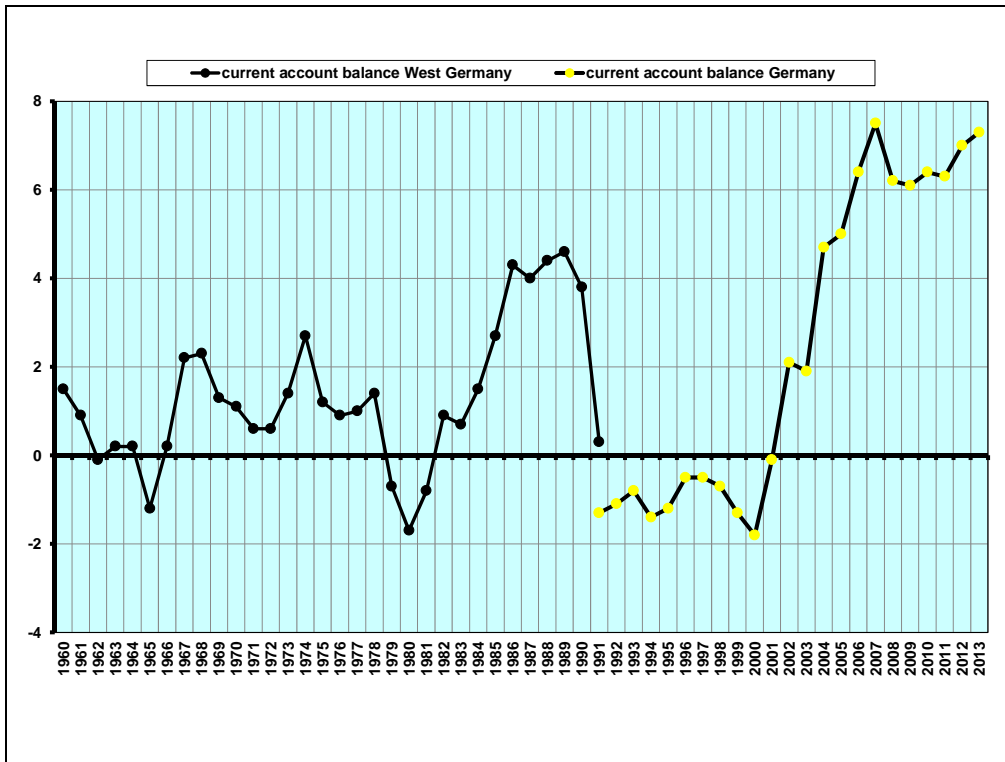
These considerations are also relevant for the discussion about a (partial) collectivization of government debt of members of the Eurozone: The ECB as a genuine European institution does not have a fiscal counterpart; its intervention on the government bonds market is only a second-best measure resulting from the fact that European bonds do not exist so far. If they did, the ECB’s intervention could be restricted to these bonds. It is often objected that European bonds must not be introduced as they would weaken the responsibility of the national governments. But this objection has to be turned around: only if liquid European bonds exist satisfying – through their implicit guarantee by the ECB – the need for a safe asset one can abstain from backing the bonds of national governments.¹⁶ This would be analogous to the situation in the United States: the Federal Reserve backs the bonds of the central government only, but not the bonds of states or municipalities.

But the intervention of the ECB is insufficient insofar as it cannot change the deeper causes of the crisis in the Eurozone: the divergence of the net international investment positions of the member states. Therefore, political action has to correct the surpluses and deficits of the current accounts. But many political actors and commentators still ascribe the current account surplus of Germany to the high quality of German products and Germany’s high productivity. But this explanation is insufficient as the quality of German products is a longer-term phenomenon and cannot explain the high export surpluses since the beginning of the 21st century: figure 7 shows that high current account surpluses are a phenomenon of the 1980s (due to the appreciation of the US-Dollar) and the last decade. Furthermore, the productivity increases in Germany since the beginning of the European Monetary Union are not exceptional; that can be shown by looking at the productivity increases¹⁷ in the member countries of the Eurozone until the beginning of the financial crisis (figure 8).

¹⁶ There are several suggestions how European bonds could be introduced: the proposal for so-called “Blue Bonds”, guaranteed by all members of the Eurozone (DELPLA/V. WEIZSÄCKER 2010); the foundation of a European Monetary Fund emitting Eurobonds (SCHULMEISTER 2012); the foundation of a European Treasury financing public investment within the Eurozone (BIBOW 2013).

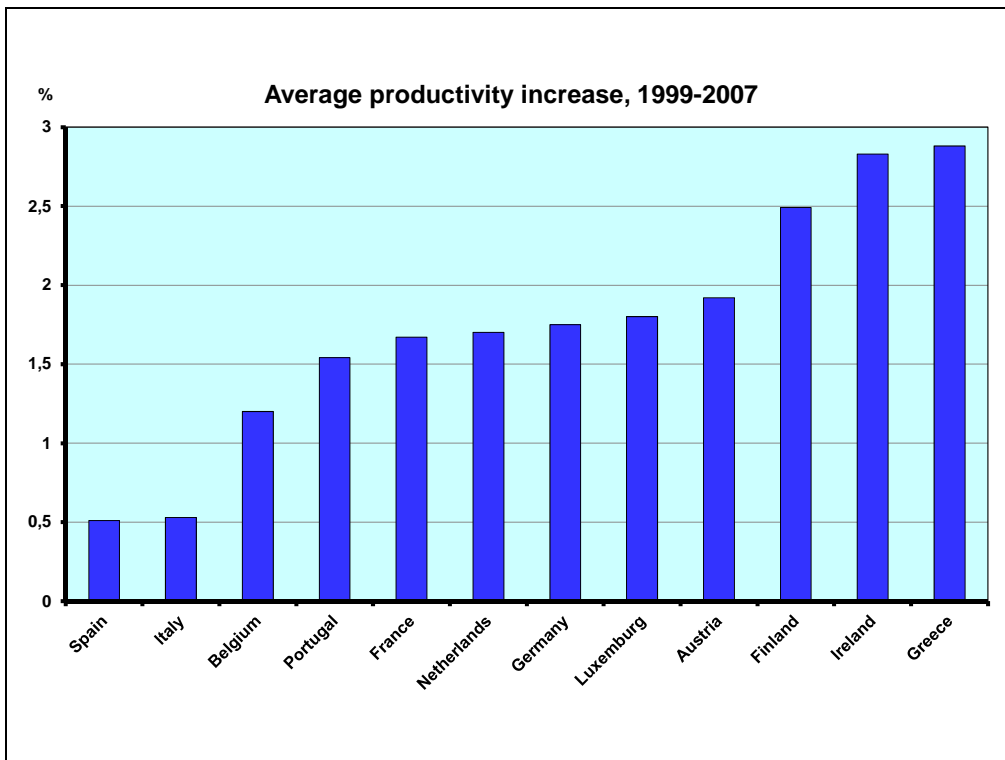
¹⁷ measured by the annual average increase of real GDP per working hour between 1999 and 2007.

Figure 7: German current account balance (% of GDP)



Source: AMECO database, own calculations

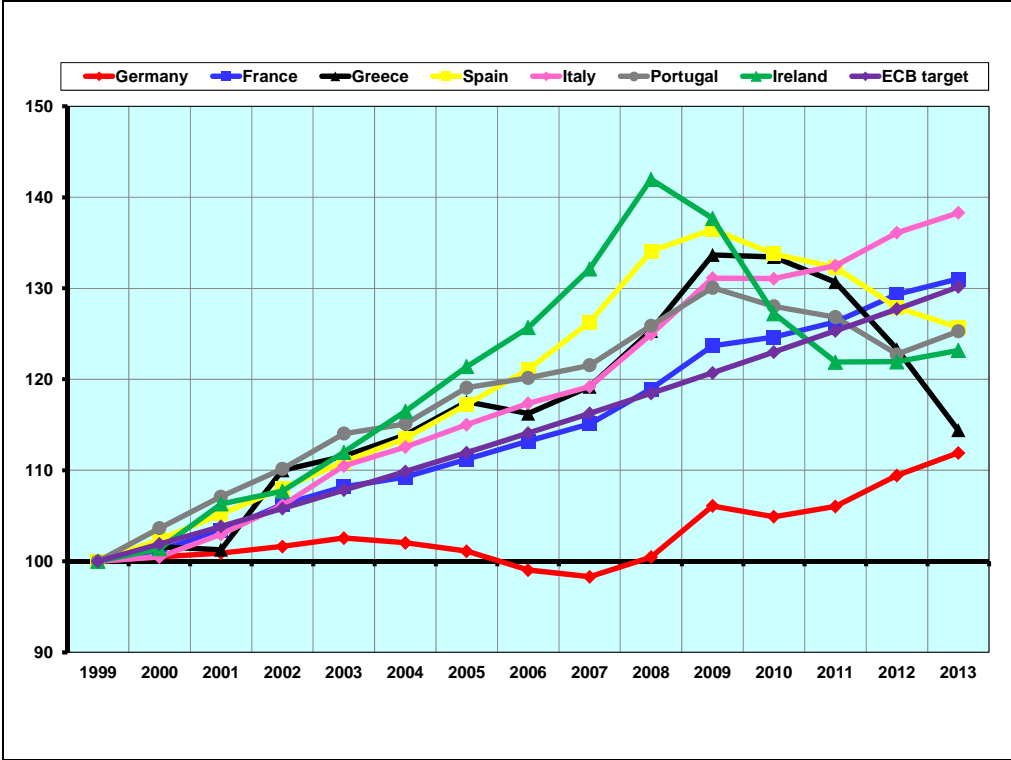
Figure 8: Productivity increases in the Eurozone countries



Source: AMECO database, own calculations

In contrast, the low wage increases in Germany were an important reason for the development of the current account imbalances: German unit labour cost increased far less than in other European countries (figure 9). As unit labour cost are a central factor in determining the price level and (nominal) depreciations are no longer possible in a monetary union, this explains the current account imbalances to a large degree.

Figure 9: Unit labour cost in the Eurozone countries (1999 = 100)



Source: AMECO database, own calculations

But it is short-sighted to demand from the deficit countries to adapt their unit labour cost to the German level: this means absolute wage cuts and was practiced in the Southern European countries in the last years, as can also be seen in figure 9. But this “adaptation” is more or less necessarily accompanied by recession or even depression: e. g. Greece’s GDP decreased by about 23% since 2007.¹⁸

In contrast, one has to take into consideration that the members of a monetary union have to have more or less the same inflation rate to avoid cumulative gains and losses of competitiveness. The ECB’s inflation target can serve as a guideline: below, but near 2% (the line in figure 9 is based on a target value of 1.9%); the same applies to increases in unit labour cost. The comparison of the Eurozone countries shows that the GIIPS countries have labour cost increases above 2%, but Germany’s were markedly below 2%. Therefore, it is not justified to hold responsible the countries in crisis only; Germany’s responsibility has to be emphasized

¹⁸ DE GRAUWE/JI (2013) also show that austerity in Europe is counterproductive.

similarly at least. This becomes especially clear if France's development is looked at: France stucked nearly exemplarily to the 2% target, but is nevertheless confronted with a deterioration of its net international investment position – and the discussion about its competitiveness has intensified in recent months. If deflationary measures on the part of France – presumably to increase its competitiveness – are to be avoided higher increases of unit labour cost in Germany and, resulting from that, an alignment of Germany to the proposed development path of unit labour cost (and inflation) is of crucial importance.¹⁹

6. A sovereign-debt default mechanism for the Eurozone?

At the height of the financial crisis ideas came up for establishing a mechanism for a controlled sovereign default and a subsequent restructuring of sovereign debt. The most prominent one was the proposal issued by the Bruegel Institute in Brussels (GIANVITI ET AL. 2010).

The authors start with three sources of uncertainty for investors related to sovereign-debt problems (GIANVATI ET AL. 2010, p. 8 f.):

- The first one is uncertainty about the willingness and ability of a distressed government to service its debt; as the power of a government to tax its citizens is the main source of revenue used for debt service new information about the ability to tax can change the risk assessment of government bonds.
- The second one is uncertainty about the behavior of other bondholders; this refers to the mechanism of self-fulfilling predictions about a looming crisis described in section 4.3. Additionally, it is about the risk of a hold-out by a group of investors that have bought a large part of government bonds at low prices and then refuse to agree to a restructuring of the sovereign debt because they hope to be paid out in full.
- The third one is uncertainty about the extent of financial assistance from other members of the Eurozone, from the EU as a whole, and from the ECB. Due to the decisions of the ECB, this kind of uncertainty has been reduced drastically.

The proposed sovereign-debt default mechanism aims at reducing the second and the third uncertainty. It wants to make sure that sovereign debt restructuring is started as early as possible so that investors' losses are reduced to the necessary minimum and that the government whose debt has been restructured can get the necessary financial breathing space to perform its functions.

The authors acknowledge the special nature of a sovereign default (GIANVITI ET AL. 2010, p. 23 f.): in contrast to a private company the state cannot be dissolved, its assets cannot be liquidated and the creditors cannot receive ownership of the state as this would be a contradic-

¹⁹ FLASSBECK/SPIECKER (2005) emphasized the importance of German wage policy at an early stage already.

tion to democracy itself. Therefore, as was already shown in section 3.1, insolvency – meaning the liabilities are higher than the assets – is difficult or even impossible to declare. Furthermore, maximizing the payout to creditors cannot be the aim of a sovereign debt restructuring mechanism as the functions of government still have to be performed. In order to avoid catastrophic fire sales of government bonds by investors and to organize an orderly restructuring of unsustainable government debt the proposed mechanism has four elements (GIANVITI ET AL. 2010, p. 24 f.):

- A formal way to initiate the debt-resolution procedure, whereby the initiative should come from the indebted government. Opening the procedure would stop immediately all debt services and there would be a stay on all litigation of creditors seeking repayment.
- A mechanism to prevent a minority of bondholders to exploit the majority by refusing to agree to a debt restructuring: About two thirds of the bondholders should be able to outvote the minority so that negotiations can be started and an agreement can be reached that is not to be challenged in court.
- A mechanism to conduct negotiations – a task that should be assumed by a neutral, politically independent body.
- A rule for the provision of fresh credit to the government in financial distress, be it from the EU or other members of the Eurozone.

To fulfill the main objective – an orderly restructuring of unsustainable government debt – the authors set out the following principles that should guide the design of the restructuring mechanism (GIANVITI ET AL. 2010, p. 26 f.):

- The mechanism should only be used for restructuring debt that is seen as truly unsustainable and create incentives for an early resolution between debtor government and its creditors.
- The mechanism should not interfere with a government's sovereignty and therefore only be activated by the sovereign debtor.
- The mechanism should provide a framework for negotiations between a debtor and its private creditors.
- A qualified majority of creditors should be able to approve a settlement that is binding for all creditors.
- The whole process should be safeguarded by an impartial dispute-resolution system.

Therefore three separate bodies are needed for this process: a legal one, an economic one, and a financial one (GIANVITI ET AL. 2010 p. 26 ff.).

- The legal body would be responsible for opening the debt-restructuring procedure upon request of the indebted government and upon approval by the economic body (see next bullet point) that the government's debt is indeed unsustainable. Furthermore, it would sort out and assess claims, rule on disputes and enforce decisions. The legal role could be assigned to a specialized chamber within the European Court of Justice.
- The economic body would have to assess whether the government's debt is truly unsustainable and which level of debt can be sustained based, *inter alia*, on an evaluation of the level of the primary budgetary surplus that can be generated in the future. During the restructuring process the economic body would guide the negotiations between the borrower and the creditors. This role could be assigned to the European Commission or the Commission jointly with the ECB.
- The financial body would provide short- and medium-term finance to the indebted government to enable it to undertake the necessary economic adjustments. Lending conditions should include a risk premium; "lending should be at rates charged by financial markets for governments with debt levels similar to those of the country in question after its restructuring (GIANVITI ET AL. 2010, p. 28). This role is assigned to (the permanent successor of) the European Financial Stability Facility (EFSF).

The central question is: will such a mechanism really prevent financial panic in the Eurozone and lead to greater stability of government finances? I suggest the answer to be negative, for various reasons.

- For a start, the proposal seems to suggest that there is a time-lag between the request of a government to open a restructuring process and the formal opening of the process, as the (un)sustainability of government debt has to be assessed by the economic body. Only after this assessment and the formal opening of the process by the legal body debt service will stop. But what will happen in the meantime? As the request by the government will not be a secret, uncertainty about the decision of the economic body will lead to large bond sales by investors. Therefore, the government's request will just lead to the kind of crisis the mechanism tries to avoid. The authors seem to be aware of that risk but only insofar as they ask if "an agreement between a borrower and its lenders [can] be found without knowing the amount of financial assistance the former will receive afterwards" (GIANVITI ET AL. 2010, p. 28). But this risk assumes that the procedure has already formally opened so that the economic body has taken its decision. That the authors do not see that the request of the government might trigger a crisis may be due to their argument that the introduction of the mechanism will lead to a different approach to government debt:

"[I]n the steady state, banks and other institutions would know that, in the future, they may take substantial losses from holding government debt and providing loans to governments. Knowing that government debt is risky, banks and financial markets would price it more realistically and assure that they will not be exposed to it excessively. This, in turn, would

expose debt-issuing governments to market signals and give them stronger incentives to refrain from excessive debt accumulation.” (GIAVITI ET AL. 2010, p. 33).

It could be doubted if such an optimistic assessment of the abilities of financial markets are really justified.

- A second problem of the proposal is that government debt is no longer a riskless asset. As was mentioned in section 4.4, the existence of a riskless asset might be an important condition for the smooth functioning of capital markets. The proposal does not seem to consider that as an important point. But even if the non-existence of a riskless asset in the domestic currency is not seen as relevant, there is still the political problem of different qualities of governments and government debt. It is very doubtful whether the European Union can remain a stable association if the debts of different governments are not seen as more or less equal. Before the crisis, the equal acceptance of all government bonds as collateral by the ECB ensured a convergence of interest rates; in other words, the ECB did not – despite some advice to the contrary – dare to differentiate between “better” and “worse” government bonds. It remains to be seen whether this can be done by the establishment of a debt restructuring mechanism that lays nearly all burdens of adjustment on the debtor countries. The introduction of such a mechanism might only be an option if European bonds are introduced and the debt burden of governments is relieved in the first place.
- This leads to the third problem: The proposal does not see the interplay between public debt and private international debt. The example of Germany vs. Spain showed that the same debt-to-GDP ratio can lead to quite different market reactions depending on the foreign indebtedness of the whole country. Therefore, a debt resolution mechanism has also to take into account the (private) foreign indebtedness of a country. Furthermore, if the analysis in section 4.4 is accepted it would not be justified to lay the burden of adjustment on the debtor countries alone. Moreover, the necessary adjustments must not be centered on the amount and structure of government expenses – although this is part of the problem – but other areas like wage policy have also to be taken into account.

7. Conclusion

To summarize: If a government is able to borrow in the domestic currency and the central bank acts as a lender of last resort calming financial panics, providing additional liquidity and purchasing government bonds if necessary, a sovereign default (in the sense of a stop of debt service) cannot occur. If the government borrows in a foreign currency, the crucial factor is the net international investment position of the country as a whole. If the country is a net debtor vis-à-vis the rest of the world and if the relation of foreign debt to GDP increases permanently, then at some point the government’s ability to pay will be doubted and a panic on the government bonds market might break out.

That is not to say that government debt in domestic currency is completely unimportant or that it cannot have negative consequences. But these potentially negative consequences were not the issue in this paper; its aim was to make clear that for deciding if (and when) a sovereign default looms it is an erroneous shortcut to look at the level of government debt only.

The consequences for the Eurozone are not too difficult to derive: If one does not want to perpetuate the implicit guarantee of all government bonds by the ECB and, at the same time, make sure that government bonds are seen as a safe and essentially riskless asset then it is necessary to introduce European bonds and to reduce the net creditor and net debtor positions between the members of the Eurozone. A mechanism for managing sovereign default is only – if at all – the third step. But to achieve the first two aims Germany has a major responsibility.

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