Debt in the eurozone - the sources and the possible consequences.

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Executive summary

When the Greek crisis exploded the core eurozone countries implemented a bailout solution, primarily to avoid a banking crisis. At the same time, Greece and Ireland agreed to implement austere adjustment programs because the bailouts were not sufficient to enable these peripheral countries to solve their debt problems. But these austerity measures, even if politically affordable, will also not suffice.

It will be difficult for Greece and Ireland to outgrow their problems and return to the market at pre-crisis levels. Their debt-to-GDP ratios are expected to grow and additional debt reorganization programs will most likely be required. The heart of the issue is the potential impact of debt reduction on the banks of the core eurozone countries and the effect that it might have in "exporting" the liquidity problems to their own countries. Their banks may need to receive public support as a result.

To address these problems a new solution (in the form of ESM) has been proposed. Unfortunately it is based on the same philosophy as the existing bailout instruments. EMS plans to change the present architecture of the eurozone functioning. But the solutions proposed so far do not soften the adverse impact of the growing debt burden on economic performance of the debt- laden countries.

The entire European Union financial system will be at risk and remain vulnerable as long as bailout mechanisms are not finally supported by debt reduction. To manage that kind of debt reorganization the Union should create the necessary procedures and be prepared politically to accept the costs connected with profound debt reduction.

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Introduction

Sovereign debt problems are not new. They have troubled nations for centuries. What has changed in the past few decades is the source of sovereign debt financing and the approach to reorganizing that debt in the case of insolvency or illiquidity. Before Brady bonds were introduced in 1989, sovereign debt was typically provided bi-laterally through country to country sovereign credit or banking credits which may or may not have been guaranteed by the government or government institutions. The Brady plan introduced a new instrument in the form of bonds issued by a country as a result of a restructuring of its defaulted bank debt. Today the sovereign debt is funded largely by state institutions (such as the Treasury or Ministry of Finance) issuing bond to banks and other financial organizations.

Sovereign debt problems have historically been addressed by using various methods including debt restructuring and debt reduction. Debt restructuring (often described as a bailout) simply postpones/extends the schedule of debt repayments without reducing the total level of the debt or else is arranged by providing the borrower with new rescue - money needed to repay amounts falling due. Whereas in debt reduction (described as a bail-in) in addition to rescheduling the payments the total amount of debt is reduced, something for which the creditors agree to incur the cost. Debt reduction can be achieved through a number of mechanisms including reducing the total amount due and/or by applying below-market interest rates, not capitalizing interest rates, having a moratorium on interest or forgiving past due interest. This bail-ins can also be tied to the creditors providing new money for the borrower to use to repay part of its debt and/ or to finance necessary adjustment programs.

There appear to be two distinct periods in the history of debt restructuring in "medium developed" countries[2]. (Low-income countries, on the other hand, are treated differently as debt rearrangement in such countries is perceived as political and humanitarian assistance rather than as a business contract.). In the first period, up to the end of the 1980s Latin America crisis, sovereign debt was resolved purely by means of debt restructuring (bailing out). However, the debt-laden nations were rarely able to "grow out of their debt" and the result was only too often growing indebtedness. Eventually the increase of the rising amounts, which were due to their banks, were being transformed into a public problem as the

[2] The financial crises of the1990s affected almost exclusively developing countries: the Mexican crisis of 1994-1995, the 1997-1998 Asian crisis, Russian crisis of 1998 Brazilian crisis of 1999, Turkish crisis of 2000, the Argentine crisis of 2001-2002 crisis Brazil again in 2002.

governments could not allow the financial systems to be considerably weakened nor let the prolonged crisis lead eventually into political destabilization in the affected region (as in Latin America debt crisis). For this reason the Brady scheme, allowing for debt reduction (bail - in), was invented and became an easy exit for the creditor banks involved and not merely to postpone the problem. This was the first time that debt negotiations included debt reduction as an important element of the arranged solution. The private creditors took a haircut of 30 - 45%. An instrument of the debt reorganization, in the form of bonds, was concurrently introduced. From this time, the bonds began to play a key role in debt management as well as in raising new funds for the middle- income countries.

The Brady plan was an unparalleled success and was viewed as a breakthrough in sovereign debt financing and restructuring. It provided the foundation for the non-conventional treatment of sovereign debt in some other medium-income countries in their dealings with their official (public) creditors. Following the Brady plan in April 1991, Poland became the first European country to successfully negotiate a reduction of its sovereign debt. Egypt followed Poland two weeks later in also negotiating similar debt reorganization. Poland and Egypt were able to negotiate a 50% net present value debt reduction in their sovereign debt. Both of these cases were politically sensitive and thus received "special treatment". Poland had recently emerged from a socialist economy and was ready and politically strong enough to adopt the profound and difficult (socially and politically) adjustment program required by the IMF as part of the agreement; while Egypt was an important partner for America in implementing its policy in the Middle East. Although these adjustment plans were very difficult to implement, they paved the way for economic stabilization and growth in both Poland and Egypt.

From the history lessons it becomes obvious that restructuring (a bailout) is a failure as it is very often only a short term solution. It could eventually manage the debt problem if the economy is suffering liquidity rather than insolvency problems and if sufficient amount of funds could be provided for the debt laden country. Debt reduction involves far more difficult preconditions. First and foremost is political will. Both sides must also agree on the causes of the debt problem (e.g. deciding if the debt is due to insolvency or illiquidity) and find the way to remove the predicaments. To achieve this compromise the parties involved must have the opportunity to express their wishes through a common platform which would create a "room" for negotiations.

One of the key issues in the current debt crisis in the eurozone is the lack of consensus about the root causes. The culprits blamed include the imperfect structure of the monetary

union, excessive private borrowing, or that the social safety-net of debt-laden countries is too generous. It is possible that the significance of each of these factors varies from each country to country. It is our opinion that an exaggerated welfare state policy was the most important contributor. In any case, the current political sensitivity in the EU does not help to facilitate the setting-up of a workable solution with the debt reduction elements. The parties involved appear to be buying time in only having recourse to bail-out solutions.

Unfortunately, history has shown that bailouts, even if successful, does not change the debt-to-GDP ratio, which all agree are beyond of acceptable levels. What's more, the current economic forecasts for several of the eurozone countries show that they will not be able to "grow out of" their problems and will, on the contrary, become increasingly debt-laden. So current "solutions" are creating even bigger problems for the European Union in the future as old indebtedness is compounded with new debt.

It will become more difficult and costly to fix the problems as time goes by. The citizens of the debt-laden countries are now being asked to make significant sacrifices for "adjustment plans" which will not solve the problem. Political capital is being wasted by this piecemeal process and there might not be enough support for future adjustment programs[3]. The creditors who do not want to share the burden now and support bailouts instead of comprehensive debt rearrangements (debt restructuring and reduction) might face even higher losses from future larger debt rearrangements. In all cases, the cost will be paid by taxpayers, if not now, in the years to come.

Debt negotiations are politically very sensitive. They have been conducted through various multilateral platforms including the "Paris Club" and the "London Club"[4]. When the current debt situation in the eurozone arose, the EU did not have the appropriate platform which could serve as a room for debt negotiations. Hastily the European Financial Stability Fund has been created to resolve the peripheral countries debt problems in the form of bailouts. By the end of 2010, the creation of a European Stability Mechanism was announced. The ESM is designed to restore economic soundness to the European economies within a couple of years. It is unclear if the ESM will also provide appropriate platforms to conduct "formal" negotiations to restructure and reduce debt of eurozone member countries. However

[3] February (2011) riots In Greece show how sensitive the adjustment program could be; in March Fich further downgraded Greece rating

[4] The Paris Club is the informal gathering of the creditor states representatives who decide, under Presidency of the French Treasury, how to resolve the public debt problems of the borrower. Similarly, the London Club is an informal association of private creditors (banks) used to dealing with the private non - guaranteed credits. World Bank, OECD chaired also in the past aid consortia - e.g. for Pakistan, India, Turkey debt negotiations.

one can imagine that within the ESM initiative the European Commission could organize the grounds for the creation of a special task force authorized to find resilient debt management solutions.

Debt problems in the eurozone

With the benefit of hindsight, one can name different causes of the present debt situation in the eurozone. It is now clear that deficit discipline has been lacking in all almost all EU countries. In Greece the general government cumulative net borrowing between 2000 and 2008 amounted to 95% of its GDP; Portugal followed at 32.2%. Even the core members of the eurozone had problems, with France at 24.2 % and Germany at 14.7 %. Ireland, on the other hand, had a 4.3 % surplus and Spain was close to break-even with a cumulative deficit of 1.9%. From 2000 to 2007, Greece violated the 3% rule in every year. Others also disregarded it including Italy (five times), Portugal and Germany (four times) and France (three times).

In this period, while the eurozone's overall trade accounts remained in balance, the PIGS (Portugal, Ireland, Greece and Spain) experienced very large deficits, offset by large surpluses in the core eurozone economies. Cumulative current account balances as a proportion of GDP for the whole euro area in the period 2000-2007 amounted to 3.3% whereas cumulative deficits for the PIGS countries represented 198.6 % of their GDP[5].

It is also clear that national banks and financial market regulators failed. Overconfidence in the self-adjusting ability of financial system led to underestimating the consequence of the accumulation of the debt and leverage which resulted from booming credit and assets prices (Galati at al. 2011). Irish, French, Spanish, and Italian banks aggressively expanded lending. Ireland's total bank assets as a percent of GDP soared from 360% in 2001 to 705% in 2007[6]. French banks grew their books by 60%, Spanish banks were similar and Italian banks were up by 50%. During the last 10 years (through the end of 2009) the eurozone core bank exposure (including Germany, Austria, France, Belgium and the Netherlands) to the PIGS rose from EUR 200 billion to EUR 1200 billion. As a result of the rapid growth in lending combined with falling capital ratios, European banks will have to

[5] According to OECD Annex Table 51 http://www.oecd.org/document/61/0,3343,en_2649_34573_2483901_1_1_1_1,00.html. That effect was predicted by Blanchard at al already in 2002

[6] According to BIS Consolidated Banking Statistics from June 2010

refinance EUR 1. 7 trillion over the coming three years[7]. Around EUR 1.8 trillion of EU bank debt is due to mature over the next two years through the end-2012[8].

In order to support the weakening banking system in the peripheral countries the European Central Bank's balance sheet now funds the equivalent of 18% of Greece's banking sector assets, 15% of Ireland's and 7% of Portugal's. There will be problems in providing further funding to banks that lack collateral eligible for ECB operations (e.g. Ireland) and some countries banks could not be able to raise new funds.

The need for recapitalization of the banking system (under the Basel 3 regime) raises the questions about the ability of nearly all eurozone governments to support their banking systems. German and French banks are deeply involved in lending to peripheral countries. These banks are also highly leveraged, so debt reduction could create pressure on budgetary funds even in these economies.

While on average the eurozone nation has debt stock of about 80% of its GDP, its banks hold liabilities many times larger. In 2010, German bank debt was over 300% of Germany's GDP - see Tables 1 below[9]. French, Spanish, and Belgium banks are in a similar situation. The corresponding figure for Ireland is over 900%.

Table 1

Total liabilities of the monetary financial institutions (MFI) and the country GDP

(EUR billions 2010)

	Ireland	Spain	Portugal	Belgium	Germany	France	Poland	Greece	Italy
Capital and reserves	111,1	279,8	42,9	56,3	380,6	476,7	42,0	44,0	348,0
Total liabilities	1 416,0	3 195,6	518,6	1 079,7	7 924,1	7 353,4	269,1	470,1	3 448,0
GDP	156,5	1 051,3	171,4	351,9	2 489,5	1 947,8	354,7	229,9	1 548,3
Total liabilities to GDP	9,05	3,04	3,03	3,07	3,18	3,78	0,76	2,04	2,23
Capital + reserves / total assets in 2010	7,3%	8,0%	7,6%	5,0%	4,6%	6,1%	13,5%	8,5%	9,2%
Capital + reserves / total assets in 2007	4,3%	7,1%	7,6%	4,4%	4,8%	5,4%	10,7%	6,1%	7,5%

Sources: Author's estimates on ECB data

The above data also shows the weak capital positions of peripheral MFI's as well as eurozone core countries.

Table 2 below shows that external debt[10] represents a significant percent in the MFI total liabilities. And the banking sector is heavily involved in the country gross external debt

[7] Wall street Journal , February, 16 2011http://online.wsj.com/article/SB10001424052748704409004576146550772203610.html?mod=WSJEUROPE_hpp_MIDDLETopNews

[8] http://www.publications.parliament.uk/pa/cm201011/cmselect/cmeuleg/428-xiv/42804.htm

[9] In some tables data for Poland is presented as Poland is the biggest of new EU countries

[10] At the end of paper we present the statistics of the macroeconomic data for the analyzed countries

position. About 44% of Ireland's banks liabilities are in the hands of foreign investors. Belgium banks have the biggest share in country gross debt position followed by Portugal and Spain.

Table 2

Total liabilities and external liabilities of MFI and MFI share in country gross debt position

(EUR billion 2010)

	Ireland	Spain	Portugal	Belgium	Germany	France	Poland	Greece	Italy
A. MFI total liabilities	1 527,10	3 475,40	561,50	1 136,00	8 304,70	7 830,10	311,10	514,10	3 796,00
B. External liabilities gross (C+D)	674,75	736,05	183,38	486,40	1 858,64	1 771,22	49,20	140,29	604,39
C. External liabilities ex eurozone	501,20	284,70	78,60	221,10	707,70	1 034,30	49,20	80,60	192,80
D. External liabilities eurozone	173,55	451,35	104,78	265,30	1 150,94	736,92		59,69	411,59
B/A	44,2%	21,2%	32,7%	42,8%	22,4%	22,6%	15,8%	27,3%	15,9%
C/A	32,8%	8,2%	14,0%	19,5%	8,5%	13,2%	15,8%	15,7%	5,1%
D/A/	11,4%	13,0%	18,7%	23,4%	13,9%	9,4%	0,0%	11,6%	10,8%
MFI share in country gross foreign debt	38,7%	41,5%	45,0%	47,9%	48,2%	46,0%	22,8%	32,2%	33,2%

Source: Author's calculations based on ECB data

In Greece general government foreign debt constitutes over 62% of the country gross foreign debt followed by Italy (over 46%) and Portugal (36%). It means that the foreign banks financed public sector policy of these countries. The facts that Ireland had the lowest share (8%) of the general government foreign debt in the stock of the country indebtedness and relatively high share of MIF's external liabilities in their total liabilities indicate that this country banks were heavily involved in financing private sectors by means of the foreign debt.

Table 3

General Government external debt and MIF external debt share in gross external debt position of the country

2q 2010	Ireland	Spain	Germany	Belgium	France	Poland	Portugal	Italy	Greece
A	8,4%	22,7%	25,7%	26,2%	30,1%	33,9%	36,1%	46,3%	61,9%
B	38,7%	41,5%	48,2%	47,9%	46,0%	22,8%	45,0%	33,2%	32,2%

Source: Author's calculations based on World Bank data

A =Gross General Government debt position; B= external liabilities of MIF in total liabilities

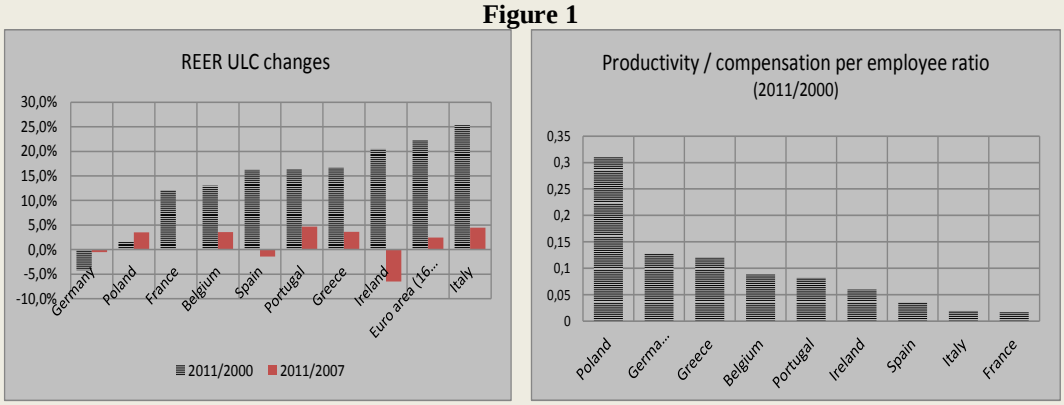
The booming economic performance in Greece, Ireland, and Spain was accompanied by prices that rose much more than average. Uneven inflation rates with a uniform interest rate policy[11] produced real interest rate differences that caused divergent trends. Borrowers in Ireland and Spain faced negative real interest rates that fuelled investment in assets such as housing. Germany's lower than average inflation, in contrast, produced relatively high real interest rates that had the opposite effect. Rapidly growing

[11] The results of the convergence of short and long term interest rates were described by G. Fagan and V. Gaspar already in 2007.

consumption and real estate booms financed by private debt emerged in a number of EU member countries but especially in Ireland and Spain. This led to sharp price and wage increases, undermining competitiveness and leading to large current account deficits.

It is worth stressing that in the last 10 years, the peripheral countries have been losing their competitiveness as measured by REER ULC deflated (unit labor costs) and weakened their productivity-compensation[12] ratios (2000 = 100) measured as the relationship between productivity and compensation. The peripheral countries were incurring debt and losing competitiveness. Gradually competitiveness has risen in some countries, like Ireland, since 2007.

Figure 1

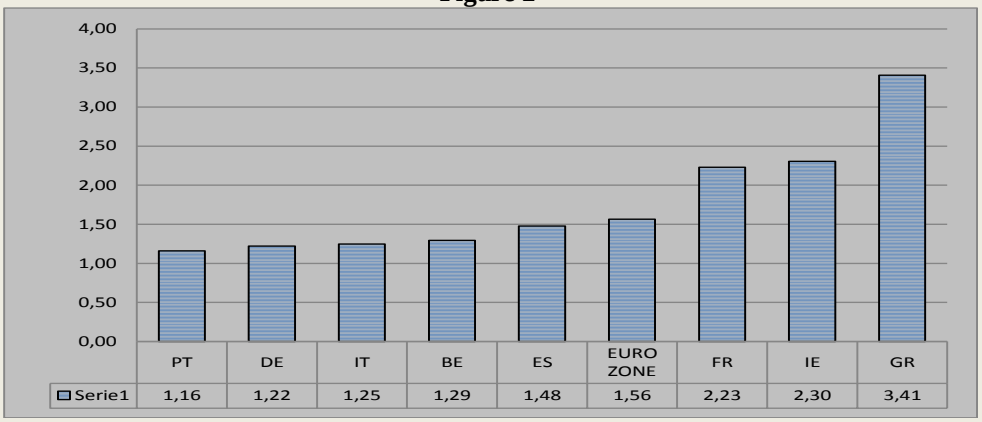


Source: Author's calculation based on EU, BIS data

Having in mind the structure of the balance sheets of the banking system in the European Union, some economists have argued that the real problem in the eurozone was an extraordinary rise in private, not public, debt. They indicate that before the financial crisis, Ireland and Spain were held up as models of responsible fiscal policy. Ireland's debt-to-GDP ratio was reduced in the period 2000-2007 by 13 percentage points to 25% of GDP, while Spain in the same period slashed its debt by 23 percentage points to 36%. It can be seen that since 2004 banks' liabilities have grown more than those of the general government in the eurozone as a whole. But the problem lies in the structure of the bank's inflated assets and the fact that an important share of these assets was used to finance budget deficits in different European Union countries. Below Figure 2 shows the increase in external liabilities of monetary financial institutions (MFI) in the euro zone countries between December 2004 and December 2008.

12 REER ULC Performance relative to 20 industrial countries (CZ DK EE LV LT HU PL SE UK BG RO TR CH NO US CA MX JP AU NZ).Productivity is defined as GDP divided by employment and real compensation per employee is calculated on AMECO data.

Figure 2



Source: Author's calculation based on ECB data

The above data does not completely confirm the hypothesis that the present debt crisis was caused by the inflation of bank balance sheets since Spanish and Portuguese banks increased their assets below the eurozone average. But the data confirm that in Ireland and Greece, as well as in the core countries, foreign activity of the banking sector contributed significantly to the current problems - see Table 4.

Table 4

Foreign exposures to Greece, Ireland, Portugal, Spain by bank nationality*

(Euro Billion 2 quarter 2010)

	Germany	Spain	France	Italy	Other EA	UK	JAP	USA	ROW	Total
Public sector	48,80	7,29	64,28	5,57	34,31	14,66	10,32	6,80	6,39	242,40
+ Banks	123,15	8,43	68,53	12,69	51,83	54,94	5,57	37,58	19,08	466,50
+ Non-bank private	150,99	60,10	118,32	22,60	123,56	152,05	22,76	54,04	34,31	901,80
+ Unallocated sector	0,00	0,00	0,00	0,41	0,25	0,00	0,00	0,00	1,23	2,30
= Total foreign claims	**322,77**	**75,90**	**251,21**	**41,27**	**210,02**	**221,57**	**38,57**	**98,42**	**61,00**	**1 613,00**
+ Other exposures**	96,95	20,31	84,58	21,29	20,14	81,31	4,01	190,53	28,17	668,20
= Total exposures	**419,80**	**96,05**	**335,87**	**62,47**	**230,16**	**302,96**	**42,58**	**288,95**	**89,25**	**2 281,30**

* Exposures of banks headquartered in the respective country are not included, as these are not foreign exposures. ** Positive market value of derivative contracts, guarantees extended and credit commitments.

Source: Author's calculations based on Bank for International Settlements, Goldman Sachs

In the middle of 2010, the exposure of twelve eurozone countries banks to Greece, Ireland, Portugal, Spanish banks and their public sectors was approximately EUR 410 billion. Ex eurozone countries exposure was about EUR 263 billion. If a debt reduction were to happen, it would not only create funding problems but also raise questions about equal treatment between eurozone, non eurozone members of EU and the rest of world, as well as rising moral hazard concerns as the non-bank private debt of these countries amounts to 50% of total foreign claims vis-a-vis the four peripheral economies.

One can construct a hypothesis, based on an analysis of macroeconomic data, that private debt accumulation (mainly in the financial sector) took place not because of

investment activity but in order to finance the social safety nets of the troubled countries. Table 5 below shows the relationship between tax burden (% GDP) of each country and the difference between their annual increases in social transfer and GDP growth [13], capital expenditure annual growth and the debt-to-GDP ratio level changes pre and post crisis. The countries are listed according to their average tax rates and all data is calculated, as an average, for the period 2000 to 2008 so as to avoid the influence of the financial crisis.

Table 5

General government revenue, expenditure, budget balances and gross debt

	tax burden**	social transfers by GG minus GDP increases*	gross savings of GG **	social transfer **	capital formation of GG **	net borrowing of GG**	debt - to - GDP ratio - average	Debt -to-GDP increase {2000-2008 -2009-2012}
Ireland	30,4	5,1	4,2	11,1	5,1	0,4	31,93	64,12
Portugal	31,9	4,1	-1,3	17,5	3,6	-3,7	57,62	27,40
Greece	32,3	3,4	-2,9	16,5	8,9	-11,9	102,98	40,32
Poland	33,1	-0,3	-0,1	17,8	4,3	-4,4	44,03	11,77
Spain	34,7	1,0	4,2	14,3	9,3	-0,3	46,74	18,33
Germany	39,5	-0,9	0,2	25,5	2,9	-2,3	63,93	11,12
Italy	41,8	1,5	1,0	19,7	3,9	-3,9	106,02	10,24
France	43,5	0,6	0,9	23,0	4,1	-2,7	62,47	21,96
Belgium	44,3	0,4	1,8	22,4	2,9	-0,4	93,40	5,95

* annual percent changes; ** % GDP ; GG represents General Government sector

Source: Author's calculations based on EU, World Bank data; except for the last column all data are calculated average for the period 2000 -2008;

Lower tax rates were accompanied in almost all countries by an increased of the social transfers compared with the GDP growth.

Table 6 shows the correlation between selected data presented in the Table 4 (for the peripheral countries only).

Table 6

Correlation between selected macro data

Correlation between:	social transfers minus GDP increases*	social transfer increases*	debt / GDP ratio	gross savings of GG**	capital formation of GG **
average tax **	-0,842	0,846	0,634	0,105	-0,475

Source: Author's calculations; asterisks as in table 5; average calculation for 2000 -2008

The figures argue that monetary union created a comfortable space for rather lax fiscal policies. Lower taxes were accompanied by higher than GDP growth in social transfers.

[13] Social transfers other than in kind and social transfers in kind via market product; all data average for the given period 2000 -2008

Similarly there was a strong correlation between lower tax levels and higher capital expenditure. As mentioned before, the debt-to-GDP ratio in Ireland and Spain was at acceptable levels before the crisis. Nonetheless the social transfer increase in Ireland and Spain was still higher than the GDP growth rate. It was the same in Greece and Portugal. There is little correlation between the tax level and gross saving in the peripheral states.

All these facts became all of a sudden evident after the Greek crisis blew up in the middle of 2010. Table 7 illustrates the changes in sovereign credit risk as perceived by the market by showing sovereign CDS spreads levels and their changes in two periods: from January 1, 2006 to September 12, 2008 ("period I"); and from 5 September, 2008 to June 28, 2010 ("period II"). All statistics are in basis points and the calculations, based on Fontana and Scheicher (2010), present the difference between the means of the CDS spreads for the two periods.

Table 7

CDS for peripheral countries

	period I	period II	changes
Germany	5,61	39,85	34,24
France	6,99	49,78	42,79
Belgium	10,8	72,08	61,28
Italy	27,43	121,39	93,96
Portugal	21,51	116,76	95,25
Spain	17,37	112,88	95,51
Ireland	14,43	180,32	165,89
Greece	30,98	251,35	220,37

Source: Author's calculations

The changes reflect the adjustment of the awareness of the risk involved in the sovereign bond holdings as the perception of crisis develops.

A CME Group Company published cumulative probability of default (CPD) which presents the probability of a restructuring of debt (based on the CDS analysis). In the January 2011 5 years CPD (%) for Greece amounted 58,8%, Ireland followed 41,2%, Portugal 35,9%, Spain 26,7, Italy 19,3%, Belgium 17,9%[14].

The data presented above points to the different causes of the present debt situation and speaks out also against standardized treatment of all illiquidity or insolvency events within the eurozone.

[14] http://www.cmavision.com/images/uploads/docs/CMA_Global_Sovereign_Credit_Risk_Report_Q4_2010.pdf

The actions taken so far

By December 2009, Greece's debt had reached the level of EUR 300 billion according to its Ministry of Finance. To put that in perspective, Greece then owed more than five times the amount that Russia owed when it defaulted in 1998 and twice as much as Argentina owed when it missed payments in 2001.

As early as February 2010, Germany tried to oppose a quick bailout of Greece, saying the country must tackle its debt problems itself. But one of the key issues preventing eurozone leaders from letting Greece face its debt problems unaided was the problem of the interconnectedness of the banking system in the eurozone. Failure in Greece, especially if it triggered problems in other countries, threatens to cause a systemic banking crisis in the eurozone core nations, including Germany, France, and Austria. The problem might have impacted the new European countries as well causing a Lehman-like financial failure.

Credit Suisse has estimated that euro area governments will have to raise EUR 1.65 trillion in 2011, consisting of EUR 1.25 trillion to refinance maturing debt and EUR 400 billion to finance the on-going deficits. This comes at a time of heightened demand for funding across the globe. The Institute of International Finance calculates that America needs to rise over USD 4 trillion in 2011 and European governments collectively need to borrow almost USD 3 trillion. Japan also, with the world's highest government debt burden combined with short maturities, must raise funds worth more than 50% of their GDP by the end of 2011[15]. The only good news is that Latin America's debt-to-GDP is expected to fall to the level of 35% (Cecchetti 2010) and Asian debt-to-GDP should stay at 40% in 2011 and 2012.

The future is uncertain. So far, debt reduction has been excluded. However, the constant need for EUR billions of fresh liquidity could accelerate at a shocking pace. And uncertainty can slow refunding, which can raise default probability, which in turn increases risk, volatility and probability of default.

In 2010 European summits declined to adopt the most frequently proposed treatments: common euro bonds to pool part of the eurozone debt, bigger bailout funds or even their more flexible use, extending short-term loans for example. Consequently in May 2010 the European Financial Stability Mechanism (EFSM) was established as part of a comprehensive package of measures to preserve financial stability in the EU and subsequently the European

[15] Before the earthquake

Financial Stability Facility (EFSF)[16] was created. Additionally the crisis was being fought by the European Central Bank which has been buying bonds and supplying liquidity to banks. The EFSF is backed by eurozone taxpayers' money, the IMF, and some other European countries (including the UK, Denmark, and Sweden). It has been created to cover the needs of an indebted country in case where questions about creditworthiness prevent the country from selling bonds directly (for example Greece and Ireland). The market is expected to accept EFSF bonds instead because they are backed by a 120% guarantee and the cash buffer of the European Union members (in spite of the fact that many of these members have heavily indebted economies as well).Within this framework, a special purpose vehicle (SPV) was established with the eurozone countries total commitments up to EUR 440 billion. Because of collateral and liquidity requirements this effectively means less and the lending capacity amounts only to EUR 250 billion. The joint political decision of the core countries is required in order to increase the potential to full EUR 440 billion. It is intended to provide funds to countries in difficulty, subject to conditions negotiated with the European Commission in liaison with the European Central Bank and IMF and to be approved by the euro area (in somewhat unspecified manner). So far Greece and Ireland have been qualified to get support at the amount of ca EUR 190 billion. The next market tests of the resistance of that mechanism will come soon. Portugal faces two large bond redemptions in April and June. Spain faces bond redemptions in April, July and October, and Belgium in March and September.

At the end of 2010 eurozone countries declared the creation of the European Stability Mechanism. As of March 2011 the construction of this instrument is not entirely clear but it should be conducted by the EU Commission and the IMF, in liaison with the ECB. According to the plan, the ESM should improve the European Union countries' competitiveness and allow for influencing the decisions of individual countries concerning pensions and retirement ages, corporation tax levels or what are called debt breaks, to prevent higher expenditure. It should also include the private sectors' involvement in form of standardized and identical collective action clauses[17]. The ESM should be operational from the middle of 2013. That envisages that up to that time only a bailout mechanism, based on the EFSF, will be in place.

[16] http://www.efsf.europa.eu/about/index.htm

[17] This would enable the creditors to pass a qualified majority decision agreeing a legally binding change to the terms of payment (standstill, extension of the maturity, interest-rate cut and/or haircut)in the event of default

On the other hand there is no certainty that the EFSF instrument will be sufficient to fight all problems which might be expected before ESM mechanism is functional.

The ESM is designed to restore economic soundness to the European economies within a couple of years[18]. It is unclear if the ESM will also provide appropriate platforms to conduct "formal" negotiations to rearrange debt of eurozone member countries. In the meantime, however, the debt-to-GDP ratios especially in the heavy debt-laden countries are expected to grow in spite of the different austerity measures undertaken by the indebted nations. However one can see that the gravity of the problem is slowly being recognized as the schemes have appeared for lowering the interest rates of the rescue funds for Greece and Ireland and extending the bailout period (what creates the bailout combined with the implicit debt reduction).

One can envisage that within the ESM initiative the European Commission could prepare the grounds for the creation of a special task force authorized to find debt management solutions. For example within this body, a "Brussels Club" for the debt negotiations could be created and here individual cases will be addressed. The IMF, with the assistance of the ECB, could pay the role of the mediator and with representatives of ECOFIN suggest the needed adjustment programs. On that basis each country can eventually get its support from the ESM and the IMF.

Prerequisite of success or failure of the present activities

A consensus emerged at the end of the last century that optimal debt relief for developing countries should include 'stock and flow' operations ensuring that a country is able to meet future debt service obligations without unduly compromising economic growth. A second condition of the international consensus was that a creditor should contribute to the security of the international financial system in order to safeguard the new inflows required to sustain the development process in the future.

From the past we have learned that debt sustainability depends on the continued growth of the economy. Exclusive emphasis on restoring sound public finances will not suffice. Everybody seems to agree that Europe's debt can only be sustainable if current debt-to-GDP ratios can be reduced. But most of the focus to date has been only on the one part of the equation - reducing the growth of public debt. While it is important, the most critical

[18] ESM could be fully operational by the end of 2017

factor in the long run is the restoration of GDP growth. Therefore, a broader political deal on economic policies and economic governance is needed to lift growth and restore confidence in the future of the eurozone and the European Union.

It is understood that employment and growth are unlikely to return to their pre-crisis levels in many countries for the foreseeable future. As a result, unemployment and other benefits will need to be paid for several years and high levels of public investment might also have to be maintained. The permanent loss of potential output caused by the crisis also means that government revenues may remain lower in many countries. Between 2007 and 2009 the ratio of government revenue to GDP fell by 2–4 % in Ireland, Spain, the United States, and the United Kingdom (Cecchetti at al 2010). It is difficult to know how much of this will be reversed as the recovery progresses. In addition, if past behavior is any guide to the future, fiscal authorities might find it difficult to adjust quickly – unless they are left with no choice. All of this suggests that fiscal policy is likely to remain under the double edge pressure in the near term i.e. growth requirements and austerity necessities.

According to the ECFIN data for the total general government current revenue as presented in November 2010 we find that the debt-to-revenue ratios are rising for the most troubled countries - Table 8.

Table 8

General government total debt-to-revenue ratios increase.

	Belgium	Germany	Ireland	Greece	Spain	France	Italy	Portugal
2010/2007	111,3%	115,6%	447,9%	122,4%	193,6%	125,7%	109,8%	120,4%
2012/2007	110,8%	113,1%	515,7%	127,6%	210,0%	130,9%	107,5%	138,9%

Source: author's calculation, ECFIN data

The debt restructuring conduced out so far vis-a-vis Greece and Ireland, could be successful under two scenarios. Either the Greek and Irish governments could achieve primary budget surpluses enough large to cover the difference between their rate of growth of GDP and the implicit interest payments[19] after the present bailout action or investors will regain enough confidence in the future sustainability of the Greek and Irish government debt-to-GDP ratios to allow them to return to the markets at the pre-crisis level. Both solutions seem to be highly arguable. The most likely outcome is that both of these countries will be forced to ask for further rescue funds granted on better terms then they have been then up to now. In the beginning of 2011 it seems unlikely that Greek or Irish debt will be reduced any time soon. However, it would be reasonable to prepare the "infrastructure" for this potential

[19] Por. Escolano J., A Practical Guide to Public Debt Dynamics, Fiscal Sustainability, and Cyclical Adjustment of Budgetary Aggregates, IMF, 2010

course of action, especially because contagion risk remains high for other eurozone economies (such as Portugal and Spain) and it is likely that they may require bailout also with IFI resources (European Union, ECB, and IMF).

If the present (March 2011) policy attitude toward the peripheral debt problems is continued, the most likely date for any new debt reorganization would be 2013, unless resources collected to date turn out it be insufficient to calm markets. Policy makers currently believe this disbursement of rescue funds will end by 2013 when contagion risks abate. Greece and Ireland and other states are expected to achieve large enough primary surpluses, and restructure their economies as to restore GDP growth (and remove output gap) by that time. It is doubtful that this will happen for the reasons presented below.

The public-sector debt of the eurozone is high with an average of ca 80% of GDP. Restoring fiscal health could take years of austerity, especially if growth is sluggish. If output gaps remain in a majority of countries and unemployment figures are still high, it would exacerbate the debt ratio. The differential between the real interest rate and real output growth is a critical input parameter in determining the future evolution of public debt. So far, the build-up of public debt in developed countries has taken place against the backdrop of an exceedingly low interest rate environment. Real borrowing rates rose throughout 2009 and are poised to continue increasing with the reversal of the current zero interest rate policy. That of course will pose bigger challenges to achieving budget surpluses in the indebted countries.

Thus the alternative plan has been proposed, advocating immediate debt reduction for certain countries, which is a step in the right direction but is the proposal not specific enough. Should it be addressed to all peripheral countries or just some of them? Are these countries insolvent or illiquid? What is the proposed platform on which both sides should negotiate? Who should be the arbiter in the negotiations and work on the adjustment program. These are only a few of the issues that need to be addressed before debt negotiations should start.

The requirement for debt reduction is very real. Table 7 shows that every country in the eurozone would have to begin to reduce its debt in 2010 in order to comply with the 60% debt-to-GDP ratio already in 2012. Table 8 indicates the required level of debt reduction. If however, the macroeconomic data, which these countries officially reported to ECFIN[20] for 2011 and 2012, are correct, debt reduction in 2010 would have to be very deep because the debt-to-GDP ratios are still growing in 2011 and 2012. The data shows that the current fiscal

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policy is unsustainable in every country presented in table 7. It also demonstrates that the debt reduction must be accompanied by new adjustment program to be successful. That requires time and political resilience.

Tables 8

The debt-to-GDP calculations in some eurozone countries

	Belgium	Portugal	Germany	Spain	France	Ireland	Greece	Italy
Implicit interest 2010	3,8%	3,9%	3,4%	3,7%	3,4%	4,6%	4,6%	4,1%
Implicit interest 2011	3,7%	4,5%	3,3%	3,8%	3,3%	3,6%	4,3%	4,1%
Implicit interest 2012	3,7%	4,6%	3,3%	4,1%	3,4%	4,2%	5,0%	4,2%
Primary deficit 2010	-1,3%	-4,4%	-1,2%	-7,3%	-5,2%	-29,3%	-3,7%	-0,4%
2011	-1,1%	-1,2%	-0,3%	-4,1%	-3,6%	-6,9%	-1,2%	0,5%
2012	-1,1%	-1,1%	0,6%	-2,7%	-2,9%	-4,8%	-0,3%	1,4%
GDP nominal 2010	3,8%	2,0%	3,9%	-0,2%	2,1%	-2,0%	-1,3%	1,8%
GDP nominal 2011	3,8%	0,3%	3,5%	1,7%	3,3%	1,3%	-1,5%	2,7%
GDP nominal 2012	3,9%	1,8%	3,3%	3,2%	3,4%	2,7%	1,5%	3,2%
Interest minus GDP								
2010	0,00%	1,90%	-0,50%	3,90%	1,30%	6,60%	5,90%	2,30%
2011	-0,10%	4,20%	-0,20%	2,10%	0,00%	2,30%	5,80%	1,40%
2012	-0,20%	2,80%	0,00%	0,90%	0,00%	1,50%	3,50%	1,00%
Debt-to-GDP 2010	58,0%	53,8%	60,4%	51,6%	53,5%	46,4%	53,3%	60,4%
Debt -to-GDP calc.2011	59,0%	57,3%	60,6%	56,8%	57,1%	54,4%	57,7%	60,8%
Debt -to-GDP calc.2012	60,0%	60,0%	60,0%	60,0%	60,0%	60,0%	60,0%	60,0%
A. debt reduction	41,2%	35,0%	20,2%	19,8%	35,5%	52,4%	62,0%	49,2%
B. debt-to-GDP ratio increase 2010-2012 after debt reduction	2,0%	6,1%	-0,4%	8,4%	6,5%	13,5%	6,6%	-0,5%
C. ratio increase 2010-2012 without debt reduction	3,5%	9,6%	-0,5%	8,6%	6,8%	16,9%	15,8%	1,0%
D. level of debt/ GDP without debt reduction	101,4%	92,4%	75,3%	73,1%	89,7%	113,4%	155,7%	120,0%

Sources: Author's calculation based on ECFIN (cut-off date 15 November 2010)

Cecchetti and al (2010) have achieved similar results. What is striking in their calculation is the difference between the primary deficit needed to stabilize the debt-to-GDP ratio at the 2007 level in the 2011-2015 period and the present forecast for 2011. For Greece the difference amounts to a reduction of 11%, for Ireland 20%, Portugal 11%, and Spain 13%. France requires a reduction of 12%, the UK 20%, the USA 15%, and Japan 18%. Even Germany would require a 7.5% adjustment. This analysis underlines the structural dysfunction of the world finances as a whole. The IMF forecasts (November 2010) that gross USA borrowings will amount to the equivalent of 99.5% of annual economic output in 2011.

The UK will reach 94.1% and Japan will spiral to 204.3%. This global situation will not help the eurozone to overcome the present debt financing problems.

If the debt reorganization (in the present or suggested in the paper more profound way) is to be successful, the governments involved will have to make the macroeconomic adjustments. The real problems lay not only in the macroeconomic adjustments of the indebted counties but also in the adjustments of the rescue mechanisms and adjustment of the eurozone and to the functioning European Union. The plans presented throughout 2012 are not sufficient. This leads to the conclusion that any assessment of the government's fiscal situation based on a short-term perspective is incomplete and at best misleading. The fact that financial sector organizations (mainly banks, but not only) contributed to the present difficult situation but have not been involved in the solution creates a moral hazard danger and undermines attempts to rebuild a prudent financial system in the European Union. The level of private sector involvement which should be anticipated will depend on the balance between size of the possible IFI resources available for the bail-in and the amount of taxpayers' money which will eventually be required.

"Bailout" or "bail - in"

The natural instinct of creditors is to regard debt relief as throwing their money away or, when there is still the prospect of repayment, as making a concession (mostly political). The compromise usually made for the creditor's benefit has been to make debt relief conditional upon the implementation (by the debtor) of specific economic reforms. These reforms are designed to secure the future payments to the creditors and to widen their sphere of economic and political influence.

In the past developing countries were typically accused of failing to repay their debts because of structural malfunctions that needed to be addressed by specific adjustment programs, most often formulated by the IMF. Therefore macroeconomic stabilization programs were prepared as a form of disbursement conditionality. The policy conditions are formally comparable to operational covenants in private debt contracts. However, in private debt contracts covenants are designed primarily to improve the prospects of repayment, whereas the principal focus in sovereign debt restructuring is often economic reform combined with political concession. The adjustment programs are thus a vehicle to secure policy performance (which may also improve the prospects of repayment).

The term "bailout", when referring to sovereign debt, is loosely used to describe an extensive official support package which fills the entire financing gap. Bailouts usually involve international financial institutions which provided resources designed to restore investors' confidence and market access and thus avoid the need for more restructuring and further more coercive forms of private sector involvement (PSI) (Roubini 2001).

The Mexican case of 1994/1995 was an example of a comprehensive bailout where the US Government and the IMF provided the Mexican Government with USD 50 billion to repay its short-term debt. A full "bailout" should be constructed also in such a way as to allow the exit of those investors who do not want to rollover their holdings. This requires the concerted action by all parties involved, including parties having enough resources to secure the success of the operation.

Three well-known issues are present in nearly all debt negotiations: conditionality, equal treatment and moral hazard. Conditionality is designed to assure the creditors that debt can be repaid after rearrangement. Equal treatment addresses the question of identical burden sharing by the creditors. The moral hazard issue is often raised by the creditors who express their concern that other debtors in the future will exploit examples of not fulfilling their obligation to repay[21]. It thus always shifts the whole responsibility of the ensuing situation onto the shoulders of the debtor and is always raised by parties who are reluctant to support debt relief decisions, making it very effective in delaying the process. In fact, moral hazard reservations have probably overshadowed the present eurozone debt discussions and may be a key reason why rescue funds were not set up when the eurozone was created.

In the current eurozone situation, it is worth considering the Sachs and Radelet (1998) dispute, analyzing the Mexico default in 1995 and the concept at that time of the lending-debt crisis paradigm. They argued that the real crisis was precipitated by the irrational sensitivity of western financial institutions in immediately closing access to all financial markets for Mexico and other defaulting countries. They argued that developing country economies are known to be seriously dysfunctional with long standing structural problems that are only partially concealed by heavy capital inflows. The effect of unilateral lender action is to cause financial panic, resulting in the collective withdrawal of creditors which brings about a capital reversal, as later witnessed in East Asia in 1997. This interpretation suggests that it is wrong to burden the debtor with all costs when a debt crisis takes place, partly because of miscalculations on both sides of a transaction or other distortions to the lending process itself.

[21] This is probably the reason, why in the present crisis, core countries reject the bay-back idea

This analysis supports the view that to avert a crisis an imminent debt problem requires the mutual cooperation of the lenders and the borrowers. If left to the market forces, unilateral lender actions will end up as a self-fulfilling crisis.

In 1989 P. Krugman argued that a heavy sovereign debt burden acts as a high marginal tax rate on the benefits of economic adjustment in the sense that the savings from fiscal austerity often accrue to foreigners (creditors). He presented a case demonstrating that partial debt relief can be Pareto optimal (beneficial to the creditors and debtor alike) by improving the incentive for the debtor country to undertake the adjustments needed to enhance their ability to service debt in future.

By the 1980s it appeared that debt restructuring, by simply altering the timing of repayments through interest capitalization, in fact increased the quantity of debt[22] and caused the debt-to-GDP ratio to increase over time. Effectively, classic debt restructuring could only work in the case of liquidity problems; in the case of insolvency, it frequently failed. Depending on the country supervisory authorities regulations[23] banks shored up the value of their outstanding loans while continuing involuntary lending to enable the debt laden countries to pay interest. Even when this classic restructuring prevailed, supported by the "sovereign risk hypothesis", the creditors' key objective was to end their involvement as quickly as possible. They did not care if the restructuring was successful or not. Therefore some of the involved creditors were selling their foreign debt through secondary markets, accepting losses in the process.

The "game-changing" event in debt reorganization began in May 1987 when Citibank announced its decision to write off USD 3 billion in loans to crisis-ridden countries. This triggered a rush for exit and eventually led to the Brady Plan (Roubini). Reinhart and Rogoff (2009) wrote that when a credit bubble finally bursts, private debt becomes public affair[24]. Following that logic, the US Treasury decided to involve itself in the Latin American crisis, implementing in 1989 the Brady Plan using the following framework:

- it instituted an "exit rescheduling" agreement that reduced private claims on debt-distressed countries (primarily bank debt) to their actual mark-to-market value by making cuts of between 30% and 45%;

[22] In Poland e.g. continuous restructurings of the sovereign debt within 1980's increased the debt level by 100%.

[23] The varied provisioning regulations made it difficult to achieve the comparability of treatment between the creditors

[24] In 1982 the exposure of the major US banks as percentage of their capital in five Latin America countries exceeded 150% and was rising

- it securitized the remaining loans to facilitate their sale on financial markets; and
- it shifted the future burden of management of the debt burden onto financial markets (which was not possible in the simple credit restructuring approach)

It is worth noting that the first default on a Brady bond did not occur until Ecuador defaulted in October 1999, ten years after the first Brady negotiations (Roubini at al. 2004).

The Brady Plan changed many things, including the source of financing for sovereign debt. Bank financing, in the form of syndicated loans, dried up and banks remained out of the business for a long time. Many of them, particularly in the United States, sold off the new securities which they received in the Brady debt swap to specialized market firms.

Bonds began to play an important role in raising funds for middle-income countries post-Brady plan. By 2010 2 quarter the foreign debt of middle income countries amounted to USD 3.31 trillion, of which USD 1.5 trillion were international debt securities[25] representing an increase of about 5 times over the last 20 years. As financial markets have taken over from banks in fundraising there has been a fundamental change of players in debt negotiations. And new challenges have emerged in restructuring sovereign debt in the form of private bonds and short-term interbank lines rather than syndicated medium-long term bank loans. The market practices of bondholders often clashed with the conventional process and administrative management of debt rescheduling seen in the 1980s.

The restructurings of the 1990s proved that sovereign and private bond restructurings are possible even without collective action clauses (CACs), as it was in the cases of Pakistan, Ukraine, Russia, Ecuador and Argentina[26]. And there were bail-ins of interbank lines in the cases of Korea, Indonesia, Thailand, Russia, Brazil, and Turkey. In all cases there was fear of contagion, which aggravated the extensive financial crisis which in turn speeded up the negotiation process. It became apparent that greater private sector involvement (PSI) could be achieved when an "arbiter" (usually an IFI) who could provide the additional funds required was involved.

A Bank of England working paper declared in 2004 that new era in sovereign debt financing had begun. "In February 2003, Mexico made a policy decision to include collective action clauses (CACs) in its sovereign bonds issued under New York law, contrary to market convention. With the first-mover problem solved, most other emerging markets issuing in

[25] BIS - amounts outstanding at September 2010 by residence of issuer

[26] Polish case lost by Bank Handlowy S.A. in the Swiss courts in 1985 has confirm that bonds cannot be rescheduled on the same terms as loans

New York have followed suit. A new market standard for emerging market sovereign bonds appears to have been set, with CACs as its centerpiece" (Haldane at al 2004)[27].

It is difficult to argue against the principle that investors in bonds issued by sovereign governments should suffer haircut if the government cannot pay the principal on its bonds. This would represent a "bail-in" as opposed to a bailout (where banks and bondholders are paid total amounts due at the expense of the public sector). However, the involvement of bondholders on the basis of equal burden sharing is still a delicate matter[28]. Bondholders are reluctant to be graded pari-passu with other creditors. In addition, they are a widely scattered group and meetings are difficult to arrange. There is a problem of representing sub-groups within the main body of bondholders. The spontaneous reaction of bondholders, or groups of bondholders, is to take legal action (as in the case of Peru vs. Elliot). There are other difficulties concerning bond debt restructuring. For example, differences between the treatment of external and domestic debt; seniority and the selection of priority of bond holders; and the interconnection between sovereign and private debt. Some of these problems can be partially solved by using CAC standards.

When a large, important country gets into trouble, the political pressure to bailout this country (usually with an exceptionally large package) is common. These cases typically receive extensive official support and are rather undersized in their PSI elements. The incentive to bailout large countries stems from several factors. These countries tend to be systemically weak and there is concern about contagion (for example Argentina and Brazil). Often, they have been subject to a liquidity run. Thus, some kind of exceptional solution may be part of the optimal policy response. They are often geographically strategic and/or politically and militarily important (for example Turkey, Korea, and Argentina). In light of these considerations, combined with the complexity of the bond infrastructure, pure bail-in episodes have rarely happened. The rare exceptions include the 1998 LTCM bail-in, and Korea in 1997.

In theory, all sovereign obligations are part of one great mass of senior unsecured debt, where all creditors are equal under law. While applying different priority criteria to official and private debt is reasonable, given their different functions, restructuring a debt stock that includes both poses an administrative challenge. One way to resolve the problem is to pick one scale over the other, for example, subordinating all official debt to all private debt, or vice

[27] www.bankofengland.co.uk/wp/index.html

[28] Similar problem relates to all interbank operations which were usually excluded from the debt reorganization

versa. Related to this is the distinction which stems from the fact that insolvent states have no recourse to a bankruptcy process that could give them meaningful financial relief and their creditors reasonable assurance of fair treatment.

There are two separate constituencies to consider when the financial sector is directly involved in any debt reorganization, since the perspectives of the foreign banks and the indebted country public sector are different. The stability of the domestic financial sector can be threatened if the domestic private banking sector is forced to incur losses through debt reduction at a level equal to that for foreign banks. Destabilization of the banking sector coerces public involvement and thus further increases the public debt of the economy which has declared insolvency. For the future economic performance of the indebted country a bailout without its component of PSI in the domestic market might improve the chances of implementing the necessary policy changes in the debt-laden economy.

Bailouts currently seem to be less expensive than bail-ins because of the interconnectedness of the financial sectors today, combined with their structure and the fragility of their balances. This could be the reason why the present bailout policy is being conducted in the eurozone. It should be kept in mind, however, that the ultimate success of a bailout depends upon the continuous availability of sufficiently large resources and the correctness of the adjustment programs which should be implemented in the debtor countries and which should lead to the sustainably GDP growth. If programs are too soft further sources will be needed, while if they are excessively harsh they might become politically unfeasible.

Although occasional rescue actions have been required over the past year (in Greece and in Ireland) the most controversial question in the debate on the reform of the international financial architecture has not yet been resolved. This is the question of involving the private sector in the resolution of the crisis. Last year bank stress tests showed that bailing out sovereign debtors in the eurozone by bailing-in creditors (banks) will, in the present circumstances, end up involving the public money of the core eurozone countries. To avoid that situation a common financial mechanism has been created (EFSM and EFSF[29]) to have all EMU governments directly involved in this rescue bailout operation. Ipso facto the public authorities of the eurozone somehow put themselves into the "lenders' trap" position, known since Latin America debt crisis. At present no one knows what the price of debt restructuring carried out now will be and what it would cost in the future if bailout action were unsuccessful.

[29] European Financial Stability Mechanism and European Financial Stability Facility

The caveat, however, is that the whole process begun in May 2010 will be a failure if debt repayments conditions do not dramatically change. And debt-to-GDP is expected to rise further, according to official data, even after the severe adjustment programs are implemented. The AMECO forecasts (see Table 9 below) show that debt-to-GDP ratios are expected to continue to grow in all countries except Germany.

Table 9

AMECO forecast of the debt-to-GDP ratio in some of the eurozone countries

Ameco forecasts	Belgium	Portugal	Germany	Spain	France	Ireland	Greece	Italy
Debt -to-GDP 2010	98,6%	82,8%	75,7%	64,4%	83,0%	97,4%	140,2%	118,9%
Debt -to-GDP 2011	100,5%	88,8%	75,9%	69,7%	86,8%	107,0%	150,2%	120,2%
Debt -to- GDP 2012	102,1%	92,4%	75,2%	73,0%	89,8%	114,3%	156,0%	119,9%
Debt -to- GDP increase pct.	3,5%	9,6%	-0,5%	8,6%	6,8%	16,9%	15,8%	1,0%

Source: AMECO

So the whole mechanism only postpones the problem. The costs will be higher and more taxpayer money will be needed. A sustainable solution can be created, as it has been in the past, when official creditors find a way to share the burden and private agents became sufficiently robust to endure the pain imposed on them by authorities in a bail-in process.

The role of the mediator in sovereign debt negotiations

Private debt markets were closed to all but the most creditworthy countries following the wave of bond defaults in the 1930s. The end of World War II ushered in a new political and economic order and, along with it, a new model of sovereign financing. LDC (less developed countries) and other economies such as socialist countries were offered official public loans. For example, in 1961, the United States Congress authorized a number of foreign loan initiatives to promote different goals: political (in Eastern Europe, Latin America, and Asia); humanitarian (poverty reduction in Africa, Asia); and economic (supporting U.S. export growth). Other governments established their own individual lending programs as well.

Until the mid-1970s the main external financing flows were provided by official foreign aid and trade-credit agencies (such as the Ex-Im Bank in the USA, Hermes in Germany, Coface in France, Ducroire in Belgium, the Export Credits Guarantee Department in the UK) or by multilateral lenders (IFI) such as the World Bank and the IMF. During this first phase, whenever developing countries encountered external financial problems they went first to the IMF for assistance in preparing and implementing a

stabilization program. Such a program was underwritten by a short-term loan from the IMF, and then discussed with their bilateral creditors in the Paris Club in order to work out debt relief along what is known as "Classic" terms[30].

This process continued when commercial banks became the largest providers of external sovereign debt (from the mid-1970s until the early 1990s). The indebted country turned to the IMF for guidance and financial support and to discuss with the banks mutually acceptable debt rescheduling[31].

An important role in every debt negotiation is played by the intermediary (or arbiter). It was most often the IMF, with the assistance of other international organizations such as the World Bank or OECD. The IMF also typically provides resources for the indebted state while working out the necessary adjustment programs to be implemented by the debtor as a precondition for the debt rearrangements. On certain occasions individual countries have also offered their assistance with solving the problems of debt-laden nations.

The IMF remained a crucial participant throughout the 1980s and 1990s in all debt negotiations. It acted on behalf of the creditor states as a mediator and a debt manager which tried to combine two objectives: to recover as much of the outstanding debt as possible, and to design an adjustment program acceptable to the debtor. The IMF determined the financing needs and policy changes required under an adjustment program framework. The balance of payments projections prepared together with the IMF showed how the burden was divided between official creditors and the banking community, according to the comparability-of-treatment principle. The document, called the "capacity of payment" was to be used by the creditors to determine their position in the ongoing negotiations.

In the 1980s, the IMF's Managing Director, Jacques de Larosière, intervened personally by refusing to approve stand-by arrangements for the crisis-hit countries until he received written assurances from bank creditors that they would share the burden by increasing their lending exposure[32] . This "concerted lending" tactic was the first instance of what later became known as "private sector involvement" in debt workout procedures. Over time, the specific tactics changed in response to evolving circumstances, but the role of the IMF as the central agency for coordinating the resolution of financial crises remained.

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[30] See Lex Rieffel, Restructuring Sovereign Debt: The Case for Ad Hoc Machinery (Washington, DC: Brookings, 2003) , pp. 56-94

[31] Porzecanski, Arturo C. Private vs. Offcial Creditors: The Record Speaks; American University; November 2006; http://mpra.ub.uni-muenchen.de/1013/

[32] The IMF compulsory financing request had first been impose in the case of Mexico

Beginning with Latin America crisis, the East European debt problems throughout the Mexican peso crisis of 1994-95, the Asian crises of 1997, and those that hit Russia, Brazil, Argentina, and Turkey in the following years, all brought the IMF to the forefront in efforts to coordinate temporary official financing, reform policies in the affected countries, and attempts to restore confidence and commitment on the part of creditors and investors[33].

The role of the IMF seems to have faded in the last decade. The "haircut" that Argentina was able to inflict on bondholders in the 2000s was an example of a bad ratio between bailout / bail-in and called into question the credibility of the IMF. In this case the IMF acted as the debt manager in organizing a bailout and supervised negotiations, but the level of funding was not sufficient and the timing was also not appropriate. Although Argentina did undertake fiscal adjustment (the cumulative primary surplus in 2002 - 2005 totaled about 12.1% of GDP) the IMF's role was heavily criticized. The US Congress claimed: "Creditors chide the IMF for failing to completely fulfill its responsibility to uphold guidelines governing lending into private arrears. In fact, the IMF found its leverage insufficient to persuade Argentina to negotiate a consensual agreement with creditors. Also the IMF's role as "official arbiter" was a critical factor in supporting the 3% primary surplus target for Argentina's ability to repay its debt. As this became the de facto maximum repayment effort by Argentina, creditors questioned whether the IMF did not help define the debt repayment ceiling from which Argentina was unwilling to deviate. Argentina is also demonstrating how IMF financial assistance without needed policy reforms is insufficient to resolve a serious debt issue"[34].

The arbiter in debt talks cannot act as a freelancer and should play its role in the special, more or less formal platform established to facilitate negotiations. The presence of "the room" for formal talks was always important for both sides, acting as a floor where all parties could address their expectations, change judgments and not be accused of favoring one creditor over another, or trying not to submit to equal treatment rules.

[33] The situation has changed in the past 10 years when the role of the IMF diminished and informal power was shifted to the G-20 which has politicized the process.

34 Argentina is still pledges to restructure and eventually repay defaulted (in 2001) debt

Prospects for the future of the eurozone

In the 1980s, the debt crisis in Latin America was triggered not by the level of debt per se, but by the rise in the cost of servicing the debt. Between 1970 and 1980, nominal debt service in Latin America rose at an annual rate of 25%[35]. The root of the problem in the eurozone is the level of indebtedness, which was only in part created by the recent financial crisis and recession.

The structure of bailout resources and the level of "haircut" inflicted on the creditor should theoretically depend on distinguishing whether there is a problem of illiquidity or an insolvency of the economy. However it is not so easy to make such a distinction. Most often it is not either/or. Illiquid countries may have serious macro and structural problems and countries that look insolvent may not be so if they implement serious adjustment and reform policies. As previously discussed, it is harder to be objective in applying the solutions of debt restructuring and reduction when the country is large and systemically important. In these cases there is a political tendency to consider the country as "illiquid" rather than "insolvent" as it is then easier to explain why public money is involved in the bailout process. That is also the case in the present eurozone debt situation.

The adjustment programs (bailout) in form of the EFSF and the EMS mostly rely only on "belt tightening". Political consensus for fiscal consolidation and other structural changes are not built in a day. Fiscal consolidation and tax overhauls mean belt-tightening, but pension schemes and labor market reforms should effectively change the national social and economic models. Fiscal contraction - cutting and taxing - could backfire if there is no political strength in place. If the scale of fiscal consolidation is unfeasible and social model cannot be revised for political reasons, the only alternative is the suspension of payments. That usually happens with the approval extorted out of the lenders which leads next to the debt reduction agreement.

The rearrangement of the debt in case the country is illiquid or insolvent, regardless of its political affiliation and its previous economics status, changes the perception of the markets which means that access to financial markets could be difficult even after successful implementation of debt reorganization. An argument can be made that debt relief should

[35] In 1982 over 50% of Latin America total external debt was short- term

precede the implementation of any adjustment program because improving domestic fiscal austerity merely for the sake of accumulating resources for debt servicing could potentially inflame political and economic instability, and as a consequence might negatively impact the capacity for debt servicing. This would be self-defeating and detrimental to the interests of the creditors. This is effectively the policy which is currently being followed in Greece and Ireland with the assistance of their eurozone partners.

Unfortunately, a large part of the new multilateral disbursements offered as a part of the debt restructuring agreements are simply going to be recycled into debt service. And the adjustment programs will not improve their "ability to pay" as GDP growth projections will not be realized. That easily could be the case when euro area bond markets will continue to exhibit wide spreads. Then governments would be able to roll over their payments only at bigger costs, because they debt will lose "characteristics of government bonds" (unless sort of the debt reduction happens) and the corporate credits will follow suit. Debt relief will ultimately be required as the "new debt" will grow much faster than the projected real GDP growth and the debt-to-GDP ratios will rise. The fiscal programs, if excessively implemented, will decrease consumption and put further downward pressure on GDP growth. Investments might be financed by FDI but both investments and exports would depend on the rise of competitiveness. However, that again requires price deflation and wages control, both socially painful and politically risky. How far public debt ratios will rise depends on several factors: the ultimate costs of the financial crisis, the rate of real growth and the level of interest rates, as well as political decisions about spending and taxes.

Central to final resolution of the debt crisis has always been the creditors' and debtors' perception of their roles and their need to cooperate. The controversy in this context depends on whether creditors take some of the blame for loose lending and whether debtor countries accept responsibilities for excessive borrowing and macroeconomic mismanagement. The future existence of the eurozone is at stake and all parties should abandon illusions that they can solve the EMU debt problems without incurring the costs. For instance it would be naïve to expect Germany to reduce its competitiveness advantage, and stimulate consumption as it is now the only positive source of demand in Europe. And the insolvent nations should not dream of continuing their welfare state behavior.

Until now all parties are trying to postpone the moment of the final negotiations. The European Commission presented plans for fundamental treaty changes that will extend the current aid mechanism – the European Financial Stability Facility. They are assuming that the bailout will continue up to 2013.

At the same time plans of the development of the situation in each country are declared officially up to 2014 or 2015. These models show that the debt-to- GDP ratios will increase for almost all countries in question. Accepting the forecasted GDP and debt-to-GDP ratio as given by ECFIN the nominal debt level of PIGS will rise by EUR 218 billion between 2010 and 2012[36]. And that should be covered by the market or by the EFSF[37]. However, the markets will not be deceived during the next 5 years that the insolvent economies after implementing Ponzi financing schemes will be in the coming years in better shape for debt negotiations than they are today. This will be true even if the effective EFSF mechanism grows to be larger than it is today.

At present one does not see political willingness to discuss the debt reduction possibilities. The seriousness of the situation requires nevertheless that the new ESM mechanism should foresee two possible solutions: debt reduction with all of the difficult adjustment programs and procedures; or the possibility that the insolvent countries might leave the eurozone with all the risks that solution would carry.

It is difficult to predict the attitude of various bondholders to debt reduction. Debt reduction for the bondholders, in e.g. the Brady bond nature, should mean bailing-in which is likely to impact national banks, not only in the eurozone, to different degrees. Comparability of treatment, and moral hazard issues so closely observed in the past would play an important role. But there are also important questions to be answered about how the various constituencies approach their own banking sector which will have to bear costs. They might decide to leave the banks to pay or offer support such as partial nationalization (to fill the gap in the bank's capital) similar to what was done at the beginning of the last financial crisis. In each case (debt reduction and restructuring) the eurozone banks will take a haircut which will influence the resilience of the financial systems of the creditors. The eurozone governments will all have to make tough political decisions about the level of public involvement in the whole process - far above already declared lending capacity of EUR 500 billion[38].

[36] General government debt of these countries will amount to ca EUR 1500 billion in 2012.

[37] If Portugal requests rescue funds at EUR 70 billion that will surpass lending capacity of EFSF (Greece - EUR 110 billion and Ireland EUR 85 billion).

[38] Cash contributions to the European Stability Mechanism, will amount to EUR 80 billion spread over five equal annual installments. Another EUR 620 billion will be callable, to give the fund an AAA rating - according to the presented arrangements

GDP, General Government gross debt, gross external position and the international reserves (in EURO billion in 2010)

	Belgium	Germany	Ireland	Greece	Spain	France	Italy	Poland	Portugal	United Kingdom	United States	Japan
GDP	351,9	2 489,5	156,5	229,9	1 051,3	1 947,8	1 548,3	354,7	171,4	1 693,6	10 922,5	4 134,0
General government consolidated gross debt	347,1	1 884,8	152,5	325,2	676,9	1 615,8	1 841,6	207,7	141,9	1 322,5	9 752,9	8 809,2
gross external debt position	990,2	3 905,8	1 701,9	429,7	1 769,8	3 893,9	1 838,6	229,8	400,4	6 850,1	10 558,6	1 884,7
international reserves	20,1	156,2	1,6	4,7	23,9	124,5	119,7	70,0	15,7	79,8	79,8	820,4
share in GDP in %	Belgium	Germany	Ireland	Greece	Spain	France	Italy	Poland	Portugal	United Kingdom	United States	Japan
General government consolidated gross debt	98,6%	75,7%	97,4%	141,4%	64,4%	83,0%	118,9%	58,6%	82,8%	78,1%	89,3%	213,1%
gross external debt position	281,4%	156,9%	1087,4%	186,9%	168,3%	199,9%	118,7%	64,8%	233,6%	404,5%	96,7%	45,6%
international reserves	5,7%	6,3%	1,0%	2,1%	2,3%	6,4%	7,7%	19,7%	9,2%	4,7%	0,7%	19,8%

Source: Author's calculations; gross external debt as for 3q 2010; other data end of 2010

References

1. Angresano James, Albertson College of Idaho, "Poland After the Shock," Comparative Economic Studies, Volume 38 Numbers 2/3, Summer/Fall, 1996
2. Baldwin Richard, Gros Daniel, Completing the euro zone Rescue: What More Needs to be done? Centre for Economic Policy Research, June 2010, http://www.voxeu.org/index.php?q=node/5192
3. Béranger-Lachand S., Eugène Ch., Banque de France, Bulletin Digest, No. 86, 2001
4. Blanchard, O., and F. Giavazzi (2002): Current Account Deficits in the Euro Area: The end of the Feldstein-Horioka Puzzle, Brookings Papers on Economic Activity, 2,
5. Boughton J.M., The IMF and the Force of History: Ten Events and Ten Ideas That Have Shaped the Institution, MF working paper, May 2004.
6. Cecchetti Stephen G, Mohanty M.S. and Fabrizio Zampolli, The future of public debt: prospects and implications; BIS Working Papers No 300, March 2010
7. De Grauwe; Fighting the wrong enemy; 19 May 2010; http://www.voxeu.org/index.php?q=node/5062
8. Escolano J. A Practical Guide to Public Debt Dynamics, Fiscal Sustainability, and Cyclical Adjustment of Budgetary Aggregates, IMF, 2010
9. Fagan G., Gaspar V., Adjusting to the euro; ECB Working Paper Series , No 716; 2007
10. Feldstein M. The risk of economic crisis, The University of Chicago Press,1991
11. Fontana Alessandro, Scheicher Martin, An analysis of euro area Sovereign CDS and their relations with Government bonds , ECB, http://www.ecb.int/pub/pdf/scpwps/ecbwp1271.pdf
12. Galati G, R. Moessner, Macroprudential policy – a literature review; BIS working paper No 337, 2011
13. Gelpern Anna, Odious, Not Debt, Http://Law.Duke.Edu/Journals/Lcp, 2007
14. Helleiner G.K., "The Sub-Saharan African Debt Problem: Issues For International Policy," (Unpublished; Toronto: University Of Toronto, April 1989)
15. Haldane A. at al, Optimal collective action clause thresholds, Bank of England, Working Paper no. 249, 2004
16. Hornbeck J.F., Argentina's Sovereign Debt Restructuring, CRS Report for Congress; October 2004, **http://fpc.state.gov/documents/organization/39301.pdf**
17. Kalonga P. , Paris Club Debt Relief, Multilateral Frameworks and Implications for Poor Country debt Department of Economics, University Of Surrey, May 1999
18. Kindlebereger Ch., Aliber R. Manias, Panics, and Crashes , John Wiley & Sons, Inc, 2000
19. Krugman P, Market based Debt reduction schemes, NBER Working Papers 2587 ; Financing versus forgiving a debt overhang, NBER Working Papers 2486,1989, http://ideas.repec.org/p/nbr/nberwo/2587.html
20. Eichengreen B., Financial instability in Global crisis, Global solutions, Cambridge University Press, 2004
21. Miller M., Zhang Lei; "Sovereign Liquidity Crisis: The Strategic Case for a Payments Standstill" CSGR Working Paper No. 35/99, May 1999
22. Porzecanski Arturo C. , Private vs. Official Creditors, American University The Record Speaks, November 2006
23. Rajan R.G. Faooult Lines, Princeton University Press , 2010
24. Radelet S., Sachs G., The onset of the East Asian Financial Crisis, NBEER Working Paper 6680, August 1998
25. Reinhard C. and Rogoff K.S., This time is different , Princenton Univerity Press, 2010
26. Roubini N., Bail-ins, Bailouts, Burden Sharing and Private Sector Involvement in Crisis Resolution: Stern School of Business, New York University, July 2001
27. Roubini N., Setser B.; Bailouts or bail-ins? responding to financial crises in emerging economies, Institute for International Economics, 2004
28. Sachs G., Radelet S., What Have We Learned, So Far, From the Asian Financial Crisis? Center for International Development at Harvard University; January 1999, http://www.cid.harvard.edu/archive/hiid/papers.html
29. Sawicki J., Znaczenie długu dla zrównoważonego wzrostu gospodarczego, Przykład Polski, Monografie IBRKK, 2010
30. Taleb N.N., The Black Swan, Penguin, 2010, page 43
31. Taleb N,N, Fooled by Randomness, Penguin Books, 2007
32. Tett G., Fool's Gold, Little, Brown, 2009
33. The Economist, 13 January 2011