B. The European Debt Crisis: How Did We Get into this Mess? How Can We Get out of it?

Professor Dr. Michael C. Burda[*]

I. Introduction

By any measure, the European Monetary Union and the European Union are in a deep hole. In the summer of 2011 we came uncomfortably close to an uncontrolled sovereign default of an EU country, a member of the European Monetary Union, hardly ten years after the common currency project was launched. In the months that followed, Greece was brought back from the precipice, but by the time of this writing has accumulated sovereign indebtedness of more than € 380 b or more than 170 % of the country's gross domestic product. By current estimates, more than half of this debt is held by foreigners, and mostly by foreign official institutions.

How could a country with less than 2 % of EU output be the source of such great concern? Quite simply, because in the meantime Ireland, Portugal, Spain and Italy (which along with Greece, are known as the GIIPS countries, or the PIIGS in less politically correct circles) have all spent significant time at the financial edge, with borrowing costs rising enough to threaten the integrity of the Eurozone banking system, the mechanism of payments, the European Central Bank and the common currency itself. In my view, we are still not out of the hole, even though most recent events may belie that assessment.[1]

My job as a macroeconomist is to provide the bird's eye view of what has happened in the past three years – and perhaps more importantly what did not happen over the past thirteen years – which has led us to where we are today. The central question to address is how a sovereign debt crisis was the product of a less-than-optimally planned European Monetary Union, and how the sovereign debt crisis of a nation or nations can credibly threaten the existence of the entire monetary edifice that Europe built. While it is important to lay blame and name names, it is more important to ask where the systemic failures of macroeconomic policy and polity at the trans-European level could have occurred, in order to have any chance of preventing a similar episode in the future. In this essay I would like to give a brief overview of how we got here. Given that, how will we get out? In concluding, I offer three scenarios, which in turn offer insight into the limited degree of freedom still available to policymakers, without taking a stand on which scenario will actually become reality.

---

* Humboldt-Universität zu Berlin. I thank Julia Otten for useful research assistance. The author has benefited from support of the Deutsche Forschungsgemeinschaft and the Collaborative Research Center 649.

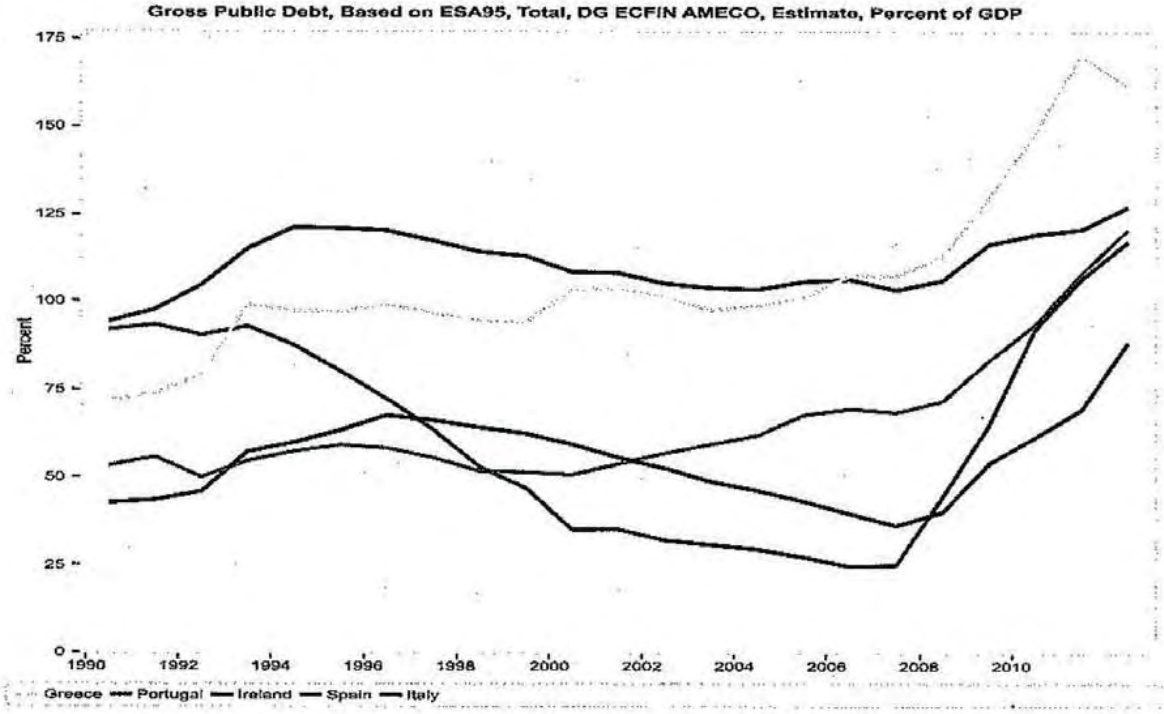
[1] The Humboldt conference was held on 13 January 2012. In the meantime, ECB President Mario Draghi has made a series of dramatic verbal commitments to do whatever necessary (summer of 2012) followed by a formal mechanism (September 2012) even though there has yet to be any actual new purchases of bonds (as of March 2013).

II. The deep hole we're in – how did we get there?

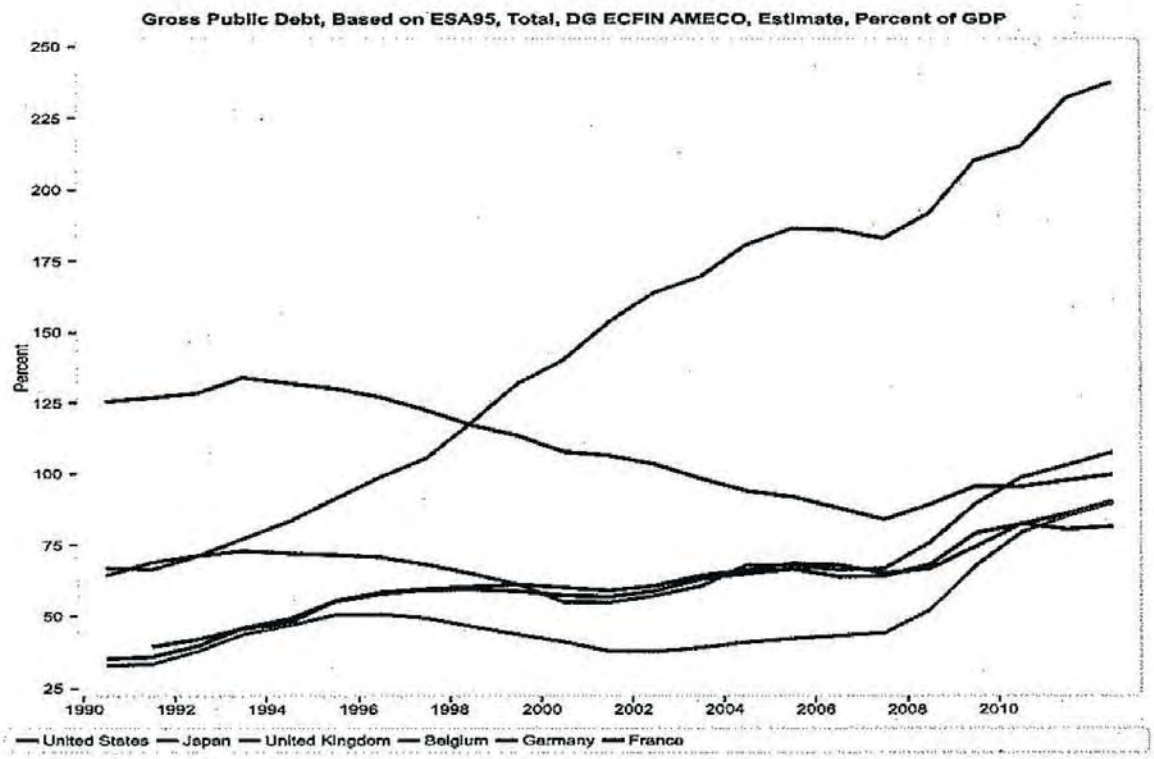
In 1995 the ratio of sovereign government debt to GDP in Greece was 97 %, which is slightly below the level of US government indebtedness today. Since the great recession, the ratio of government debt to GDP has risen dramatically in all OECD countries, and especially in the GIIPs countries, as a result of fiscal stimulus legislation, falling tax revenues and financial market bailouts. Figure 1 shows that government debt levels are not only high everywhere relative to GDP but they have risen precipitously since 2006. The severity of the Great Recession has undoubtedly been responsible for this development, yet it is interesting that some highly indebted countries (Japan, UK, US) have retained high credit ratings, while even the most reputable of European sovereigns struggle with the consequences of drastic downgrades.

Figure 1
Debt-GDP ratios, 1990–2012

1. Greece, Ireland, Italy, Portugal, Spain



2. Belgium, France, Germany, Japan, UK, USA



Sovereign debt has existed for centuries. Governments of countries like Ireland, Belgium, Greece, and Italy have or have had large levels of sovereign debt – were able to borrow large fractions of GDP in normal times *until 2007*. Yet countries have also defaulted spectacularly – Greece five times since its founding in 1826; Russia, China and Cuba after their revolutions. Yet the existence of sovereign debt proves the point: international lenders are willing to take a bet that a country will make good on an unsecured and unconditionally promised income stream which is backed not by productive activity directly, but rather the state's ability to extract resources from its economy. This is a bet, not only regarding the Leviathan's ability to set tax rates high enough to service the debt. It is also a bet that the borrowing economy will continue to grow sustainably into the indefinite future. Holding tax rates and the willingness to pay constant, economic growth implies growing tax revenues. It is fair to say that this bet is not unreasonable: Estimates of aggregate macroeconomic activity in countries which comprise the current OECD have grown robustly since the early 1820 s at about 1.8–2 % p.a. despite wars, panics, and natural disasters (Maddison[2]).[3]

Furthermore, it is in the nature of international lending that the more important determinant of the willingness to lend internationally is the willingness of borrowers to commit "original sin", i. e. to borrow in a foreign currency (Eichengreen, Hausmann and Panizza (2005)[4]), and thereby to rule out macroeconomic crimes of

[2] Monitoring the World Economy, 1820–1992, 1995.

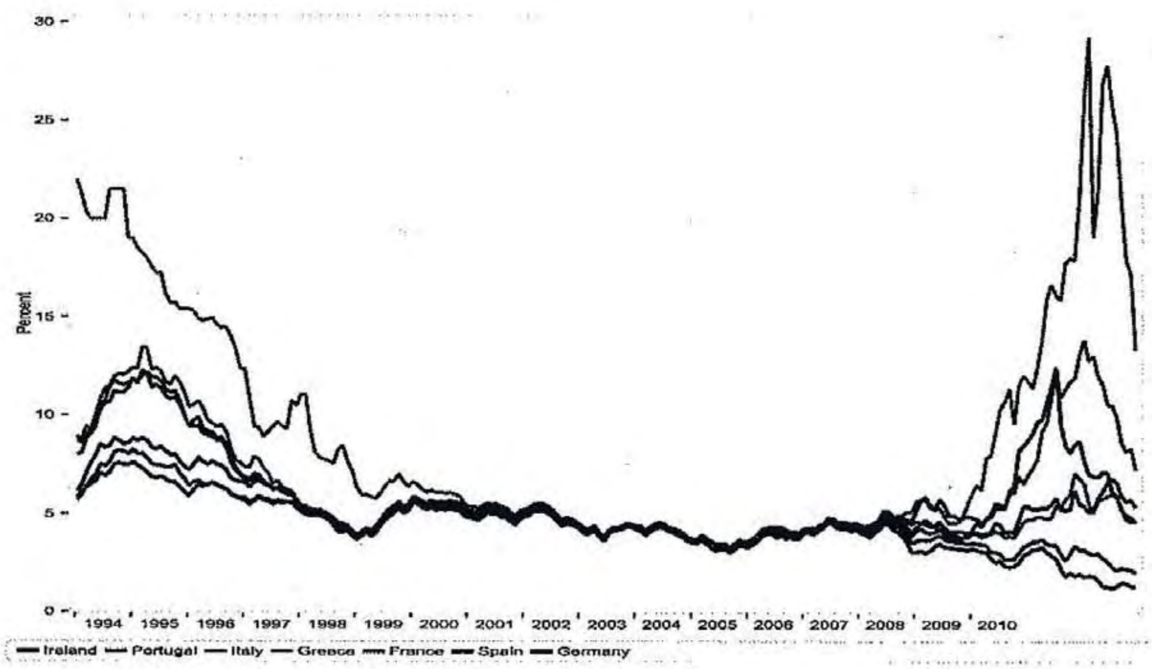
[3] It is well-known that a number of countries, such as Argentina, were internationally visible and successful a century ago yet did not make it into the OECD league.

[4] *B. Eichengreen, R. Hausmann, U. Panizza*, The Pain of Original Sin, in: Barry Eichengreen, Ricardo Hausmann (eds.). Other People's Money, 2005.

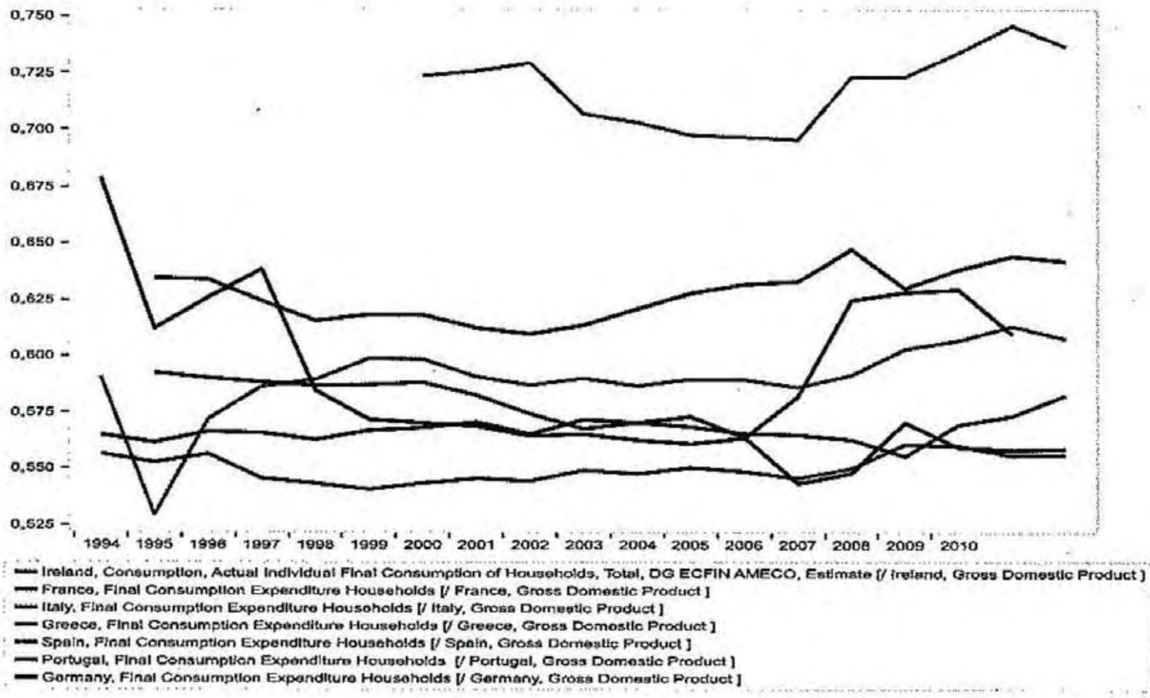
surprise inflation and currency debasement. With very few exceptions (the US, the United Kingdom, Japan, ...), sovereign borrowers have original sin on their hands. The Eurozone sovereigns are really no exception. For Greece or Portugal to issue sovereign debt in Euros is to issue debt in a foreign currency, over which the national authorities have no direct influence. Yet financial markets were willing to take this risk with a vengeance. The first panel of Figure 2 shows that during the "Golden Age" of European monetary union (2002–2007), ten-year yields on government debt in the Euro area converged to within only a few basis points of the most credible borrower-state, Germany. This convergence of interest rates was celebrated by then-ECB President Jean-Claude Trichet – somewhat naïvely, it turns out – as proof that the monetary union had ushered in a new age of monetary and financial integration.

Figure 2
Sovereign debt yields 10 year maturity and consumption-GDP shares, 1994–2012

1. Yields on 10 year government bonds



2. Consumption as a fraction of GDP



All this changed with the global financial crisis (2008–2009), and the Great Recession which followed. Although it clearly originated in the US, it sent shock-waves across the world. In particular, it burst real estate bubbles in Ireland and Spain and deflated tax revenues in Greece, Italy and Portugal as well as more solid economies. In Ireland and Spain, collapsing real estate prices threatened the solvency of mortgage lender banks as well as the arrangers of wholesale lines of finance, which ultimately implicated financial institutions in Germany and France and elsewhere in Europe. For better or for worse, banks were bailed out at taxpayer expense, ballooning government deficits. Then the financial markets suddenly discovered that the emperor had no clothes, as I will outline below.

Yet this cannot be the whole story, and it is not. Selectively but decisively, international lenders came to the conclusion that European governments could no longer cover deficits by borrowing at the same interest rates they had faced in previous years. Financial markets lost their trust in the Leviathan's ability to repay. The deeper crisis in Europe, especially in southern Europe, was a perceived inability to grow and integrate itself in the world trading system to the extent that the northern neighbors had. This failure to adapt to the greater problem, in contrast to Germany, with Austria, Finland, and the Netherlands, must also be addressed.

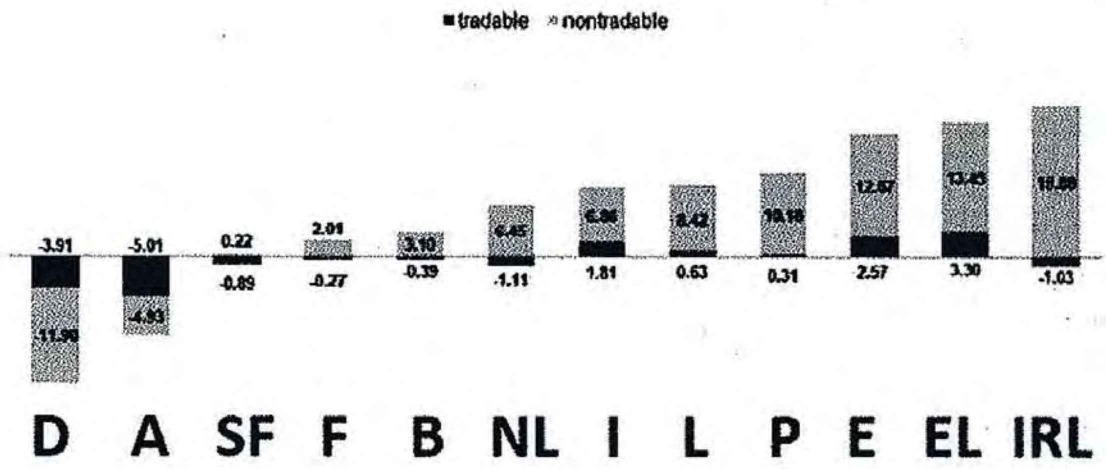
From the macroeconomic perspective, there are two interpretations of the crisis. The *fundamental interpretation* of the crisis was that the GIIPS countries were fundamentally insolvent, or on an easily identified path towards insolvency, to begin with. *Nonfundamental interpretations* are more subtle: the collapse of sovereign bond prices and implied rise in government borrowing rates were the central event that made them insolvent. These accounts are by no means mutually exclusive – and are most likely to reinforce each other. But they do put emphasis on different players.

Let us begin with the fundamental viewpont. In this narrative, the GIIPS countries squandered their chance to profit from low interest rates following monetary union (see Figure 2), modernize their economies and improve their competitiveness. Instead they went on a consumption binge up until 2006. The second panel of Figure 2 lends some credence to this explanation. The deterioration of competitiveness – meaning specifically a country's ability to export enough to able to service its debt today and in the future – deteriorated significantly in the years following the introduction of the Euro. In an article which appeared on February 19, 2006, the German daily newspaper *Frankfurter Allgemeine Zeitung* reported cumulative increases of unit labor cost deterioration of the GIIPS countries relative to Germany of 20 % and more – more than three years before the Euro sovereign crisis erupted. On top of this, the southern European periphery was running large and growing current account deficits. If the countries had used the opportunity to modernize their capital stock or infrastructure, there would have been payback in terms of more competitive exports. As the second panel of Figure 2 shows, the fraction of GDP dedicated to consumption rose significantly in all the southern countries, in comparison to Germany, which was stable.[5]

The surge in domestic consumption in the GIIPS countries led to a dramatic increase in the price of nontradable goods over the same period, which in turn fed into workers pay demands and diminished national competitiveness. Figure 3 displays the cumulative change in relative prices over the period 2000–2008. Recall that in a monetary union, nominal exchange rate changes between members are no longer possible, so within-Eurozone trade is determined by relative price levels only. As countries lose competitiveness their ability to service external debt with export revenues deteriorates while their dependence on imports grows. The total height of each country's bar measures the cumulative change in relative price competitiveness vis-à-vis the Eurozone average. Clearly, the secular deterioration of southern Europe and Ireland's competitiveness derives from a marked rise in the relative price of nontraded goods (apartment rents, restaurants and other consumer services, transport). This deterioration leads to higher wage demands and higher unit labor costs (as documented by the Frankfurter Allgemeine already in 2007 and now widely recognized). Combined with the general deterioration in current account balances, we have prima facie evidence that the problem lies in a long-standing lack of price competitiveness. The only way to restore current account balance is for relative prices in the southern periphery and Ireland to decline relative to Germany and northern Europe in general, and for this to happen for an extended period of time.

[5] In the period 2000–2007 the absolute level of real consumption expenditures increased by 33 % in Greece, 12 % in Portugal, 28 % in Spain, 41 % in Ireland and 6 % in Italy – compared with 4 % in Germany over the same period.

Figure 3
Unit labor costs, cumulative change by sector 1999–2008



Source: *Brede*, Tracking the Deterioration of Competitiveness within the Eurozone 1990 to 2010 – Theory and Evidence Bachelor Thesis, Humboldt University Berlin, September 2011

At the same time, a *nonfundamental* account of the crisis also contains serious merit, even if can always be exploited as a self-serving defense of delinquent debtors. Solvency of a sovereign government is an inherently loose concept, depending not only on competitiveness but also on the ability and willingness of governments to raise revenue from the real economy. Crucially, it also depends on the rate of interest. Even an AAA borrower like Germany would be bankrupt if it had to borrow at current GIIPS interest rates. Consider the following convenient formula which states the primary surplus (*PSurp*) necessary to keep the ratio of debt (*D*) to GDP (*Y*) constant for a given rate of future real economic growth (*g*) and real interest rate to be paid on the debt (*r*):[6]

$$\frac{PSurp}{Y} = (r-g)\frac{D}{Y}$$

This formula often comes as a surprise to non-economists: in order to keep D/Y constant, it is not necessary to run a large budget surplus or even any surplus at all, as long as the denominator (Y) is growing at a rate g which is sufficiently high relative to that of the numerator (D) – the rate of interest r.

In normal times the interest rate exceeds the growth rate of the economy, so it is customary for the IMF to shoot for a primary surplus when prescribing an adjustment program. Yet the markets, and not governments or the IMF, determine the interest rate r at which lenders lend to countries. For precisely this reason, a debt-GDP ratio of 97 % at the beginning of the Euro-Odyssey 2001 seemed sustainable at the time for Greece, if one were willing to assume that growth would

[6] The primary surplus is the overall financing surplus less interes income – put differenently, the primary deficit equals the government borrowing requirement less interest payments. See e. g. *M. C. Burda, C. Wyplosz,* Macroeconomics: A European Text, 6th ed., 2012, Chapter 17.

remain high relative to the borrowing rate.[7] A nonfundamental perspective would emphasize that a pessimistic turn of market expectations of Greece's creditworthiness or inability to grow induced a sharp increase in interest rates that itself moved that country into a state of insolvency. Both the interest rate and the rate of economic growth play central roles.

So what happened in Greece in 2009? It all started after a legendary run-in with the leading global sovereign bond investment fund Pimco – which manages more than $ 1.3 trillion in assets for insurance companies and pension funds, among others. After Greece's public concession in late fall of 2009 that its fiscal deficit had reached 14 % of GDP – twice the original estimates – Pimco allegedly demanded an explanation from the Greek finance ministry, which gave a very evasive and uninformative answer. Unsatisfied, simply dumped its entire Greek sovereign portfolio, which was followed by a roughly 100 basis point rise in its 10 year bond yields over the month of December 2009. Pimco did not stop there: they also sold off their Portuguese and Spanish sovereign debt, initiating a rapid unraveling of the tight cross-country bond yield structure that had prevailed for more than seven years (see Figure 2).[8] The event underscores the "no-nonsense" approach of Anglo-US finance, pointing out that "the Emperor has no clothes," a fact which the Europeans and financial markets had managed to repress for years.

III. Who's to blame?

The Euro crisis is about a massive collective failure. It is important for commentators not to mince words in this forum, and I won't. But having thought about it for several years now, I conclude that playing the blame game is a useless exercise. My conclusion is that all parties were to blame, not only for their actions but for their implicit complicity that goes with not criticizing the state of affairs, but by putting on horse-blinders and muddling through.

Political elites of Europe, starting with Kohl and Mitterand and proceding through Schröder and Chirac and Barroso, Monti and Trichet, blithely ignored the momentous implications of financial integration for financial stability. The policy of "benign neglect" of ignoring or even sanctioning Greek and Italy's fraudulent entry into the Euro didn't help matters. When confronted with these accusations, they turn and blame...

...***the GIIPS countries*** for failing to take advantage of Euro membership after 2000 to build a solid foundation for economic growth. Figure 2 shows the extent to which sovereign borrowing rates converged during the "golden era" of monetary union 2000–2007. In the second panel, Figure 2 plots consumption as a fraction of GDP in these same countries over the same period. When confronted with these numbers,

[7] In five years prior to 2001, the Greek economy grew at 3.2 % p.a. and the five-year yield on debt in 2002 was roughly 5 %. Assuming (perhaps naïvely) a growth rate of 3.2 % p.a. and a 100 % debt-to-GDP ratio, the formula in the text would require a primary government surplus of 1.8 % of GDP to stabilize the debt-GDP ratio constant. In 2001, Greece's primary government surplus was 1.5 % of GDP, and averaged 3.1 % in the years 1996–2000! Upon joining the Eurozone in 2002, however, Greece's fiscal discipline weakend considerably; in the years 2002–2007, the primary surplus averaged -0.9 % (a deficit), reaching -2.8 % in 2004.

[8] http://www.thisamericanlife.org/radio-archives/episode/455/continental-breakup?act=3 provides a vivid description of this fateful chain of events.

the ruling elites in the southern periphery and Ireland are quite adept at blaming the lenders, so we could turn our attention to…

…*French and German financial institutions*, and investment banks in particular, who participated in the party without questioning the assumptions behind the business model. In banking, it alwas takes two to tango. Sovereign lending is inherently unsecured. There is no easy path to asset recovery as in the case of national private lending, and if there is, it is a costly road with much uncertainty.[9] Lenders in Germany and France were cognizant of this fact. Many loans financed by banks to sovereigns involved big ticket industrial or military items (e. g. French jets and radar defense systems, German submarines and tanks) after either being encouraged by their respective governments or actually being directed to do so (i. e. Germany's *Landesbank* problem). Investment banks like Goldman Sachs, are known to have even constructed financial deals which enabled Italy and Greece to squeak past the Maastricht criteria or to "show significant progress towards achieving those targets". When confronted with these accusations, the banks duck and cover behind the fig leaf of the rating agencies, which are a natural target, so looking in that direction, we find that…

…*Ratings agencies* present the greatest challenge to the blame game. One doesn't need to be a rocket scientist to see that these central institutions entrusted with the objective assessment of sovereign lending risks were either embarrassingly ignorant or collectively corrupt. Neither prospect sheds a positive light on their activity. How could they have been so naïve to give Greece an A borrowing rating up until December 2009, and only after the dogs of finance had been awakened by a private sovereign bond fund (Pimco)? Rudimentary macroeconomics tells us that real shocks and fiscal adjustment have stronger effects under fixed exchange rates (Mundell,[10] Fleming,[11] Burda and Wyplosz[12]) and rating agencies should have taken the eventuality of disruptive fiscal stabilizations into account. Banks trusted blindly the quality of government debt and the quality of the rating agencies, so overly optimistic ratings, such as those given to Greek sovereign debt in 2001 or to Irish banks until 2007, led to excessive bank holdings of these securities and increasing vulnerability to contagion.[13] When confronted with this accusation, the rating agencies blame the politicians ….

So we are back to square one, the political elites. If they are indeed at fault in the eyes of the ratings agencies, then the blame game has become a transitive and infinite loop! In the case of Greece, Portugal and Italy, budgetary problems led to

[9] One thing is certain: since becoming an independent state in 1829, Greece has defaulted on sovereign debt five times, once in1894 in the context of the Latin Monetary Union, a currency union including France, Spain, Belgium, Italy and Switzerland. Greece ultimately left the Latin Monetary Union in 1908.

[10] *R. Mundell*, Capital mobility and stabilization policy under fixed and flexible exchange rates, Canadian Journal of Economic and Political Science 1962, 475 ff.

[11] *J. M. Fleming*, Domestic financial policies under fixed and floating exchange rates, IMF Staff Papers 9, 1962, pp. 369 ff.

[12] *M. C. Burda, C. Wyplosz*, Macroeconomics: A European Text, 6th ed., 2012.

[13] Moody's clung to its A rating for Greece government debt until 2010, after the yields on its debt began climbing in December 2009. See "Ratings Firms Misread Signs of Greek Woes", New York Times November 29, 2011. Similarly, only after the December 2009 sell-off did Fitch reduce its own rating of Greek sovereign debt from A- to BBB+ and downgrade Greece below investment grade for the first time in a decade.

sovereign debt crises, which in turn threatened the viability of banks, which had loaded up on supposedly riskless government debt, which in turn led to government bailouts which led to even more dramatic budgetary shortfalls. In Ireland and Spain, a real estate bubble led to an orgy of inadequately collateralized bank lending, which led to massive losses and a collapse of interbank lending. Governments stepped in, in the case of Ireland irrationally so, and guaranteed all liabilities, leading to dramatic quantum increases in government debt.

If everyone is to blame, then all parties are collectively responsible. Yet if all are responsible, no one will ever take responsibility. One might call it a case of *systemic moral hazard*. Few parties to this disaster raised their voices, either because they didn't have the courage to do so, or for fear of raining on the parade or losing out on a chance for lucrative profits.[14] Neither the Eurocracy nor the plutocracy bothered to ask whether the breathtaking pace of financial integration didn't already imply a mutual European liability for government debt, due to "too big to fail"? Implicitly, the taxpayers of debtor countries were saddled with the liability without ever being asked! The real travesty of democracy as opposed that cited by globalization opponents should be: Why were these sovereigns allowed to borrow in the first place?

IV. How will we get out of the hole? Possible Scenarios

The usual prescriptions from the International Monetary Fund (IMF), the European Commission and the ECB are well known, and all unappetizing. The classic IMF formula, rigorously applied in the GIIPS countries, is budgetary austerity. Applying the budgetary knife means cutting the deficit directly by raising tax rates, expanding the tax base, closing loopholes as well as cutting spending on goods and services as well as transfers to households. While these measures usually appease the creditors, they do little to create a future basis of economic growth besides creating excess capacity. In unresponsive, state-dominated economies such as Greece's, the option of selling some of the family jewels is more attractive, especially if one believes that the government running large enterprises is a source of and not solution to the economy's problems – provided the proceeds are used to retire existing debt. Even more attractive – were the government capable of organizing it – would be a debt-equity swap of assets directly for debt, possibly at advantageous terms.

And then there are the bailouts. The simplest form of bailout is predicated on a judgment that the country is fundamentally solvent – in the sense that it could, politically as well as economically, muster the resources in present value terms at an "acceptable interest rate". This judgment is notoriously vague, since the interest rates are the collective judgment of the market. In the end, it is an assessment of the "fundamentalness" or "non-fundamentalness" of the interest rate at which lenders, especially foreigners, should advance resources to the sovereign. For purely political reasons, it may be deemed appropriate to refinance these countries at low and subsidized interest rates.

---

[14] The Financial Times quoted ex-CEO of Citibank, Charles "Chuck" Prince, on July 10 2007 – as the financial crisis was erupting – as saying "When the music stops, in terms of liquidity, things will be complicated. But as long as the music is playing, you've got to get up and dance. We're still dancing."

At some level, private sector involvement (PSI) is demanded of private creditors to sovereigns, and under such conditions is likely to be seen as coercion and may represent technically a default. Such are the haircuts that are often under discussion. Such controlled forms of bankruptcy or reorganization are certainly to be preferred to "uncontrolled bankruptcy" triggered by an ECB liquidity cutoff and the introduction of scrip. These national IOUs would rapidly become a new currency and undergo a sharp depreciation. This new currency would be accompanied by a dramatic depreciation vis-à-vis the Eurozone, leading to recriminations and possibly to further opportunistic beggar-thy-neighbor policies.

Yet these are simply short-term fixes – fixes for those who own the banks, claims on wobbly financial institutions, or high-yielding government debt. These are largely wealthy individuals. The only truly robust solution which benefits all involves re-establishing a sustainable basis for growth in the medium run. Greece's problems are primarily supply side problems, and cannot be solved by a demand stimulus. This remains true despite the paradox that current austerity measures have dampened growth in the short run. The Greek tragedy is that supply side policies require an investment of time and patience of 3–5 years or even longer, time that the Greeks may not have. Furthermore these reforms must be credible; mere announcements without any follow-through erode the credibility of every announcement which follows.

All the caveats notwithstanding, the case for good supply side policies – clever market oriented labor and product market reforms – is validated by the experience of the Netherlands after 1982, Denmark after 1990, Germany after 2004 not to mention Ireland after 1988–2000, when GDP per capita rose from 80 % in 1990 to 144 % of France's level in 2005, before the banks took over and ruined the party. While these policies are more difficult to implement politically, they are also the ones that will be noticed a decade later. They leave a sustainable footprint on the trajectory of GDP per capita in the long run, the basis for long-run increases in standards of living.

Supply side reforms are politically complicated, and are easily blocked. Product market reforms, labor market reforms, the establishment and consistent application of rule of law, the banishment of corruption, increasing competition in all walks of economic life – all measures which tend to make it easier for new entrants to engage in economic activity and expand the current set of economic alternatives. These measures also destroy rents in protected, regulated sectors which may have taken decades to accumulate. Current debates over market access to the "free professions" in Italy and the issuance of new licenses in the transport sector in Greece are two particularly salient examples, but there are many, many more. As is frequently the case, the devil's in the detail.

Good supply-side policies are difficult to implement precisely because their benefits come so late in the game and their initiators can harvest little political advantage from them. It is notoriously hard to document these things much less quantify them with numbers. Yet those attempts to construct indexes of the business climate and freedom from arbitrary regulation, taxation, and obstruction of market access tell us unequivocally that the south of Europe, and Greece in particular, still has far to go. The renowned "Doing Business Index" constructed by the World Bank (www.doingbusiness.org)[15] measures the assessment of the busi-

[15] See *S. Djankov, R. La Porta, F. López de Silanes, A. Shleifer*, The Regulation of Entry, Quarterly Journal of Economics 117, 2002, pp. 1 ff.

ness climate by lawyers, by consultants, accountants and other experts in more than roughly 190 countries. In 2010, Greece occupied 109th place, just behind Bangladesh, Paraguay, Yemen and Ethiopia. (Italy, Spain, Portugal and Ireland ranked 80th, 49th, 31st and 9th respectively). These results are validated by other benchmark assessments such as the World Competitiveness, Freedom from Corruption and Business Freedom indexes. It should be noted that in the past years Greece has improved many of its rankings – but the most important subcomponent of that index – the ease of starting a business – remains in the lower half of the 185 countries surveyed, improving from 149th in 2010 to only 146th in 2013!) There is much to be done in this regard.

With all this in mind, let me sketch three scenarios: the Good, the Bad and the Ugly.

The Good

In the Good Scenario, Greece ultimately accepts the "tough love" reform program of the Troika (EU/IMF/ECB) to restore investor confidence – with a great deal of national reluctance but with a good measure of resolve. Because the Troika's policy is pursued with determination despite the pain, it is rewarded by the EU with stabilization programs and further support for infrastructure investment. The Greek government reforms are followed by privatization, the proceeds of which are used to retire debt (at an effective exchange rate favorable to the Greeks), ratings improve and bond yields fall again. Greece stays in the Euro area and restores fiscal responsibility, and in seven years has access to credit markets once again.

In my Good Scenario I also see a de-politicization of both banking and credit allocation. This will require bold steps – one of which is the abolition of the national central banks and the creation of geographically and economically comparably efficient "banking districts" as was done when the US Federal Reserve Bank was created in 1913.[16] This would eliminate the currently national (and sometimes nationalistic) discussion of the natural balance of payment imbalances which arise at a regional level in a monetary union and the way they are dealt with.

The Bad

In the Bad Scenario, the Troika's program leads to significant resistance in the population, as soon as the reforms on paper are actually implemented. The political consequences of the program raise domestic anger and resentment of the Euro and the EU, especially the European Commission, which is seen as the extended hand of German and French creditors. Financial markets continue to short Greek debt, interest rates rise, budgetary problems mount. The Greek government collapses, politicians all over Europe blame the ECB for not bailing out the country yet again. Greece exits the Euro, reintroduces the drachma. By 2018 – and after considerable social and political chaos – the sharp gains in competitiveness in Greece become the object of envy in the other countries of the southern periphery. Other countries are tempted to follow. Financial markets sense this envy and temptation and short-sell sovereign debt with a vengeance, leading to a self-fulfilling dissolution of the southern Euro periphery.

[16] For an articulation of this position, see *Burda*, Hume on Hold?, www.voxeu.org, 17 May 2012. For a discussion of how the United States solved its regulatory issues in the Progressive Era see *Frieden*, Global Economic Governance after the Crisis, Perspektiven der Wirtschaftspolitik, forthcoming.

The Ugly

The Ugly Scenario is a classic case of "Weiterwurschteln à la Européenne" – muddling through as Europe has always done when confronted with challenges. In this scenario, the Troika imposes an IMF-style program on Greece to restore investor confidence. The Greeks (and the rest of Southern Europe) promise much but deliver little. Because foreign investors understand this, crucial foreign direct investment does not materialize. In 2015 the result is no growth, and more demands for more relief. The political consequences of chronic transfers to the south raise domestic anger and resentment of EU and the Euro. Financial markets continue to short GIIPS debt, interest rates rise, budgetary problems mount. ECB funding of zombie southern European banks has political repercussions in Germany and other northern countries. This time it is the Germans and other northern Europeans who recoil at the prospect of a permanent bailout of sovereign countries, while interest rates for savers remain persistently below the rate of inflation – which is creeping upwards at the same time. The political profitability of an "anti-Euro" party is too great and the party not only weakens the major parties but also shifts their European orientation. Rising inflation in the Eurozone leads to a galvanized political movement in Germany for the exit from the Euro by these countries. The result is a NEURO – or "Nordeuro" – which appreciates sharply, devastating the progress made towards real economic integration in Europe and setting us back in the way the Great Depression did in the 1930 s.

V. Conclusion

I am fond of telling my students that the European monetary union is like a rooming group at university – an experience that every student has had and can relate to. It is not the same as family, and there is a certain amount of private space that each person has a right to – a private room, a corner of the pantry or medicine cabinet, and if there is little trust, an individualized locker or cabinet kept under lock and key. Necessarily there are shared common areas which are essential to leading a normal lifestyle – kitchen, living room, WC, etc. Sustainable use of common areas implies that each member of the rooming group has an obligation to clean up afterwards, which can often lead to tensions. There is always – almost by construction – someone who does more of the work keeping the apartment clean while others are slackers. All rooming arrangements are characterized by conflicts, and often fights arise over matters which seem trivial, when considered with some emotional distance. Yet the longer people room together, the harder it is to separate. Sometimes rooming groups can last years or decades, and when they break up, it is usually under less than friendly terms.[17]

The metaphor can be developed even further. All members of a *Wohngemeinschaft* have an interest in the health of each and every individual. We all benefit if everyone washes his hands, bathes regularly and keeps a clean and tidy

[17] Somewhat controversially, the US economist Martin Feldstein (EMU and International Conflict, Foreign Affairs 76(6), (Nov/Dec 1997), 60–73) concluded that inappropriate monetary unions are the source of political instability, civil unrest, and even war. Fifteen years later, he confirmed his pessimistic assessment of the long-term prospects for the common currency, *Feldstein*, The Failure of the Euro, Foreign Affairs 91(1), (Jan/Feb 2012), 105–116.

room. For this reason, Europe – and not just the Eurozone – needs to rethink the structure of the European house and how its residents can maintain a modicum of economic hygiene. The title of my essay asks "How can we get out of it" – the answer is only with a lot of serious housecleaning and soul-searching. Questions of governance, fiscal responsibility and insolvency resolution – central questions posed at this conference – can be thought of as good housekeeping rules that need to be agreed upon before friends and acquaintances move together and become housemates. Some of the most important issues on Europe's table at the moment need to be decided in the same way: A banking union equipped with real power and authority to act swiftly, decisively, and perhaps even undemocratically; a fiscal union of some sort which at least defines what the European union cannot do in support of its weakest members; the establishment of an enforceable country insolvency regime as well as a credible fiscal stability pact. Doing all this correctly from the outset is an essential element for keeping the European rooming group together for the long haul.

Michael C. Burda