PANOECONOMICUS, 2012, 5, pp. 529-552
Received: 09 November 2012.

UDC 338.124.4 (4-672EU)
DOI: 10.2298/PAN1205529A
Original scientific paper

Angelos A. Antzoulatos

Department of Banking and Financial Management,
University of Piraeus,
Greece

✉ antzoul@unipi.gr

Policy Responses to the European Debt Crisis Treating the "Symptoms" or the "Disease"?

Summary: The conventional narrative for the European debt crisis stresses three factors, namely, bad policies and profligacy in the afflicted countries – mostly southern ones, flaws in the EMU design, and wise policies in the northern frugal countries. This paper argues that the root causes of the crisis lie in the failure of many "safety valves" of market economies, at many levels of the society, both in the crisis countries and in the more "prudent" EMU countries, in an economic environment where unfettered finance can overwhelm even the biggest and best managed economies. Hence, the policy responses based on the conventional narrative are akin to treating the "symptoms", not the "disease". As such, they may be setting the foundations for a bigger crisis in the future by strengthening the always-present perverse incentives of many economic players and by proposing complex and unworkable regulatory and supervisory structures. This, together with the unequal sharing of the burden of adjustment – both across and within countries, bodes ill for the long-term prospects of EMU, despite that the aforementioned failures are not intrinsically related to the euro.

Key words: Bank supervision, Economic and financial imbalances, EMU, European debt crisis, Financial regulation, Market discipline.

JEL: E65, F34, F36.

Paper by invitation

I thank, without implicating, Angeliki Anagnostou, Nikolaos Apergis, Claire Economidou, Dimitris Kyriazis, Kosta Josifidis, George Katsimbris, George Kontos, Stefanos Papadamou, Nikitas Pittis, John Thanopoulos, Chris Tsoumas and Dimitrios Voliotis for many insightful comments. Financial support from the University of Piraeus Research Center gratefully acknowledged.

An earlier version can be found as a discussion paper at http://ssrn.com/abstract=2166186

The conventional narrative for the European debt crisis stresses three factors: bad policies and profligacy in the afflicted countries – mostly southern ones, flaws in the Economic and Monetary Union (EMU) design, and wise policies in the northern frugal countries. This narrative has guided – and, as of the writing of this paper, keeps guiding – the policy responses, despite their apparent ineffectiveness so far in containing the crisis.

A representative summary of the said narrative is quoted below.[1]

"Adoption of the euro led to convergence of interest rates in periphery countries to the levels in core countries and, in combination with rising capital inflows owing to greater financial integration, set off a consumption and real estate boom in periphery countries, leading to higher growth and increases in government revenue and spending.

[1] From the abstract of the paper by Justin Y. Lin and Volker Treichel (2012). Fully recognizing the risk of inadvertently misrepresenting the authors' views by quoting a passage possibly out of context. I would like to stress that I agree with their assessment. However, going one step further, I argue that what they describe are "symptoms", not the "disease".

The resulting real appreciation led to a loss of competitiveness in periphery countries, adversely affecting export performance and causing rising current account imbalances. While the fiscal position remained manageable before the crisis owing to rising revenue, the recession brought about by the global financial crisis led to the burst of real estate bubbles and a financial sector crisis and to sharply increased budget deficits and worsened debt indicators and triggered the sovereign debt crisis.

Core countries, in particular Germany, maintained a competitive edge through wage restraint allowing them to increase exports to periphery countries, while their banks profited from increased lending to frnon-core countries.

In sum, the euro exacerbated intra-European imbalances whose unsustainability became evident in the aftermath of the global financial crisis and triggered the current sovereign debt crisis."

In line with this narrative, the policy responses to contain the crisis include fiscal adjustment, to reduce budget deficits and government debt; wage restraint, to help restore competitiveness since the option of nominal devaluation is not available within the EMU; plus measures to recapitalize the banking systems in the crisis-hit countries – Greece, Ireland, Italy, Portugal and Spain.

The proposed policy responses, that purport to address some EMU design flaws, include a fiscal union, common underwriting of government debt and banking union. A fiscal union would ease the burden of adjustment in cases of "asymmetric shocks"; common underwriting would reduce the cost of borrowing of the more indebted countries and, as such, would reduce the possibility of self-aggravating debt dynamics; a banking union would make rescuing banks in trouble easier and, thus reduce the possibility of self-aggravating bank fragility and pertinent self-fulfilling expectations.

This paper voices three serious concerns about the conventional narrative and its policy prescriptions.

First, and foremost, about the root causes and propagation of the crisis. Going one step further than Krugman, whose assessment is very close to that of this paper (Paul Krugman 2012, pp. 166–187), the root causes lie in the failure of many "safety valves" of market economies, at many levels of the society, both in the crisis countries and in the more "prudent" EMU-countries, in an economic environment where unfettered finance can overwhelm even the biggest and best managed economies. These failures were not the inevitable consequence of the introduction of the common currency.

Second, about the policy responses. They are akin to treating the "symptoms", not the "disease". This applies to both the measures taken so far to contain the crisis and to the proposed measures to avoid another crisis in the future. As such, they may be setting the foundations for a bigger crisis in the future by strengthening the always-present perverse incentives of many economic players; and by proposing complex and unworkable regulatory and supervisory structures, which, additionally, may be impotent in the case a crisis afflicts a major EMU country – something no one can preclude.

Third, about the unequal sharing of the burden of adjustment, both across and within countries, something that is hardly mentioned in the policy debates. Specifi-

cally, the measures taken so far place the burden of adjustment almost exclusively on the crisis countries, despite that they are not solely responsible for the crisis. Even worse, within these countries, the burden is borne disproportionately by the weakest and least-responsible for the crisis social classes. This is something that bodes ill for the long-term survival of the EMU, regardless of whether Greece exits in the near future or not. Which, in some sense, is ironic for one cannot blame the euro for the crisis – it could have happened even without it.

The remainder of the paper is as follows. Section 1 compares the afflicted countries by analyzing selected indicators of macroeconomic and financial imbalances, indicators widely used as warning signals of troubles ahead. Descriptive in nature, with occasional remarks about the root causes of the crisis. Section 2 addresses the question "Whom to blame for the crisis", by presenting an alternative view regarding its root causes and by re-examining euro's contribution. Section 3 concludes.

The analysis is based on data from reliable sources, as well as on soft information from the author's personal experience and discussions with senior people in the private sector in Greece.

1. Comparing the Afflicted Countries – One Debt Crisis or Many Crises?

Typical indicators of macroeconomic and financial imbalances suggest that each crisis-country's experience is different, with Greece's experience coming closer to the conventional narrative. A deeper look, however, reveals a common cause that is neither unique to the crisis countries, nor the product of euro: financial system excesses.

Briefly, viewed in isolation, typical indicators of macroeconomic imbalances did not provide strong *ex-ante* warnings for the severity of the government debt crisis, with the exception of Greece and, to a lesser extent, Portugal. The warnings got stronger after 2003, during a period of abundant liquidity and historically-low interest rates worldwide, a powerful reminder that "good times" foster complacency, weaken market discipline and stoke imbalances that eventually lead to crises.

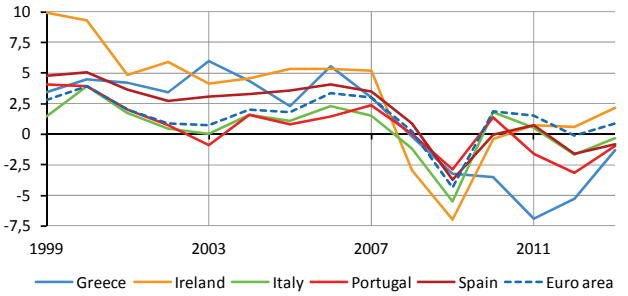
Yet, financial indicators reveal that the crisis-hit countries were on unsustainable paths long before the eruption of the crisis. Debt was rising fast and, in some countries, namely, Spain, Ireland and Greece, production was distorted by a real estate bubble. The debt-financed growth, fueled by consumption and construction, masked the growing macroeconomic imbalances and gave a false sense of fiscal soundness in some of the crisis countries.

The analysis begins in 1999, the year of EMU's launch, and extends through 2007, the year the global financial crisis begun. Occasionally, the data stretch back into the 1990s, to document that the problems were brewing before euro's introduction, and beyond 2012, to highlight the ineffectiveness of the measures taken so far.

1.1 Indicators of Macroeconomic Imbalances

Three of the five crisis countries, namely, Greece, Ireland and Spain, enjoyed high rates of growth during the 1999–2007 period, above the EMU average. Italy and Portugal had lower rates, even lower than the EMU average.

The protracted slump of Greece, the result of the draconian stabilization program and the accumulated imbalances in the economy, raises serious concerns about the policy mix and the sequence of the undertaken measures (for a summary, see George P. Kouretas and Prodromos Vlamis 2010; and Angelos A. Antzoulatos 2011). After four years of deep recession, Greece was expected -as of May 2012- to have negative growth for at least two more years, with a cumulative decline of real GDP of about 25% from the peak in 2007.

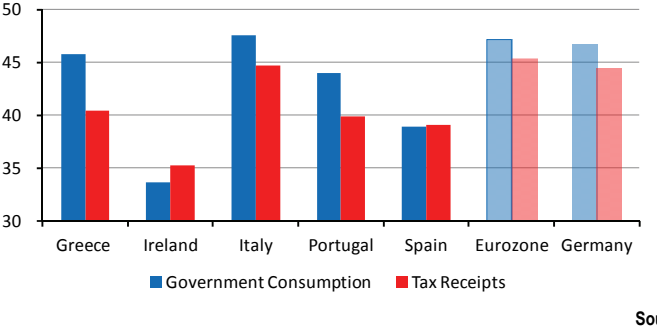


Source: OECD (2012). The figures for 2012 and 2013 are forecasts.

Figure 1 Episodes of Financial Crises

The picture is broadly similar for private consumption, investment and government consumption growth. Hence, for domestic demand as well.

The role of the government in the economy in the crisis countries wasn't that different from the EMU average or from Germany's, as indicated by government consumption and tax receipts – as percent of GDP.

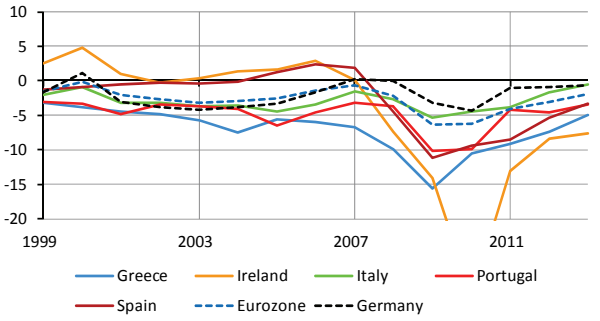


Source: OECD (2012).

Figure 2 Government Consumption & Tax Receipts (% of GDP), Average 1999–2007

In fact, Ireland, Spain and, to a lesser extent, Portugal had a lower share of government consumption than the Eurozone and Germany.

This casts doubt on the policy of fiscal contraction to address the post-2007 budget deficits (see below for pertinent figures). Fiscal contraction and the resultant shrinking of the public sector were neither inevitable and, given the state of the economy, nor advisable – at least not to the extent forced upon the crisis countries. This assessment, of course, does not question the need for fiscal consolidation and improving public services.



Source: OECD (2012). The figures for 2012 and 2013 are forecasts. Ireland's budget deficit in 2010 was 31,2 % of GDP.

Figure 3 Budget Deficit (% of GDP)

Even for Greece, which had the biggest and longest-running budget deficit, the fiscal contraction imposed with the stabilization program seems to be a "second best", at best. With its political elite unable, or unwilling, to tackle tax-evasion and waste, the country was forced to cut spending in the midst of a severe contraction. Treating the "symptoms", i.e. the deficit, and not the "disease", i.e. the weak public administration.

Moreover, Greece illustrates that the sequence of policy measures should have been different. Start with the problematic areas of the government and, if need arises -something not evident by the statistics in Figure 2- proceed with fiscal cuts. This reservation regarding the sequence of measures is strengthened by the analysis below, pertaining to the loss of competitiveness and the attendant current account deficits – both of which call for urgent action to create the conditions for sustainable export-led growth.

The case against fiscal contraction in the midst of the crisis is stronger for the countries whose post-2007 deficits were likely a symptom not a cause of the government debt crisis – treating the "symptoms" again… This applies to Ireland, Spain and Italy, even after taking into account that Ireland's and Spain's tax receipts were boosted by an unsustainable surge in debt-financed domestic demand and one of its results – a real estate bubble (see Figures 8–13). Ireland and Spain, in particular, were running budget surpluses and occasionally modest deficits, a performance that was better than that of the Eurozone and of Germany. Italy's deficits were about the same as Eurozone's.

Greece's substantial deficits, in excess of the Maastricht Treaty limits for several years before the eruption of the crisis, provide strong evidence about the aforementioned failure of many "safety valves". EMU's built-in mechanisms were not effective at preventing these deficits. Neither was market discipline. Indicatively, in January 2006, the spread of the 10-year Greek government bonds over the 10-year German bunds was about 20bp, while one year later, and just eight months before the onset of the global financial crisis, the spread had risen to just about 25bp.

Portugal's fiscal performance was slightly better than Greece's. Yet, its post-2007 deficits are likely a symptom of the crisis.

Ireland provides the best indication that the fiscal contraction treats the "symptoms". The country's dramatic deterioration of the budget, reflected on a deficit of 31.2% of GDP in 2010, was essentially the product of the government's assuming the financial obligations of the country's banks which were collapsing under the burden of bad real-estate loans.

While the budget deficit figures provided strong *ex-ante* warnings for Greece and Portugal, government debt was a warning signal for Greece and Italy only.

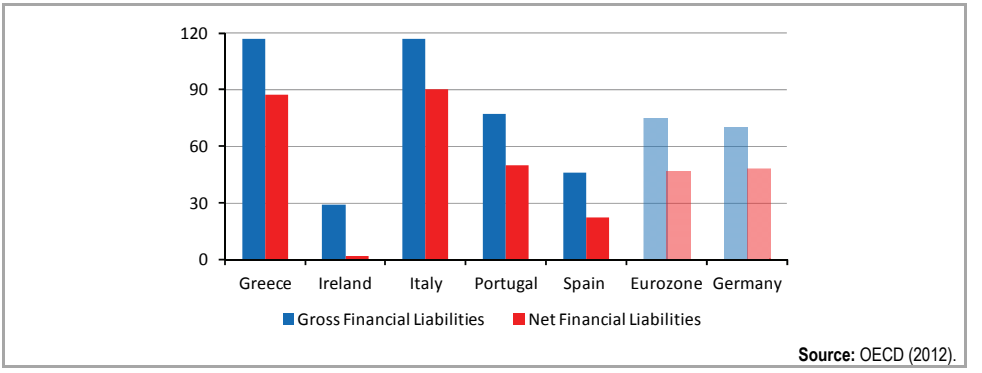


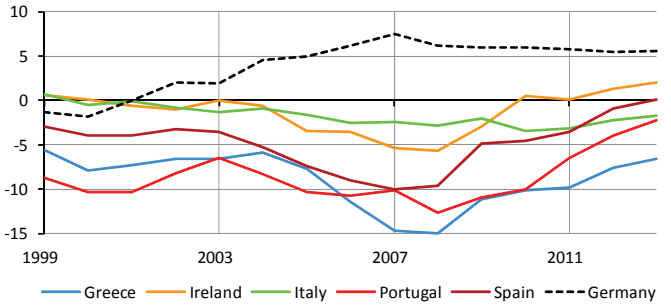
Figure 4 Government Financial Liabilities (% of GDP), 2006

Providing another strong indication that "market discipline" did not work, credit rating agencies did not warn about the accumulating imbalances. Specifically, Greece, which also had a severe problem of fast accumulating external debt – owing to the country's large and persistent current account deficit (see Figure 5) had at the end of 2006 sovereign credit rating A (Standard and Poor's). Ireland and Spain had AAA; Portugal, with similar to Greece's current-account deficits, AA-; and Italy, with similar to Greece's government debt, A.

The current account (Figure 5) was providing strong warnings for Greece and Portugal throughout the examination period; for Spain after 2003 and Ireland after 2004, during a period characterized by fast credit growth and swelling real-estate bubble (see below for details).

Three things stand out. One, Greece's current account deficit is expected to stay in the "red zone" in 2013, exceeding 6% of GDP, despite that the economy will have contracted by more than 20% since its peak in 2007. This is a strong indication that Greece's adjustment program is missing some important ingredient – that of

competitiveness. It is an open question whether wage restraint would suffice to address it. Yet, there have been strong reservations about, right from the beginning of the program (see, among many, Antzoulatos 2011). True, only about half of the projected current account deficit is attributed to goods and services. The rest is attributed to the income account – mostly interest payments to service the country's external debt. Yet, this is hardly reassuring given the more than 20% real GDP fall since 2007, when the current account was about 15% of GDP. Once growth resumes, the goods and services deficit will likely widen, unless growth is export led –not very likely given the structural weaknesses of the economy- or unless Greece is condemned to many years of anemic growth, high unemployment and reduced living standards.



Source: OECD (2012). The figures for 2012 and 2013 are forecasts.

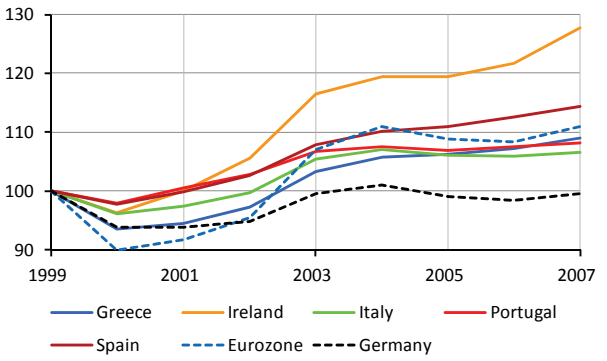
Figure 5 Current Account (% of GDP)

Two, Greece's and Portugal's alarming deficits before the beginning of EMU -in excess of 5% of GDP- are indicative of the long-brewing problems in these two countries. The loss of competitiveness was evident and should have been alarming long before the eruption of the crisis. Ironically, ill-spent money from EU fiscal transfers contributed to this loss of competitiveness. So probably did fixing the exchange rates of drachma and escudo to the euro, upon EMU entry, at uncompetitive levels. Two policy mistakes that were neither inevitable, nor the common currency's fault. The second mistake is reminiscent of the U.K.'s entry into the ERM in October 1990 with an exchange rate that many knowledgeable observers regarded as overvalued (see, for example, Marcus Miller and Alan Sutherland 1990). As is well known, the U.K. was forced out of the ERM in September 1992.

Three, the widening current account deficits of the crisis countries were matched with rising surpluses by Germany. Paraphrasing Krugman's forceful argument (Krugman 2012), that a country's expenditure is another country's income, a country's current account deficit is another country's current account surplus. Germany's external – as well as, overall economic performance would not have been that good without the unsustainable, debt-financed booms in the periphery countries – especially, in Greece, Ireland and Spain.

Related to that, the efficient functioning of any international monetary system -including a monetary union- requires a leading country that subsumes its own economic priorities for the common good, i.e., the stability of the system, especially in periods of need, as now, and more so in a monetary union where the common currency removes one adjustment tool – the (nominal) exchange rate. It is another manifestation of the "N-1 Problem". Roughly, in a world with N countries only N-1 can pursue independent policies; the N^{th} country, presumably the leading one, cannot. In the Bretton Woods system, the N^{th} country was the USA (see, Ronald I. McKinnon, 1997, pp. 46–47). In the EMU, it is Germany. By pursuing the "Agenda 2010" in the mid 2000s (see below for details), Germany essentially violated the economic principle that the N^{th} country cannot have an independent exchange-rate policy – here, real not nominal exchange rate. Moreover, it has not risen sufficiently to the duties of the leading country by not pursuing expansionary policies to ease the burden of adjustment of the crisis countries.

Nevertheless, the loss of competitiveness was more pronounced for Ireland and -to a lesser extent- Spain, while Greece's and Italy's was smaller than that of the Eurozone.



Source: OECD (2012).

Figure 6 Competitive Positions (1999=100), Based on Consumer Prices

The loss of competitiveness after 2000 reflects euro's nominal appreciation plus country specific factors. One such notable factor was wage restraint in Germany, under the "Agenda 2010" program, that helped the country avoid the loss of competitiveness stemming from euro's nominal appreciation. In essence, Germany, not having the option for a nominal depreciation within the EMU, implemented a real depreciation.

Germany's performance, as illustrated in Figures 5 and 6, raises a question with important policy implications: What would have happened had the other Eurozone countries embarked on similar competitive *real* devaluations? How stable would the euro have been even during the good times leading to 2007? Would Germany have enjoyed the current account surpluses discussed above?

Under the Bretton Woods system, and owing to the memories of the competitive devaluations during the Great Depression of the 1930s and the resultant collapse of international trade, the IMF was monitoring country policies in order to prevent such devaluations. Is there any such watchdog in the EMU? If not, perhaps coordination of labor-market policies might be more effective than the proposed fiscal union, banking union and common underwriting of government debt.

Global factors, beyond the control of the crisis countries, played also a role. The deterioration of the current account deficits and the loss of competitiveness of the crisis countries accelerated after 2003, during a period of abundant liquidity and historically-low interest rates worldwide.

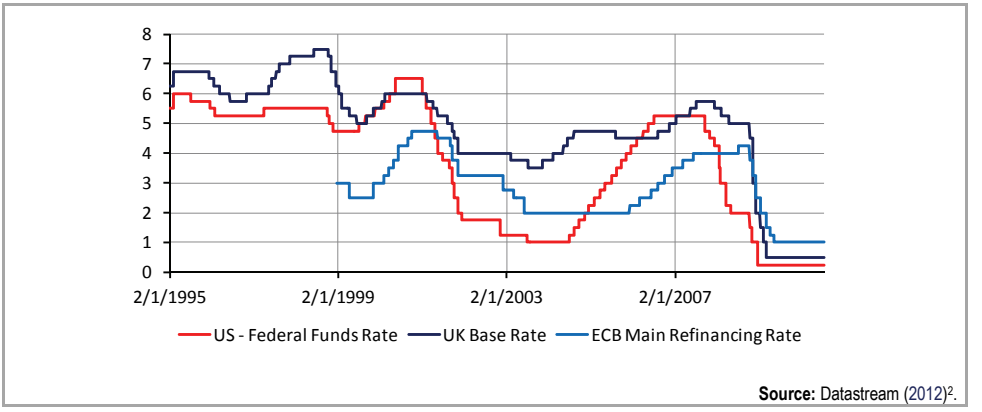


Figure 7 Policy Rates – From Scylla to Harybdis

The low interest rates, in the aftermath of the collapse of the global equity bubble in the early 2000s, were the product of the increasingly desperate efforts of the major central banks to avert the then much-feared deflation from the bursting of the bubble. But these low rates fuelled the real estate bubble in many industrial countries, the bursting of which was the catalyst for the European debt crisis.

Yet, the root causes of the real estate bubble go farther back. In the fall 1998, when the US Fed cut interest rates to help US banks with a big exposure to the failed LTCM hedge fund. The lower interest rates, together with the moral hazard created by the impression that the authorities would step in to protect investors from their excesses, contributed to the stock market bubble of the late 1990s.

As economic history has made plainly apparent, in a world of unfettered financial markets, trying to contain the fallout from market excesses creates the conditions for bigger crises in the future – "from Scylla to Harybdis". And these excesses were not the product of the common currency.

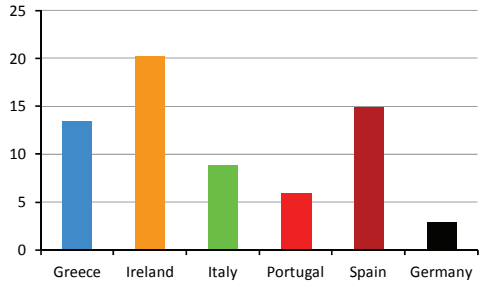
[2] **Datastream.** 2012. FDTR index, UKBRBASE index and EURR002W index (accessed August 28, 2012).

1.2 Indicators of Financial Imbalances

Financial indicators provided strong *ex-ante* warnings that the crisis countries were on unsustainable paths. Notably, the strongest warnings were for the countries with the "best" budget and government-debt indicators, i.e. Ireland and Spain. In addition, though they were (mostly) private-sector financial imbalances, they metamorphosed into government-debt crisis – raising another question mark regarding the policy responses to the crisis.

Briefly, there were strong and strengthening *ex-ante* warnings about growing banking fragility, on both the asset and the liability side of bank balance sheets.

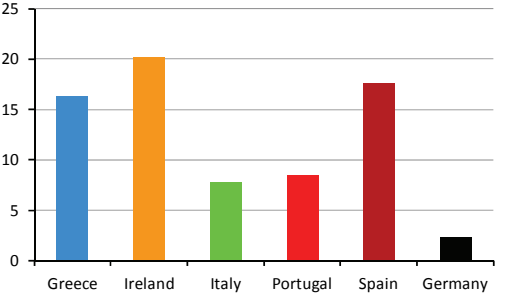
On the asset side, there was an alarmingly fast growth of bank assets and loans, most prevalent in Ireland, Spain and Greece (Figures 8 and 9): in Greece and Spain, in the vicinity of 15% per year; in Ireland, in the vicinity of 20% per year. German banks were more prudent, with average asset and loan growth, 2.9% and 2.4% respectively, close to the average nominal GDP growth, 2.5%.



Source: OECD (2000-2009)[3].

Figure 8 Bank Assets – (Geometric) Average Annual Growth Rate, 2000–2007

In Ireland, total bank assets in 2007 were seven times the country's GDP – too big for any chance of the Irish authorities to save the banking system in case of need. They ought to have acted before reaching this precarious situation. For the other countries, it was between 1.5 (Greece) and 2.7 (Spain) times.



Source: OECD (2000-2009).

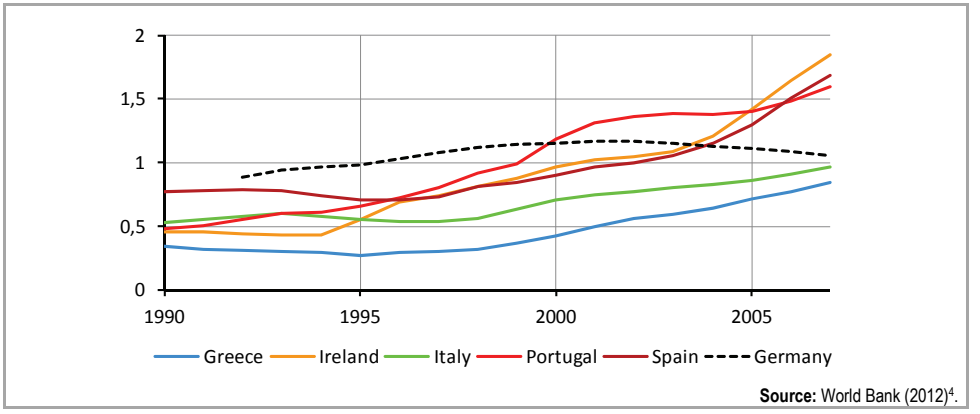
Figure 9 Bank Loans – (Geometric) Average Annual Growth Rate, 2000–2007

[3] **OECD.** 2000-2009. Bank Profitability: Financial Statements of Banks. http://stats.oecd.org/Index.aspx?DataSetCode=BPF1 (accessed August 26, 2012).

The fast rise in private credit should have been a cause for alarm, for it usually coincides with lax lending criteria and, eventually, with problems in the banking sector. These problems would be severe due to the size of the banking sector relative to GDP.

Despite the fast GDP growth during the period 2003–2007, private credit to GDP rose fast as well (Figure 10). The rise was particularly steep after 2003 in Ireland and Spain. In Portugal, the ratio was relatively high since the late 1990s. In Greece, the rise, as well as the level, of this indicator was smaller than in the other countries.

As a result of the fast credit growth, countries, with historically low levels of private indebtedness, got private sectors more indebted than that of Germany which, until the end of the 1990s, had higher levels of private credit to GDP.

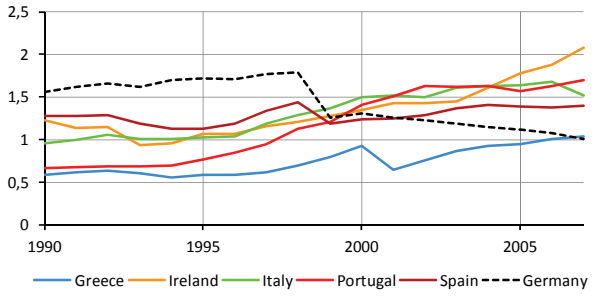


Source: World Bank (2012)[4].

Figure 10 Private Credit to GDP

On the liability side of bank balance sheets, there was an increasing reliance on market financing to meet the growing demand for credit which could not be satisfied by the inadequate domestic savings – the latter reflected on the current account deficits. It was more prevalent in Ireland, Portugal and Italy, where the ratio or private credit to deposits exceeded 1.5 after 2003. In Spain, it hovered around 1.4 since 2003.

[4] **World Bank.** 2012. Financial Structure and Development Database. http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0, contentMDK:20696167~pagePK:64214825~piPK:64214943~theSitePK:469382,00.html (accessed August 26, 2012).



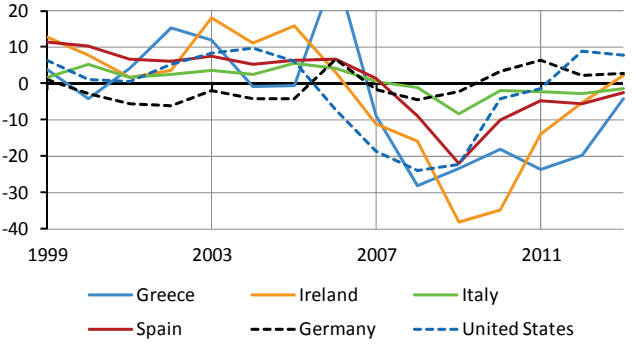
Source: World Bank (2012).

Figure 11 Private Credit to Deposits

Thus, increased vulnerability on the asset side of bank balance sheets, owing to the size of the banking system, fast credit growth and (likely) lax lending criteria, coincided with increased vulnerability on the liability side. In contrast, during the same period German banks were reducing their liability-side vulnerability: private credit to GDP declined from more than 1.5 during the 1990s to about 1.0 by 2007.

Yet, despite the alarming evidence about the growing financial fragility, and the attendant macroeconomic imbalances and fragilities, bank supervisors did not act preemptively. Perhaps, they did not have the necessary regulatory tools or adequate regulatory cover to intervene (for details, see below the discussion about the role of the institutional framework). But this is hardly the fault of euro.

The warning signs were stronger if one takes into account where the money was going to. Fueling a real estate bubble was one of the strongest warning indicators. The pertinent evidence was stronger in Ireland and Greece, but longer lasting in Spain. Not surprisingly, the post-2007 collapse of residential investment was more pronounced in these countries (Figure 12). Pertinent data for Portugal is not available.

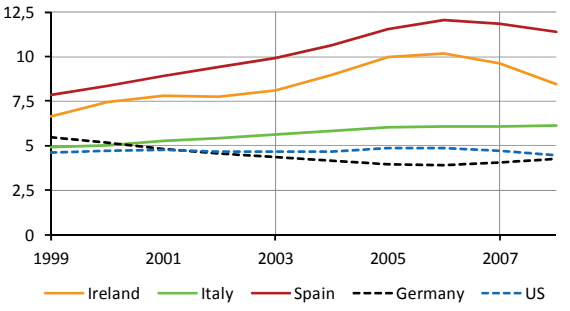


Source: OECD (2012). The figures for 2012 and 2013 are forecasts. Greece's figure for 2006 was 31.4%. Data for Portugal was not available.

Figure 12 Real Gross Residential Investment, % Change

Strengthening the assessment that the crisis is the product of many failures, at many levels of the society, failures not intrinsically related to the euro, Greece's more-than-30% increase in gross residential investment in 2006 was fuelled by elections-related changes in real estate taxation the year before. Short-sighted policy measures, exacerbating long-brewing problems and stoking long-term troubles.

Boding ill for the recovery prospects of these countries, the housing bubble was accompanied by a misallocation of their productive resources towards the construction sector. At the height of the bubble, construction accounted for about 12% of total value-added in Spain and 10% in Ireland. In contrast, even at the height of the sub-prime mortgage bubble in the mid 2000s, construction's contribution to GDP never exceeded 5% in the USA.



Source: OECD (2012). Data for Greece and Portugal are not available.

Figure 13 Value-Added in Construction, % of Total Value-Added

As with other warning signs, this perverse allocation of resources in Spain and Ireland was apparent from the 1990s. These countries needed a better development strategy long before the introduction of the euro. Judging from the yawning current account deficits (Figure 5) the same applies to Greece and Portugal.

Hence, sustainable recovery does not merely require reducing budget deficits and improving numerical indices of competitiveness, like those in Figure 6 or like the real effective exchange rate. More importantly, and more difficult to achieve, it requires redeployment of the productive resources towards the external sector – essentially a different growth model. Strengthening the concern about the sequence of the measures taken so far, the measures taken so far hardly address this need.

1.3 Digression

Table 1 summarizes the evidence above. In the years leading to the crisis, the macroeconomic indicators put Greece and Portugal to a more precarious situation compared to the other crisis countries. The financial indicators, however, were providing stronger warnings for Ireland and Spain, the two countries with the best fiscal performance.

Table 1 Warning Indicators Prior to 2007

	Greece	Ireland	Italy	Portugal	Spain
Indicators of macroeconomic imbalances					
Budget deficit	✓			✓	
Government debt	✓		✓		
Current account deficit	✓	✓		✓	✓
Loss of competitiveness		✓			✓
Indicators of financial imbalances					
Bank assets – Growth	✓	✓			✓
Bank loans – Growth	✓	✓			✓
Private credit to GDP		✓		✓	✓
Private credit to deposits		✓	✓	✓	✓
Real estate bubble	✓	✓		*	✓
Exposure to foreign banks**		✓	✓		✓

Notes: * - Data not available; ** - See Figure 14.

Source: Author's calculations.

The macroeconomic and financial imbalances discussed above are related. Rising private debt was fuelling the real estate bubble and supported rising domestic demand (consumption and investment). The latter led to worsening current account deficits and, on a more positive tone, to higher tax revenues which helped the crisis countries portray a better-than-actual fiscal position.

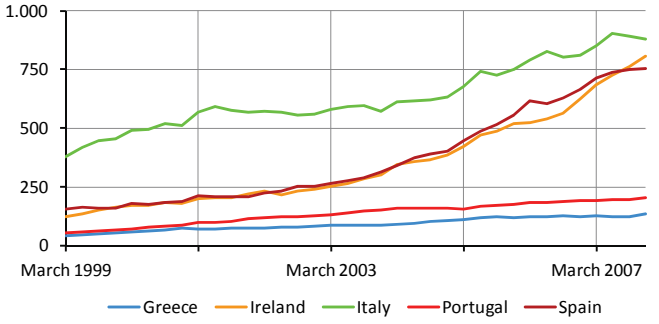
These developments are reminiscent of Raghuram's conjecture (Rajan Raghuram 2010), that rising credit is an easy solution for governments to support consumption at levels not consistent with real incomes. In this episode, it was made possible by the conditions in the international financial markets.

The discussion points to several causes of the imbalances. Briefly, "mistakes" in the crisis countries by the private sector, policy-makers and banks; unsatisfactory performance by market-watchdogs, like bank supervisors, the credit rating agencies and international investors; propitious macroeconomic environment and, in particular, historically low global interest rates which owed their existence to previous financial-system excesses; and destabilizing factors inherent in fixed-exchange rate systems, i.e. the "N-1 Problem" and the attendant need for policy coordination, plus the requirement that the leading country adjust its policies to the needs of the other members of the system.

Still, it seems that the crisis countries were largely responsible for their fate. Hence, one could justify why these countries should bear most of the burden of adjustment.

Delving deeper, however, it becomes apparent that responsibility does not lie exclusively with them. Having substantial current account deficits for many years, they needed external financing to avoid a contraction of money supply and credit. The fast-rising credit suggests that these countries were attracting private capital in excess of what was needed to finance their current account deficits. Foreign financial institutions and investors were financing both the current account deficits and the fast credit growth of fragile – owing to the accumulating imbalances – countries.

Highlighting this poor performance of foreign providers of capital, the claims of foreign banks vis-à-vis the crisis countries increased – especially after 2003. The increase was dramatic for Ireland and Spain, for which the claims increased threefold between March 2003 and March 2007, from about €250bn to about €750bn.



Source: Bank for International Settlements (2012).

Figure 14 External Positions of Reporting Banks vis-à-vis Individual Countries (€bn)

2. Whom to Blame for the Crisis?

As foresaid, this paper argues that the conventional narrative is incomplete and, as such, has led to ineffective policy prescriptions – prescriptions which have made the necessary adjustments more difficult than it could have been and, even worse, may create the conditions for more severe crises in the future.

2.1 Delving Deeper into the Root Causes of the Crisis

The root causes of the crisis are similar to those of financial crises: severe imbalances, micro-economic, macro-economic and financial, plus destabilizing expectations.

Delving deeper, behind these causes are several mutually-reinforcing weaknesses of the market economies. All together conspired to inhibit preemptive action by governments and financial-system supervisors, as well as the effective working of market discipline. Nonetheless, the biggest responsibility does not lie with households and businesses in the crisis countries, which bear a disproportionate and – judging from Greece and the levels of unemployment in all crisis countries – unbearable share of the burden of adjustment.

One weakness is perverse incentives, perhaps together with myopia, by banks and financial-market participants, households, businesses, governments and (perhaps) regulators and supervisors. As mentioned above, these may have been exacerbated by earlier central bank interventions aiming at containing the fallout from previous financial-system excesses.

Two, banking, and financial system in general, opaqueness, as a result of which no one (usually) knows the level and location of risk. This opaqueness has

been affected by the existing regulatory framework, notably Basel II banking regulations, and has undermined the third pillar of Basel II – that of market discipline.[5]

Three, inadequate risk-management systems. The crisis made plainly evident that quantitative models are not adequate, also casting doubt on the advanced quantitative techniques for risk-measurement of Basel II (and III).

Four, ineffective supervision, in both the crisis and the creditor countries. The excesses were so large, and lasted for so long, that they could not have escaped the attention of supervisors. An open question is whether the existing regulatory framework and the conditions in the international financial markets, together with political-economy constraints, allowed supervisors any room for preemptive intervention.

Five, poor performance by crucial market players, like the credit rating agencies, which contributed to weak market discipline and, likely, limited the room of manoeuver of bank supervisors. Generously high credit ratings may have misled investors to finance countries with high levels of debt and severe imbalances. They may also have allowed banks to set aside relatively little capital for their holdings of government bonds and loans which, in turn, allowed them to extend more loans to the private sector, given their capital base.

Six, macroeconomic environment propitious for the creation of a real estate bubble, and, in particular, the historically low global interest rates in the aftermath of the bursting of the stock-market bubble of the late 1990s. Seasoned observers were warning about this risk since the early 2000s – see, for example, the Economist (2003).

Lastly, limited power of governments and central banks vis-à-vis the markets, the result of the sweeping financial deregulation of the 1980s and 1990s.

The above will be illustrated following the flow of funds for a typical crisis country, depicted in Figure 15.

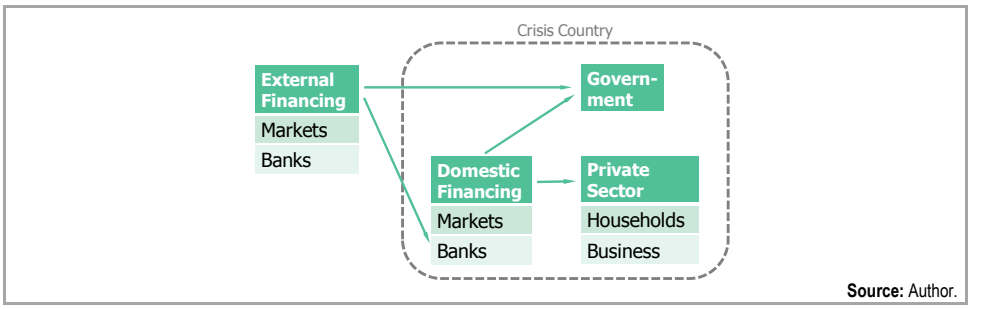


Figure 15 Flow of Funds and Market Failures

[5] Recognizing this, influential bank supervisors and regulators have started calling for simpler regulations that promote transparency. Indicatively, Andy Haldane, executive director for financial stability at the Bank of England, remarked that the Basel rules "spawned startling degrees of complexity and an over-reliance on probably unreliable models… It may be time to rethink its architecture." The quotes are from Financial Times (2012).

Households and Businesses

Starting from the end of the flow of funds, households over-extended themselves by borrowing to finance consumption and real-estate investments. In this way, they contributed to both the widening current account deficits and the real estate bubble. Myopia and, to a lesser extent, perverse incentives were likely behind their behavior.

So did businesses, by borrowing from banks and in the bond market, to overinvest. In this episode of financial-system excesses, equity financing did not played an important role as, for example, during the period of the stock-market bubble at the end of the 1990s. Again, myopia and, to a lesser extent, perverse incentives can explain their behavior.

Governments

Myopia and perverse incentives can explain the behavior of governments as well. To begin with, even in countries with low budget deficits and low government debt, notably, Ireland and Spain, governments should be aware of, and alarmed by, the fast rising private-sector indebtedness and the resultant unsustainable domestic-demand surge which portrayed a rosier-than-actual picture of their tax revenues and fiscal situation.

Governments failed to act on the unsustainable developments, amply manifested in the alarming current account deficits and the misallocation of productive resources to the construction sector, in order to curb the excesses and implement a more sustainable growth strategy. As Raghuram (2010) notes, the false impression of prosperity created by debt-financed consumption and investment suited their electoral concerns well. Indicatively, in Greece, the government actually exacerbated the excesses with elections-related changes in real-estate taxation in 2005.

To the defense of governments, especially those with high levels of debt and large budget and current account deficits, they had the "seal of approval" from the markets. Greece, as foretold, could borrow in January 2006, with ten-year bonds, at a spread over German Bunds of as little as 20bp.

Had market discipline worked effectively, the high cost of borrowing, together with a commensurately low credit ratings, should have forced the governments in the crisis countries to take corrective action earlier, during the good times in the international economy, when the human cost of the necessary structural adjustments would have been smaller and, hence, the political cost of such adjustments more bearable.

The defense is not strong though. For one thing, the return-chasing behavior of investors during periods of low interest rates in the major industrial countries, as a result of which they ask for premia that are not commensurate with credit risk, was a known phenomenon. Governments ought not to take much comfort because domestic and international banks and investors were extending loans and buying bonds at low interest rates.

In addition, the poor performance of credit ratings agencies in predicting crises was already well-documented (see, for example, IMF 1999).

The poor performance of credit-rating agencies may have contributed to the financing of governments at low interest rates via another channel – a channel that highlights the subtle yet pervasive role of the regulatory framework in this crisis. In

short, the high credit ratings allowed banks to set aside less capital for government loans and bonds and, thus, extend more credit to both the public and the private sector even in cases where national supervisors were concerned by the accumulating imbalances. Basel II's reliance on statistical techniques to assess risk-adjusted assets exacerbated bank opaqueness and, perhaps, inhibited preemptive action by bank supervisors. Even worse, it contributed to the self-aggravating panics once the crisis begun.

Domestic Financing

Domestic investors and banks should not have financed the government, at least not at such low interest rates. Nor should they have financed the unsustainable increase in domestic demand. Myopia and perverse incentives were present – again. Inadequate risk-management systems, fine-tuned with the latest statistical techniques but with wrong assumptions regarding the sources, size and correlations of risks, played a role as well, by creating a false sense of security about the overall risk exposure of banks, when in fact the risks were very high.

There were subtler influences as well. For example, Greek pension funds were obliged by law to keep their reserves at the central bank which, by law, invested them in government bonds. A subtle form of financial repression that contributed to the mispricing of credit risk before the crisis and to the severity of the required budget consolidation after its eruption.

Another subtle influence, indicative of the poor performance of many market-players, applies to banks. As a senior executive in one of the biggest private banks in Greece told the author of this paper, the bank he was working for did not want to enter the market of consumer finance in the early years of the 2000s. Other banks were more-than-willing though to extend loans for every need, real or imaginable; vacation loans is a characteristic example. These banks were recording initially, i.e. before the bursting of the consumer-loan bubble, high earnings. Stock-market analysts, overlooking that these earnings were not risk-adjusted, started nailing the first bank for not entering the seemingly lucrative market and, as a result, missing profit opportunities. The bank's share came under pressure, heightening the risk of a hostile take-over. The bank's management unwillingly entered the market of consumer finance and has ever since regretted its decision.

External Financing

Foreign investors and banks should not have financed the government or the banks of the crisis countries: the accumulating imbalances –macroeconomic and financial – were strong warnings about the worsening creditworthiness of governments and banks.

Myopia, owing and to the poor performance of other market-players, such as, credit-rating agencies and stock-market analysts, played a role. So did the perverse incentives from the low interest rates and the expected support for banks (see, Moody's 2007).

Bank Supervisors

Bank supervisors, in both the crisis and the creditor countries, were not effective, too. In the crisis countries, they did not prevent the excessive risk-taking of the domestic banks, which, by the way, exacerbated the accumulating macroeconomic and financial imbalances. In the creditor countries, they did not restrain their banks in financing the banks in the crisis countries.

Several factors may be behind this poor performance. Notably, the inherent opaqueness of financial institutions, exacerbated by the poor performance of credit rating agencies and stock-market analysts, plus the limited powers to intervene in a largely liberalized financial system where private capital can overwhelm even the biggest countries. Both, as already mentioned above, were affected by the existing regulatory framework.

Perverse incentives, at both the personal and institutional level, could have been an important factor as well. Starting from the personal incentives, individual bank-examiners might hesitate to cross a powerful bank or even want to be in good terms with it for the prospect of future employment. At the institutional level, central banks might not want to intervene in the early stages of a bubble for the fear that they might strangle economic growth for a bubble that did not exist, or for the fear that their intervention might not be appreciated by the government.

2.2 On Euro's Contribution

The discussion centers around two questions:

a) Could the crisis have happened without the common currency?

b) Was the crisis the inevitable outcome of faults in EMU's design, namely, lack of fiscal union, of common underwriting of government debt and of banking union?

The answer to the first question is "yes"! To the second "no"!

a) Could the Crisis Have Happened without the Common Currency?

Returning to the conventional narrative quoted in the introduction,

"Adoption of the euro led to convergence of interest rates in periphery countries to the levels in core countries and, in combination with rising capital inflows owing to greater financial integration, set off a consumption and real estate boom in periphery countries, leading to higher growth and increases in government revenue and spending.

The resulting real appreciation led to a loss of competitiveness in periphery countries, adversely affecting export performance and causing rising current account imbalances."

The above passage overlooks that the convergence took place in an environment of record-low interest rates internationally (Figure 7), which was the product of previous financial-system excesses and for which the euro had no role.

Moreover, the above passage, starting at the expression "rising capital flows", could describe the experience of Mexico, leading to the "Tequila crisis" in 1994. Mexico at that time did not have a fixed-exchange rate arrangement. It followed an

exchange-rate-based stabilization program that, leading to the crisis, came under intense and increasing pressure from international capital flows – for appreciation, not for depreciation. For details, see Antzoulatos (2002). The same "return-chasing" behavior of international investors and banks drove the spreads of the crisis countries to very low levels leading to the crisis in 2007.

Had the crisis countries not been EMU-members, their plight might have been even worse. Briefly, they might have experienced a bigger nominal appreciation and, hence, a bigger loss of competitiveness during the period of low interest rates. Taking into account the "hysteresis effect", a term coined for the permanent effects of transitory exchange rate movements (Richard Baldwin and Krugman 1989), the depth of the crisis and the magnitude of the necessary structural adjustments might have been bigger without the euro. So might have been the reaction of the forward-looking investors when the crisis erupted in 2007, precipitating a widespread bank panic – which, for the time being, has been averted.

Perhaps, Mexico was plagued with the same "character faults" as the southern European countries. But what about "more prudent" countries?

The above passage, with the removal of "Adoption of the euro led to convergence of interest rates in periphery countries to the levels in core countries", could also describe the experience of the Scandinavian countries in the early 1990s – an experience that ended in the so-called "Nordic banking crisis". Following the financial deregulation of the mid 1980s, these countries experienced a lending boom and massive private capital inflows that led to real-estate and stock-market booms, inflation and current account deficits. These countries also experienced a significant loss of competitiveness. See, Antzoulatos (2011, Table 1, pp. 246–247).

In essence, under both fixed – like the euro – and flexible exchange-rate arrangements, private capital flows exacerbate the inherent conflict between internal and external balance.

There is no easy solution to this problem. Throwing "sands in the wheels of finance", in the form of some variant of the "Tobin tax", has severe potential side-effects which might turn the "medicine" worse than the "disease". Placing more restrictions on bank activities raises the issue of whether they can be enforced effectively, especially in an international setting, while minimizing their side-effects. It also brings into the picture the role of the institutional framework, suggesting, again, that crisis prevention and resolution requires a holistic approach, an indispensable ingredient of which is financial regulation.

b) Was the Crisis the Inevitable Outcome of Faults in EMU's Design?

Economic history and logic suggest that no design, short of extensive controls amounting to the financial repression of the "Bretton Woods" era, could tame international capital flows. Hence, the proposed measures, i.e. fiscal union, common underwriting of government debt and banking union, are akin to "treating the symptoms", not the "disease", and, at best, a "second best" solution. Yet, as mentioned in the previous paragraph, the "first best", i.e. restricting finance, has severe potential side-effects.

To begin with, it would be hard, both economically and politically, for a fiscal union to prevent private-sector excesses. Consider, for example, the quandary the central budget disciplinarian would face regarding Ireland and Spain in the years leading to 2007. The two countries had mostly budget surpluses, and occasional modest deficits – well below the Maastricht Treaty limit. However optimistic this picture was, because it relied on an unsustainable increase in private credit and a related real estate bubble, the central disciplinarian would need a better understanding of the local conditions than the respective national governments. Moreover, he would need a wide-enough mandate, based on several indicators – not only a limit for budget deficits, in order to intervene. Easier said than done…

In addition, a fiscal union might exacerbate the aforementioned problems in the crisis countries, by creating a false sense of security and stronger perverse incentives to private agents. Strengthening this reservation, ill-used fiscal transfers in the 1980s and 1990s contributed to the loss of competitiveness of the crisis countries. Moreover, the perceived benefits of a fiscal union rest on the assumption of effective monitoring mechanisms where previous such mechanisms failed.

Pertaining to the common underwriting of government debt, with the aim to reduce the borrowing costs of the governments in crisis-hit countries, the reservations are as above.

Even worse, this measure, whose appeal rests in that it might help the resolution of the current crisis, carries the risk of creating the conditions for a bigger crisis in the future. Briefly, investor monitoring of governments may be substituted by less effective political monitoring. This would create a stronger false sense of security in good times but, reminiscent of "Merphy's Law", will also create higher risk of destabilizing expectations in bad times – when the sense of security is mostly needed – as markets recognize that political horse-trading undermines monitoring. In addition, this measure may exacerbate perverse incentives in the good times preceding the crisis.

The reservations regarding a banking union are stronger. To begin with, banking unions have four components, namely, a resolution and recapitalization fund, joint deposit insurance, a central regulator and central supervision. The first two, which in the current crisis involve fiscal transfers from the "northern" countries, would exacerbate the perverse incentives of private economic agents and even create such incentives to national governments as well. The latter may turn a blind eye to financial-system excesses that serve their short-term electoral needs, knowing that somebody else will foot the bill when these excesses lead to banking problems. For the same reason, market discipline may be weaker.

The case for a central regulator rests on some heroic assumptions. Specifically, he will be better than national regulators, despite that he will be farther away from the conditions – economic and financial – in each individual country. This assumption puts blind faith in quantitative models that purport to measure risk. A related reservation is more general: When it comes to financial system regulation, "Does one size fit all?"

Another heroic assumption is that the central regulator will have weaker perverse incentives in setting the rules than national regulators, at both the personal and

institutional level. These rules will affect the possibility and the strength of future financial system excesses.

The case for a central supervisor rests on heroic assumptions as well. To begin with, that he will be more efficient than national central banks, despite that he will be farther away from the conditions in each country, as well as bigger, more bureaucratic, less flexible, (perhaps) more influenced by politics and subject to stronger perverse incentives. "Merphy's Law" regarding the risk of destabilizing expectations applies here too.

Another heroic assumption is that coordinated supervision will be more effective. Does, however, hold that "The bigger the better?" How can a central supervisor effectively monitor hundreds of banks in the Eurozone? Limiting central supervision to the more systematically important banks in each member country opens the room to these banks for regulatory arbitrage, for example, by creating specialized subsidiaries. Leaving aside the unequal supervisory cost of these banks, does the experience of commercial banks on managing risks justify "the bigger the better"?

Moreover, since macroeconomic developments and financial stability are intertwined, regulators and supervisors must cooperate with national governments. The growing trend towards macroprudential policies reflects this need for cooperation (see, for example, Jaime Caruana 2012). Is it certain that cooperation by centralized and, by necessity, rules-bound bodies will be more efficient than cooperation at the national level? What does the extensive literature on "Rules vs. Discretion" tells about? And what about the monitoring and influencing of almost every aspect of government policies that affect competitiveness and economic outcomes, such as, labor market policies?

3. Concluding Thoughts

This paper argues that the measures taken so far and those planned for the future are dealing with the symptoms and not with the root causes of the European debt crisis. Thus, it is not surprising that they have not been successful so far – leaving aside that they were not taken in the right sequence and that the burden of adjustment has fallen disproportionately upon the crisis countries and, within them, upon the weakest social classes. Even worse, they pave the way for more severe crises in the future, provided they do not undermine euro's existence first.

So, what is to be done? Addressing the most pressing concerns, give more time and resources to the crisis countries to implement the structural reforms that will lead to sustainable export-oriented growth. It would also help if Germany, the leading country in the EMU, resolved the "N-1 Problem" by pursuing more expansionary policies; if EMU members coordinated their policies better to avoid competitive – and self-defeating – devaluations of the real exchange rate, such as, labor-market and industrial policies; and if the ECB allowed inflation to exceed its stated target of 2%, in order to ease the burden of debt.

If the economic destruction and the attendant humanitarian catastrophe, brought about by the draconian austerity measures, continue, the mounting cost of staying in the EMU will exceed at some point the however-horrendous cost of leaving it. Such an event will endanger EMU. Financial markets, discounting this possi-

bility, might bring this event forward, before any country reassesses the relative costs and benefits of EMU-participation.

Taking a longer view, "treat the disease, not the symptoms", that is, strengthen market discipline and reduce the propensity and the capacity of the financial system for excesses. It is not easy and, given the incentives and ingenuity of financial-system participants, it may never be attained at a satisfactory level, a level at which the desire to avoid crises does not overly harm growth. However, compared to the proposed measures, this approach is fraught with fewer risks and likely to create fewer perverse incentives. Which is all the more important as no one can predict which countries and which financial-system segment will be afflicted by the next crisis.

The contours of such policies have been explored and discussed extensively. Among them, reduced opaqueness of financial institutions – something that requires simpler rules (see, for example, footnote 5); better coordination between all aspects of economic policy, including financial-system regulation and supervision; and bigger accountability for politicians, bank directors and market watchdogs – such as, bank supervisors and the credit rating agencies – in an effort to reduce perverse incentives, myopia and the propensity for "mistakes".

References

Antzoulatos, Angelos A. 2002. "Arbitrage Opportunities on the Road to Stabilization and Reform." *Journal of International Money and Finance*, 21: 1013-1034.

Antzoulatos, Angelos A. 2011. "Greece in 2010: A Tragedy Without(?) Catharsis." *International Advances in Economic Research*, 17(3): 241-257.

Baldwin, Richard, and Paul Krugman. 1989. "Persistent Trade Effects of Large Exchange Rate Shocks." *Quarterly Journal of Economics*, 104: 635-654.

Caruana, Jaime. 2012. "Dealing with Financial Systemic Risk: The Contribution of Macroprudential Policies." Paper presented at the Central Bank of Turkey/G20 Conference, Istanbul.

***Financial Times*.** 2012. "Regulator Attacks New Bank Rules," September 14.

International Monetary Fund - IMF. 1999. *Developments, Prospects and Key Policy Issues*. Washington, DC: International Monetary Fund.

Kouretas, George P., and Prodromos Vlamis. 2010. "The Greek Crisis: Causes and Implications." *Panoeconomicus*, 57(4): 391-404.

Krugman, Paul. 2012. *End This Depression Now*. New York and London: W. W. Norton & Company, Inc.

Lin, Justin Y., and Volker Treichel. 2012. "The Crisis in the Euro Zone: Did the Euro Contribute to the Evolution of the Crisis?" World Bank Policy Research Working Paper 6127.

McKinnon, Ronald I. 1997. *The Rules of the Game: International Money and Exchange Rates.* Cambridge, Massachusetts: The MIT Press.

Miller, Marcus, and Alan Sutherland. 1990. "Monetary and Exchange Rate Targets, and After: A Stochastic "Hard Landing" for Sterling?" In *Choosing an Exchange Rate Regime – The Challenge for Smaller Industrial Countries,* ed. Victor Argy and Paul de Grauwe, 319–344. Washington, DC: International Monetary Fund.

Moody's Investors Service. 2007. "Incorporation of Joint-Default Analysis into Moody's Bank Ratings: A Refined Methodology." http://www.moodys.com/PublishingImages/topics/gbrm/GBRA_JDA.html (accessed February 2, 2012).

Organization for Economic Co-operation and Development - OECD. 2012. *OECD Economic Outlook, May 2012*. Paris: OECD Publishing.

Rajan, Raghuram. 2010. *Fault Lines: How Hidden Fractures Still Threaten the World Economy.* New Jersey: Princeton University Press.

***The Economist*.** 2003. "House of Cards - Special Report: Property," May 29.