What Really Caused the Eurozone Crisis?

The Street Light, September 22, 2011

I've been doing some work on gaining a better understanding of the root causes of eurozone (EZ) debt crisis. As a point of departure, let's take a couple of dueling quotes. First, Wolfgang Schäuble, Germany's finance minister, from his recent piece in the Financial Times:

"Whatever role the markets have played in catalysing the sovereign debt crisis, it is an undisputable fact that excessive state spending has led to unsustainable levels of debt and deficits that now threaten our economic welfare".

Next, here's an excerpt from a statement recently made by Greece's Deputy Prime Minister and Minister of Finance, Evangelos Venizelos:

"We should not be the scapegoat or the easy excuse that will be used by European and international institutions in order to hide their own lack of competence to manage the crisis and give a definitive and complete answer to the attacks against euro, the world's strongest currency".

These two statements capture the essence of two radically different views about the origins of the EZ debt crisis. Which one is right?

Local Causes or Systemic Causes?

Some believe that the crisis was fundamentally caused by profligate, irresponsible behavior by governments and individuals in the EZ periphery. (Note: by the "EZ periphery" I mean Greece, Portugal, Ireland, and maybe Spain. Italy has not really been accused of such behavior, to my knowledge, and it seems generally accepted that it is much more the victim of contagion rather than the cause of the crisis.) Let's call this the *local causes* point of view: government deficits and debt in the periphery were so large that once the Great Recession of 2008-09 hit, investors lost confidence in the ability of those countries to remain solvent. So they tried to dump the bonds from those countries, triggering the crisis.

An alternative point of view is that, while the crisis may have had some peculiarly local triggers (the Greek government's admission that it fudged some official statistics certainly didn't help), much of the current mess is the result of forces and decisions outside the control of peripheral Europe's governments. In other words, the crisis could have non-local, *systemic causes*.

For example, suppose that the adoption of the euro suddenly made it more attractive for investors in the rest of Europe to buy assets in the periphery. This could have caused a large, exuberant capital flow from Europe's core to periphery, much like NAFTA helped to spark a surge in capital flows from the US to Mexico in the early 1990s. In theory, that's a good thing, and should help the process of economic convergence. But we know that such "capital flow bonanzas" (so named by Reinhart and Reinhart) are notoriously susceptible to changes in investor attitudes, and can come to an abrupt halt. These sudden stops in capital flows, as they are referred to in the literature, typically trigger a financial crisis. (See this paper by Calvo, Izquierdo, and Mejia for much more about sudden stops.) As noted by Rudi Dornbusch in the context of the Mexico crisis of 1994, it's not speed that kills; it's the sudden stop.

Crucially, sudden stops may happen even when a country is following all the right macroeconomic policies. As a result, financial crisis may be largely outside the control of a country that's on the receiving end of a capital flow bonanza. Mexico in 1994 is a good example of that, I think. And it could be that some of the peripheral EZ countries also fit this characterization. If so, then it's not appropriate to lay the blame for the crisis entirely at the doorstep of the peripheral EZ's governments; while they may have done some things that contributed to the crisis, the odds were significantly stacked against them to begin with.

Evidence

Which view of the EZ crisis - the *local causes* view or the *systemic causes* view - better matches the evidence? There are a few different types of clues we can look for.

1. Which deficit predicted the crisis?

If the crisis is due primarily to local causes, then we would expect the best predictor of crisis to be government deficits and debt. On the other hand, if the systemic causes view is correct, then a better predictor of the crisis would be large current account deficits, which necessarily happen when there's a capital flow bonanza.

The following table shows both fiscal (i.e. national government) budget balances and current account balances during the period after the adoption of the euro and before the worldwide financial crisis and recession struck in 2008. All figures are from the OECD and expressed as a % of GDP.

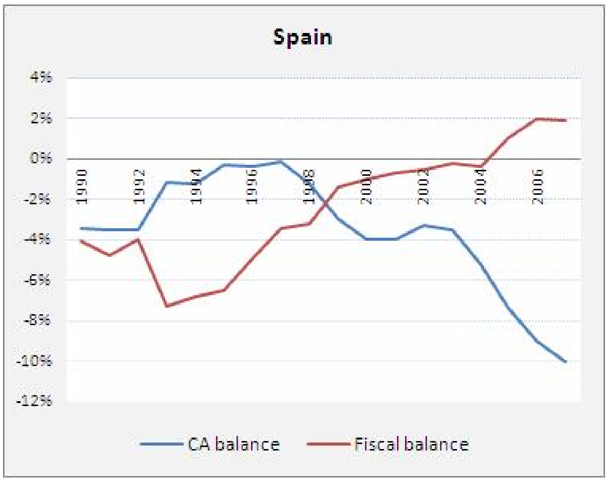
Fiscal balance		CA balance	
Country	2000-07 ave	Country	2000-07 ave
Greece	-5.4%	Portugal	-9.4%
Portugal	-3.7%	Greece	-8.4%
Italy	-2.9%	Spain	-5.8%
France	-2.7%	Ireland	-1.8%
Germany	-2.2%	Italy	-1.3%
Austria	-1.6%	France	0.4%
Netherlands	-0.6%	Austria	1.6%
Belgium	-0.4%	Belgium	3.0%
Spain	0.3%	Germany	3.2%
Ireland	1.5%	Netherlands	5.4%
Luxembourg	2.3%	Finland	5.9%
Finland	4.1%	Luxembourg	10.6%

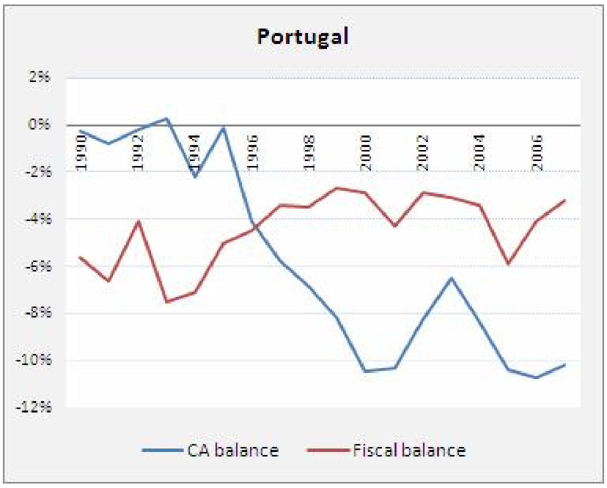
The factor that crisis countries have in common is that, without exception, they ran the largest current account deficits in the EZ during the period 2000-2007. The relationship between budget deficits and crisis is much weaker; some of the crisis countries had significant average surpluses during the years leading up to the crisis, while some of the EZ countries with large fiscal deficits did not experience crisis. This is one piece of evidence that a surge in capital flows, not budget deficits, may have been what laid the groundwork for the crisis.

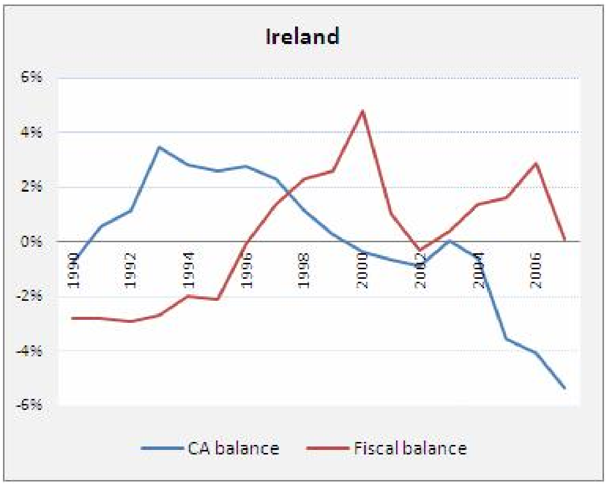
2. Which deficit grew after euro adoption?

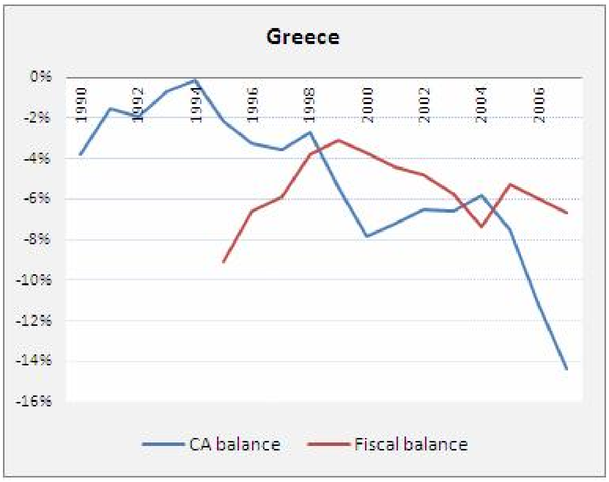
If the crisis is due to the profligacy of governments in the peripheral EZ that took advantage of EZ membership to increase spending, we would expect to see budget deficits grow in the periphery after the common currency was introduced in 1999. But if the crisis was really the result of a post-euro adoption surge in capital flows from the EZ core that then came to a sudden stop, we would expect current account deficits (i.e. capital flows) to have grown more after adoption of the euro.

The following charts show the path of both types of deficits during the years before and after adoption of the euro. (Data from the OECD, expressed as % of GDP.)









Note: minor data discrepancies in the fiscal balance series above have been corrected.

Capital flows (i.e. current account deficits) increased substantially in all the EZ periphery countries in the period after adoption of the euro. Meanwhile, the peripheral countries generally tended to have tighter fiscal policies after adopting the euro than before euro adoption.

Note that the capital flow bonanzas in evidence in these charts were directly the result of the adoption of the euro by the peripheral EZ countries, which made it easier for capital in the core EZ countries to find investment opportunities in the periphery. In fact, this was exactly what the advocates of the common currency intended and expected, and has always been touted as a selling point for the euro project - it's called "financial integration". The problem is the sudden stop that frequently follows such a capital flow bonanza.

3. What did the periphery countries spend their money on?

If the crisis is due to irresponsible behavior by governments and individuals in the EZ periphery, then one indicator of that would be a rise in government spending and/or personal consumption after euro adoption. On the other hand, the systemic causes view would suggest that crisis could strike even if a country is behaving 'responsibly' (in a macroeconomic sense) by spending more on investment goods (i.e. capital formation) and less on personal consumption.

The next table shows the fraction of domestic purchases spent on consumption and investment goods in each of the EZ periphery countries. Germany is included in the table for comparison.

	Germany	Greece	Ireland	Portugal	Spain
Consumption as % of Domestic Purchases:					
ave 1992-99	65.2%	73.2%	67.0%	66.4%	66.1%
ave 2000-07	67.4%	69.7%	61.3%	65.5%	62.4%
difference	2.2%	-3.5%	-5.7%	-0.9%	-3.7%
Capital Formation as % of Domestic Purchases:					
ave 1992-99	18.4%	14.9%	18.0%	19.6%	18.7%
ave 2000-07	16.2%	16.8%	23.9%	19.0%	23.0%
difference	-2.2%	1.9%	5.9%	-0.6%	4.4%

There is a clear tendency for investment spending to rise in the periphery countries (with the exception of Portugal), and for consumption to fall. This is consistent with the convergence story; capital flowed from the core to the periphery to take advantage of and fund investment opportunities there. Meanwhile, with the periphery countries experiencing fiscal contraction, a smaller share of purchases going to personal consumption, and a higher share of purchases going to investment goods, it is hard to see evidence for the story that the capital inflows were simply frittered away on a spending binge either by individuals or governments.

So... What Really Caused the Crisis?

Putting it all together, it seems that the EZ crisis is more consistent with the systemic causes view than the local causes view. In other words, while they didn't necessarily make the right decision every time, the peripheral EZ countries were up against powerful exogenous forces - capital flow bonanzas and sudden stops - that tended to push them toward financial crisis. They were playing against a stacked deck.

It's useful to reevaluate the macroeconomic history of peripheral Europe in light of this interpretation. Rather than large current account deficits being the result of fiscal mismanagement or excessive consumption, the current account deficits were the necessary and unavoidable counterpart to the surge in capital flows from the EZ core. Rather than above-average inflation rates and deteriorating competitiveness being signs of labor market inefficiencies or lax fiscal policies in the peripheral countries, appreciating real exchange rates were inevitable as the mechanism by which those current account deficits were effected.

The eurozone debt crisis is big enough that there's plenty of blame to go around, and some of it certainly should go to the crisis countries themselves. But it must also be recognized that as soon as those countries adopted the euro, powerful forces were set in motion that made a financial crisis likely, and very possibly unavoidable, no matter what the governments of the peripheral euro countries did. Irresponsible behavior by the periphery countries did not set the stage for the eurozone crisis; the common currency itself did.

2. Policy Implications

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In the previous post I sketched out the origins of the eurozone crisis, and argued that powerful systemic forces, not irresponsible behavior, pushed the periphery countries toward crisis – and may well have done so no matter what the peripheral eurozone countries had done. The common currency encouraged (in fact, was designed to encourage) large-scale capital flows from the eurozone (EZ) core to periphery. We know from experience that such "capital flow bonanzas" are susceptible to sudden changes in investor sentiment, and very often come to a sudden stop. The sudden stop in this case happened in 2009 (exploring the specific reasons for that stop is interesting, but will have to wait for another day), made it difficult for the periphery countries to roll over their debt, and thus caused a crisis.

But note that other aspects of the common currency meant that the odds were stacked even more heavily against the peripheral EZ countries. Euro-adoption not only set the stage for the crisis by encouraging a capital flow bonanza to the EZ periphery; it also made it impossible for the periphery countries to deal with the sudden stop to those capital flows if and when it came. In his excellent recent paper (pdf), Paul De Grauwe has pointed out that the adoption of the euro by Europe's periphery effectively caused them to be "downgraded to the status of emerging countries", in the sense that they could no longer issue sovereign debt in their own currency. This made those countries peculiarly vulnerable to changes in investor sentiment. As Paul Krugman recently put it, thanks to the common currency, the periphery countries lacked the tools to manage their balance of payments.

Given that, the heavy firepower for dealing with the crisis necessarily had to come from the rest of the EZ, i.e. the core (by which I generally mean Germany, France, Benelux, Austria, and maybe Finland). But does this understanding of the origins of the crisis tell us anything else about proper policy responses?

Immediate Implications

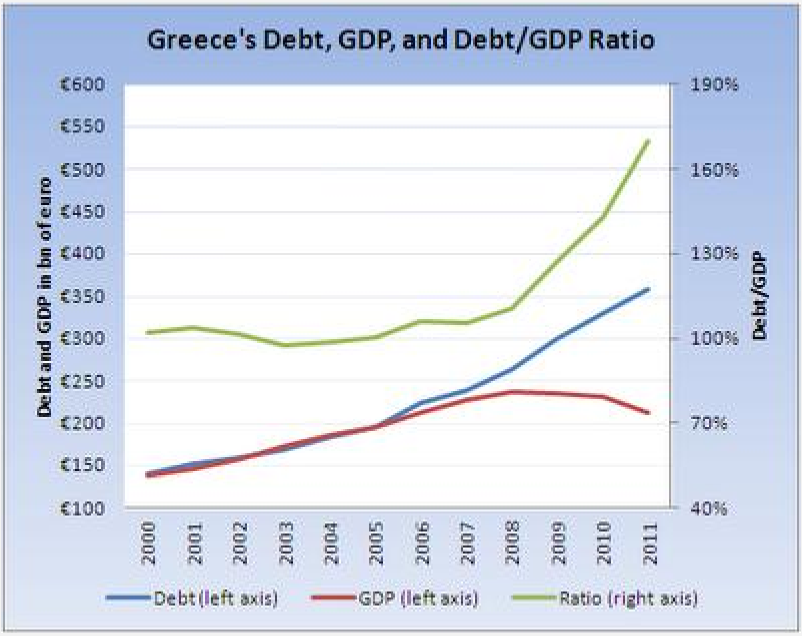
1. Being judgmental is not helpful.
One of the objections raised by some who oppose support from the EZ core to the periphery is that such a bailout of the periphery countries may just encourage future irresponsible behavior. The periphery behaved badly, according to that argument, must pay the price, and clean up its own mess.

But if the very structure of the common currency area contained the essential ingredients for this crisis, and if the easy answer (namely, that the crisis is due to the irresponsible behavior of the periphery countries) is not the right answer, then such an argument no longer works. Since the crisis was largely the result of forces outside the control of the EZ periphery countries, it's not appropriate to try to punish those countries through the bitter medicine of insufficient assistance. In other words, this crisis should not be turned into a morality story.

2. Austerity is not helpful.
Severe fiscal austerity by the periphery EZ countries has been the condition attached to assistance from the core EZ. But that austerity requirement brings with it several problems.

First, it is largely counterproductive with respect to reducing annual deficits; a simple textbook example illustrates how fiscal contraction during a recession will typically fail to meet deficit reduction goals, because the austerity itself makes the recession worse. That's exactly why Greece keeps missing its deficit reduction goals: not because they aren't trying hard enough, but because it's inherently unrealistic and unreasonable to try to balance a budget through austerity during a recession.

Second, austerity is completely counterproductive with respect to reducing debt burdens. As the economy shrinks thanks to austerity, the debt burden skyrockets relative to the country's income. Just look at the debt, GDP, and debt-to-GDP ratios for Greece to see how that works. It's no wonder that it has recently become crystal clear that Greece will never have enough income to repay this level of debt. (Note: data from Eurostat; 2011 figures are forecast.)



But finally, and most importantly in the context of this analysis, austerity shifts most of the burden of dealing with the crisis onto the EZ periphery countries. And that means that citizens of the core EZ countries like Germany, France, and Benelux are essentially getting a free ride.

All of the members of the EZ have enjoyed the benefits of the common currency; that's apparent simply from the fact that they have worked so hard to construct and maintain it (recent evidence notwithstanding). Many of those benefits are political, but some are baldly financial as well: the large capital flows from the EZ core to the periphery during the years 1999-2007 are evidence that investors in the core EZ countries enjoyed and took full advantage of the high returns they could get on new investment opportunities in the periphery. Furthermore, the capital outflows from the core meant that the core EZ countries had to run current account surpluses; they have been able to enjoy significantly stronger exports for the past 10 years thanks to the euro.

But there is a fundamental asymmetry that goes along with international capital flows: the country on the receiving end risks a serious financial crisis when that flow stops, while the country that is the source of the capital bears no similar risk. In other words, the periphery of the EZ bore the bulk of the systemic risks inherent to the common currency area, while the benefits were shared by both the core and the periphery. In a sense, the periphery countries "took one for the team" when they allowed themselves to be placed at risk for the greater good of the entire eurozone. Given that, it doesn't seem appropriate that the burden of solving the crisis should be placed so overwhelmingly on the periphery countries that had such little control over the crisis to begin with. Trying to solve the crisis primarily through austerity is thus just plain unfair. (For reference, I provide an estimate of the cost of the eurozone crisis to its members.)

3. Shared responsibility is very helpful.
The opposite of trying to solve the crisis through austerity – which places the burden of escaping from the crisis on the periphery countries themselves – is for the core EZ countries to substantially share the cost of getting out of this mess. Once it is clear that the systemic risk of crisis that came along with the creation of the euro was borne disproportionately by the EZ periphery, while the benefits of the common currency were enjoyed by both core and periphery, the calculus of how to respond to the crisis changes. In that context, substantial assistance from the core to the periphery in response to the crisis is not only helpful, but can in fact be viewed as the *responsibility* of the core EZ countries. The degree to which they choose to accept that responsibility – and pay for it – will determine how the crisis is resolved.

And let's not kid ourselves about something: policy-makers in Europe know exactly how the crisis can be solved. It's not a mystery that if the core EZ countries contribute sufficient funds to finance Greece's debts for the foreseeable future, accept a substantial write-down on the amount owed by Greece, and provide funds to recapitalize banks in Greece and elsewhere in the EZ, then the crisis will be over. So the question is simply whether the core EZ countries are willing to pay that required price. If they are, then the EZ will remain intact. If not, it will not. The current debate going on among European policy-makers is simply the unpretty process of figuring out the answer to that question.

After the Crisis

Suppose that at some point the EZ emerges from this crisis. And let's be as hopeful as possible, and further suppose that the EZ emerges more-or-less intact, i.e. with most or all of its member countries still exclusively using the euro. What then?

The problem is that the logic that led to this crisis will not have changed. At some point, if financial integration and convergence between the core and periphery is to resume, there will once again be capital flows from the EZ core to the periphery. It might take 10 or 15 years, but investors at some point will regain confidence and once more try to seek out the higher returns that are available in the periphery countries. And the recipients of the resulting capital flows will once again be vulnerable to a sudden stop. And they will once again lack any policy tools to deal with it when it happens. So can anything be done to fundamentally make the eurozone system more stable?

A few thoughts come to mind.

1. Impose policies to reduce capital flows.
Every financial crisis seems to generate renewed suggestions from economists that it might make sense to use policy to slow down international capital mobility, and this one should do the same. The most famous incarnation of this idea is the Tobin Tax, the suggestion put forward by Nobel prize-winning economist James Tobin in the early 1970s that each international transaction (in his case he was specifically talking

about currency transactions) be subject to a small transaction tax. This would make investors think more carefully and move more slowly both into and out of international capital markets.

2. Make explicit institutional changes to explicitly support the EZ periphery countries ahead of time.

One of the reasons that this crisis has gotten so bad is that the EZ periphery countries lacked any tools to deal with it, largely because in a common currency area they have no central bank to fall back on in the event of a liquidity crunch. This problem can be solved, however, through a number of steps. For example, if the ECB promises to provide unlimited liquidity to any EZ country that needs it. Yes, the Maastricht treaty would probably have to be amended. And yes, such a policy could potentially be expensive for the core EZ countries. But crucially, it would be a mechanism for the EZ core to carry its share of the burdens that come with the currency union. Paul De Grauwe's paper suggests other institutional changes that would help. But details aside, the point is basically quite simple: one way or another, if the eurozone is going to survive in the long run, there needs to be a recognition that since all members benefit from the common currency, all will have to pay the price of dealing with its vulnerabilities when they arise.

3. Restrict the eurozone to the core.

If the core EZ countries are simply not willing to accept the burden of substantially footing the bill to clean up the mess left by a capital markets crisis, then the only real remaining solution will be to make sure that all of the countries using the euro are similar enough that there won't be any large-scale capital flows from one to another. If there are no significant and systematic capital flows within the EZ, then the likelihood of crisis goes away. The remaining eurozone would probably be half of its current size; but it would be stable.

The basic choice that policy-makers face is therefore fundamentally the same in both the short-run and the long-run: the core EZ countries need to be willing to pay a substantial portion of the cost of fixing the current mess, and they need to be willing to remain on the hook for any similar future events. In return, they will be able to continue enjoying the substantial political and economic benefits that the euro has brought them. If they decide that it's not worth the price, then the eurozone will not continue to exist in its current form for much longer.