D Bank Financial Group

Observation

TD Economics

December 3, 2010

HIGHLIGHTS

- The latest iteration of the European sovereign debt situation escalated dangerously close to heavyweights Spain and Italy
- A permanent solution to this ongoing crisis will likely require both the reengineering of the euro zone institutional setting and debt restructuring. These will be lengthy processes.
- In the meantime, the European Central Bank will have to prove that it actually is the "guardian of the euro"

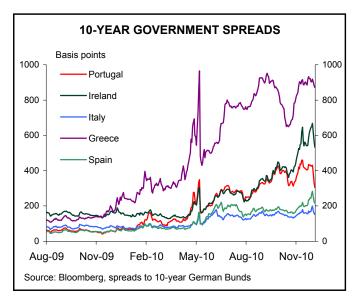
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EUROPEAN SOVEREIGN DEBT: THE TIME HAS COME FOR THE ECB TO GUARD THE EURO

On November 28th the Government of Ireland agreed to enter into a financial assistance program put in place jointly by the European Union and the IMF, which had also been negotiated in liaison with the European Central Bank (ECB). The financial component of the program will provide the Irish with sovereign funding for up to \in 85 billion over a period of three years.

The problem in Ireland was not its inability to honor an imminent sovereign debt redemption, as was the case with Greece in May. Rather, Ireland's need for help was caused by its banking system. After joining the euro zone in January 1999, Irish banks borrowed heavily in the global wholesale market to finance a massive domestic credit expansion with high exposure to real estate activity. Irish banks' debt held by foreign banks peaked at US\$ 495 billion –187% of GDP– in June 2008 from

a negligible amount in 1998. When the 2008 global financial crisis hit, the Irish real estate market collapsed and wholesale funding dried up, thus straining Irish banks' balance sheets. Eventually the Irish government had to intervene to stabilize the country's main banks. So far, the cost of the banking bail-out has been estimated at \in 50 billion, but non-performing loans are still rising.



In addition, their inability to regain access to wholesale funding has made Irish banks extremely reliant on short-term funding from the ECB. More recently, an acceleration of deposit withdrawals forced the country's central bank to provide roughly \in 20 billion in additional liquidity support during September and October. This was the trigger that prompted the Irish government to seek financial support from the European Union and the IMF.

Despite the announcement of the Irish assistance program, borrowing costs for Portugal, Ireland, Italy, Greece, and Spain kept climbing earlier this week, only to recede yesterday, after the ECB announced it would extend its emergency liquidity lines. There was also speculation that over the last two days the ECB has ramped up the purchase of government bonds to prevent spreads from escalating further. In this Observation we revisit some of the underlying factors that are fueling marD

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SOVEREIGN VULNERABILITY (% of GDP)										
	Gross Gen. Gov. Debt *	Primary Balance *	Gen. Gov. Debt Held Abroad *	Domestic Banks Exposure to Sovereign *	Foreign Banks Exposure to Sovereign ^					
France	84.2	-5.8	51.4	19.1	8.0					
Germany	75.3	-2.2	37.8	21.5	9.8					
Greece	130.2	-2.2	94.2	20.6	21.1					
Ireland	93.6	-15.0	54.9	14.8	8.7					
Italy	118.4	-0.8	55.5	32.0	14.3					
Portugal	83.1	-4.1	59.9	15.8	15.3					
Spain	63.5	-7.5	31.1	22.2	6.7					
U.K.	76.7	-7.6	18.5	6.2	2.9					
Source: * IN	Source: * IMF-Global Financial Stability Report October 2010									
^ B	^ BIS-June 2010, TD Economics									

kets' concerns regarding the fiscal sustainability of these countries. Secondly, we briefly discuss the more salient characteristics of the European Financial Stabilization Mechanism (EFSF), and finally, we conclude that the risks of debt restructurings have materially increased in recent weeks. But, on the upside, we also argue that the political will to resolve this situation is also growing.

Why are PIIGS under the spotlight?

The 2008 financial crisis and the ensuing global recession played havoc with public finances across most developed nations. Fiscal deficit positions were exacerbated by falling revenues, at the same time that governments were providing significant fiscal stimuli to buffer the downturn and, in some cases, rescuing financial institutions. The accompanying table above shows some indicators that describe the vulnerability of these European countries, providing some hints as to why they are perceived as being increasingly risky. For instance, Portugal has a gross debt-to-GDP ratio in excess of 83%, which is elevated, but pales in comparison to Italy's 118.4%. However, one of Portugal's major weaknesses is its reliance on foreign funding: roughly three quarters of its sovereign debt is held by foreigners, which makes the country more vulnerable to shocks. In the case of Spain, its debt level is noticeably lower than those of its peers, a fact constantly highlighted by Spanish Prime Minister José Luis Rodríguez Zapatero. However, its large primary deficit, together with rising interest payments on its outstanding debt, will drive the overall fiscal shortfall close to 10% of GDP by year's end. In turn, Spanish banks - which are also suffering the negative implications of a real estate bubble collapse in their own country - hold more than a third of the country's public debt. This will prove challenging both for the sovereign and the local banks, as they tap capital markets to roll over a combined € 150 billion next year. In any case, the interconnectedness of global financial markets implies

that any of the abovementioned weaknesses represent a risk not only to their local economies, but also at a regional – and even global – level. For instance, the table below shows U.K. banks had claims on Ireland equivalent to 6.7% of U.K. GDP. No wonder the U.K. agreed to provide \in 3.8 billion for the Irish bail-out, even after having opposed to take part in the EFSF in the aftermath of the Greek crisis.

In two reports published earlier this year (European Sovereign Debt: The Beginning Of A Long Journey Down A Slippery Road and European Sovereign Debt: Policy Actions Might Be Insufficient To Avert Debt Restructuring), we analyzed these issues in greater detail, as well as other relevant structural characteristics of these economies which will present serious fiscal consolidation challenges for a number of years. In particular, we highlighted the negative feedback loop between fiscal tightening and weaker economic growth. Our estimates of the negative impact of fiscal tightening on economic growth and unemployment were similar to those presented in recent research by the IMF. According to IMF estimates, a fiscal consolidation equal to 1% of GDP typically reduces GDP by 0.5% within two years and raises the unemployment rate by about 0.3 percentage points.¹ In our view, it is precisely the prospect of several years of slow growth induced by fiscal consolidation efforts carried out simultaneously across many advanced economies that feeds current investors' skepticism. This in turn impacts negatively on the perceived likelihood of success of some of the policy actions taken to deal with the sovereign debt market jitters, as we discuss below.

Another fact to highlight is that, as the sovereign debt

FOREIGN BANKS CLAIMS ON PIIGS (% OF LENDER BANKS' HOME COUNTRY GDP)										
	Greece	Ireland	Portugal	Spain	Total Exposure to PIIGS					
Ireland	3.7		19.6	2.5	12.2	38.0				
France	2.1	2.0	16.4	1.6	6.4	28.4				
Portugal	4.4	8.5	1.5		10.2	24.6				
Belgium	0.4	11.7	5.3	0.6	4.1	22.1				
Netherlands	0.6	2.7	5.5	0.7	9.3	18.8				
Germany	1.1	4.2	4.7	1.1	5.6	16.8				
U.K.	0.5	6.7	3.0	1.0	5.0	16.3				
Austria	0.8	1.2	6.0	0.5	1.9	10.5				
Switzerland	0.5	3.5	2.3	0.6	2.3	9.1				
Spain	0.1	1.0	2.3	5.6		9.0				
Denmark	0.0	5.3	0.1	0.1	0.6	6.1				
Italy	0.3	0.7		0.2	1.3	2.5				
Sweden	0.1	1.0	0.3	0.1	0.8	2.4				
Greece		0.2	0.2	0.0	0.2	0.6				
Source: BIS -	June 201	0, TD Eco	onomics							

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FOREIGN BANKS CLAIMS ON PIIGS											
	(% change from December 2009 to June 2010)										
	Greece	Ireland	Italy	Portugal	Spain	Total Exposure to PIIGS					
Austria	-33.3%	-45.9%	-13.0%	-33.5%	-18.9%	-22.6%					
Belgium	-44.3%	-11.2%	-17.7%	-17.7%	-12.9%	-14.3%					
Denmark	-40.7%	-20.6%	-28.5%	-19.1%	-25.7%	-21.4%					
France	-28.9%	-17.0%	-18.1%	-6.3%	-26.0%	-20.2%					
Germany	-18.1%	-24.6%	-19.0%	-21.4%	-23.7%	-22.1%					
Greece		-42.7%	-31.7%	-3.8%	55.1%	-16.2%					
Ireland	-7.8%		-11.5%	-5.2%	-16.2%	-12.4%					
Italy	-22.8%	-16.7%		-29.8%	-17.8%	-19.3%					
Netherlands	-60.3%	-31.2%	-37.1%	-58.7%	-39.3%	-39.7%					
Portugal	2.9%	-9.9%	-34.6%		-17.8%	-13.4%					
Spain	-27.3%	-10.8%	-30.2%	-9.1%		-16.0%					
Sweden	-30.0%	-7.7%	-43.8%	-15.8%	-37.2%	-27.7%					
Switzerland	-34.0%	6.5%	-30.6%	-28.0%	-35.6%	-21.7%					
U.K.	-20.6%	-20.8%	-13.2%	-7.7%	-2.9%	-13.7%					
Overall change in Lending	-29.0%	-15.1%	-21.0%	-15.9%	-22.4%						
Source: BIS -	Source: BIS - June 2010, TD Economics										

situation escalates, public concerns regarding the survival of the monetary union start to rise. This has the potential to put further strain on the banking systems of those countries that are perceived to be the weakest within the union. As people lose confidence, deposits are withdrawn from the banks in order to be transformed into safer assets (i.e., assets with the capacity to withstand a potential currency depreciation in the even the currency union would fall apart). Tellingly, growth in M2, the monetary aggregate composed of banks' reserves plus currency in circulation plus deposits, has been gaining momentum in Germany and France. On the other hand, it has been continuously declining on an annual basis since August 2009 in Portugal and since March 2010 in Spain. In Italy the rate of growth of M2 has decelerated very sharply in recent months. This reduces the funding supply for banks, at a time when they are also experiencing a squeeze in wholesale funding. The table on the left shows the declines in foreign banking lending experienced by the PIIGS from December 2009 to June 2010. Greece suffered the most, with a 29% contraction, followed by Spain (-22.4%), and Italy (-21%). Therefore, these two facts combined have the potential to create an asymmetric response to stimulatory monetary policy between "at risk" countries and their stronger neighbors, further complicating the adoption of monetary policy actions in response to the crisis. Next, we explore some of the implications of the issues we have discussed so far in relation with the EFSF.

The European Financial Stabilization Mechanism (EFSF)

The EFSF was the main policy response that resulted from the financial turmoil triggered by Greece's fiscal crisis in May 2010. It is a corporation owned by the 16 euro zone member states and its objective is to provide financial assistance to euro zone countries under financial distress. In order to fulfill its mandate, the EFSF has the capacity to issue debt guaranteed by its founding members for up to \notin 440 billion. The guiding principle was that those guarantees, combined with an additional 20% guarantee buffer would allow the EFSF to obtain the strongest credit rating possible, thereby reducing its funding costs. Indeed, the three leading credit rating agencies assigned the EFSF their highest rating. The accompanying table shows the original guarantee contributions that each country has agreed to provide to the EFSF. The following are some of the main characteristics describing the structure and functioning of the EFSF:

1. In order to secure a loan from the EFSF, a country has to sign a Memoranda of Understanding (MoU) with the European Commission, which acting on behalf of the euro area member states, stipulates criteria for budgetary

	SOVEREIGN DEBT REDEMPTIONS (billion euro, % of total public debt outstanding)															
	Fran	nce	Gern	nany	Gre	ece	Irela	and	lta	ly	Port	ugal	Spa	ain	U.	K.
2011:Q1	111.7	7.0%	126.3	8.5%	17.6	4.1%	6.2	4.8%	120.4	5.8%	10.3	5.9%	35.0	4.6%	81.4	4.3%
2011:Q2	76.8	4.8%	69.4	4.7%	13.6	3.2%	2.9	2.2%	73.0	3.5%	12.7	7.2%	39.7	5.2%	25.4	1.3%
2011:Q3	71.7	4.5%	73.9	5.0%	13.4	3.2%	0.0	0.0%	109.1	5.2%	5.2	3.0%	42.0	5.5%	29.0	1.5%
2011:Q4	40.8	2.5%	52.2	3.5%	7.1	1.7%	5.8	4.5%	36.4	1.8%	3.9	2.2%	36.8	4.8%	28.1	1.5%
2012:Q1	22.3	1.4%	60.9	4.1%	16.5	3.9%	6.7	5.2%	83.2	4.0%	0.3	0.2%	14.0	1.8%	47.6	2.5%
2012:Q2	34.7	2.2%	48.5	3.2%	11.2	2.6%	1.9	1.5%	39.7	1.9%	10.9	6.2%	22.5	2.9%	39.6	2.1%
2012:Q3	57.8	3.6%	66.4	4.5%	13.8	3.2%	0.0	0.0%	55.8	2.7%	1.0	0.6%	30.8	4.0%	13.4	0.7%
2012:Q4	39.7	2.5%	28.3	1.9%	1.5	0.4%	1.2	1.0%	60.1	2.9%	1.9	1.1%	24.6	3.2%	8.2	0.4%
Total	455.5	28.4%	526.0	35.2%	94.6	22.3%	24.8	19.1%	577.8	27.8%	46.2	26.3%	245.4	32.1%	272.5	14.3%
Source: B	Source: Bloomberg, TD Economics, as of November 30th 2010															

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	UNEMPL	OYMENT R	GDP GROWTH (% chg) ^						
	Latest	Pre Crisis Low	Avg. 1999- 2010	Real	Nominal				
France	9.8	7.5	9.0	1.7	3.0				
Germany	6.7	6.7	8.5	2.5	4.1				
Greece	12.2	7.5	10.0	-1.8	-0.1				
Ireland	14.1	4.3	5.9	1.5	1.8				
Italy	8.6	5.8	8.2	1.1	0.6				
Portugal	11.0	7.5	6.8	0.6	1.6				
Spain	20.7	7.9	11.7	0.7	1.3				
U.K.	7.7	5.1	5.6	2.0	4.6				
Source: * E	urostat, TD	Economics							
A IME MEO October 2010, everage 2010, 2012 forecast									

^ IMF-WEO October 2010, average 2010-2012 forecast

discipline and economic policy guidelines, in a similar fashion to those traditionally provided by the IMF. The interest rate which will apply to each loan is intended to cover the cost of funding incurred by EFSF and shall include a margin which shall provide remuneration for the guarantors. In addition, an up-front 50-basis point service fee may be used to cover the operational costs of EFSF.

- 2. Before each disbursement of a loan under an agreement, the European Commission will, in liaison with the ECB, present a report analysing compliance by the relevant borrower with the terms and conditions set out in the MoU. The guarantors will evaluate such compliance and will unanimously decide on whether to permit disbursement of the relevant loan.
- 3. In the event that there is a delay or failure to pay by a borrower of a payment under a loan, which would, in turn, create a shortfall of funds available to meet a scheduled payment by EFSF on its own debt, then EFSF shall make a demand to cover its shortfall on a pro rata basis on the guarantors.
- 4. In the event that a guarantor experiences severe financial difficulties and requests a stability support loan, it (the "stepping-out guarantor") may request the other guarantors to suspend its commitment to provide further guarantees. The remaining guarantors, acting unanimously may decide to accept such a request. The stepping-out guarantor shall not be required to issue its guarantee in respect of any further funding instruments issued by EFSF. Therefore, any further guarantees shall be issued by the remaining guarantors, after their contribution shares have been proportionally adjusted.

Such adjustments shall not affect the liability of the stepping-out guarantor under existing guarantees. Greece was deemed to be a stepping-out guarantor for the effect of entry into force of the EFSF.

To better illustrate these points, the table on the next page provides an example of how the EFSF would work when faced with subsequent requests for financial aid. On the fourth column, the table shows each guarantor's adjusted contribution after Greece was declared a stepping-out guarantor at inception of the EFSF. The total remaining lending capacity of the EFSF - after adjusting by the 20% buffer - has been reduced from a nominal € 440 billion to € 366.7 billion. In turn, the sixth column shows the remaining guarantee contributions of each country after we factored in the €17.7 billion provided by the EFSF towards Ireland's bail-out. As a result, the total remaining lending capacity of the EFSF has been further reduced to € 329.7 billion. To carry on with our example, let's assume Portugal makes a request for \in 75 billion – a reasonable assumption, given the size of the country's debt redemptions over the next two years. Assuming also that the IMF would provide a third of this amount, then the EFSF would lend Portugal € 50 billion. At that point, it would be left with a lending capacity of € 262.1 billion. Unfortunately, in light of the sizeable redemptions Spain will have to roll over during 2011-2012, it is not inappropriate to conclude the EFSF would have to be expanded to handle a hypothetical Spanish bail-out. This example highlights the main underlying weakness of the EFSF, which is that, as the demand for financial aid increases, the pool of guarantees to issue debt in order to generate its funding decreases. Beyond this, there are other perceived flaws on this mechanism.

For instance, although a guarantor does not provide actual funding, but rather acts as a backstop for the EFSF, its own credit rating should also reflect the fact that in the event of default of a borrower, the guarantor is liable for its share of the guarantee. In other words, even though the guarantor's sovereign debt does not increase by the mere fact of providing a guarantee to the EFSF, it's risk profile does indeed deteriorate. This could, in turn, affect the guarantor's borrowing costs. This impact could be sizeable even for the strongest guarantors, given they also face large roll over needs over the next two years.

Furthermore, the fact that each disbursement needs to be approved unanimously by participating guarantors raises a political risk. It is not inconceivable that domestic social pressure might become a strong conditioning factor at the time of approving a disbursement, especially in the event

GUARANTEE CONTRIBUTIONS TO EUROPEAN FINANCIAL STABILITY FACILITY									
	Original Co	ontribution	Excl	Excl. G ¹		G + I ²	Excl. G + I + P ³		
	Billion euro	%	Billion euro	%	Billion euro	%	Billion euro	%	
Germany	119.4	27.13%	99.5	27.92%	93.6	28.38%	76.4	29.15%	
France	89.7	20.38%	74.7	20.97%	70.3	21.32%	57.4	21.89%	
Italy	78.8	17.91%	65.7	18.42%	61.8	18.73%	50.4	19.24%	
Spain	52.4	11.90%	43.6	12.24%	41.0	12.45%	33.5	12.78%	
Netherlands	25.1	5.71%	21.0	5.88%	19.7	5.98%	16.1	6.14%	
Belgium	15.3	3.48%	12.7	3.58%	12.0	3.64%	9.8	3.73%	
Greece	12.4	2.82%							
Austria	12.2	2.78%	10.2	2.86%	9.6	2.91%	7.8	2.99%	
Portugal	11.0	2.51%	9.2	2.58%	8.7	2.62%			
Finland	7.9	1.80%	6.6	1.85%	6.2	1.88%	5.1	1.93%	
Ireland	7.0	1.59%	5.8	1.64%					
Slovakia	4.4	0.99%	3.6	1.02%	3.4	1.04%	2.8	1.07%	
Slovenia	2.1	0.47%	1.7	0.48%	1.6	0.49%	1.3	0.51%	
Luxembourg	1.1	0.25%	0.9	0.26%	0.9	0.26%	0.7	0.27%	
Cyprus	0.9	0.20%	0.7	0.20%	0.7	0.21%	0.6	0.21%	
Malta	0.4	0.09%	0.3	0.09%	0.3	0.09%	0.3	0.10%	
Total	440	100%	356	100%	330	100%	262	100%	
Remaining Lending Capacity	366.67		356.34		329.73		262.08		

Source: European Financial Stability Facility, TD Economics

1) Excluding Greece

2) Excluding Greece and Ireland, and assuming Ireland pays 5.8% interest on the 17.7 billion 3-year loan it got from the EFSF

3) Excluding Greece, Ireland and Portugal, assuming the latter gets a 50-billion 3-year loan from the EFSF paying 6% interest

of a borrower missing some of the fiscal performance targets of its MoU. For example Portugal, despite the fiscal tightening initiatives it implemented earlier this year, has seen its fiscal deficit widen by 1.8% of GDP. This latter risk takes us back to the root problem of this ongoing sovereign debt crisis, which is the subdued growth outlook for these European economies. If we look at Spain, with sovereign debt approaching 70% of GDP in 2011, rolling over its debt redemptions at the 5% interest rate investors are currently demanding to hold its debt will seem increasingly unsustainable, especially considering the country's nominal GDP is forecast by the IMF to grow by only 1.3% on average during the next two years. We do care about nominal GDP growth, because it ultimately poses a ceiling to the speed at which fiscal revenues can grow.

Final Remarks

Under the current circumstances, given the dim growth outlook for these European economies, and also given the current European institutional setting, the risk of a series of debt restructurings has sizeably risen since the Greek fiscal crisis. Market confidence will not be restored until a permanent, credible solution to Europe's sovereign debt situation is crafted. Therefore, between now and then, every sovereign debt redemption or new bond auction will be closely watched by the markets as a stress gauge, and, as such, could prove to be a trigger event for further volatility bouts. As we have highlighted, the debt redemption calendar of these countries provides a good indication that there is not going to be any shortage of those potential triggers. In our view, a permanent solution to Europe's sovereign debt situation will have to deal eventually with the extraordinarily difficult task of debt restructuring, simply because the amount of fiscal tightening that is required to bring fiscal accounts back to good health is actually self defeating due to the short- to medium-term drag it imposes on economic growth.

Having said this, timing remains a critical issue. The more time elapses without having a severe disruption, the more room there is for financial markets to reduce risky exposures and reallocate resources to more productive, safer activities. This is made very clear by the accompa-

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nying table on page 3, which shows the change in banks' exposure to PIIGS from December 2009 to June 2010. In addition, time is also of the essence to allow for the design and implementation of policy actions to deal with this situation. Very likely, a permanent solution to Europe's fiscal sustainability will require changes on its institutional setting, which could bring the euro zone much closer to a monetary and fiscal union. This process will impose very complex

political negotiations. In the meantime, the European Central Bank will play a key role. It has the tools to provide the time bridge necessary to get there and avoid a full blown debt crisis. It will also most likely have the resolve to do so, even at the cost of contemplating inflation temporarily above its 2% target. After all, as Mr. Trichet said, he is the guardian of the euro.

Endnotes:

1) "Will it Hurt? Macroeconomic Effects of Fiscal Consolidation", International Monetary Fund, World Economic Outlook: Recovery, Risk and Rebalancing, Chapter 3, October 2010.

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