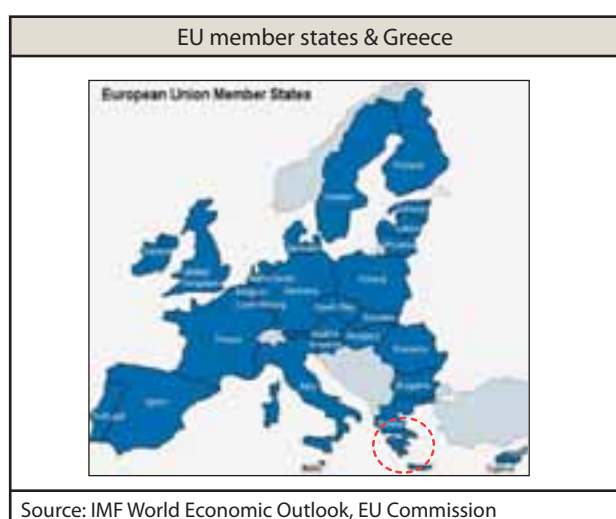
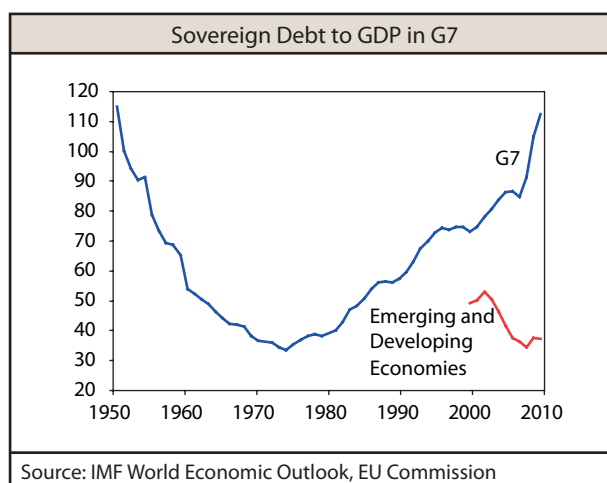


Sovereign Risk Focus

The eurozone in a fiscal quagmire

- Policy responses to address the 2008 global financial crisis, coupled with a slowdown in global economic growth have led to a worsening situation for sovereign debt burdens in developed economies.
- Over the last few months, focus was squarely on Greece and the broader PIGS countries, as a result of revisions to Greece's fiscal positions after its recent domestic elections, and the delayed manner in which the bailout package was rolled out.
- In terms of nominal GDP, Greece is clearly not a large economy. However, the complication is that it is part of EU and EUR arrangement. A failure of Greece could implicate Portugal, Ireland, Spain or even Italy, whereby overall debt levels are also relatively high. Although the situation in respective countries differs, the market is certainly not convinced. As such, the life-line is not for Greece alone, but the viability of the EU arrangement.
- For now, the 'liquidity situation' appears to have been resolved, but 'solvency risk' remains, which means 'volatility'.
- Trigger will be from two fronts: (1) Greece meeting EU-IMF conditionalities; (2) Maturing debt and debt auction developments in PIGS countries; We have listed down key schedules for EU-IMF draw downs, debt maturities and auction dates that the market will be closely watching in the coming months.

The fiscal responses to address the 2008 global financial crisis, coupled with a slowdown in global economic growth have led to a worsening situation for sovereign debt burdens in developed economies. This new phase in the global adjustment after the 2008 crisis and its associated risks was a consequence of the decline in markets' willingness to support banks' leverage or sovereign balance sheets - as liquidity is being withdrawn from policy normalisation. Notably, G7 sovereign debt levels as a proportion of GDP have been rising sharply since the crisis began while debt levels in emerging economies have fallen.



Started from Greece....

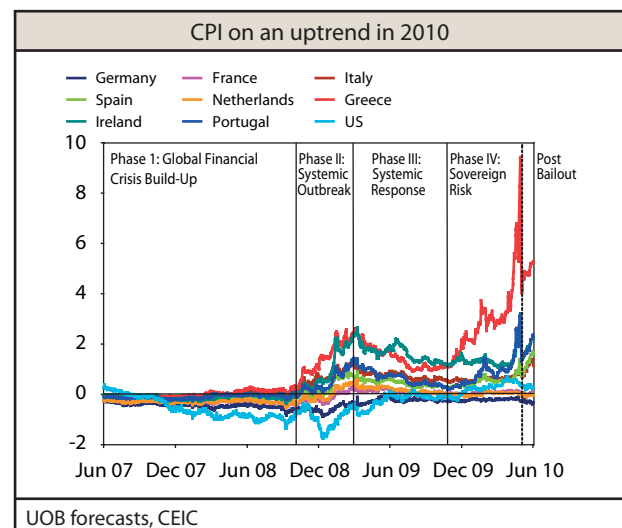
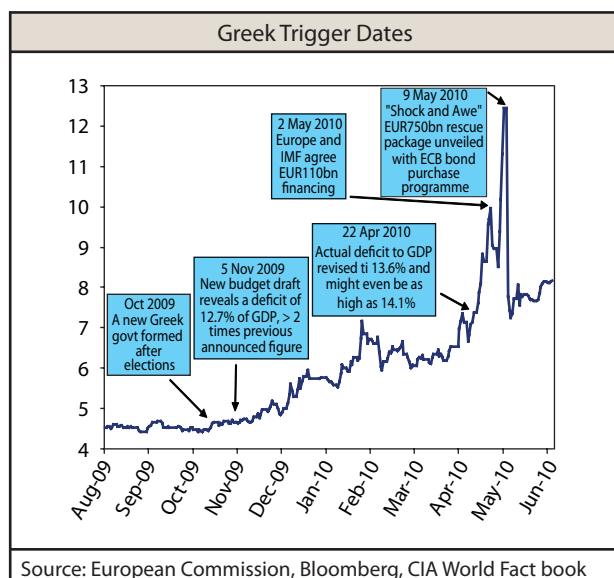
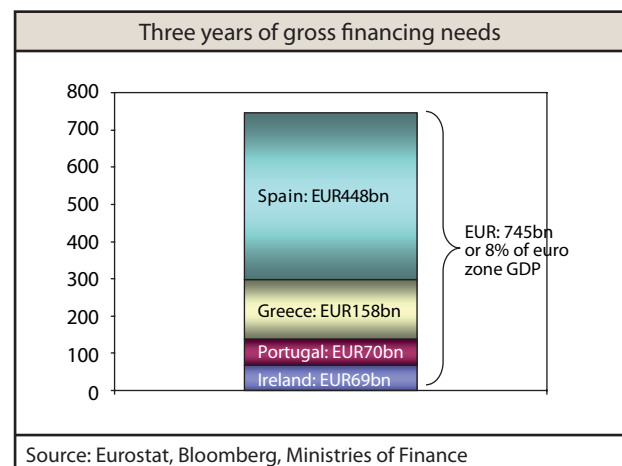
Greece's fiscal problems since Nov 2009 and developments since then was clearly the main trigger for the market's re-assessment about sovereign risk and the widespread deterioration of public sector balance sheets that took place within the Euro zone. Revisions to Greece's fiscal positions after its recent domestic elections, together with the hesitant and delayed manner in which the bailout package for Greece was coordinated, has worsened the situation with adverse impact on other similar PIIGS economies with weak fiscal outlook. Over the past quarter, various developments emerged which included the unilateral move by Germany to ban certain types of short selling, have led many to question again the long term viability of the euro, and bring into question its reserve currency status.

Sovereign Risk Focus

Greece is not big, but EU and EUR arrangement threatens the viability of EU arrangement

In terms of nominal GDP, Greece is clearly not a large economy. However, the complication is that Greece is part of EU and EUR arrangement. A failure of Greece could implicate Portugal, Ireland, Spain or even Italy - whereby overall debt level are relatively high (see table). Although the situations in respective countries differ, the market is certainly not differentiating. As such, the life-line is not for Greece alone, but perhaps the viability of the EU arrangement and its knock-on effects on the EUR.

interventions in the euro area public and private debt securities markets (Securities Markets Programme) to ensure depth and liquidity in dysfunctional market segments. **Our estimates show that the EUR750bn or US\$1.1tn more or less matches the combined gross financing liquidity needs for three years or total public debt of Greece, Portugal, Ireland and Spain. This has helped substantially reduced immediate threat of financing crises. However, long-term solvency issues remain.** Post-bailout credit spreads have fallen but has begun to rise again albeit not to levels seen around May 12.



On 10 May 2010, the IMF and EU announced “shock and awe” measures – EUR750bn financial support programme (EUR60bn Balance of Payments facility, EUR400bn EU loan program and EUR250bn IMF loans) for the euro area countries and the aggressive ECB actions which includes

How bad is the situation in PIIGS? Long-term solvency issue remains, public debt is large (relative to respective GDP) and economic situation is weak.

The economic situation looks bleak in PIIGS countries, given the fiscal measures undertaken. Greece, which has received bailout funding, has very high debt stock levels and a large negative flow (budget deficit), relative to other PIIGS countries, and the situation may worsen if they were to meet the strict EU-IMF conditionalities required quarterly. Spain

Sovereign Risk Focus

Economic Fundamentals in PIIGS								
Country	Greece	Portugal	Spain	Ireland	Italy	US	China	Germany
Nominal GDP (US\$ bn)	331	228	1,464	228	2,118	14,256	4,909	3,352
% of World Nominal GDP	0.6	0.4	2.5	0.4	3.7	24.6	8.47	5.79
% of EU Nominal GDP	2	1.4	8.9	1.4	12.9	86.7	29.9	20.4
Real GDP (% YoY growth)*	-2	0.3	-0.4	-1.5	0.8	3.1	10	1.2
	(-2.5)	(-3.3)	(-3.6)	(-7.5)	(-5.0)	(-2.4)	-12.2	(-5.0)
Unemployment Rate**	11.3	9.2	19.1	13.8	8.3	9.7	9.6	7.8
	(7.7)**							
Population Size (in mn)	11.3	10.7	45.9	6.2	60.2	309.2	1,337.40	81.8

*2010 (parentheses for 2009), ** 2009, Source: IMF WEO

Public Debt Exposures					
	Greece	Portugal	Spain	Italy	Ireland
Budget deficit (2009) (% of GDP)	-12.7	-9.3	-11.4	-5.4	-14.3
Public debt (% of GDP)	113.4	76.6	55.2	113.9	64
Public debt in (US\$ bn)	375	175	805	2412	137
Gross Government Financing needs for 3 years (2010-2012) (in US\$ bn)	205	91	582	-	90
Nominal GDP (in US\$ bn)	331	228	1464	2118	228
Public debt service in 2010* (% of GDP)	11.6	2.5	4.7	14.1	12

Source: Eurostat, Bloomberg, Ministries of Finance, IMF.* Includes long-term debt redemptions and interest payments

and Ireland have lower debt ratios than Greece, but their primary fiscal position remains a worry. If the adjustment is not implemented, their debt stocks could also rise rapidly.

Liquidity problems covered until 2012-3, but solvency issues linger

We note that the EU-IMF bailout package will be able to cover refinancing and liquidity risks, but it does not solve the solvency issue. In the case of Greece, it would require large fiscal adjustments within a weak growth environment over the next few years. Past historical case studies show that fiscal adjustments during strong growth regimes would require around 5-8 adjustment years. Also, given Greece's adoption of the euro and loss of domestic currency control, restoring competitiveness would require low inflation coupled with a low euro zone interest rate environment. **This clearly explains why various polls suggest that Greece may eventually walk down the default avenue over the next few years, although we do not expect such an outcome until the current EU-IMF package runs out in 2013. We will re-visit this issue in the coming months.**

Besides government debt concerns, fear is reigning over contagion into banking, and drying-up of liquidity and credit – a' la post Lehman

Since the onset of the global crisis, spreads have widened in some highly indebted economies with underlying vulnerabilities, as longer-run public solvency concerns have escalated into strains in sovereign funding markets that may have cross-border spillovers. There have been concerns about the subsequent transmission of sovereign risks to local banking systems and feedback through the real economy.

This is especially pertinent because BIS reporting banks' exposures to the euro area countries facing market pressures (Greece, Ireland, Portugal and Spain), as at 31 December 2009, is quite significant. Together, they have \$727bn of exposures to Spain, \$402bn to Ireland, \$244bn to Portugal and \$206bn to Greece. French and German banks were particularly exposed to the residents of Greece, Ireland, Portugal and Spain. At the end of 2009, they had \$958 billion of combined exposures (\$493bn and \$465bn, respectively) to the residents of these countries. This amounted to 61% of all reported euro area banks' exposures to those economies. French and German banks were most exposed to residents of Spain (\$248bn and \$202bn), respectively.

Sovereign Risk Focus

The joint foreign claims of banks headquartered in the euro zone on the public sectors of Greece, Ireland, Portugal and Spain (\$254bn) amounted to approximately 16% of their combined overall exposures to these countries. Most

of those claims belonged to French (\$106bn) and German (\$68bn) banks. These two banking systems had sizeable exposures to the public sectors of Spain (\$48bn and \$33bn, respectively), Greece (\$31bn and \$23bn, respectively) and

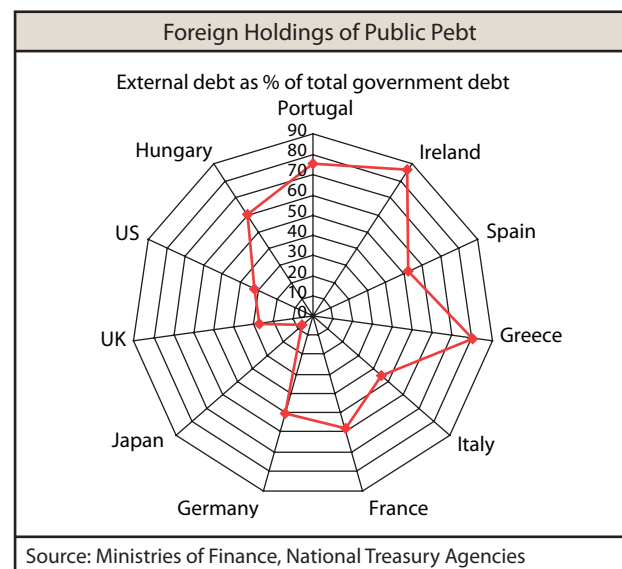
Banks' Exposures to PIIGS (% of reported assets)													
% of reported assets	Austrian	Belgian	French	German	Greek	Irish	Italian	Dutch	Portugese	Spanish	Swiss	UK	US
Greece	0.9	0.9	2.1	1.4	0.0	1.4	0.7	0.8	6.1	0.1	0.2	0.4	0.7
Ireland	1.5	9.5	1.4	5.6	0.4	0.0	1.8	1.8	5.5	1.1	1.1	4.9	2.3
Italy	4.9	6.9	13.8	5.8	0.5	7.4	0.0	4.4	3.4	3.5	1.2	2.1	2.2
Portugal	0.6	0.7	1.2	1.5	0.1	0.9	0.7	0.9	0.0	6.2	0.2	0.7	0.2
Spain	1.7	5.0	5.7	7.3	0.3	5.1	3.3	7.6	18.1	0.0	1.3	3.1	2.4
Total to PIIGS (%)	9.5	23.0	24.3	21.6	1.2	14.8	6.5	15.5	33.1	10.9	4.1	11.2	7.7

*2010 (parentheses for 2009), ** 2009, Source: IMF WEO

Portugal (\$21bn and \$10bn, respectively). The largest non-euro area holders of claims on the above four public sectors were Japanese and UK banks (\$23bn and \$22bn, respectively). The greatest exposures of both these banking systems were to the Spanish public sector (\$13bn and \$9bn, respectively) - BIS Quarterly Review, June 2010.

PIIGS sovereign debt on average 80% are funded overseas, market will be volatile in the coming months

One characteristic of some of these high-solvency risk countries is their heavy reliance on external funding to address their liquidity/solvency challenges. Unlike local demand sources, non-resident buyers are naturally more attuned to sovereign risk and inclined to quickly step back in times of market stress. Portugal, Ireland, Italy, Greece and Spain have foreign holdings as a % of total debt at 75%, 86%, 45%, 80% and 52% respectively. This compares with other developed countries such as Japan, UK and US with 7%, 27% and 32%, respectively.



Going forward, market will be closely watching:

- (1) Greece meeting EU-IMF conditionalities;
- (2) Maturing debt and debt auction developments in PIIGS countries;

Meeting EU-IMF conditionalities

There are several key dates that Greece will have to abide to as part of their stand-by or bailout arrangement with the IMF and EU. This will be administered by IMF officials, along with EU Commission, before additional disbursements. Notably, the August 30 deadline will be watched by markets. Prior to that IMF-EU officials will be releasing a preview report on Greece's fiscal program end July.

Sovereign Risk Focus

Greece and EU-IMF drawdown schedules	
Greece key dates: Access and Phasing under the Proposed Stand-By Arrangement, 2010-2013	
Review	Availability
Board Approval of SBA	May 9, 2010
First, Observance of End-June 2010 performance criteria, completion of first review	August 30, 2010
Second	November 30, 2010
Third	February 28, 2011
Fourth	May 30, 2011
Fifth	August 30, 2011
Sixth	November 30, 2011
Seventh	February 28, 2012
Eighth	May 30, 2012
Ninth	August 30, 2012
Tenth	November 30, 2012
Eleventh	February 28, 2013
Twelfth	April 30, 2013

Source: IMF May 2010 IMF Country Report No. 10/110, Greece: Staff Report on Request for Stand-By Arrangement

Maturing debt

A sovereign debt profile with concentrated maturities also introduces - trigger dates around which policymakers must navigate. These hurdles could constrain policy options and increase the likelihood of standoffs developing between the government and investors demanding higher risk premiums. Enclosed are key dates in the PIGS countries, where 'volatility' is likely to increase.

Thus far, Spanish banks have reportedly been having difficulty in getting funding from foreign banks. Spain's treasury secretary on 14 June acknowledged officially for the first time a liquidity problem faced by some Spanish banks in the interbank market and said the government was working to restore confidence through budget cuts and structural economic reforms. It will be interesting to see if Spain will face problems as it attempts to refinance around EUR20bn of bonds in July.

Key Redemption Schedule Dates for Greece, Portugal and Spain					
Greece		Spain		Portugal	
Date	EUR(bn)	Date	EUR(bn)	Date	EUR(bn)
July 16, 2010	0.91	July 20, 2010	1.04	July 23, 2010	0.91
July 16, 2010	1.04	July 23, 2010	6.66	September 17, 2010	1.04
July 23, 2010	2.4	July 30, 2010	16.71	November 19, 2010	2.4
September 29, 2010	0.19	August 20, 2010	6.79		
October 15, 2010	1.28	September 24, 2010	5.83		
October 15, 2010	0.96	October 22, 2010	4.95		
		November 19, 2010	5.52		
		December 17, 2010	4.62		

Source: Bloomberg

Sovereign Risk Focus

Auction dates

The following bond auction dates are likely to trigger market volatilities given the level of uncertainty with regards to the PIGS medium to long term solvency issues. In particular, the outcomes from Spain's bond auctions may provide some indication of the markets perception of Spanish assets, given developments in its banking sector and fiscal reforms. Thus far, markets have been supportive. On 17 June 2010, Spain successfully sold EUR3bn of 10yr

debt at an average yield of 4.864%, less than the 5.04% yields traded prior to the auction. Bid-to-cover ratio was 1.89. Spain also sold EUR479.2mn of 30yr debt at 5.908% at a bid-to-cover ratio of 2.45, higher than the 1.38 at the previous sale on Mar 18. The yields were a little higher than previous auctions but yesterday's successful auction indicates Spain's ability to finance their deficit at non-prohibitive costs. The buyers were largely EU central banks and sovereign buyers.

Auction dates		
Spain	Portugal	Ireland*
July 1, 2010	June 23, 2010, 5 yr bond, EUR 0.3bn - 0.8 bn	July 20, 2010
July 15, 2010		August 17, 2010
August 5, 2010		September 21, 2010
August 19, 2010		October 19, 2010
September 2, 2010		November 16, 2010
September 16, 2010		
October 7, 2010		
October 21, 2010		
November 4, 2010		
November 18, 2010		
December 2, 2010		
December 16, 2010		
January 13, 2010		
*In each auction, up to two bonds may be offered and the NTMA envisages auction sizes in the range of €1 billion to €1.5 billion.		
Source: National debt management agencies		