Market Access for Sovereigns When Are You at Risk of Losing It – When Can You Regain It?

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The Distress in the Peripheral Sovereigns: the Last Stage in the Deteriorating Process

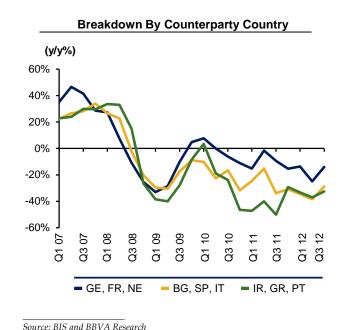
The Distress in the Peripheral Sovereigns: The Last Stage In The Deteriorating Process

■ The financial sector was one of the first to show evidence of the disruption in the cross border financing mechanisms. As early as 2009 a brisk reduction in flows was started to be observed (initially as a consequence of the turmoil in the US in the last part of 2008). It took about a year before a similar pattern was observed in the Euro public debt flows.

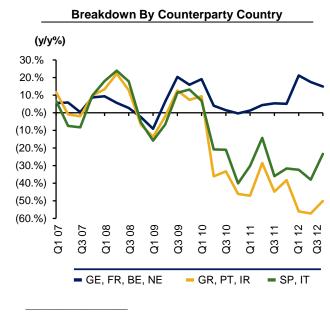
Assets of US Institutional Money Market Mutual Funds*

Source: ICI and BBVA Research

BIS Reporting Banks' Exposure To Foreign Banks



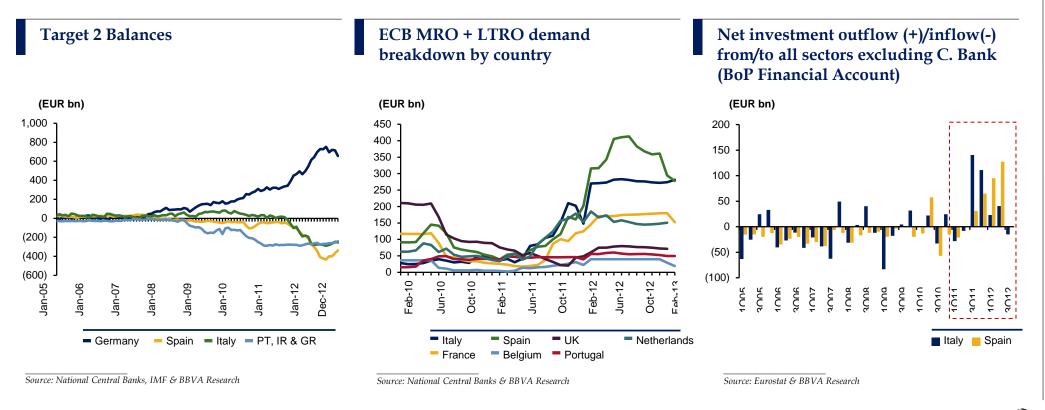
BIS Reporting Banks' Exposure To Foreign Public Debt



Source: BIS and BBVA Research

The Distress in the Peripheral Sovereigns: The Last Stage In The Deteriorating Process

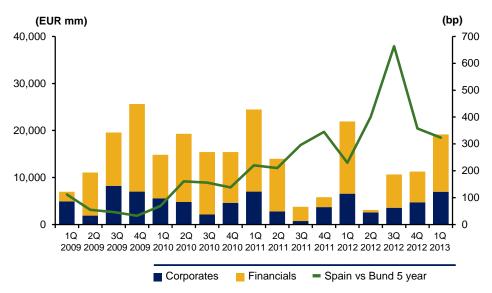
In the Eurozone, it has been the Eurosystem that has been playing a major role making up for the deterioration of the private cross border flows among participant financial systems. This has been clearly reflected in the Target2 imbalances that some countries have accumulated from 2009 up to mid-2012. The first hints of reversion in these imbalances that have been observed in some of the countries (chiefly Spain, whose banks are even more prone to reducing their dependence on ECB funding) serves as an indication of a certain degree of easing in the financing conditions.



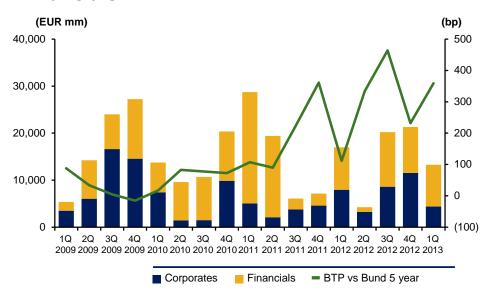
The Distress in the Peripheral Sovereigns: The Last Stage In The Deteriorating Process

■ In 3Q11 and 2Q12, sharp declines in new-issue volumes of Spanish and Italian financials and non-financials led to major peaks in the risk premium in government bonds in the following quarter.

Bond Issuance in Spain - Financials & Non-Financials



Bond Issuance in Italy – Financials & Non-Financials



Market Indicators Pre-empting a Loss in Market Access

Market Indicators: Reduced Demand at Auctions -> IR, PO

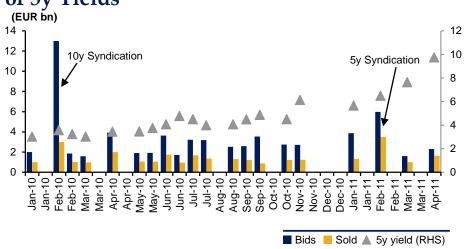
Portugal:

- Syndication of new 5y closed with a book size less than half of that of new 10y in early 2010
- Reduced bids at auctions in 2011, and reduced frequency of auctions

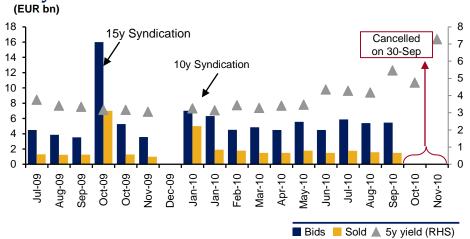
Ireland:

- The 10y syndication in 2010 met reduced demand compared to the 15y syndication in Oct-09
- The amount of bids per auction remained stable, but the rise in yields (10y spread to AAA crossing 400bp) prompted the treasury to cancel the Oct and Nov auctions as the state was already fully funded into mid 2011.





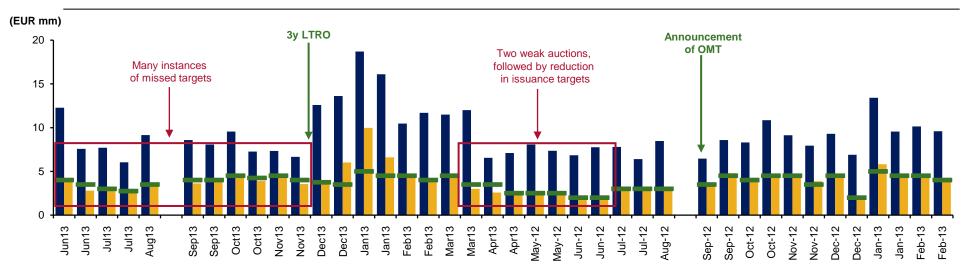
Ireland: Bids vs. Amount Sold, and Evolution of 5y Yields



Market Indicators: Reduced Demand at Auctions -> Was Observed in SP

- Spain also experienced a declining demand at its auction in mid 2011, as well as mid 2012
 - The Tesoro failed to issue the maximum target amount at several instances in 2011 and Mar-Apr 2012
 - The Tesoro had to reduce the maximum target at its auctions in mid 2012 (to just €2bn in June)
- But three elements prevented this from leading to a loss in market access:
 - The 3y LTROs in Dec-11 and Feb-12
 - The resulting large prefunding at the start of 2012, making it possible to reduce issuance in mid 2012. By the end of May, 56% of total scheduled bond issuance had been met.
 - The official announcement of the OMT in Sep-12

SPGB Auction Results



Market Indicators: Implications of an Impaired Market Access in the Sovereigns' Funding Strategy

- From a primary market standpoint, the spread between the marginal and the average rate at which the bond auctions are allocated is a good indicator of the strength of the demand. The tighter this spread is, the less disperse the bids are, reflecting a deeper market. The last part of 2012 seems to represent a turning point (for the better) in this variable in Spain.
- Regarding the secondary market, the size of the bid-ask spread in the bond market is an indicator of the market liquidity and the transaction cost. As seen in the chart below, the bid-ask spread has widened or tightened in recent years depending on the appetite for the Spanish paper.

(bp)

12

Tail* at the Spanish Sovereign Bond Auctions



Feb-12

Mar-12 Apr-12

Jan-12

Bid-ask Spreads in Sovereign Debt

Source: BBVA Research and the Spanish Public Treasury

Aug-11

Jul-11

Oct-11 Nov-11 Dec-11



■ SPA ■ ITA

4ug-12

Dec-12

Jul-12

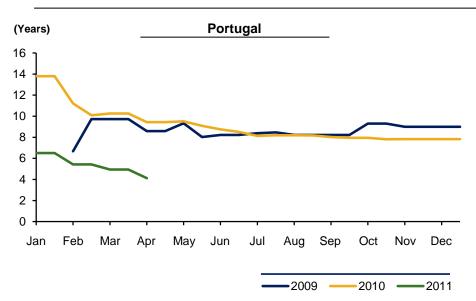
May-12

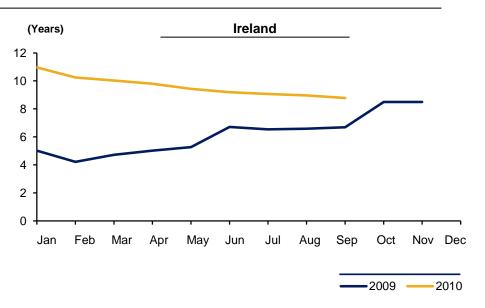
Source: BBVA Research and the Spanish Public Treasury
*Spread between marginal and average allocation rate- Moving average of the last 5 auctions

Market Indicators: Reduced Duration of Bond Auctions -> IR, PO

- The rise in yields drove a shortening in the maturity of bonds being auctioned. This was mainly observable in Portugal (see chart below comparing the evolution of the duration of issuance up to each month in 2011 to that in the previous two years).
 - In fact, the last auction conducted by ICGP in April was that of a 1-year bond only.
- This was not observed as much in Ireland as:
 - The NTMA cancelled auctions/didn't need to issue when yields surged
 - The NTMA conducted syndications of short term bonds in early 2009, while it sold a new 10y in early 2010

Weighted Average Duration of Bond Issuance up to Each Month of the Year

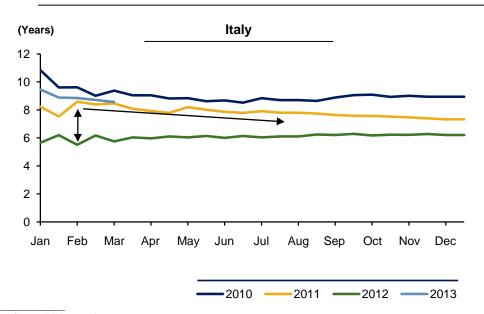


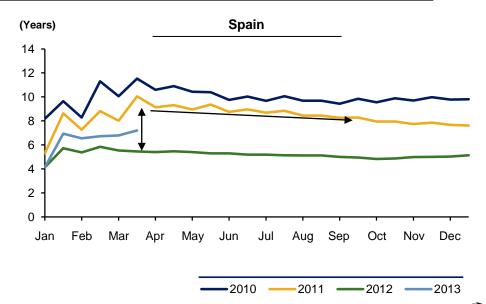


Market Indicators: Reduced Duration of Bond Auctions -> IT, SP

- Spain and Italy have also had to undertake a reduction in the maturity of their bond supply
- With in particular the quasi absence of 15y+ issuance in both Spain and Italy, and over 40% of issuance done in the Sub-3year sector in Spain over Jan-Jul 2012.
- But figures are skewed by the presence of strong demand for short dated paper due to 3y LTROs and OMT announcement

Weighted Average Duration of Bond Issuance up to Each Month of the Year

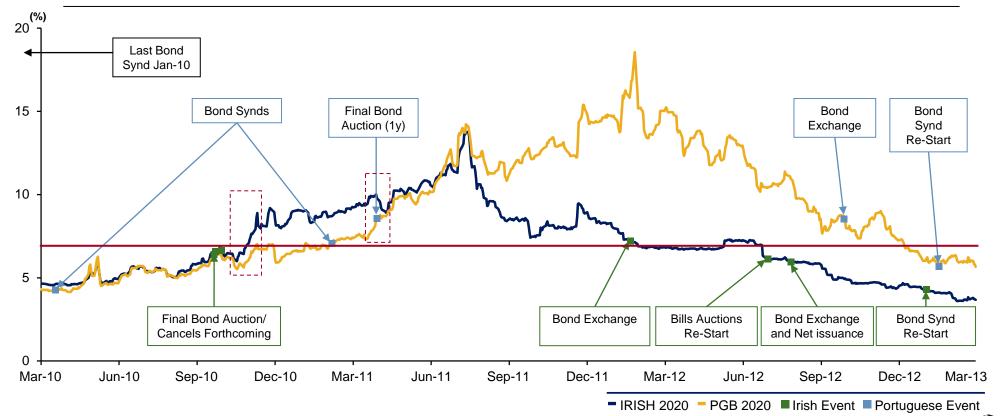




Market Indicators: Yields Rose (Fast) to Unsustainable Levels -> IR, PO

- Little issuance activity was observed after 10y yields breached the 7% level
- It took 18 days for 10y Irish yields to surge from 6% to over 8% (from 18-Oct-10 to 10-Nov-10) → **EU/IMF aid request on 21-Nov-10**
- Just 10 days for 10y Portuguese yields to move from 7.4% to over 8.5% (from 21-Mar-11 to 1-Apr-11) → **EU/IMF aid request on 7-Apr-11**

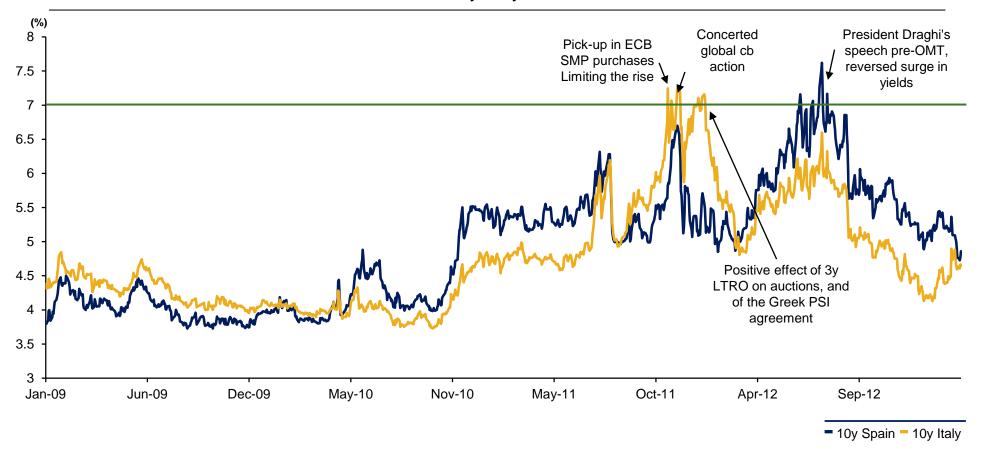
Evolution of 2020 Bond Yields



Market Indicators: Yields -> IT and SP Came Close to Unsustainable Levels

- Spanish and Italian 10y yields also came close to unsustainable levels in mid 2012
- But official interventions reversed the sell-off in a matter of days

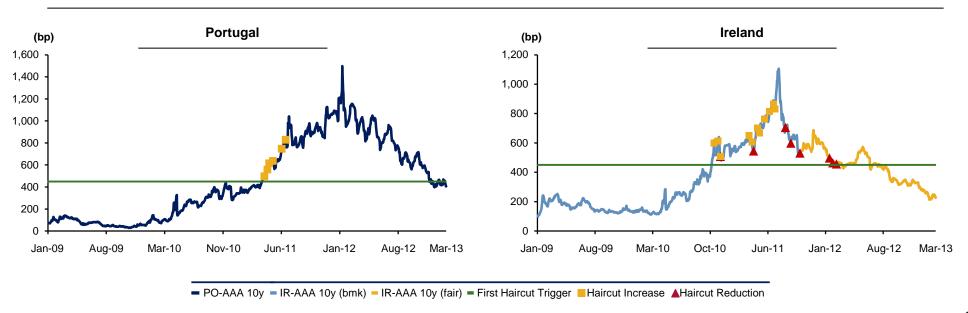
History of 10y Yields



Market Indicators: 10y Spreads to AAA Index Breaking Key Levels -> IR, PO

- LCH Ldt risk management rule: first 15ppt increase in haircut for trading of government bonds in RepoClear when the 10y benchmark spread to AAA Bloomberg index breaches the 450bp level, and remains significantly above for several consecutive days.
- Further increases are made when spreads breach higher threshold levels
- The introduction of these additional haircuts in Ireland and Portugal reduced repo activity and led to significant cheapening of bonds (in particular versus CDS: the CDS-bond basis tightened to negative territories following the first haircut changes).
- Irish spreads are now below the first threshold

10y Benchmark Bond Spread to AAA Bloomberg Index, and LCH Repo Haircut Changes



Market Indicators: 10y Spreads to AAA -> Almost There as Well for IT, SP

- Spain: additional haircuts were introduced on the LCH domestic platform, but President Draghi's speech end of July, followed by the first mention of OMT at the August ECB meeting prevented an extended surge in spreads.
- In Italy, renewed SMP buying and coordinated CB action were enough to lower the spread below 450bp in Nov-Dec 2011

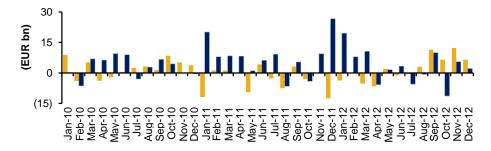
10y Benchmark Bond Spread to AAA Bloomberg Index



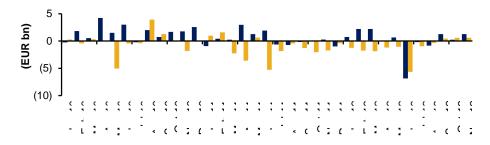
Market Indicators: Outflows in Sovereigns from Foreigners

- It has been 2H11 and 1H12 when most of the risk-off towards peripheral sovereign debt has been observed. Except for when the SMP programme was applied, most of the effort to make up for the significant outflow of foreign investment was made by the domestic financial system (other domestic sectors may have played some sort of role yet a minor one).
- This situation has started to be reversed in the last part of 2012 (chiefly after Draghi's commitment with euro in summer) with demand from foreigners returning and permitting some moderation in flows from the domestic financial sector.

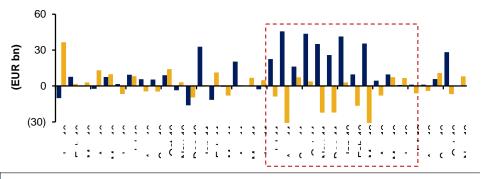
Change in Holdings of Spanish Central Government Debt Securities



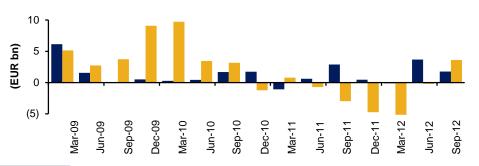
Change in Holdings of Portuguese Central Government Debt Securities



Change in Holdings of Italian Public Debt Securities



Change in Holdings of Irish Public Debt Securities



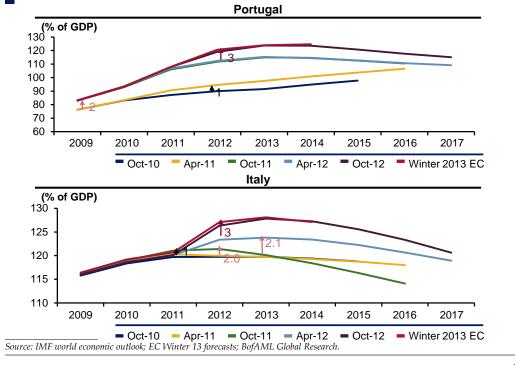
Residents Non Residents

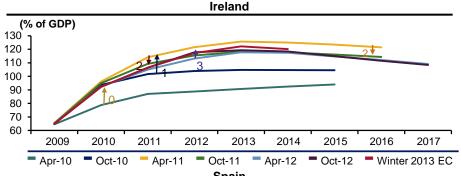
Sovereign Debt Sustainability

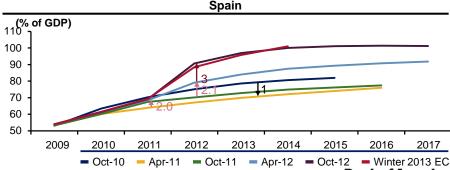
Sovereign Debt Sustainability: Changes in Expected Level of Sovereign Indebtedness

- Upward revisions in expectations of debt/GDP as well as historic levels
- Level of 100% was expected to be breached for Portugal in 2011 (forecasts as of Oct-11)
- For Ireland, the 100% level was expected to be breached as well in 2011 (already based on Oct-10 forecasts)
- We note downward revisions were made for Ireland (between Apr-11 and Oct-11)
- Large revisions to Spanish 2012 Debt/GDP ratio, but latest forecasts are still looking for the ratio to just touch the 100% level
- Italy: debt level above 100% from before 2002. There were large revisions as well to the 2012 figure, but the IMF continued to expect a strong downward trend for the medium term.

Evolution of the Expected Path of Debt/GDP (IMF World Economic Outlook Projections)



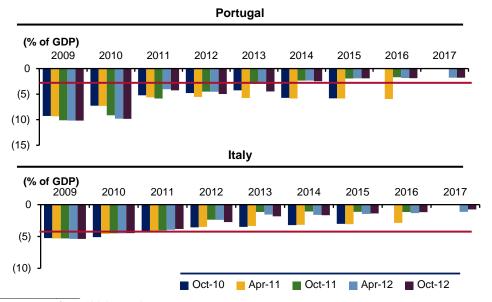


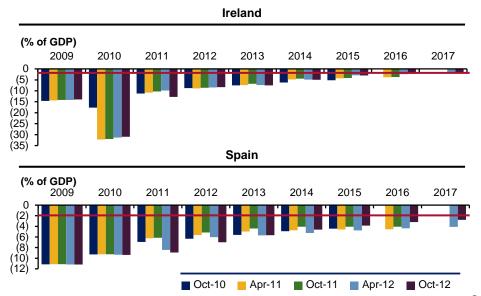


Sovereign Debt Sustainability: Fiscal adjustment -> IR, PO, IT and SP

- For Portugal:
 - Deterioration in long term deficit forecasts between Oct-10 and Apr-11; And several large revisions to 2010 figures were made in following two years
 - Improvements after Portugal entered the programme
 - And more flexibility now given in the fiscal adjustment path (Oct-12 figures for 2012-2013 deficit)
- For Ireland:
 - Aside from revisions to 2010-2011 figures, to account for bank support, forecasts were revised positively More flexibility offered in 2012 for 2013-2014 adjustment
- But Ireland is now accessing the market with a deficit of over 7%, while Portugal wasn't able to do so in 2011 with deficit of less than 6%
- Spain maintained market access despite a deficit of over 7ppt for several years, and despite large revisions to 2011 and 2012 figures
- → There is no deficit threshold to access the market, what is more important is the expectation of a strong, sustained adjustment

Evolution of the Expected Path of Deficit/GDP (IMF World Economic Outlook Projections)



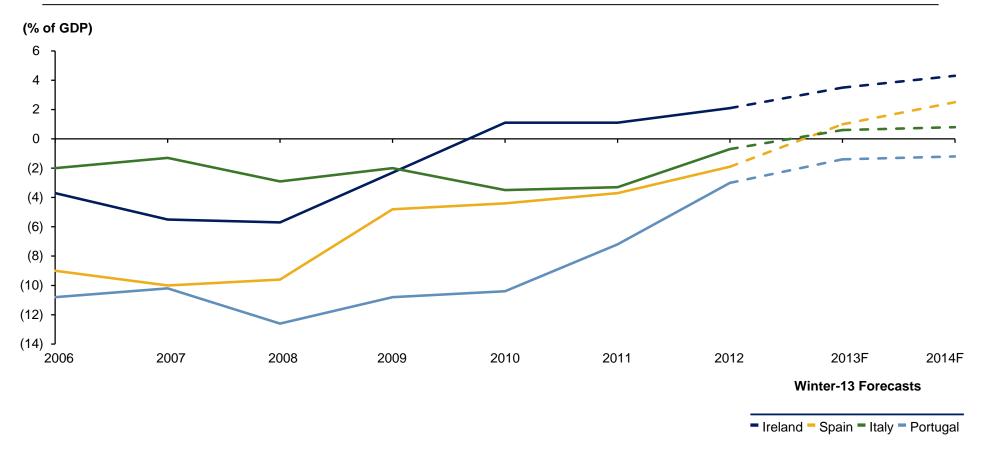


Source: Source: BofAML Global Research.

Sovereign Debt Sustainability: Current Account Balance

■ An increasingly positive current account balance to limit the reliance on external funding

Current Account Balance (% of GDP)

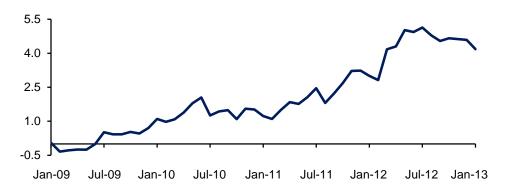


Credit Default Risk vs Convertibility Risk

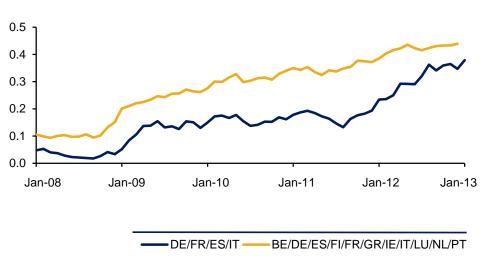
Credit Default Risk versus Convertibility Risk: Market Fragmentation

- Financial fragmentation of the single market has been taking place since 2010 (linked to the European debt crisis)
- In mid 2012 a severe fragmentation was observed, only slowly receding since the announcement of the OMT
- There is a very long way to go to return to the previous level of financial integration. Still very far from restoring the proper transmission of monetary policy.

Composite Measure of Euro Area Financial Fragmentation*



Euro Zone Loans: Interest Rates



Source: Bloomberg, ECB, National Central Banks and BBVA Research

* first principal component of (i) the cross country dispersion (specifically, coefficient of variation) of bank lending rates

Variation coefficient of interest rates for corporate loans in euro-area countries of up to &\text{1m and up to one year} \
Source: ECB and BBVA Research



^{*} first principal component of (i) the cross country dispersion (specifically, coefficient of variation) of bank lending rates to corporates and households (average) (ii) the Target 2 balances of surplus (iii) gross liquidity provision by Eurosystem as a share of bank assets and (iv) the interquartile range of Euro area countries' two-year government bond yields

Section V

Conclusions

Section V: Conclusions

- An impaired access to funding markets for the sovereigns may be a lagging indicator of country-risk. Our analysis shows that the initial signs of distress take place mainly in the banking sector as well as the private cross-border flows
- **Key thresholds:** In the current environment, a 7% yield in the 10 yr. government bond, a spread of 450bp versus AAA bonds, and a 600bp level for the 5yr. CDS have been critical levels to signal major distress in sovereign markets. There is no evident threshold for the level of the sovereign's debt/GDP or deficit/GDP that allows a return to market access. The expectation of a strong, sustained adjustment is more important.
- The perception of a negative feedback loop between banks and sovereigns remains crucial for the sovereigns' market access. The relative strength of the domestic banking sector and the internal investor base to absorb sovereign bonds appears as major difference between Spain & Italy vs. Portugal & Ireland, in particular after 3y LTROs were set up.
- The announcement of structural reforms and expectations of future debt sustainability are necessary but not sufficient conditions for regaining market access. Over the last few years, market participants have pondered the possibility of an euro break-up as the current European architecture may not be efficient to deal with major crisis. In order to reduce the convertibility risk, the introduction of the OMT programme, the creation of the European Banking Union, harmonisation of banking regulation among other initiatives towards a further integration have proven very effective to stop the contagion.
- Market fragmentation has been receding slowly but it remains well above pre-crisis levels.