

The Financial System: Crisis and Reform

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Background: Financial Fragmentation in the Eurozone

The European financial system has never been so close to implosion as in 2012. At the epicentre this time was Spain (like Greece, Portugal and Ireland in 2010 and 2011), experiencing an adverse feedback loop between an economy in severe recession, fiscal adjustment that further deepened the crisis and a crippled banking system incapable of fulfilling its core mission of furnishing credit.

Against this background, we discuss the most important milestones in the evolution of the financial system in Spain and Europe in 2012. Abundant on both sides of the Pyrenees were policy decisions and actions with regard to the Spanish banking system, which has emerged as the main focus of concern regarding the European financial system.

Although the purpose of the chapter is to review 2012, to understand the full implications of what happened in that year we need to go back to the summer of 2011, when the events that triggered a major financial crisis in the Eurozone began to unfold. The Eurozone was already experiencing serious credibility problems

due to its handling of the successive crises that unfolded in the three small economies that were eventually bailed out, one of them (Greece), twice.

The lack of credibility in managing the crises in these smaller countries had a knock-on effect on the Spanish and Italian economies, leading to major vendor tensions in their government bond markets in the early summer of 2011. Nonetheless, the key escalating element in the Eurozone financial crisis was the freezing of the wholesale funding markets for almost all of Europe's banks in the summer of 2011. The major French banks were especially affected by this situation, as they were excessively reliant on short-term securities in both the euro and dollar markets and so were especially vulnerable to any system-wide freeze. According to International Monetary Fund (IMF) estimates, the large French banks saw their dollar funding lines from US money markets cut by almost 100 billion euros.

LTROs: Curing One Ill with Another

Central banks responded to the collapse in wholesale funding for European banks in two

ways. The first, aimed at repairing the extraordinary liquidity risk to which the European banking sector was exposed, was for the US Federal Reserve, in coordination with the European Central Bank (ECB), to grant funding through swap lines to European banks dependent on dollar funding. The second, more decisive measure was the ECB's announcement of two long-term (three-year) refinancing operations (LTROs) in two tranches to be allotted in December 2011 and in February 2012.

Compared with the ECB's previous policy of liquidity injections, the LTROs represented an extraordinary step forward in three ways:

- They involved funding granted for a term (three years) never before contemplated by the ECB (the maximum had been one year, for special financing operations in 2009).
- No quantitative ceiling applied, provided the financial institutions had sufficient collateral (primarily, but not exclusively, public debt).
- A hugely reduced interest rate was offered, set initially at 1 per cent, that would be reduced in line with the ECB intervention rate (as happened, in fact, in July 2012 and which may well happen again in the coming months).

The LTROs were welcomed by the European banking system and led to two allotments of around 500 billion euros each, offered in late 2011 and early 2012.

An injection of funding on this scale by the ECB had an extraordinarily favourable impact on the European banking system, not only in terms of ensuring liquidity for a period long enough to allow wholesale markets to revert to normal, but also in terms of the generation of a financial spread, given that the funds provided by the LTROs would be invested in assets that would generate returns substantially higher than the cost of the funds. This was especially

the case for the peripheral countries (where public debt was more profitable), as their banks would be able to benefit from a significant spread through carry trading, whereby money obtained from the ECB at 1 per cent (and falling) would be invested in government bonds with much higher yields.

The opportunity could not be missed: Spanish banks flocked to the two auctions and were allotted some 200 billion euros. As a result, the aggregate borrowing position of the Spanish banking system was 400 billion euros in the spring of 2012 – representing 33 per cent of the total loan granted by the Eurosystem and almost three times the key capital share (11 per cent) corresponding to Spain. In fact, as can be seen in **Figure 1**, the Spanish banking system became by far the largest borrower of Eurosystem funds, significantly exceeding Italy and France, which, a few months previously, had been the main users of ECB funds.

The Adverse Feedback Loop between Banks and States

Heavy Spanish borrowing from the Eurosystem was to have very perverse effects, as the link between banking risk and sovereign risk became hugely amplified. This was because, as a way to monetise the funds made available by the ECB, Spanish banks purchased Spanish public debt on a massive scale in carry-trading operations, with the banks obtaining a higher interest rate on the public debt than they paid to the ECB.

As can be seen in **Figure 2**, Spanish banks dramatically increased their Spanish public debt holdings (by more than 60 billion euros) as a consequence of the two LTRO auctions. This increase coincided with a drop of almost the same

magnitude in Spanish public debt holdings by foreign investors. Thus, thanks to the support provided by the ECB, flows moved in a single direction: as foreign investors reversed their positions in Spanish public debt, Spanish banks took up the slack using ECB funds provided through LTRO auctions.

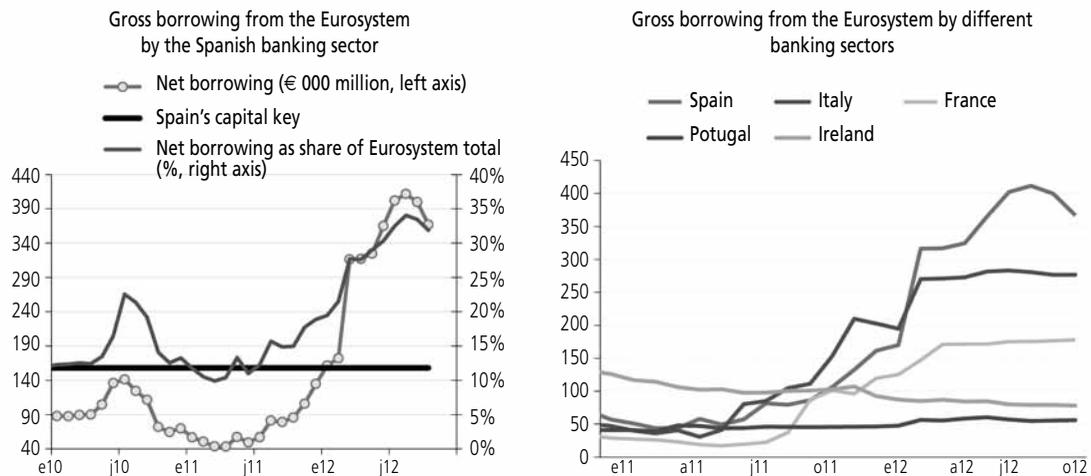
In fact, as shown in **Figure 3**, an ECB measure aimed at injecting liquidity into the banking system, at a time when wholesale financing was proving impossible, produced an extraordinarily perverse result that segmented bank dependence on the ECB in an unprecedented way. The banks of the peripheral countries – Spain, Italy and Greece, Ireland and Portugal (GIP) – became major ECB debtors and indirectly the main financiers of their respective treasuries; meanwhile, the public debt risk remained with the banking system of each country. In contrast, banks from financially the healthiest countries (Germany, the Netherlands and Finland) have accumulated large net claims on the Eurosystem.

A Crisis of Confidence in Spanish Banks

This extraordinary asymmetry in the position of banking systems in the Eurosystem was only the first sign that European financial integration was under threat. The most worrying manifestation became evident as early as the second quarter of 2012, when the perception of financial fragmentation reached deep into the heart of the finance system: high-street banking.

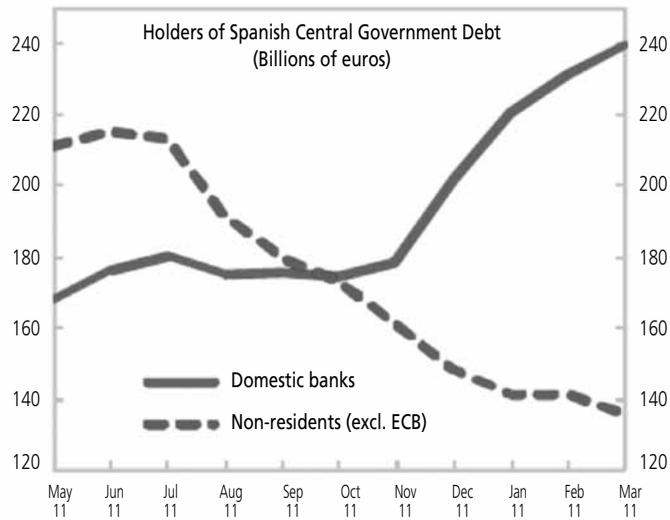
Figure 4 shows the evolution of deposits in banking systems in three broad behavioural categories. French and German banking systems experienced systematic growth in deposits; Greece, Ireland and Portugal continued to see a downward trend in 2012, following a trend established in late 2009; and a change in trend occurred in Italy and Spain at the turn of 2012, with a significant decline in deposits as compared to the stability, or even moderate increase, recorded in the previous year.

This asymmetric behaviour of bank deposits in different Eurozone blocks points to a



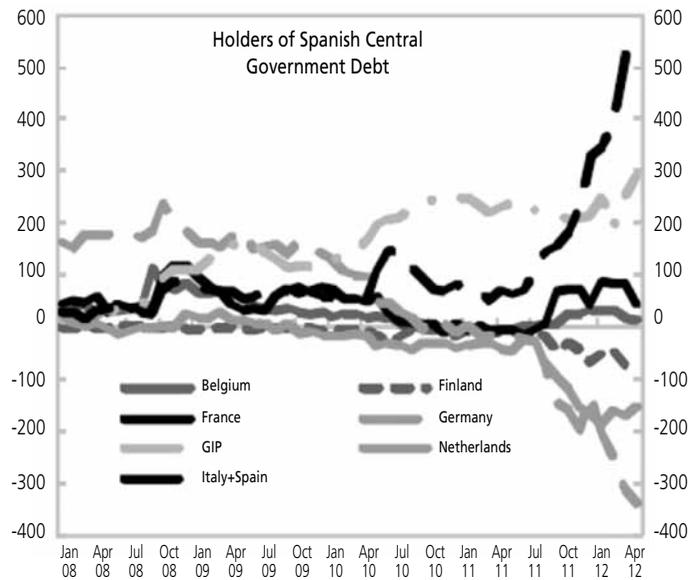
Source: Afi, ECB, Banco de España.

Figure 1



Source: Banco de España, IMF Country Report No. 12/182 (July 2012).

Figure 2



Source: IMF, International Financial Statistics database.

Figure 3

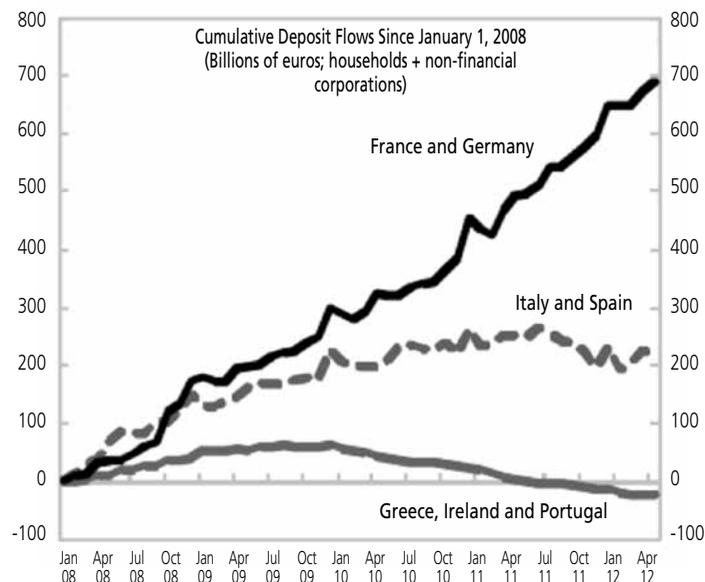
fragmented banking system, with evident risks for the financial stability of the monetary union.

Confidence in the Spanish banking system hit rock-bottom in May 2012, with the implosion of Bankia, Spain's third largest bank. Forced to restate its 2011 financial statements and admit to extraordinarily high asset devaluation losses, Bankia required urgent intervention and recapitalisation by the Spanish state.

Several elements of the Bankia crisis accounted for the loss of faith in the Spanish banking system and led to a bailout request. Most important was the extraordinary revision of Bankia's earnings statement for 2011: the 2011 profit of 300 million euros declared in March was reformulated a month later as a loss of 3 billion euros, due to asset impairment not acknowledged in the initial set of accounts. An about-turn of this magnitude, by no less than the third largest bank in the Spanish banking

sector, with more than 300 billion euros of assets, inevitably inspired profound distrust regarding the true state of the Spanish banking system. Additionally, the fact that Bankia was created by merging seven institutions – five minor savings banks and the second and third largest savings banks in Spain in terms of assets – cast serious doubts on the consolidation process that had been under way in Spain for the previous two years.

These three ingredients – a major bank in deep trouble, doubts about the veracity of financial statements and a questioning of the savings bank consolidation process – left the Spanish banking system facing an unprecedented crisis of confidence that implied nothing less than system-wide risk. This contrasted strongly with the previously transmitted message of a localised problem that affected a mere handful of weak institutions.



Source: European Central Bank.

Figure 4

The Bailout and Its Conditions

The loss of faith in the Spanish banking system came at a time when, as we explained in the previous section, Spanish banks had emerged as the principal, indeed, almost the only buyer of Spanish public debt. This added in a dangerous aggravating factor to the adverse feedback loop between bank risk and sovereign risk.

The consequences for market perceptions of the two risks were devastating, with negative repercussions for Spain's possibilities of rolling-over matured debt. The Spanish risk premium shot up, for the debt of both the Treasury and the largest banks in the system (the only debt for which an active secondary market existed). In fact, a remarkable feature of this situation was the close correlation between bank risk and sovereign risk premia, arguably the main element in the adverse feedback loop between the two types of risk.

But even more worrying than the increase in risk premia in the secondary market was the collapse of the primary (new issue) market: the Treasury was barely able to place 10 billion euros a month between March and June of 2012, compared to the 20 billion euros it had managed to place monthly towards the end of 2011 and in early 2012. Even more dramatic was the situation for Spanish banks, frozen out of the financial markets and unable to perform any operations at all between April and July.

Locked out of the markets and with a 150 billion euro funding requirement looming in the second half of 2012 (approximately two-thirds corresponding to the Treasury and one-third to the banking system), Spain had no choice but to apply for financial aid – a bailout – to shore up its struggling banking system and, in late June 2012, the Eurogroup approved credit for Spain amounting to a maximum of 100 billion euros.

The Memorandum of Understanding (MoU) for this bailout, signed in early July 2012, included a number of key requirements regarding restructuring of the Spanish banking system, virtually all of them to be implemented in the second half of the same year. These requirements focused on five core issues:

- Identification of capital needs through a comprehensive asset quality review of the banking sector and a bank-by-bank stress test.
- Development of a new legal framework to enable bank restructuring and resolution – including burden sharing for hybrid capital holders – as a way of reducing the net amount of the capital injection.
- Segregation and transfer of impaired assets to an asset management company, not to be consolidated with transferring banks or with the public sector.
- Capital injections to banks in need after burden-sharing exercises and transfer of impaired assets to the AMC.
- Development of restructuring plans for banks receiving capital injections, to be approved by the European Commission.

Progress with the MoU requirements to the end of 2012 will be analysed in Section 7. First, in keeping with the timeline of milestones in Europe's and Spain's finances, we shall now describe two important ECB actions of July and August 2012 that proved crucial to restoring, at least partially, confidence in the Eurozone.

A New ECB Manoeuvre: OMTs

The actions of the ECB need to be framed in the context of Eurozone tensions unfolding since the spring of 2012 in both public debt markets and in the fragmented Eurozone banking

systems. As already mentioned, the Spanish banking system was a major focus of concern, but not the only one, as Italy was also experiencing severe pressures on its public debt (the spread with Germany exceeded 4.5 per cent in July). In general, the risk premia for banks in all European countries (including the core countries) were being squeezed, especially because of their holdings of peripheral country debt. In fact, the risk of a breakup of the euro peaked in late June–early July, according to some unofficial betting houses.

Against this background, the ECB adopted two important measures in July and August. First, it reduced its intervention rate from 1 per cent to 0.75 per cent, while relaxing collateral requirements for access to its main refinancing operations (MROs). This measure had a positive impact, as it enabled banks to avail themselves of further funding by the ECB at reduced cost and so enhanced the spread on their carry-trading operations.

But the measure that had the greatest impact on markets was the announcement that the ECB would engage in outright monetary transactions (OMTs) in the secondary market to purchase the sovereign debt of European countries. The purchased bonds would have a maturity of up to two years and there would be no limits on the size of the operations. This decisive message was well received by the markets, with a general easing in risk premia; in Spain, the reduction was in the order of 1.5 percentage points for both government bonds and major bank debt.

However, the greatest impact of the announced OMTs was the immediate upturn experienced in the new issue market. Monthly issues of Spanish Treasury bonds, which had fallen sharply between April and June, increased significantly after the announcement of the OMTs,

to the point that the Treasury was able, in the second half of 2012, to place more debt than it needed to cover its requirements for maturing bonds and deficit financing (**Figure 5**). This meant that it had accumulated a liquidity cushion of almost 40 billion euros with which to face maturities falling due in early 2013.

Not only did the Spanish Treasury's debt issue capacity increase, but the profile of the investors who flocked to the debt issues also changed, with residents now accounting for a lesser share. The announcement of the OMTs thus had the effect of reversing a downward trend in debt purchases by non-residents.

Furthermore, if the OMTs have been crucial for providing finance to the Spanish Treasury, they have been even more critical for the Spanish banking system. After more than four months of financial drought, Spanish banks were able to issue debt amounting to over 25 billion euros in the last third of 2012, enabling them to roll over a significant proportion of debt maturing in that period and also to reduce their requests to the Eurosystem. The fact that not all banks could tap the financial markets, however, was clear evidence of segmentation. One of the objectives of the restructuring plan was therefore to ensure that the problems of a handful of entities did not become system-wide.

Bank Restructuring within the MoU Framework

Bank restructuring progressed in line with a pace established by the MoU for 2012, specifically regarding new regulations and the actions of the financial institutions themselves.

Regarding new regulations, Royal Decree-Law 24/2012, approved on 31 August (the deadline set by the MoU), laid the foundation

for a bank restructuring and resolution framework and for the creation of the asset management company, to be known as SAREB (Sociedad de Activos Procedentes de la Reestructuración Bancaria). This decree-law was later deployed via Law 9/2012 and Royal Decree 1559/2012, respectively. The new legislation was instrumental in ultimately reducing the final bailout to an amount far smaller than the initially approved maximum of 100 billion euros.

Stress tests that addressed adverse scenarios were carried out on a total of 17 banks (representing 90 per cent of the total assets in the system). The maximum capital shortfall was estimated to be in the order of 54 billion euros, distributed among four groups, as specified in the MoU:

- Group 0: Banks with sufficient capital to deal with the adverse scenarios addressed by the stress tests, namely, Santander, BBVA, Caixa-bank (including Banca Cívica) Kutxabank, Sabadell, Bankinter and Unicaja.
- Group 1: Banks already mostly owned by the public sector (via the Fund for Orderly Bank Restructuring, or FROB) and with the greatest need for equity (46 billion euros), namely, BFA-Bankia, NovaGalicia Banco, Catalunya Banc and Banco de Valencia.
- Group 2: Banks unable to meet their existing capital shortfalls without recourse to state aid, namely, BMN (Mare Nostrum), CEISS, Caja3 and Liberbank (estimated capital requirements 6.2 billion euros).
- Group 3: Banks identified by the stress test as able to meet existing capital shortfalls from private sources (that is, without recourse to state aid) through liability management exercises, asset disposals and capital

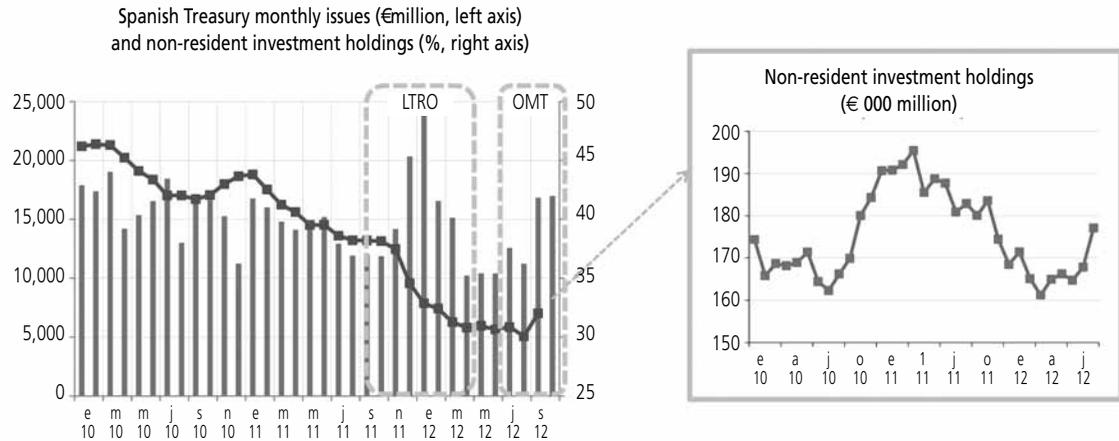
raised in the financial markets. This group is composed of just two banks, Banco Popular and Ibercaja (total requirement 3.4 billion euros).

Once banks were classified in these groups, real estate loans and assets from foreclosures, valued at around 63,000 million euros, were transferred to SAREB, thereby freeing up capital for Group 1 and Group 2 banks.

To be able to absorb this quantity of assets, SAREB was created with funds of its own (equity and subordinated debt) amounting to 5 billion euros, equivalent to 8 per cent of total assets. Also in accordance with the requirements of the MoU, SAREB shareholders are mostly private (55 per cent) – mainly Group 0 banks, other entities without capital needs (primarily credit unions), foreign banks with a presence in Spain and insurance companies.

Another MoU requirement was for banks needing capital to perform liability management exercises, allocating losses to the hybrid capital holders of their preference shares and subordinated debt. The underlying philosophy is that losses are borne by holders of shares in the rescued banks and of the above-mentioned hybrid instruments, thereby minimising the amount of capital to be provided by the public sector.

The burden-sharing exercises and the transfer of assets to SAREB resulted in a reduction of around 14 billion euros in the capital shortfall as initially estimated. To the final figure of 39 billion euros should be added an amount of just under 2.5 billion euros needed to bring FROB's share of SAREB to 45 per cent. The final total of 41.5 billion euros was therefore well below the 100 billion euros initially approved by the Eurogroup.



Source: Afi, ECB, Banco de España.

Figure 5

Outcome: A Supervised and Highly Concentrated Banking System

The MoU states that European Commission approval of aid to the Spanish banking sector is conditional on radical restructuring of the institutions receiving assistance. The most stringent requirements are imposed on the Group 1 banks, as major recipients of aid (37 billion euros); these requirements include capacity reduction (in branches and people), »withdrawal« to their home markets and rapid deleveraging to enable them to balance loans and deposits.

A number of corporate operations have been concluded, such as the sale of Banco de Valencia to Caixabank and Caja3 to Ibercaja. This process will continue in the coming months, when it is planned to auction several of state-aided banks – although not Bankia (given its size) or BMN and Liberbank (given the intention eventually to list them on the stock exchange).

The result – and endpoint for the moment – of the restructuring process accelerated by the MoU is a map with just ten entities in the place

of the former banks and savings banks (the distinction is hardly valid any more), accompanied by a large number of rural banks and credit unions as the only banks continuing to adhere to the principles of proximity banking and territorial affiliation.

One final consideration refers to another key element that has been at the forefront of the negotiation process for the bank bailout, namely, the possibility of direct capitalisation from European funds versus capitalisation through FROB. If the source of the problem is the aforementioned adverse feedback loop between bank risk and sovereign risk, then the most effective way to break that loop is to bypass the Spanish public sector as a guarantor of banking risks and directly capitalise banks from Europe.

However, the European position is that this would be feasible only within the framework of a fully operational banking union, or, at least, of effectively implemented EU-wide banking oversight. Since progress in this regard has been much slower than expected, with banking oversight not due before 2014, Spanish banks will

of necessity be recapitalised by FROB. Since FROB will assume the debt to the EU and will acquire shares in the capitalised banks, the link between banking risk and sovereign risk is re-

tained, meaning that any losses on asset disposals or on the restructuring of state-aided banks will be borne in their entirety by the Spanish public sector.

APPENDIX. SUMMARY OF FINANCIAL MEASURES		
EUROPE/EUROZONE	2011	SPAIN
<ul style="list-style-type: none"> • Europe-wide bank financing crisis (Spanish and Italian but also French for the first time) • US Federal Reserve swap lines • European fiscal agreement, opposed by the UK 	August	
<ul style="list-style-type: none"> • ECB: LTRO1 (€500 billion) 	December	
	2012	
<ul style="list-style-type: none"> • ECB: LTRO2 (€500 billion) 	January	
	February	<ul style="list-style-type: none"> • Royal Decree-Law 2/2012: Provisions for impaired property asset risk
<ul style="list-style-type: none"> • France loses AAA rating 	March	<ul style="list-style-type: none"> • Acknowledgement of budgetary difficulties
	April	<ul style="list-style-type: none"> • Royal Decree-Law 18/2012: Additional provision for property asset risk (impaired and standard) • Intervention in Bankia
	May	
	June	<ul style="list-style-type: none"> • Sovereign and bank ratings downgraded three notches from A+ to BBB (and lower) • Application for financial assistance for banking sector
<ul style="list-style-type: none"> • Eurogroup: €100 billion credit line approved as financial aid for Spanish banks 	July	<ul style="list-style-type: none"> • Memorandum of Understanding signed • Stress tests: Top-down
<ul style="list-style-type: none"> • ECB: OMTs announced • Base rate reduced (1% → 0.75%) 	August	<ul style="list-style-type: none"> • Royal Decree-Law 24/2012: New framework for restructuring and resolution of financial institutions
<ul style="list-style-type: none"> • ECB: OMT details • EC: First banking union proposal 	September	<ul style="list-style-type: none"> • Stress tests: Bottom-up
	October	
<ul style="list-style-type: none"> • Restructuring and resolution for Group 1 banks approved 	November	<ul style="list-style-type: none"> • Law 9/2012: Restructuring and resolution of credit institutions • Royal Decree 1559/2012: Asset management company
<ul style="list-style-type: none"> • Disbursement of the first tranche of aid to Spanish banks (€37 billion) • Approval for restructuring and resolution for Group 1 banks 	December	