

# FLASH ECONOMICS

## ECONOMIC RESEARCH

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## The euro-zone crisis: A series of economic policy errors

*The euro-zone crisis is basically the result of a series of economic policy errors:*

- *from 2002 to 2007, lack of macroeconomic supervision of the countries; in many countries, excessive indebtedness and a real estate bubble with no economic policy response, and in particular no monetary policy response from the ECB; in some countries, fiscal deficits despite high growth;*
- *in 2008-2009, misunderstanding by some governments of the nature of the crisis (chronic shortfall in growth due to the halt in the increase in private-sector indebtedness and not a mere cyclical downturn), hence excessive fiscal deficits and the transition from a private debt crisis to a public debt crisis, especially in those countries in which this growth trend break has been severe;*
- *since 2010, systematic and still persisting confusion between countries faced with a chronic solvency crisis and countries faced with a liquidity crisis; as a result, the solutions applied are inappropriate: further lending to insolvent countries; refusal to lend to countries which suffer a liquidity crisis but are solvent; the crisis spread to banks, and worsened due to the perception of overall solvency risk.*

ECONOMIC RESEARCH

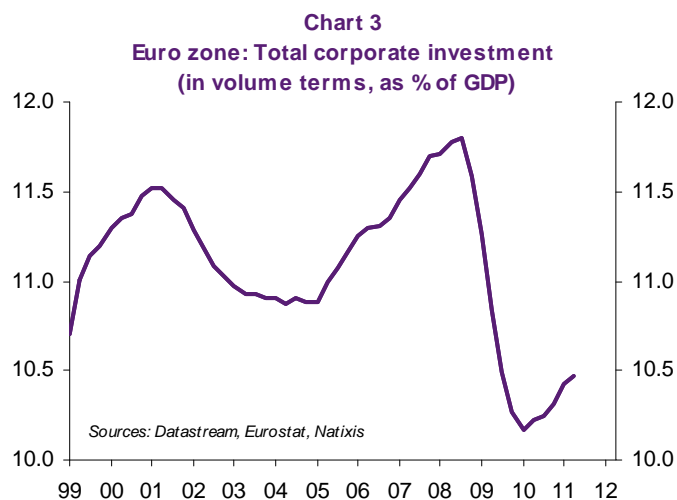
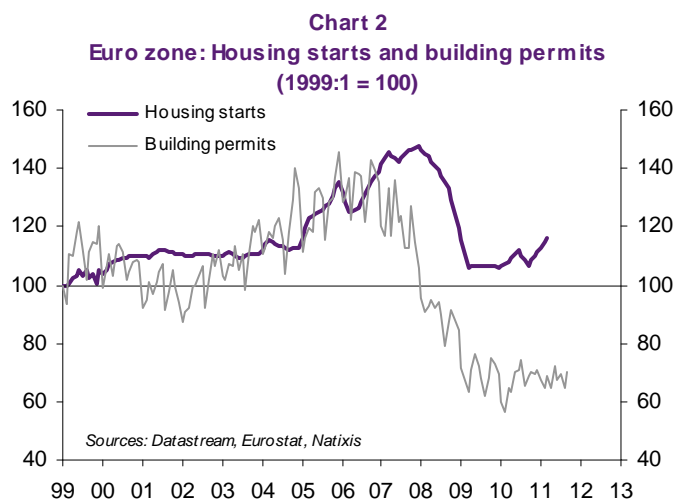
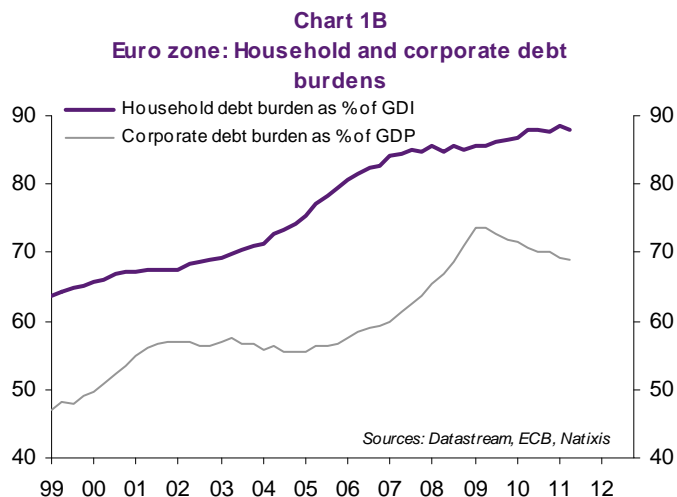
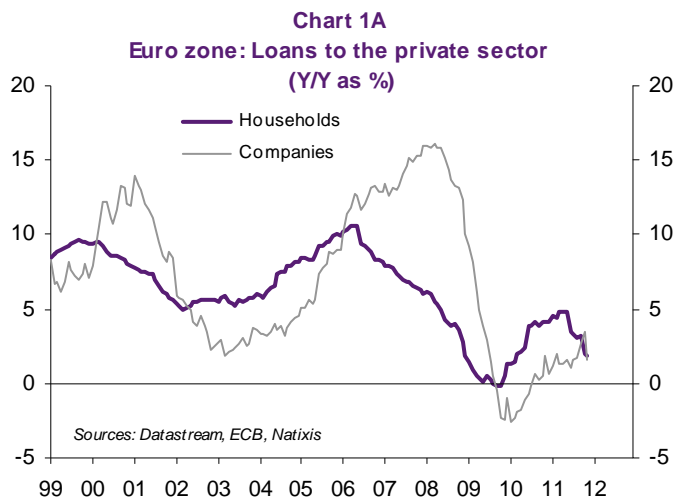
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*Patrick Artus*

### What are the main causes of the euro-zone crisis?

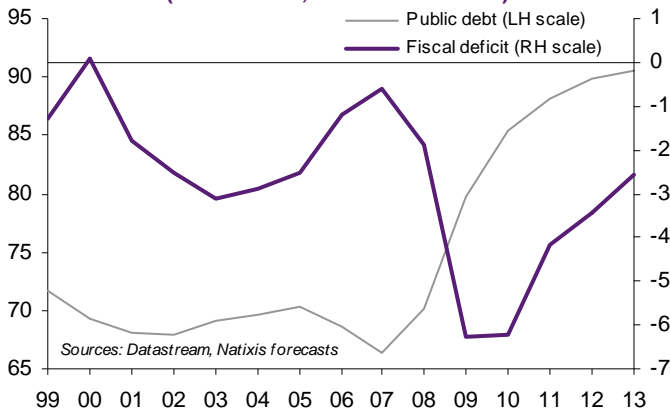
The euro-zone crisis is both:

- a crisis due to private-sector deleveraging following a period in which private-sector indebtedness increased sharply (Charts 1A and B). Deleveraging by households led to a steep decline in residential construction activity (Chart 2), and deleveraging by companies to a steep decline in the corporate investment rate (Chart 3);

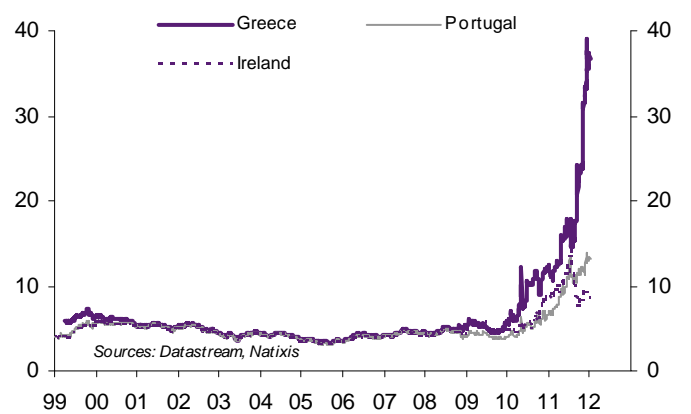


- a crisis of excessive government debt, due to the fiscal deficits that were run up when activity declined as a consequence of private-sector deleveraging and following the Lehman bankruptcy (Chart 4). This crisis, which eliminated or reduced governments' borrowing capacity, affected Greece, Portugal, Ireland, and then Spain, Italy, and even Belgium, Austria and France (Charts 5A, B and C);

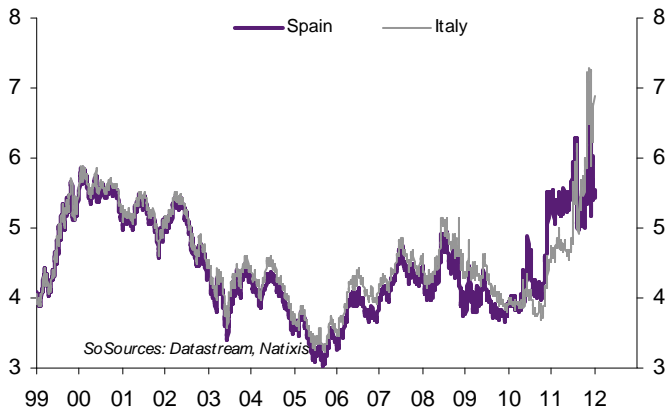
**Chart 4**  
Euro zone: Public debt and fiscal deficit  
(as % of GDP, in nominal terms)



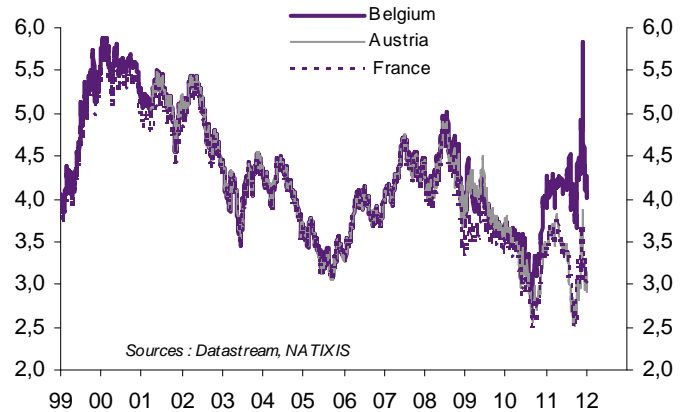
**Chart 5A**  
Interest rates on 10-year government bonds



**Chart 5B**  
Interest rates on 10-year government bonds

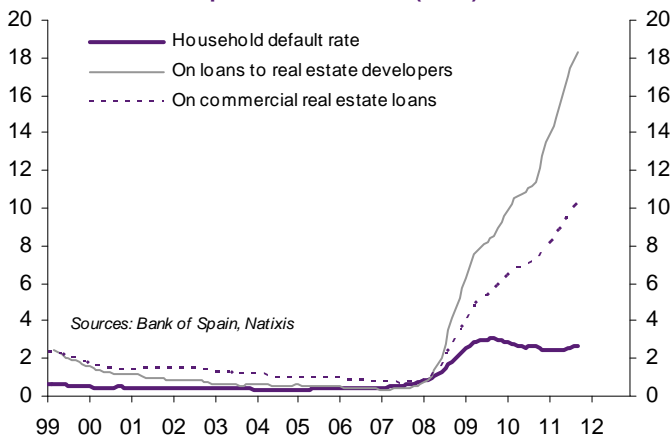


**Chart 5C**  
Interest rates on 10-year government bonds

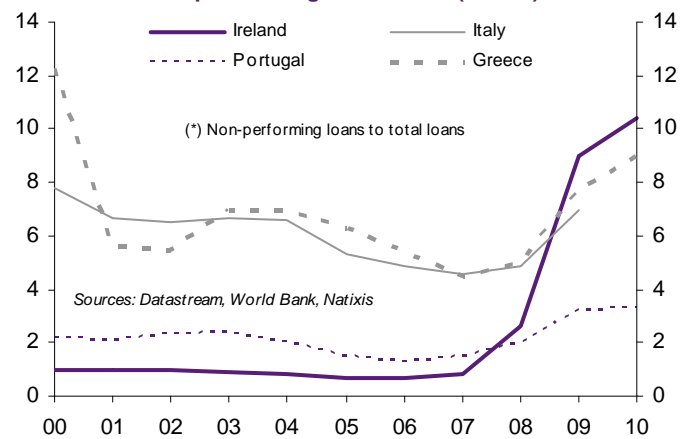


- a banking crisis, in some countries due to defaults by private borrowers (Charts 6A and B), and in all countries due to the public debt crisis and banks' large holdings of sovereign bonds (Chart 7, Table 1).

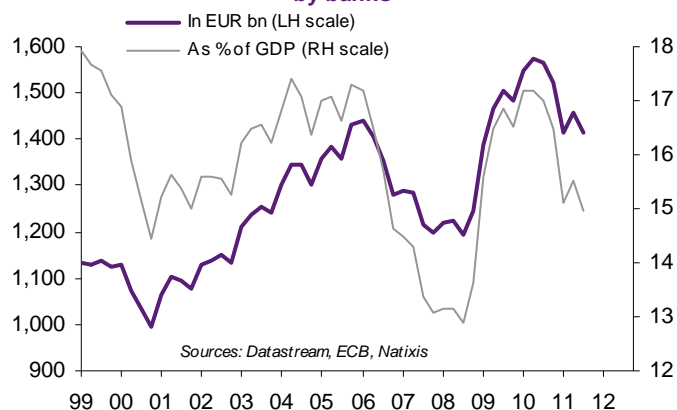
**Chart 6A**  
Spain: Default rates (as %)



**Chart 6B**  
Non-performing loan ratios\* (as a %)



**Chart 7**  
**Euro zone: Outstanding government bonds held by banks**



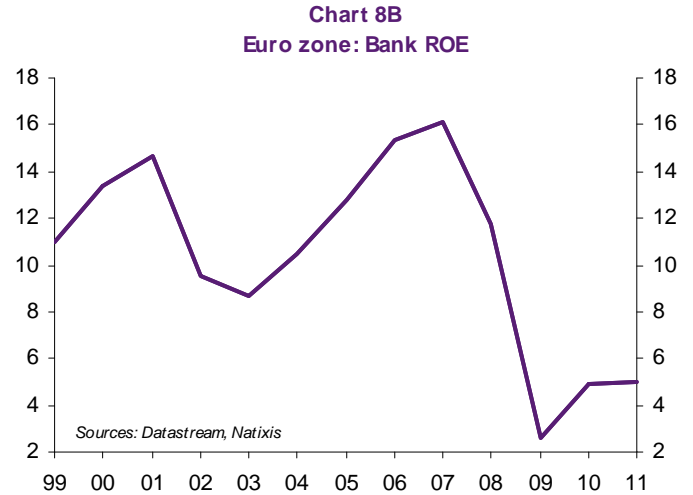
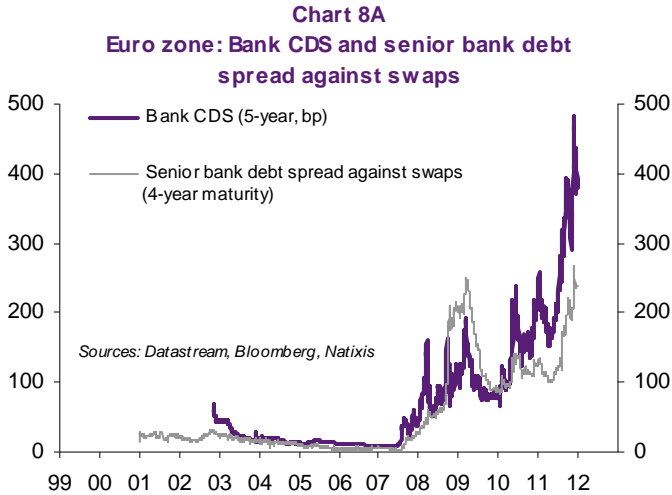
**Table 1**  
**Amount of sovereign debt of euro-zone countries held by banks in euro-zone countries (September 2011, in EUR bn)**

Debt of	Austria	Belgium	Cyprus	Estonia	Finland	France	Germany	Greece	Ireland	Italy
Banks in										
Austria	11.63	0.40	0.02	0.00	0.16	0.29	1.45	0.13	0.05	1.05
Belgium	2.06	24.90	0.04	0.00	0.25	2.30	12.49	4.27	0.38	18.45
Cyprus	0.34	0.04	0.97	0.00	0.00	0.49	0.00	4.93	0.36	0.10
Germany	10.75	7.01	0.11	0.02	0.62	17.34	315.84	6.35	0.89	30.01
Spain	0.26	0.91	0.00	0.00	0.13	4.49	3.44	0.25	0.00	6.95
Finland	0.00	0.15	0.00	0.00	0.14	0.01	0.15	0.00	0.04	0.00
France	4.00	34.70	0.19	0.00	2.05	108.64	32.01	7.52	1.79	41.79
Ireland	0.23	0.00	0.00	0.00	0.07	1.03	0.27	0.02	12.46	0.24
Italy	2.94	0.19	0.02	0.00	0.03	0.28	20.02	1.47	0.19	156.04
Luxembourg	0.09	0.16	0.01	0.00	0.01	0.07	0.06	0.08	0.00	1.40
Malta	0.00	0.00	0.01	0.00	0.00	0.02	0.01	0.01	0.01	0.01
Netherlands	3.08	15.07	0.02	0.00	2.08	22.84	29.49	0.87	0.37	4.52
Portugal	0.02	0.01	0.00	0.00	0.00	0.24	0.01	1.02	0.55	0.96
Slovenia	0.18	0.23	0.00	0.00	0.03	0.27	0.21	0.01	0.01	0.03
Total euro-zone banks	35.58	83.77	1.38	0.02	5.57	158.31	415.46	26.91	17.10	261.54

Debt of	Luxembourg	Malta	Netherlands	Portugal	Slovakia	Slovenia	Spain	United Kingdom	Euro zone
Banks in									
Austria	0.02	0.06	0.12	0.03	6.40	0.37	0.10	0.01	22.26
Belgium	0.18	0.00	0.30	1.99	1.60	0.26	2.61	0.50	72.08
Cyprus	0.01	0.13	0.00	0.00	0.00	0.04	0.00	0.00	7.41
Germany	0.37	0.08	7.54	3.97	0.89	0.51	19.17	7.38	421.49
Spain	0.00	0.00	0.72	3.39	0.00	0.00	167.58	12.68	188.12
Finland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
France	0.27	0.00	14.07	3.57	0.53	1.14	11.42	5.49	263.68
Ireland	0.00	0.00	0.36	0.10	0.00	0.00	0.03	3.52	14.81
Italy	0.00	0.00	0.18	0.29	3.18	0.34	3.77	0.41	188.94
Luxembourg	2.20	0.00	0.03	0.14	0.01	0.00	0.17	0.00	4.44
Malta	0.00	0.80	0.00	0.00	0.01	0.00	0.00	0.00	0.87
Netherlands	0.25	0.00	55.42	0.66	0.13	0.08	1.32	1.18	136.20
Portugal	0.00	0.00	0.01	22.74	0.04	0.00	0.10	0.00	25.70
Slovenia	0.01	0.00	0.22	0.00	0.02	1.43	0.02	0.00	2.64
Total euro-zone banks	3.31	1.07	78.97	36.89	12.81	4.16	206.28	31.17	1,349.14

Source: European Banking Authority

The crisis of the euro-zone banks has taken the form of an **increase in their funding costs (Chart 8A)** and a **fall in their profitability (Chart 8B)** which makes it hard to increase their capital, all this threatening to lead to a contraction in credit supply.

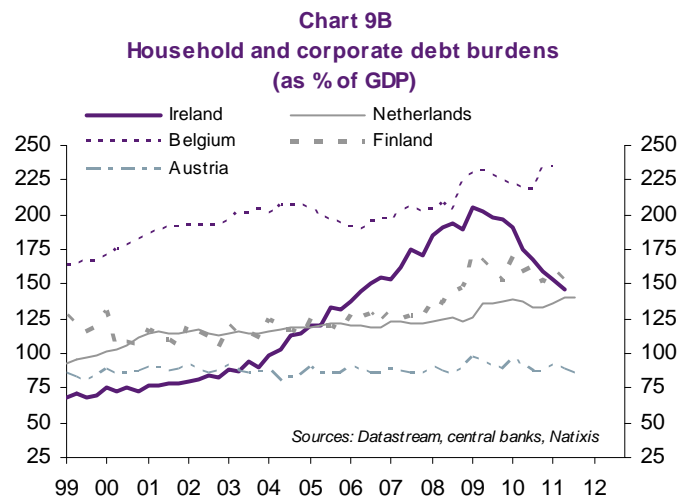
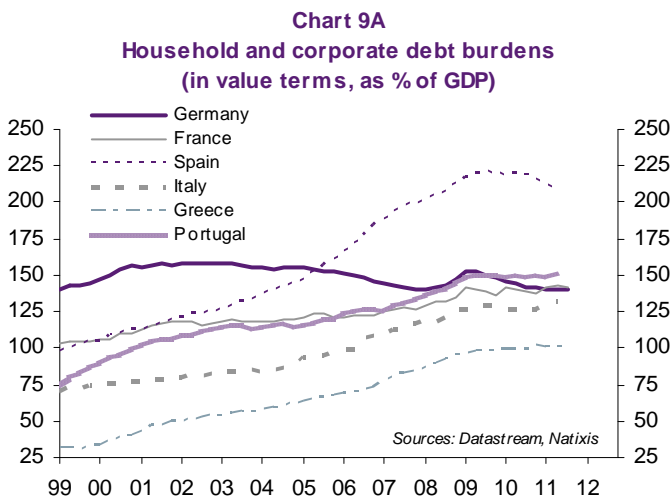


**We believe that this multi-faceted crisis of the euro zone is due basically to economic policy errors:**

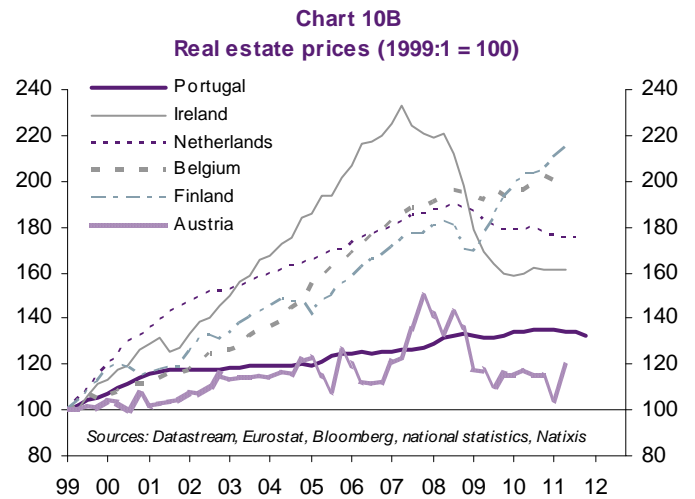
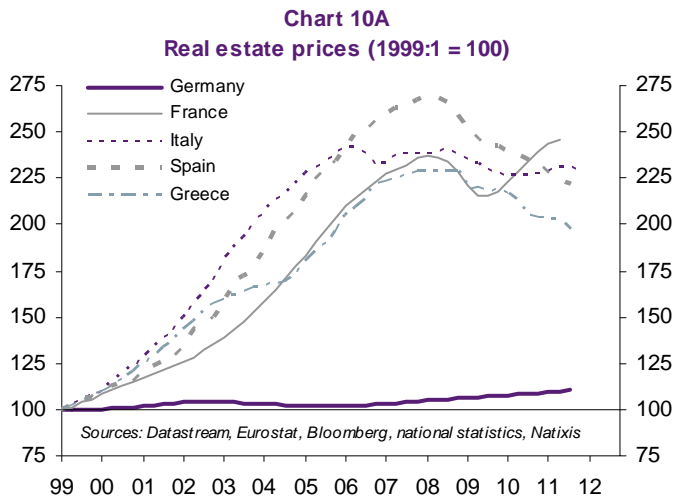
- when private-sector indebtedness was increasing (2002-2007);
- when the crisis of over-indebtedness of the private sector morphed into a crisis of over-indebtedness of the public sector (2008-2009);
- when the sovereign debt and bank crisis worsened (2010-2011).

**Economic policy errors when private-sector indebtedness was increasing (2002-2007)**

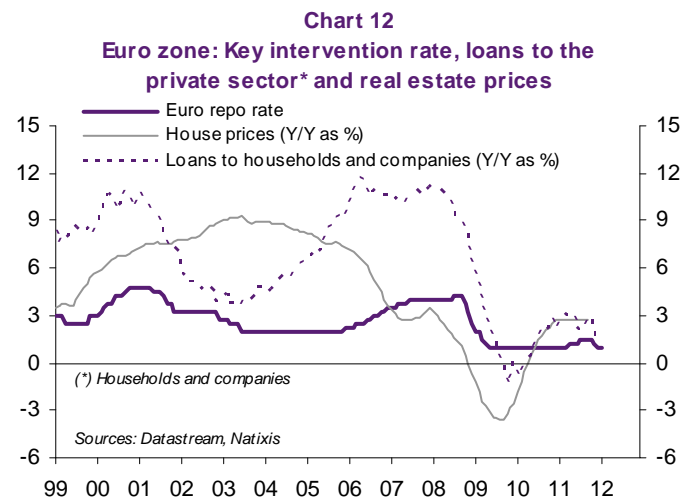
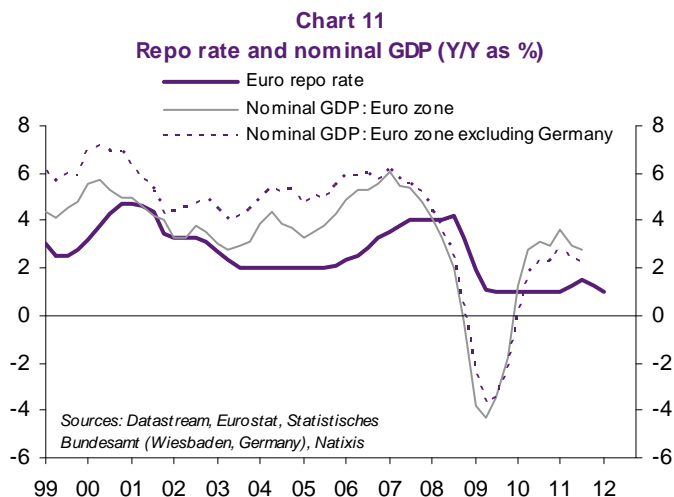
The increase in private-sector indebtedness in the euro zone from 2002 to 2007-2008 (**Charts 1A and B** above) affected the peripheral countries, but also the Northern euro-zone countries apart from Germany (**Charts 9A and B**), such as the Netherlands, Belgium and Finland.



It was due to the **lack of an economic policy response to the increase in private indebtedness (Charts 1B, 9A and B)** and the **rise in real estate prices**, which was particularly significant in France, Spain, Italy, Greece, Finland, Belgium, Ireland and the Netherlands (**Charts 10A and B**).



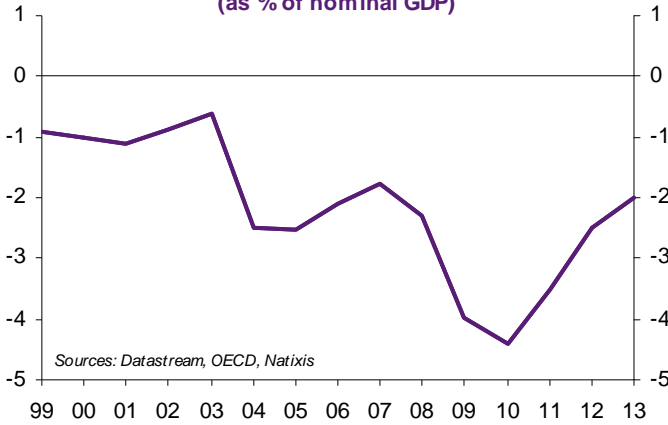
Fiscal policies did not endeavour to curb lending or the rise in real estate prices (a more restrictive fiscal policy would have been needed, an increase in taxes on capital gains, etc.); **the euro zone's monetary policy was expansionary**, especially considering **the euro zone apart from Germany (Chart 11)**.



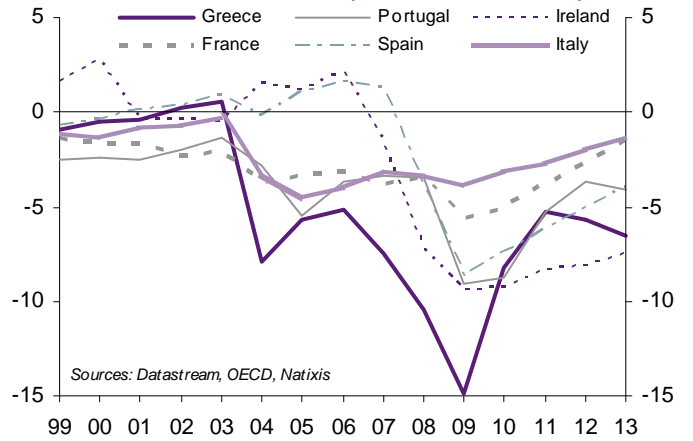
Focused solely on inflation targeting, **the ECB did not react to the increase in lending and real estate prices (Chart 12)**. The few counter-cyclical measures taken (counter-cyclical increase in banks' capital in Spain, for example) were insufficient.

**Fiscal policy maintained a structural fiscal deficit (Chart 13A)** when there was growth driven by the credit and real estate bubble. **In some countries (Greece, Portugal, France, Italy), the structural deficit was substantial even when the economy was growing**, sometimes even (in the case of Greece) without it being analysed **(Chart 13B)**.

**Chart 13A**  
Euro zone: Structural fiscal deficit  
(as % of nominal GDP)



**Chart 13B**  
Structural fiscal deficit (as % of nominal GDP)

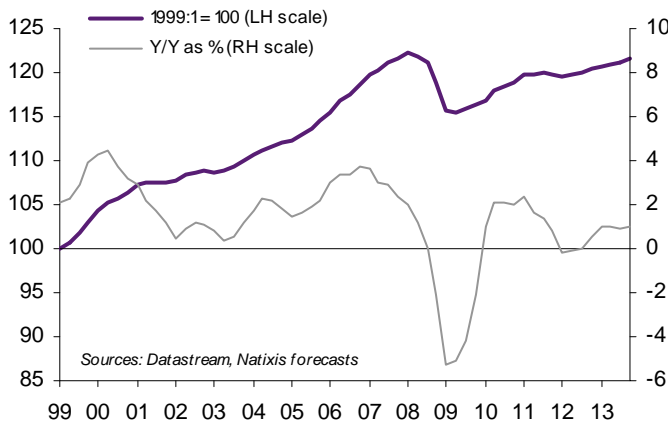


The euro zone's pro-cyclical policy mix from 2002 to 2007 therefore largely contributed to the occurrence of the first part of the crisis, the private debt crisis.

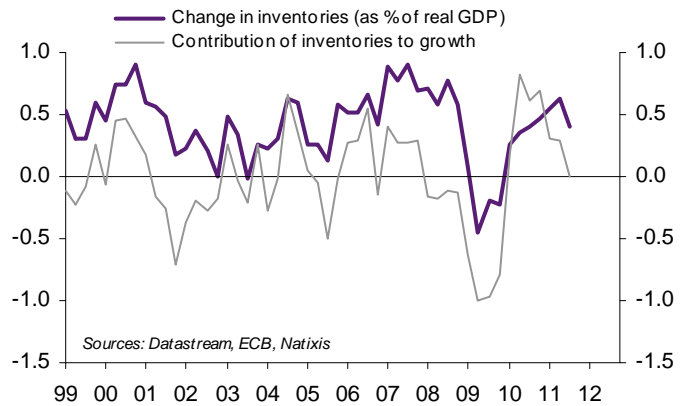
**Misunderstanding of the nature of the crisis and fiscal policies since 2008**

The euro zone experienced a deep recession in 2008-2009 (Chart 14) due to private-sector deleveraging (Charts 1A and B above), destocking (Chart 15A), and the decline in global trade (Chart 15B).

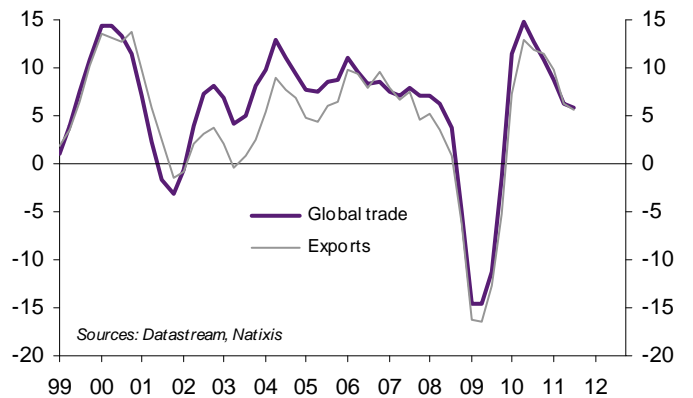
**Chart 14**  
Euro zone: Real GDP



**Chart 15A**  
Euro zone: Change in inventories and contribution of inventories to growth



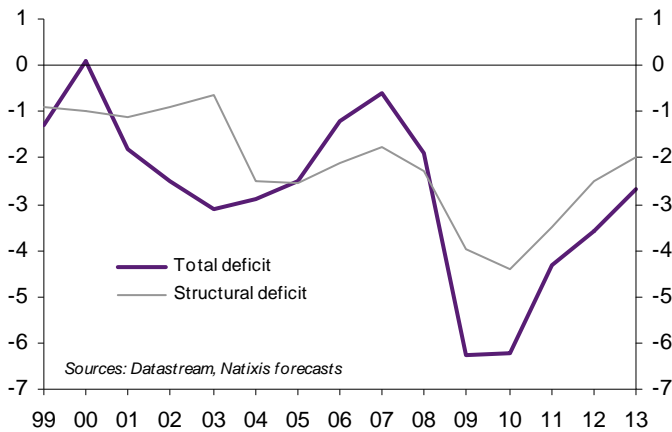
**Chart 15B**  
Euro-zone exports and global trade  
(in volume terms, Y/Y as %)



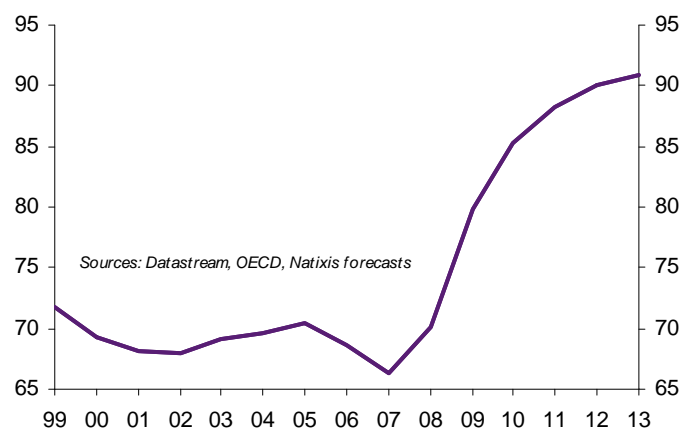


In response to this recession, governments adopted very expansionary fiscal policies (Chart 16A) which went beyond a mere reaction to the cycle, because there was a sharp increase in structural fiscal deficits (Chart 16A). The problem is that governments did not understand that now that economies are no longer stimulated by private indebtedness, growth will be chronically weaker (Chart 14 above). The increase in public indebtedness generated by the expansionary fiscal policies (Chart 16B) therefore led, given the low growth trajectory, to a prospect of a fiscal solvency risk in some countries (Greece, Portugal, Ireland, even Italy, Spain, Belgium, France and Austria, Chart 16C), which triggered the euro-zone sovereign debt crisis (Charts 16D and E).

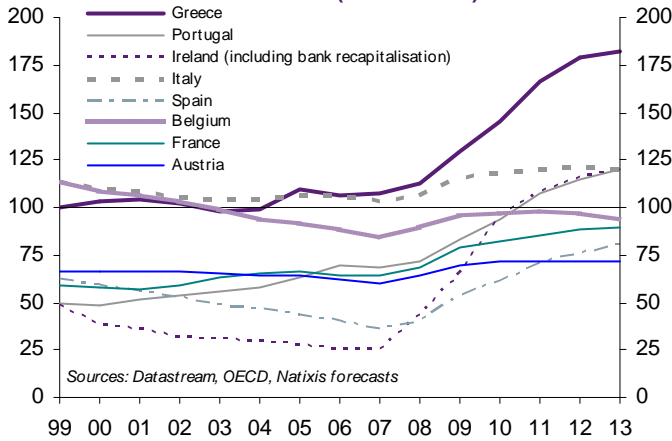
**Chart 16A**  
Euro zone: Fiscal deficit (as % of GDP)



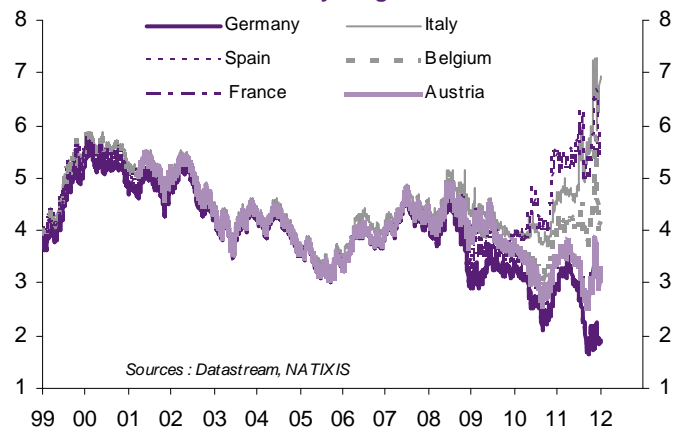
**Chart 16B**  
Euro zone: Public debt (as % of GDP)



**Chart 16C**  
Public debt (as % of GDP)

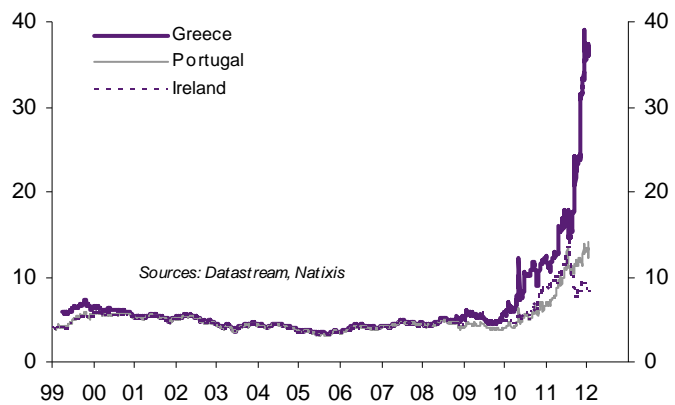


**Chart 16D**  
Interest rates on 10-year government bonds



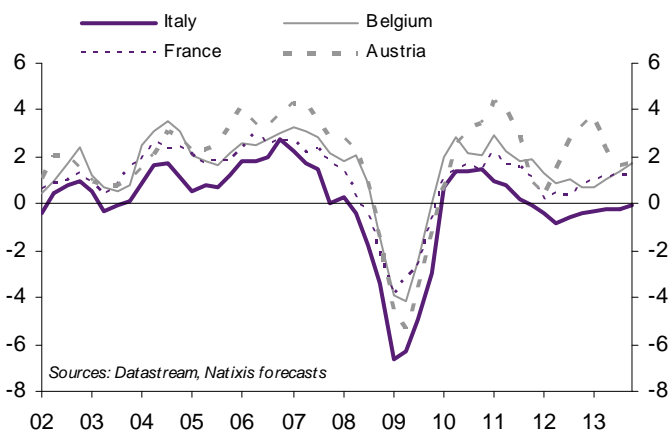


**Chart 16 E**  
Interest rates on 10-year government bonds

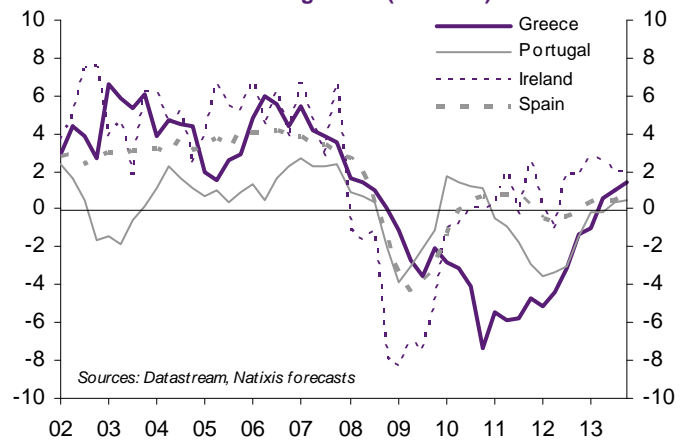


Governments should have realised that growth would be chronically weaker than before the crisis in those countries where it had been boosted by indebtedness (by the real estate market), and that this limited their fiscal leeway. 2009 was not a mere cyclical downturn but a structural inflection of the growth trend, which was particularly sharp in Spain, Greece, Ireland and Portugal (Charts 17A and B).

**Chart 17A**  
Real GDP growth (Y/Y as %)



**Chart 17B**  
Real GDP growth (Y/Y as %)

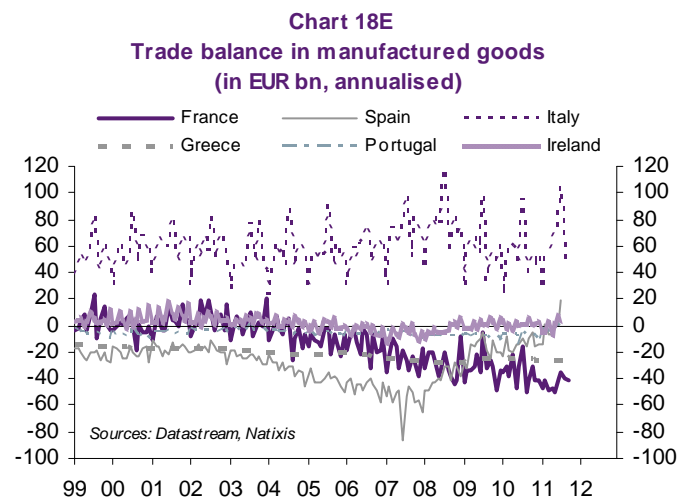
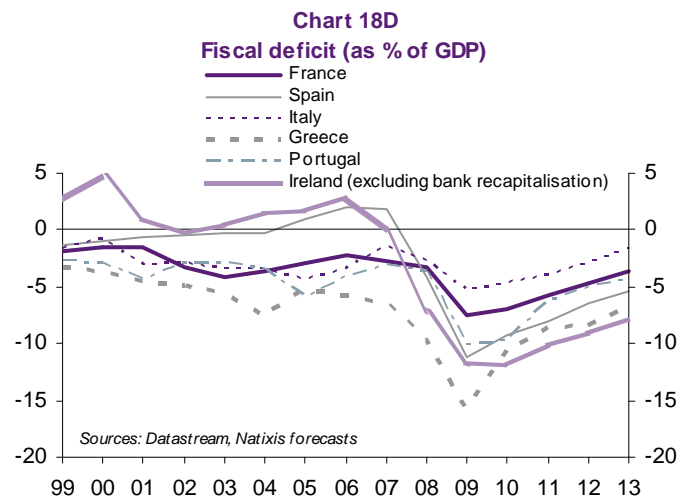
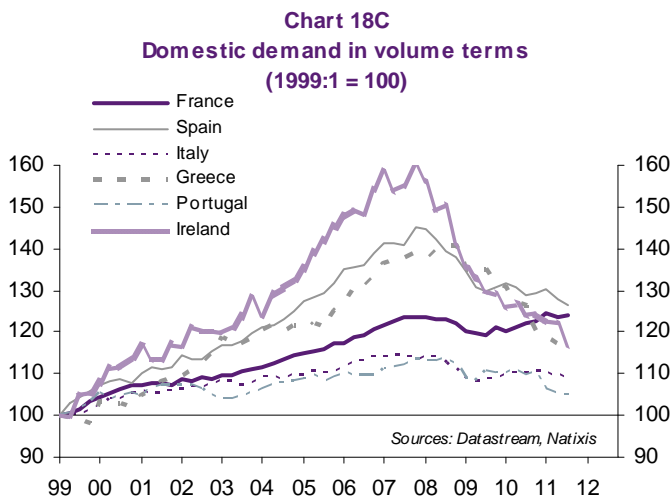
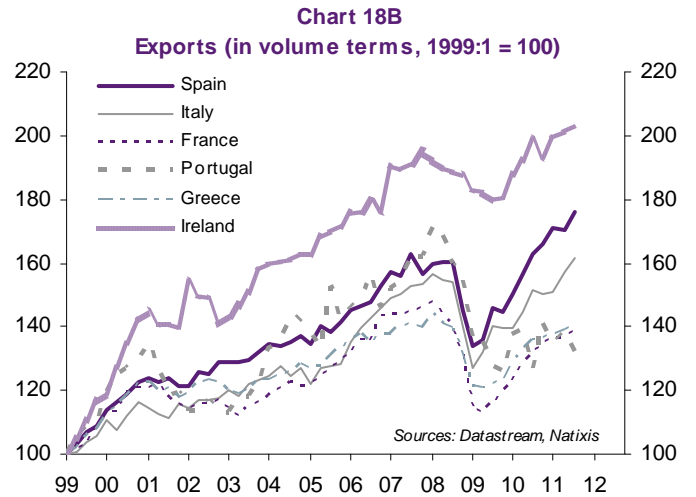
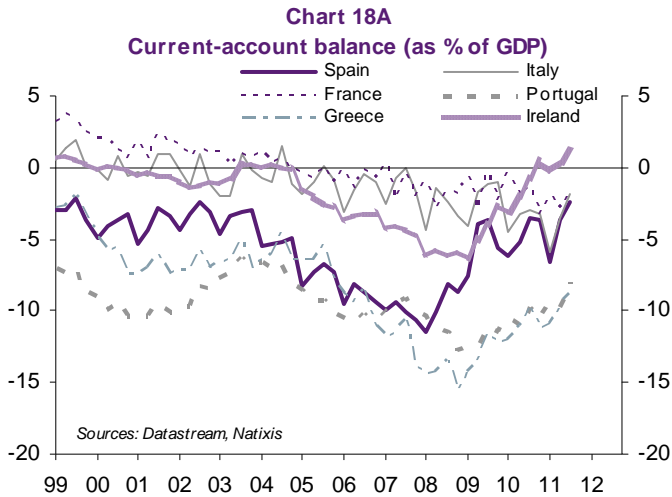


**Confusion between solvency crisis and liquidity crisis since the start of the sovereign debt crisis**

The euro-zone countries affected by the sovereign debt crisis (see Charts 16D and E above) are not all in the same situation:

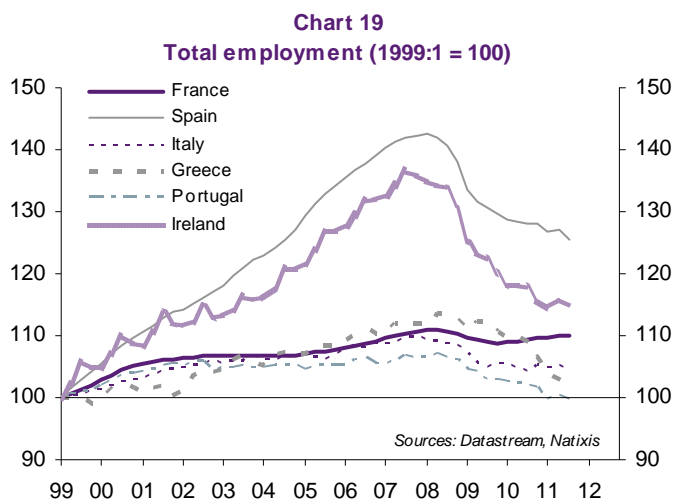
- **some are probably chronically insolvent: Greece and Portugal** have very large external deficits (Chart 18A) and are unable to revive their exports (Chart 18B), and it is hard to imagine that they could reduce their domestic demand (Chart 18C) further until their external deficits disappear. These countries will therefore probably have to continue to borrow from other countries, hence their chronic insolvency;

- other countries are probably in a liquidity crisis (difficulty of obtaining financing) but are solvent or are only temporarily insolvent: Ireland already has an external surplus (Chart 18A); Spain has significantly revived its exports and its external deficit is disappearing (Charts 18B and C); France and Italy have small external deficits and are going to reduce their fiscal deficits (Chart 18D); Spain and Italy now have an industrial trade surplus (Chart 18E).



The logical strategy should therefore have been to distinguish from the outset between the countries facing a solvency crisis (Greece and Portugal in our opinion) and the countries facing a liquidity crisis (the others, in particular Spain, Italy and Ireland):

- it is no use continuing to lend to insolvent countries, and yet this has been done (Table 2). When a country is insolvent, its debt must be reduced (partial default) and it must be helped to regain its solvency: it is no use lending to support the budget of such a country. What is needed is to invest in the country in order to create new jobs and production there, which is the opposite of what was done: the loans to these countries have gone hand in hand with a collapse in activity (Charts 17A and B above) and employment (Chart 19), and it is not known how these countries will repay these new loans;



**Table 2**  
Bailout plans for Greece, Portugal and Ireland (in EUR bn)

	Greece					
	Plan 1				Plan 2	
	2010	2011	2012	2013	2011-2014	2015-2020
EU	27.5	29.0	17.6	5.9		
EFSF					79.0	
IMF	10.5	11.0	6.4	2.1	30.0	
PSI*					50.0	106.0
<b>Total</b>	<b>38.0</b>	<b>40.0</b>	<b>24.0</b>	<b>8.0</b>	<b>159.0</b>	<b>106.0</b>

	Portugal					Total
	2011	2012	2013	2014		
IMF	25.2	16.7	6.7	3.4	52	
EFSF	12.6	8.3	3.3	1.7	25.9	
<b>Total</b>	<b>37.8</b>	<b>25</b>	<b>10</b>	<b>5.1</b>	<b>77.9</b>	

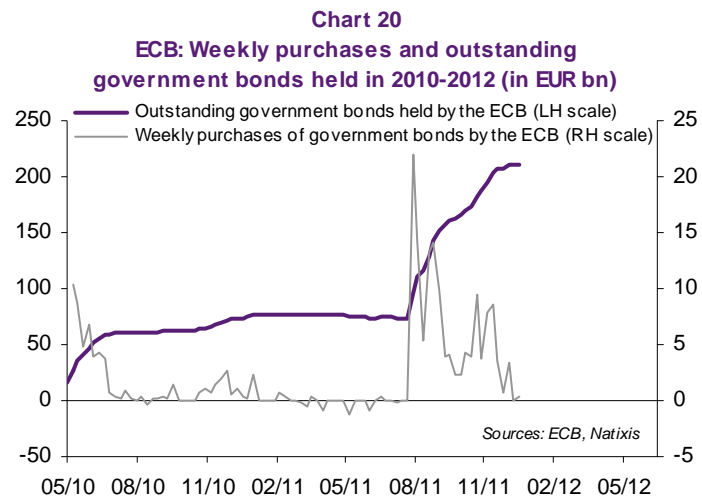
\* Private Sector Involvement

#### Ireland

- EUR 22.5 bn from the IMF;
- EUR 45 bn from Europe (of which EUR 22.5 bn from the EFSM and EUR 22.5 bn from the EFSF, including bilateral loans from the United Kingdom, Sweden and Denmark);
- EUR 17.5 bn from Ireland (of which EUR 12.5 bn from its National Pensions Reserve Fund and EUR 5 bn from the country's liquidity reserves).

Sources: Natixis, IMF, European Commission

- on the other hand, it is essential to lend to countries faced with a liquidity crisis, in order to prevent the rise in interest rates (Charts 16D and E above) from pushing them from a liquidity crisis to a solvency crisis. This was done for Ireland, but very little for Spain and Italy (only through insufficient ECB purchases, Chart 20).

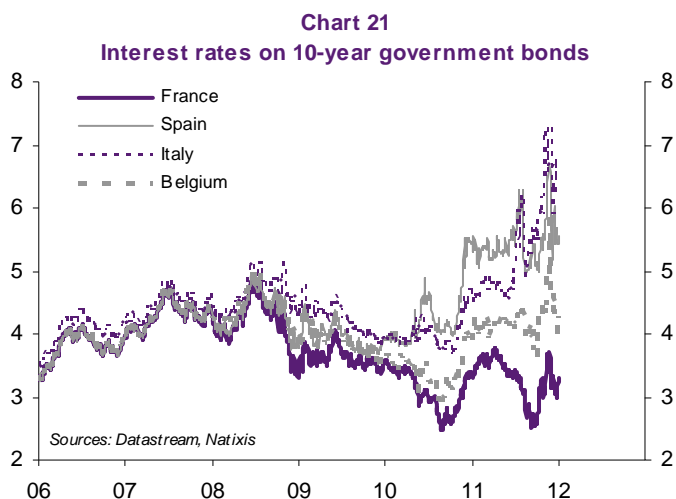


The distinction between solvency crisis and liquidity crisis has been constantly blurred by euro-zone governments and the European authorities:

- **Private Sector Involvement (PSI), implying losses for banks and private investors, was mentioned in July and then October 2011 (abandoned in December 2011) for all the countries in difficulty, which sent the message that all these countries were faced with a solvency crisis; the ECB, on the contrary, defended the equally mistaken opposite position that there was merely a liquidity crisis, even in Greece;**
- **the liquidity crisis (in Italy and Spain in particular) was to be dealt with by setting up a huge emergency fund (EFSM-ESM) (the figure of EUR 1,000 bn was mentioned). But this fund has to obtain financing through issuance in financial markets, which is not credible: how could a fund that is guaranteed by, among others, the countries in trouble, issue very large amounts in times of crisis? If a euro-zone country could be faced with a liquidity crisis, there must be a lender of last resort for the countries, and the lender of last resort must use monetary creation, so it must be the ECB, but it refuses to play this role;**
- **the prudential regulations for banks and institutional investors are in contradiction with the actual situation of the borrower countries, because they continue to consider both for banks (Basel III Liquidity Coverage Ratio (LCR), calculation of risk-weighted assets in order to determine regulatory capital) and for insurers (Solvency II capital requirements) that sovereign bonds are liquid, risk-free assets.**

### The confusion between liquidity crisis and solvency crisis therefore caused:

- **contagion of the crisis from Greece and Portugal to other countries** (Spain, Italy, even Belgium and France). When the possibility of an across-the-board default was mentioned and when the partial default on Greek debt was announced (July and October 2011), the interest rates for these countries rose significantly (**Chart 21**);
- **contagion of the crisis to the banks**, as we saw earlier (**Chart 8A** above), due to the large euro-zone bank holdings of euro-zone countries' sovereign bonds (Table 1 above);
- **a deepening of the crisis** through the perception of an across-the-board solvency risk, **which led banks** (**Chart 22, Table 3** shows the case of the French banks) **and institutional investors to become sellers of euro-zone sovereign bonds**, thereby preventing a normal balancing of the markets for these bonds, at a time when the countries have substantial issuance requirements (**Table 4**).



**Table 3**  
French banks' exposure to Italian, Spanish, Portuguese and Greek debt (in EUR bn)

Italy				
	BNP Paribas*	Société Générale	Crédit Agricole	BPCE
Jun-11	20.80	5.00	8.72	4.16
Sep-11	12.20	2.50	6.75	3.01
Spain				
	BNP Paribas*	Société Générale	Crédit Agricole	BPCE
Jun-11	2.70	2.30	1.79	1.03
Sep-11	0.50	1.80	1.52	0.41
Greece				
	BNP Paribas*	Société Générale	Crédit Agricole	BPCE
Jun-11	4.00	1.90	0.32	1.19
Sep-11	1.60	0.80	0.18	0.54
Portugal				
	BNP Paribas*	Société Générale	Crédit Agricole	BPCE
Jun-11	1.40	0.60	0.80	0.26
Sep-11	1.40	0.50	0.70	0.33

\* only banking portfolio

Sources: Reuters, banks' financial reports, Natixis

**Table 4**  
**Gross government bond issuance (in EUR bn)**

	2011	2012	2012			
			Q1	Q2	Q3	Q4
Germany	187	183	52	55	38	38
France	184	179	54	57	33	35
Italy	215	242	85	60	53	44
Spain	94	86	26	20	15	26
Netherlands	50	60	23	17	12	8
Belgium	39	39	14	11	9	4
Austria	17	22	9	6	4	3
Greece	-	-	-	-	-	-
Finland	16	13	6	3	3	2
Portugal	12	-	-	-	-	-
Ireland	-	-	-	-	-	-
Euro zone	813.80	824.27	269.49	228.30	166.98	159.51

Source: Natixis

**Conclusion: Three economic policy errors**

We believe that the euro-zone crisis would have been less serious without three huge economic policy errors, by governments, the European authorities and the ECB:

- from 2002 to 2007, the lack of responsible macro-prudential supervision (of fiscal policies, private-sector indebtedness, real estate prices, the guidelines of monetary policy, etc.);
- in 2008-2009, over-expansionary fiscal policies because governments did not understand that there was not a cyclical recession but a trend break in growth due to the halt in stimulation of demand by increased indebtedness;
- since 2010, a continual and erratic confusion between countries faced with a solvency crisis and countries faced with a liquidity crisis and between the economic policy treatments appropriate for these two forms of crisis.

This confusion persists in 2012, because there is almost no instrument to bail out countries faced with a solvency crisis.

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