NATIXIS

FLASH ECONOMICS

ECONOMIC RESEARCH

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The worst-case scenario for Greece and Portugal: What effects?

Let us assume that the worst-case scenario for Greece and Portugal unfolds: their fiscal solvency does not improve and they decide to default completely on their public debt, for all the holders.

What would be the effects in that case?

- ***they would not leave the euro, given the weight of their imports;***
- ***they would have to nationalise and recapitalise their banks;***
- ***if their banks went bankrupt, the European System of Central Banks would incur losses on their holdings of Greek and Portuguese debt, both directly and as collateral for repos to Greek and Portuguese banks;***
- ***the losses for other euro-zone banks (non-Greek or Portuguese) would amount to 0.2% of their total assets, which is very little; those for non-bank investors of all kinds would amount to 5% of their total assets, which is considerable;***
- ***after the default, the fiscal solvency of Greece and Portugal would practically be restored; these two countries' external solvency would be greatly improved;***
- ***the contagion to other euro-zone government bonds would probably be quite limited, which would not have been the case one year ago.***

ECONOMIC RESEARCH
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The causes of the "worst-case scenario" in Greece and Portugal

We imagine that **the worst-case scenario in Greece and Portugal unfolds: a total and across-the-board default on their public debt (Charts 1A and B).** It may be impossible to avoid this default, given **the irreversible deterioration in their fiscal solvency: negative growth (Chart 2),** making the restrictive fiscal policies inefficient in terms of reducing the fiscal deficit **(Charts 3A and B),** which is already the case in Greece; **fall in public (Chart 4A) and productive investment (Chart 4B)**, leading to **a loss of potential growth.**

Chart 1A
Greece: Public debt

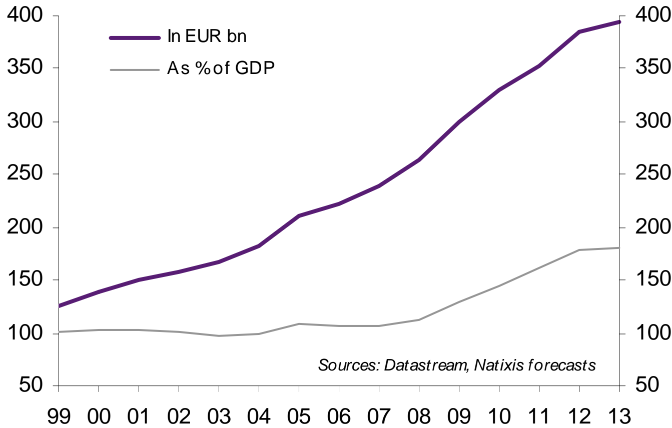


Chart 1B
Portugal: Public debt

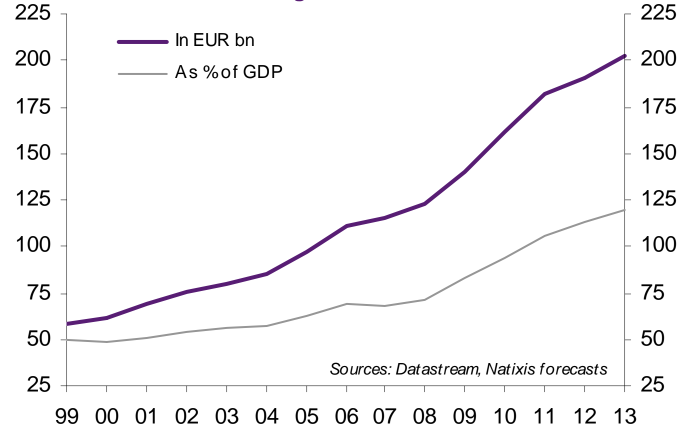


Chart 2
Real GDP growth (Y/Y as %)

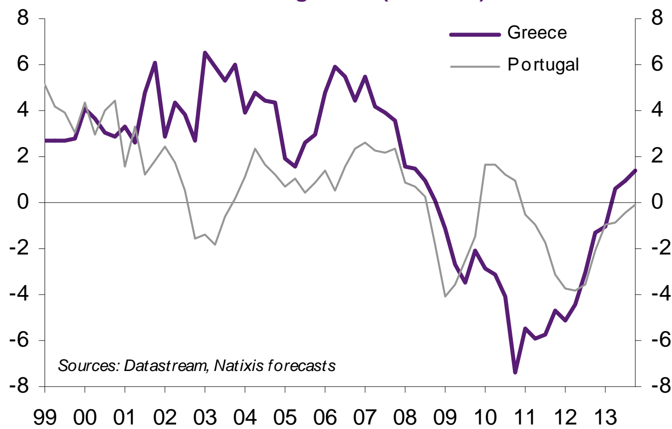


Chart 3A
Greece: Cumulative monthly fiscal deficit (in EUR bn)

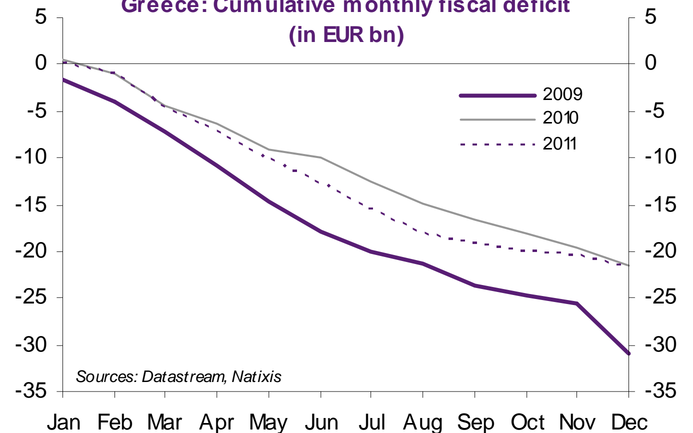


Chart 3B
Portugal: Cumulative monthly fiscal deficit (in EUR bn)

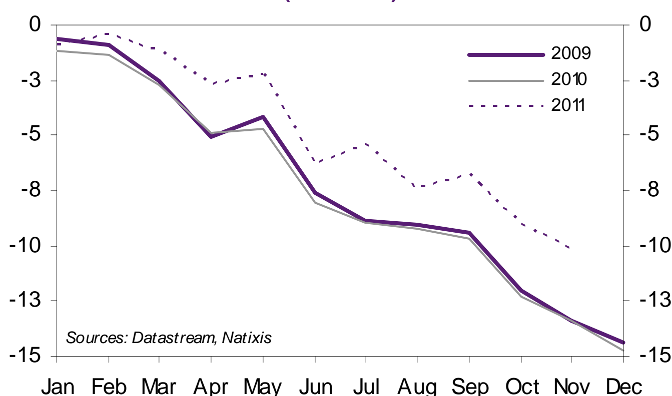


Chart 4A
Public investment rate (in value terms, as % of GDP)

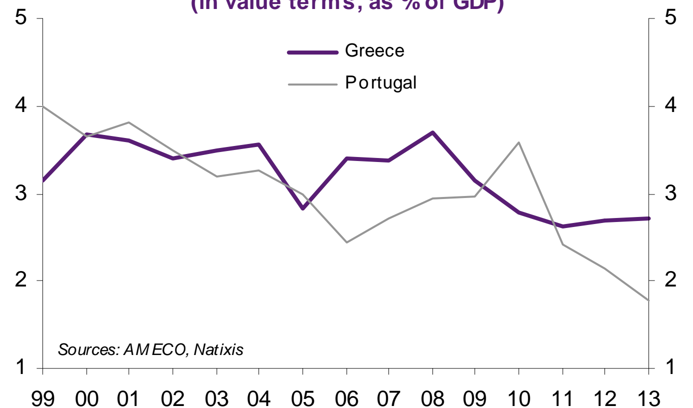
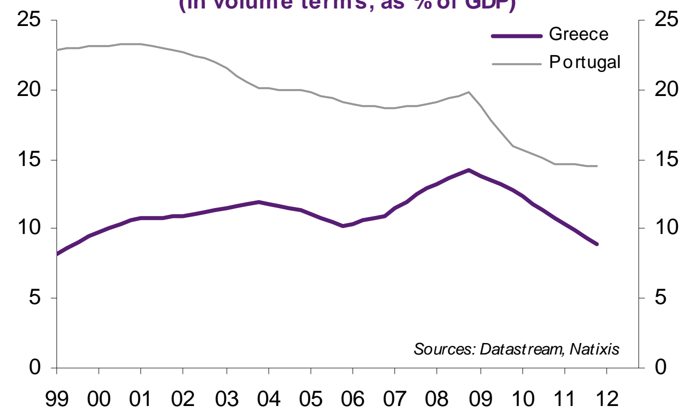


Chart 4B
Productive investment
(in volume terms, as % of GDP)



Fiscal insolvency is coupled with external insolvency for these two countries: the external debt is increasing continuously because of the size of the current-account deficit in both countries **(Charts 5A** and **B).**

Chart 5A
Net external debts or assets* (as % of GDP)

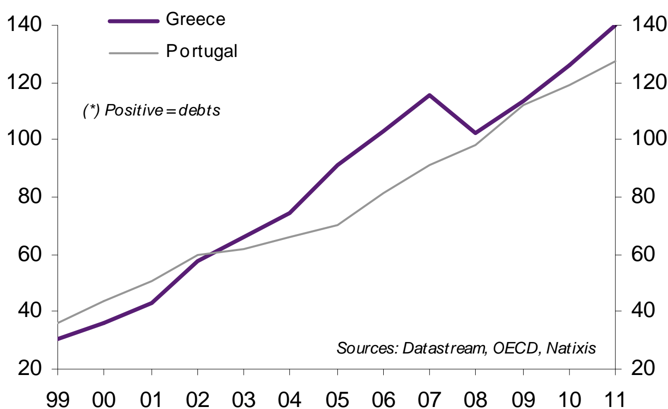
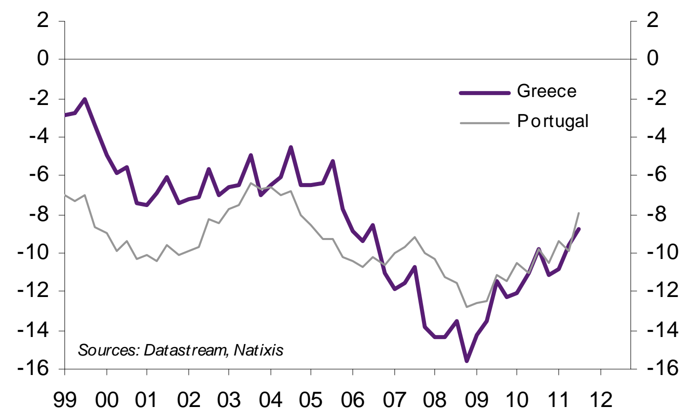


Chart 5B
Current-account balance (as % of GDP)



On this point, Greece is in a worse situation than Portugal, as there is an upswing in exports in Portugal, due to the decline in domestic demand and the low level of wages, but not in Greece **(Chart 6). Let us therefore assume in the following section that the irreversible insolvency of Greece and Portugal leads to a complete default on these two countries' public debts.** What would be the consequences of this default, which the markets almost expect **(Chart 7)?**

Chart 6
Global trade and exports
(in volume terms, 1999:1 = 100)

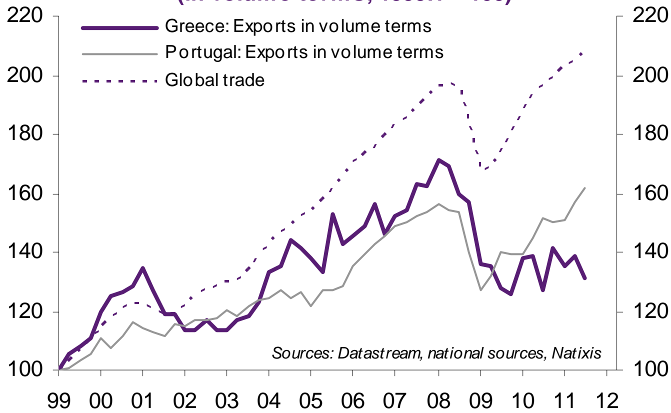
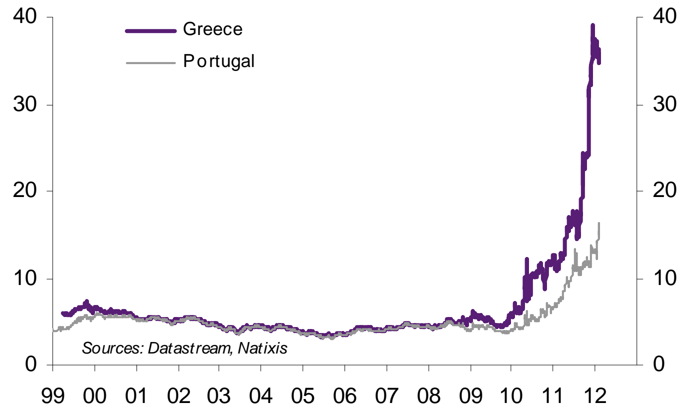


Chart 7
Interest rate on 10-year government bonds



Consequences of a complete default on the Greek and Portuguese public debts

1. These two countries would not leave the euro

A withdrawal from the euro and a devaluation only make sense if the improvement in foreign trade in volume terms outweighs the loss of purchasing power linked to the rise in import prices.

However, these two countries have:

– **very substantial imports** relative to their exports **(Charts 8A** and **B)**;
– **small industry**, especially Greece **(Chart 9)**, and therefore an inability to substitute domestic products for foreign products.

Chart 8A
Greece: Exports and imports of goods
(in EUR bn, annualised)

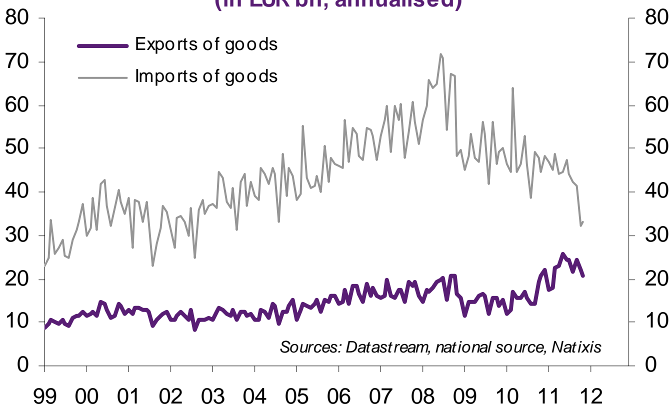


Chart 8B
Portugal: Exports and imports of goods
(in EUR bn, annualised)

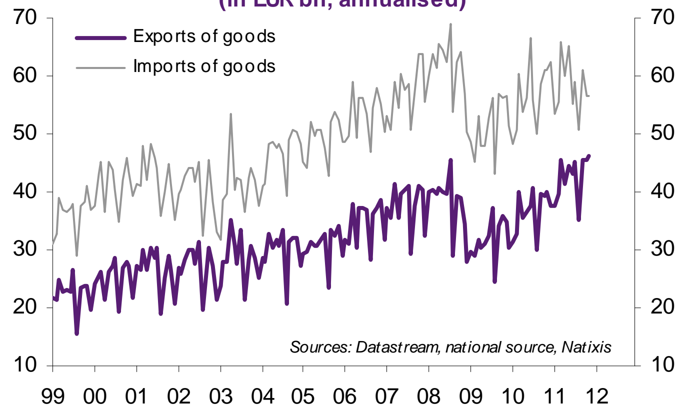
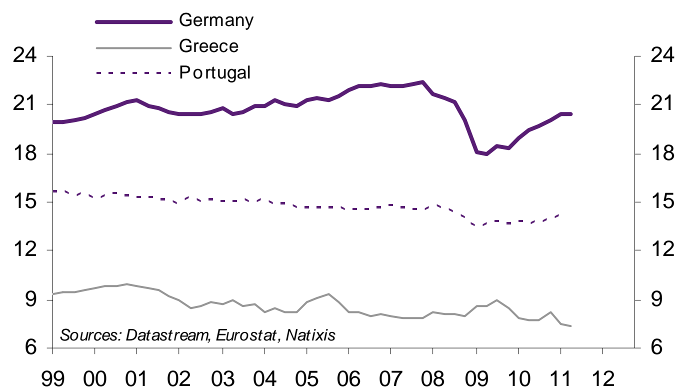


Chart 9
Value added in the manufacturing sector
(in volume terms, as % of GDP)



For these two countries, there could therefore be a default on the public debt without a withdrawal from the euro.

2. These two countries would have to nationalise and recapitalise their banks

Table 1 shows the amounts of Greek and Portuguese government debt held by banks in euro-zone countries; Table 2 shows the capital of banks in euro-zone countries. The losses for the banking systems in these two countries resulting from **a complete default on Greek and Portuguese public debt** would amount to 200% (Greece) and 130% (Portugal) of their capital, **which means these banks would go bankrupt and would have to be recapitalised.** This would obviously put a burden on these two countries' public finances that would reduce the gain from the default.

Table 1
Government debt held by euro-zone banks (in EUR bn)

Debt of… / Banks in…	Greece	Portugal
Austria	0.46	0.14
Belgium	3.91	2.09
Cyprus	5.81	0.00
Estonia	0.00	0.00
Finland	0.00	0.00
France	10.07	4.75
Germany	7.93	3.58
Greece	54.45	0.00
Ireland	0.04	0.24
Italy	1.41	0.37
Luxembourg	0.08	0.18
Malta	0.01	0.00
Netherlands	1.17	0.84
Portugal	1.41	19.57
Slovakia	0.00	0.00
Slovenia	0.02	0.02
Spain	0.45	4.85
Euro zone	87.23	36.62

Source: European Banking Authority

Table 2
Capital of banks in euro-zone countries in EUR billion

	At 31/12/2007	At 31/12/2008	At 31/12/2009	At 31/12/2010
Germany	147.02	134.49	154.22	169.48
Belgium	41.36	28.88	38.94	41.45
Cyprus	0.84	0.59	0.59	6.83
Spain	105.65	107.30	125.58	150.47
Finland	1.87	1.64	2.27	2.38
France	157.47	162.47	196.61	201.62
Greece	23.84	20.92	30.55	27.26
Ireland	17.20	15.79	16.84	10.91
Italy	165.47	164.85	178.21	184.37
Luxembourg	1.26	1.13	1.35	1.28
Malta	NA	NA	NA	0.96
Netherlands*	54.25	56.10	56.24	65.41
Austria	17.04	16.48	21.97	26.55
Portugal	11.76	12.07	15.94	15.57
Slovenia	0.69	0.82	0.75	0.75
Euro zone	745.71	723.53	840.05	905.28

(*) incl. bancassurance
Sources: Datastream, Natixis

3. Losses for the European System of Central Banks

If the Portuguese and Greek banks go bankrupt, **the losses for the European System of Central Banks would stem from two sources:**

- the ECB's **purchases of Greek and Portuguese government bonds** as part of the SMP **(Chart 10, Table 3)**;
- **the Greek and Portuguese government bonds provided as collateral for repos by Greek and Portuguese banks (Table 4).**

Chart 10
ECB: Purchases and outstanding government bonds in 2010 and 2012 (in EUR bn)

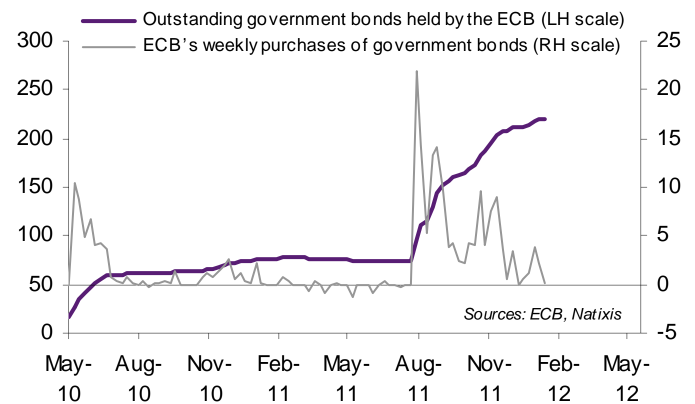


Table 3
Outstanding debt held by the ECB

Greek	Portuguese
circa EUR 45 bn	from EUR 10 to 20 bn

Source: Natixis estimate

Table 4
Banks' funding from the ECB (EUR bn)

	Greek	Portuguese
01/01/2008	4.11	2.04
01/02/2008	4.80	2.26
01/03/2008	6.29	2.05
01/04/2008	6.92	2.86
01/05/2008	9.55	3.37
01/06/2008	11.61	2.85
01/07/2008	12.41	3.47
01/08/2008	11.33	5.69
01/09/2008	15.00	5.63
01/10/2008	23.00	6.88
01/11/2008	31.63	7.84
01/12/2008	40.59	10.37
01/01/2009	36.97	5.39
01/02/2009	38.59	5.36
01/03/2009	48.06	5.56
01/04/2009	48.87	5.09
01/05/2009	45.70	5.11
01/06/2009	54.00	10.72
01/07/2009	45.81	9.66
01/08/2009	41.05	9.80
01/09/2009	37.98	9.72
01/10/2009	42.09	11.90
01/11/2009	41.37	12.38
01/12/2009	49.72	16.66

Table 4 (continued)
Banks' funding from the ECB (EUR bn)

	Greek	Portuguese
01/01/2010	47.35	16.05
01/02/2010	59.82	16.12
01/03/2010	67.06	16.24
01/04/2010	84.88	18.58
01/05/2010	89.80	37.36
01/06/2010	94.30	40.20
01/07/2010	96.60	48.80
01/08/2010	95.90	49.10
01/09/2010	94.30	39.70
01/10/2010	92.50	40.00
01/11/2010	95.10	37.90
01/12/2010	97.80	40.90
01/01/2011	94.55	41.00
01/02/2011	90.60	41.10
01/03/2011	87.90	39.10
01/04/2011	86.84	48.00
01/05/2011	97.50	47.20
01/06/2011	103.00	43.90
01/07/2011	96.30	44.20
01/08/2011	93.10	46.02
01/09/2011	78.10	45.62
01/10/2011	74.80	45.54
01/11/2011	74.00	46.00
01/12/2011	73.00	

Source: Natixis

There will be a loss here if it exceeds the loss already valued by the market at the time of the repo.

4. Losses for other banks and other investors in the euro zone

Table 5 shows the amounts of Greek and Portuguese public debt held by non-residents (mainly Europeans).

This breaks down between:

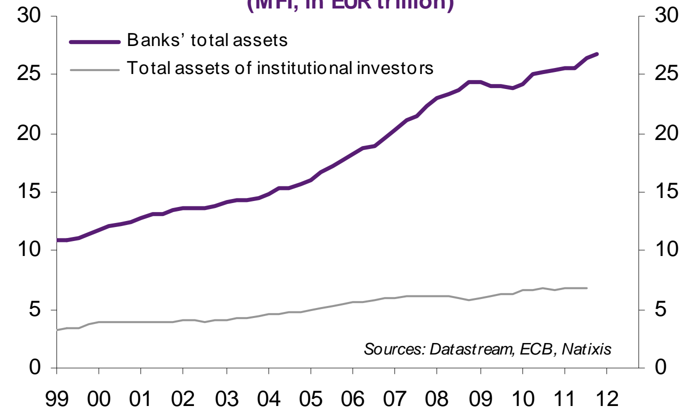
- **banks (see Table 1) outside of Greece and Portugal:** EUR 50 bn, **i.e. less than 0.2 % of their total assets;**
- **European System of Central Banks** (see above): EUR 65 from the SMP alone;
- **other investors of all kinds:** EUR 370 bn, **i.e. more than 5% of their total assets (Chart 11).**

Table 5
Percentage of the public debt held by non-residents in 2010 (as % of total)

	Greece*	Portugal*
Percentage of the public debt held by non-residents	79.04	86.50

(*) Marketable debt
Sources: National sources, Natixis

Chart 11
Euro zone: Banks' total assets
(MFI, in EUR trillion)



5. Solvency of the two countries after the default

The objective of a complete default on the public debt is **to restore the country's fiscal and external solvency. The gain in terms of fiscal solvency can be seen from the size of the interest paid on the debt (Chart 12), the gain in terms of external solvency from the reduction in the current-account deficit (Chart 5B)** thanks to the end of interest payments on the public debt to non-residents. **The gain in terms of fiscal solvency would be massive; the external deficit would be divided by three. After the default, fiscal solvency would be restored thanks to a zero primary fiscal deficit (Chart 13)**; external solvency thanks to a very low current-account deficit, once the interest payments to the non-resident holders of the public debt are stopped.

Chart 12
Interest paid on the public debt as % of nominal GDP

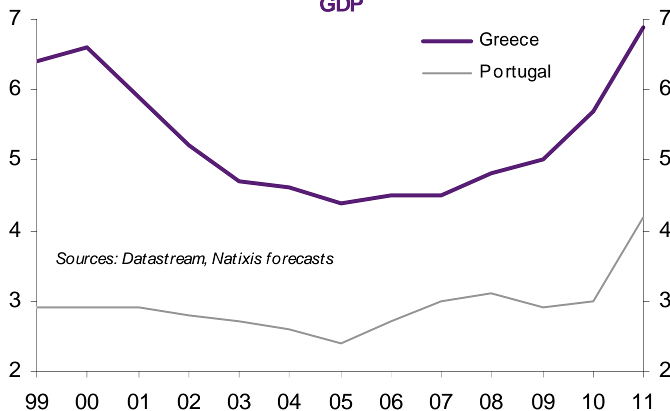
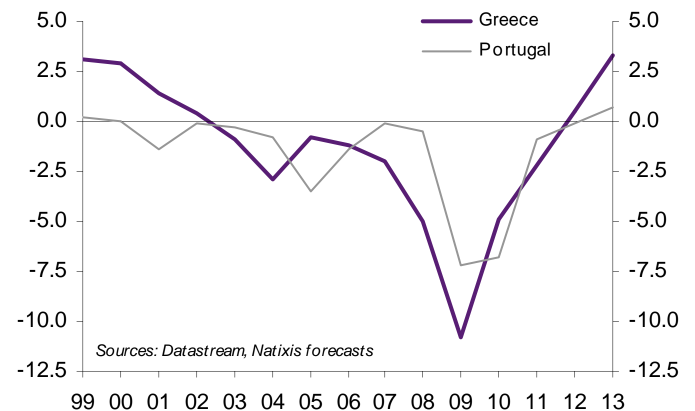


Chart 13
Primary fiscal surplus/deficit (as % of GDP)



6. Contagion to other countries

In the third quarter of 2011, the worsening of the Greek crisis spread to Italy and Spain (Charts 14A and **B)**, and investors were concerned that the default solution would spread to all the troubled euro-zone countries.

Chart 14A
Interest rate on 10-year government bonds

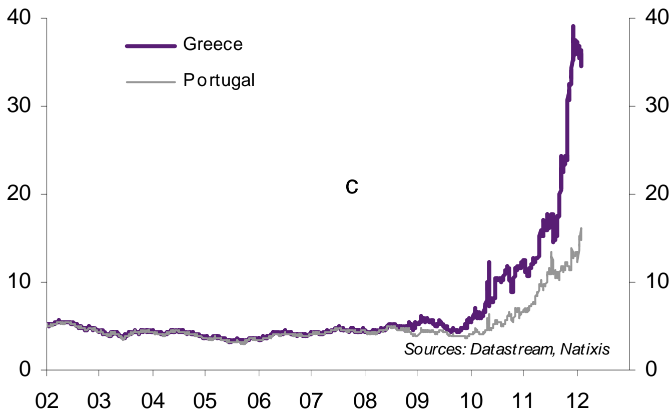
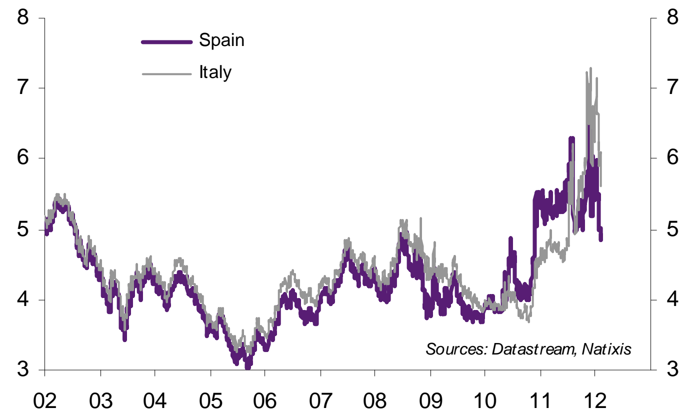


Chart 14B
Interest rate on 10-year government bonds



In January 2012, the worsening of the crisis in Greece and Portugal did not spread to other countries, on the contrary in fact: the risk of contagion visibly decreased, thanks to increased investor discrimination between the different countries.

Conclusion: What should be feared if the worst-case default scenario for Greece and Portugal unfolded?

If their fiscal and external insolvency was not corrected and drove Greece and Portugal to a complete default on their public debts, we should in our opinion expect the following scenario:

- these two countries would remain in the euro;
- their banks would have to be nationalised and recapitalised;
- the European System of Central Banks would incur substantial losses;
- banks in other euro-zone countries would lose 0.2% of their total assets, **and other investors in other euro-zone countries 5% of their total assets**, which is considerable;
- **the fiscal and external solvency of Greece and Portugal would be considerably improved;**
- **the contagion to other euro-zone countries** (Spain, Italy, etc.) **would be muted.**

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