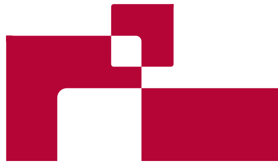

bruegelpolicybrief

ISSUE 2011/**02**
FEBRUARY 2011

A COMPREHENSIVE APPROACH TO THE EURO-AREA DEBT CRISIS

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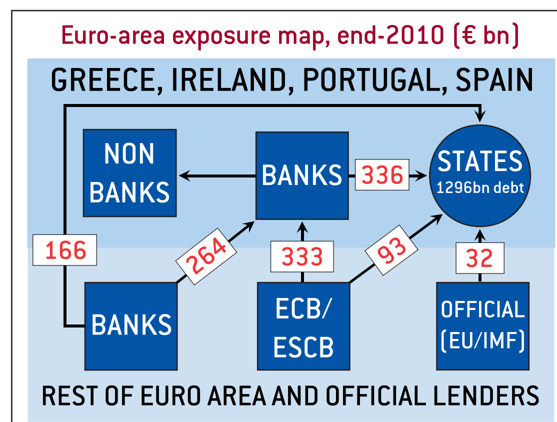
SUMMARY The euro area's sovereign debt crisis continues though significant steps have been taken to resolve it. European Union and euro-area crisis mechanisms have been set up, and financial assistance has been provided to Greece and Ireland. Governments have implemented severe austerity measures and started to put in place structural reform programmes. And the European Central Bank has embarked on a (controversial) peripheral sovereign debt purchase programme, while continuing to provide liquidity to euro-area banks. But these measures have not restored calm to markets. In early February 2011, spreads on 10-year government bonds issued by Greece, Ireland, Portugal and Spain were all higher than they were in April 2010, before rescue measures started to be implemented.

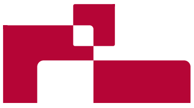
POLICY CHALLENGE

EU policies have been insufficient to solve the problem for three reasons: they have failed to recognise the possibility of insolvency and have addressed all crises as if they were pure liquidity crises; they have failed to address systemically the interdependence between banking and sovereign crises and cross-country interdependence; and they have been reactive rather than proactive, squandering credibility because of inadequate responses. A swift, radical and comprehensive solution is now needed comprising a plan to restore banking-sector soundness; revising EU assistance facilities and restructuring of public debt where needed; and fostering adjustment and growth by promoting budgetary consolidation and competitiveness-enhancing domestic reforms in peripheral countries.

Euro-area exposure map, end-2010 (€ bn)



Source: Bruegel. See Table 2 for explanations.



THE COUNTRIES MOST AFFECTED by the euro-area crisis – Greece, Ireland, Portugal and Spain[1] – share many common traits. They have spent and lived beyond their means by accumulating private and/or public debt and running large current account deficits. Nominal wages have also grown beyond what is justified by productivity gains, resulting in prices growing too fast relative to the rest of the euro area (Figure 1). In some cases (Ireland) price divergence essentially took place in the non-traded sector – especially construction and services – whereas in other countries the traded sector – especially manufacturing – was also affected. Such behaviour, and the policies that made it possible, was fundamentally at odds with euro participation.

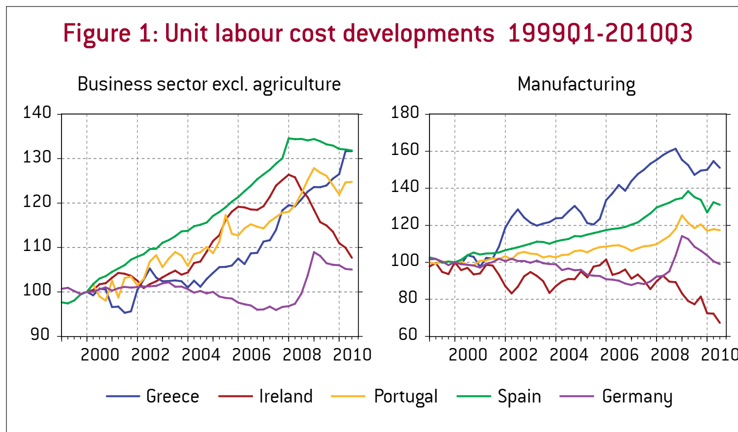
In the last two years adjustment has started in these countries and major policy measures have been taken. Results are already visible in Ireland.

However, as argued by Marzinotto *et al* (2010), the Greek crisis stands apart from those in the other peripheral countries. First, Greece's public debt predicament has arisen mainly because of public finance mismanagement, while banking problems have played a secondary role. Second, with a debt-to-GDP ratio scheduled to exceed 150 percent, Greece is clearly on the verge of insolvency. By contrast, in Ireland and Spain, the public finance consequences of private-sector debt accumulation is the main reason for solvency concerns, not least because of the cost of rescuing insolvent banks. Public debt levels in Ireland, Portugal and Spain are more manageable than in Greece[2].

This assessment is confirmed by a forward-looking evaluation of the public debt situation in the four countries (Box 1). Under Consensus Economics (2010) forecasts of GDP growth, and an optimistic evolution of market interest rates (in the case of Greece, a reduction of spreads vis-à-vis Germany from 970 basis points today to 350 in 2014), the adjustment needs are of a frightening magnitude, not only in Greece but also in Ireland. This is even truer under more cautious growth and interest rate assumptions (Figure 2).

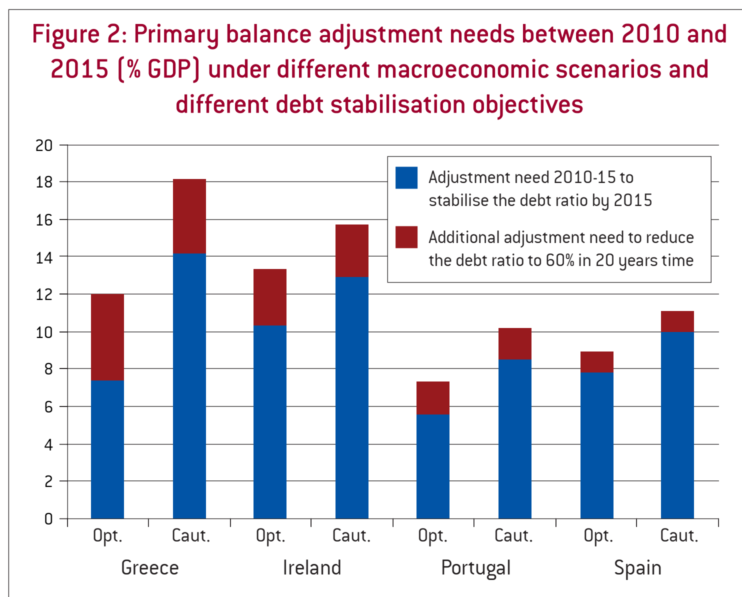
It is not only the size of the adjustment effort that matters. The key indicator of solvency is the size of the primary budget surplus. This needs to be maintained over a period of years to achieve, in the

Figure 1: Unit labour cost developments 1999Q1-2010Q3



Source: Bruegel calculations using OECD data. Note: 2000Q1=100.

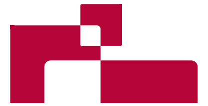
Figure 2: Primary balance adjustment needs between 2010 and 2015 (% GDP) under different macroeconomic scenarios and different debt stabilisation objectives



Source: Bruegel. Note: Opt. = optimistic; Caut. = cautious. The 2010 primary balances were -3.7% in Greece, -9.6% in Ireland (excluding bank support), -4.4% in Portugal and -7.3% in Spain. The stabilised levels of debts in the case of the adjustment indicated by the blue part of the bars are the following: 160% in Greece, 123% in Ireland, 98% in Portugal and 84% in Spain.

1. Our criterion for focusing on these countries is the level of interest-rate spreads on long-term government bonds. We call them 'peripheral countries', because this is the standard expression used by others. We could have spoken of 'high-spread countries'.

2. Levels in 2011 are forecast to remain below 70, 90 and 110 percent of GDP, respectively, in Spain, Portugal and Ireland.



medium term, a gradual return to safe levels of public debt. Here Greece stands apart from the other countries. Even in the optimistic scenario, the primary surplus required to reduce the debt ratio to 60 percent of GDP by 2034 would be 8.4 percent of GDP. It would reach 14.5 percent of GDP under the cautious scenario. This implies devoting between one-fifth and one-third of tax revenues to interest payments on the public debt. Over the last 50 years, no OECD country (except Norway, thanks to oil surpluses) has sustained a primary surplus above six percent of GDP. Even less ambitious targets would require politically unrealistic surpluses[3].

Our conclusion therefore is that Greece has become insolvent. Further lending without a large enough debt reduction is not viable. This does not apply to Ireland which also needs to carry out a major budgetary adjustment, but where the primary surplus required to keep the debt ratio sustainable remains within the range of what has been achieved historically[4].

However, the possibility of restructuring Greek sovereign debt has met with total opposition both from the Greek government and other euro-area countries. The main argument seems to be that it could create contagion effects and spillovers, since much Greek debt is held by euro-area banks (mainly France and Germany), which invested heavily in higher-yielding peripheral bonds.

There is also a 'wait-and-see' attitude: it is hoped that Greek reforms will transform the economy, putting it on a faster-track growth path, thereby alleviating the situation. It is also hoped that time will help weaker euro-area banks to restore solvency, so that they are in better shape for restructuring at a later date.

History suggests, however, that a 'wait-and-see' approach is a dubious strategy. Although clearly desirable, reforms and growth acceleration are difficult and time-consuming processes. The lingering threat of restructuring is likely to be economically and financially damaging. Moreover, as official creditors - EU partners and the International Monetary Fund (IMF) - are gradually substituting Greece's private creditors, postponement of restructuring would imply, to keep the debt ratio sustainable, either a restructuring of official loans, or a significantly higher eventual haircut on private claims.

BOX 1: SUSTAINABILITY ASSESSMENT

We examine two scenarios:

Optimistic scenario:

- Interest rate spreads against German Bunds are optimistically assumed to fall by 2014 from the current high levels to 350 bps in Greece, 200 bps in Ireland, 150 bps in Portugal and 100 bps in Spain, and are assumed to stay at these levels.
- Consensus Economics GDP growth forecasts.

Cautious scenario:

- Expected interest rates are calculated using the expectation hypothesis of the term structure, leading to considerably higher interest rates than in the optimistic scenario.
- Lower growth and inflation compared to the optimistic scenario due to efforts to regain competitiveness, especially in Greece, Portugal and Spain.

In both scenarios we use estimates from Barclays Capital on potential additional bank recapitalisation by governments (for Ireland and Spain, their high-risk estimate): €10 billion in Greece, €31.5 billion in Ireland, €10 billion in Portugal and €75 billion in Spain. We take into account the €17.5 billion that the Irish government has put aside from its cash reserves and liquid assets to support banks. The Spanish value does not include government support already provided. We remain on the conservative side by not assuming any privatisation revenue.

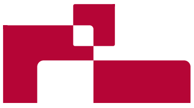
The primary balance (in percentage of GDP) in Greece and Ireland is assumed to evolve according to the EU-IMF programme assumptions. For Portugal and Spain we use the European Commission's November 2010 forecast up to 2012, and assume that the primary balance will improve by 1.5 percent of GDP both in 2013 and 2014.

With the above assumptions, we calculated the persistent primary balance needed from 2015 onwards in order to (a) stabilise the debt/GDP ratio at its 2015 level, (b) reduce the debt/GDP ratio from its simulated 2014 level to 60 percent of GDP (the Maastricht criterion) by 2034.

Darvas *et al* (2011) present the detailed assumptions and calculations.

3. Like many countries the Greek state has assets, including significant holdings of land. These could potentially serve as collateral to guarantee loans but even a major divestiture of public property would be insufficient to modify the conclusion.

4. Considering the current official lending rates to Ireland, a 3.7 percent persistent primary surplus would be needed from 2015 in the optimistic scenario, and 6.1 percent in the cautious scenario, to reduce the debt ratio to 60 percent between 2014 to 2034, according to our calculations. See Table 1 for the impact of possible policies and a fall in market interest rates on these results.



ASSESSING THE SOFT OPTIONS

To be fair, the EU has moved away from complete denial of the Greek debt situation to looking for a middle way between adjustment and debt restructuring. Table 1 gives for the peripheral countries an assessment of what the effects might be of three types of measures that are currently under consideration:

- A lowering of the interest rate charged on all official EU loans (IMF rates cannot be lowered) to 3.5 percent annually;
- An extension of the maturity of all official EU loans to 30 years, and the transformation of the Greek IMF Stand-by Agreement into an Extended Fund Facility (which would extend the repayment date from 2018 to 2023, as in Ireland);
- The purchase by the European Financial Stability Facility (EFSF) of all government bonds currently held by the European Central Bank within the framework of its Securities Market Programme and the retrocession of the corresponding haircut to the issuing country[5].

We also provide an evaluation of the effect of a drop of 100 basis points in market yields, and the joint impact of the three policies and the drop in market yields, even though it is difficult to assess the expected market reaction to these measures[6].

Each measure would clearly help reduce Greece's debt burden both directly and indirectly via lower market interest rates. However, our calculations indicate that even if all the measures were applied it would still not be enough to return Greece to solvency. The primary budget surplus requirement would still be unrealistically high.

Furthermore, the current stance of 'no default now, but possible default on bonds issued from 2013' is inconsistent and not credible. Up to 2012, markets will price in the default option, making it difficult for troubled governments to borrow. From 2013, if the stance is indeed maintained, the Greek government will be unable to issue bonds. However, a second official lending programme for Greece in 2013 would likely meet even more political resistance from euro-area partners and would further increase the share of official creditors in Greek debt.

A debt reduction is therefore necessary for Greece. We estimate that, in order to return to a sustainable path and reach a 60 percent debt-to-GDP ratio by 2034, Greece would need (in addition to the three measures in Table 1) a 30 percent haircut on the marketable public debt[7].

ASSESSING POTENTIAL SPILLOVERS

The main obstacle to a rapid resolution of the euro-area crisis is the difficulty policymakers have in tackling the spillover effects

Table 1: Assessment of alternative policies

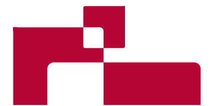
		Persistent primary surplus needed from 2015 onwards to stabilise the debt/GDP ratio at its 2015 level (% GDP)				Persistent primary surplus needed from 2015 onwards to reduce the debt/GDP ratio from its 2014 level to 60 percent by 2034 (% GDP)			
		(a)	(b)	(c)	(d)	(a)	(b)	(c)	(d)
			Deviation from baseline				Deviation from baseline		
	Scenario	Baseline	Three policies	100 bps lower mkt yields	Three policies + mkt reaction	Baseline	Three policies	100 bps lower mkt yields	Three policies + mkt reaction
Greece	Optimistic	3.7	-1.3	-1.0	-2.1	8.4	-1.8	-0.8	-2.4
Greece	Cautious	10.5	-2.7	-1.0	-3.4	14.5	-3.0	-0.9	-3.6
Ireland	Optimistic	0.7	-0.5	-0.6	-1.0	3.7	-0.8	-0.4	-1.1
Ireland	Cautious	3.3	-0.8	-0.5	-1.2	6.1	-0.9	-0.4	-1.3
Portugal	Optimistic	1.2	-0.1	-0.7	-0.7	2.9	-0.1	-0.6	-0.8
Portugal	Cautious	4.1	-0.1	-0.7	-0.8	5.8	-0.1	-0.7	-0.8
Spain	Optimistic	0.5		-0.6		1.6		-0.6	
Spain	Cautious	2.7		-0.7		3.8		-0.7	

Source: Bruegel. Note: Column (d) is not the sum of columns (b) and (c) because the marginal impact of policy measures is smaller when market interest rates are lower.

5. We only consider here buy-backs from the ECB, which is feasible without any market interference. Note also that as the current market value of ECB holdings is close to their value at the time of purchase, we consider this retrocession to be broadly neutral for the ECB profit-and-loss account.

6. Obviously calculations only apply to measures that are currently applicable. For example, we only consider maturity extension for the countries (Greece and Ireland) that benefit from financial assistance; for Portugal we only consider the buy-back of current ECB bond holdings from a 30-year 3.5 percent loan.

7. This assumes that assistance loans will be exempt from restructuring and that market reaction to the debt reduction will result in a drop of the spread vis-à-vis Germany to 200 basis points. Under these conditions, from 2015 a 6 percent persistent primary surplus (the programme assumption) is needed in our cautious scenario, with a 3.6 percent surplus in the optimistic scenario, to reach the 60 percent debt ratio by 2034.



between banking and sovereign difficulties and across countries in the absence of European sovereign debt and banking crisis resolution mechanisms.

In order to assess what needs to be done, we start from a simplified map of bank and sovereign interdependence in the periphery countries, and between periphery banks and those elsewhere in the euro area (front-page figure and Table 2). Although drawing up such a map involves a number of assumptions[8], it provides a reasonably accurate representation of the actual situation.

Starting with Greece, our estimates indicate that the spillover from a sustainability-restoring haircut on sovereign debt would have a manageable impact on banks in the rest of the euro area. Some would no doubt need recapitalisation, but even assuming that recapitalisation would be borne by the public purse (a disputable choice and therefore an extreme assumption), the impact on the public finances of other euro-area countries would remain limited. The fear of a domino effect is understandable, but exaggerated.

Table 2 also shows that spillover effects from crises in other countries are clearly different. The exposure of euro-area banks to Irish sovereign risk is small and it is really exposure to banks that matters. Exposure to Portugal is limited. Only Spain is really systemic, through both the sovereign and the banking channels.

A COMPREHENSIVE SOLUTION

A comprehensive solution to the crisis would have three planks:

- A plan to restore banking-sector soundness;
- Resolution of sovereign debt crises;
- A strategy to foster growth and competitiveness.

Strengthening the euro-area banking system

Our assumptions are deliberately cautious, but we still assess the spillover risks to be manageable and conclude that only Greece is in need of a public debt reduction. We are aware, however, that our information is incomplete.

Our estimates of financial interdependence in the euro area show the exposure of peripheral banks to peripheral sovereigns, and of non-peripheral banks to both peripheral banks and sovereigns. But what is missing from our mapping is the exposure of peripheral banks to potentially non-performing loans and the resulting risk for banks in the rest of the euro area, and for sovereigns in both peripheral and non-peripheral countries, should banks need to be recapitalised with public funds. This gap was supposed to have been filled by the European stress tests published in July 2010. Unfortunately the stress tests were totally discredited by subsequent developments in Irish banks, leading to market concerns that the position of euro-area banks may be far worse than currently admitted.

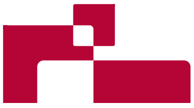
The implementation of rigorous

Table 2: Estimated exposure to periphery government debt and banking system (€ bn), end-2010

	Greece	Ireland	Portugal	Spain	Total
Total government debt (at face value)	325	153	142	677	1297
of which held by :					
Domestic banks	68	11	19	227	336
Rest of euro-area banks	52	14	33	79	166
Other banks	6	9	5	24	43
Non-banks (both domestic and foreign)	119	97	64	347	627
ECB	50	22	21	0	93
IMF, EU and official lenders	32	0	0	0	32
Ratio of average market value to face value of government debt	0.75	0.85	0.9	1	
Foreign banks' exposure to national banking systems	10	119	43	209	381
of which euro-area banks	6	66	37	154	264
Eurosystem lending to banks	95	132	41	65	333

Source: Bruegel. For data sources and explanations see Darvas *et al* (2011).

8. See Darvas *et al* (2011) for details.



and credible stress tests is therefore an absolute priority for the euro area. Because EU banking supervisors squandered credibility in the previous round of stress tests, we advocate involving the IMF and possibly the Bank for International Settlements, in the next round of tests. We suggest that the March 2011 European Council adopts the necessary measures to ensure that the forthcoming stress tests be as rigorous and credible as possible.

Once such tests have been carried out, euro-area countries must proceed immediately with bank restructuring where necessary, which should imply the recapitalisation of viable institutions and the closure of non-viable ones. To this end, EFSF funding should be made available to governments.

The restructuring of some banks in core countries is likely to be necessary, especially if bank losses turn out to be significant in Spain, the only peripheral country where restructuring would, according to our estimates, have a significant spillover effect on the rest of the euro area.

Bank restructuring would be accelerated if EU countries were to introduce special bank resolution mechanisms in their domestic legislation, as proposed by the European Commission. In line with the February 2011 German proposal[9], we advocate that heads of state and government agree in March to put in place such mechanisms without delay. But beyond national efforts, there is a strong rationale for the creation of a temporary 'European Bank Treuhand' (Posen and Véron, 2009), to catalyse recapitalisation and manage any distressed assets that may fall into public ownership, while keeping fiscal outlays in national hands.

9. See, for example, the *Financial Times* of 3 February 2011, 'Euro-zone members are negotiating a "grand bargain" to tackle the bloc's debt crisis'.

Beyond the immediate short term, there is an obvious need to put in place a solid European banking supervision and resolution framework. One lesson from the crisis is that such a framework must go beyond coordination between national institutions. Nothing less than supranational banking supervision and resolution bodies can handle the kind of financial interdependence that now exists in Europe. Ideally, such bodies should cover all EU countries, since they all belong to a single financial market. However, in case this proves to be politically unrealistic, euro-area countries should create their own institutions.

Before the crisis, the creation of EU- or euro-area banking supervision and resolution institutions was considered unacceptable by European countries because it would amount to the pooling of risks associated with bank failures. The crisis has shown that the absence of such institutions imposes even greater burden-sharing on countries, especially within the euro area, where the ECB has been forced to act as the lender of last resort to banks that may turn out to be insolvent.

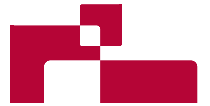
Resolution of sovereign debt crises

Our calculations have shown that it is preferable to implement a significant reduction of Greek debt sooner rather than later.

It would clearly be less disruptive financially to achieve a reduction in the debt level through voluntary exchanges rather than through across-the-board debt restructuring. This justifies giving the EFSF the mission and the financial means to carry out such operations on a significant scale. Euro area leaders should agree to this at the March European Council, as part of the overall package under consideration. The EFSF should immediately buy from the ECB debt securities purchased within the framework of the Sovereign Market Programme.

A debt exchange however is not without problems. In particular, a voluntary exchange will only be marginally effective as long as the EU sticks to its no-restructuring commitment because, if credible, this commitment is an incentive to hold rather than sell the asset. In order to make debt-exchange schemes effective, public authorities would need to convey to markets their determination to achieve a reduction of public debt to a sustainable level. This requires on their part a recognition of the unsustainable character of the present course, and a joint evaluation by the Commission, the ECB and the IMF of the amount of debt reduction needed.

Restructuring would not be easy either, both because of its impact on financial institutions that have not marked debt securities to market (which is the case for many



banks) and because of the seniority issue. Currently, bilateral government loans and EFSF loans do not enjoy formal seniority status. Yet it would be unthinkable to bail in those EU members who came to the rescue of their ailing partners, especially since the IMF, which provided parallel loans, enjoys senior creditor status. If formal restructuring is needed, we advocate that it takes inspiration from the mechanism presented in Gianviti *et al* (2010).

In both cases, the burden of adjustment should not fall only on private bondholders. First, investors should be offered a variety of new, guaranteed instruments (eg Delpla and von Weizsäcker, 2011). Second, investors should be able to benefit from an upturn in economic conditions through eg GDP-indexed bonds. Third, Greece should post collateral to guarantee the new debt instruments.

Furthermore, Greece and Ireland currently benefit from loans from EU states or the EFSM/EFSF at relatively high interest rates compared to the rates at which these countries or institutions are able to borrow. This was intended to signal that these loans should not be regarded as concessionary, partly in response to fear of recourse to the German constitutional court for breach of the EU treaty's no bail-out clause. However, high interest rates have caused political tensions in the borrowing countries and reduced the domestic ownership of the programmes. High rates have also weakened the credibility of these programmes by aggravating somewhat the Greek and Irish sustainability problem. Interest rates on official loans should correspond to the lender's borrowing cost, plus an operational margin, in line with EU assistance to Hungary, Latvia and Romania. The experience of the three countries suggests that countries may be willing not to draw the full amount of the preferential-rate assistance when reasonable market borrowing conditions are restored, in order to boost market confidence[10]. Longer maturity EU assistance would also reduce the magnitude of haircut on marketable Greek debt and improve the sustainability of other countries receiving assistance.

Fostering growth in the peripheral countries

Given the size of public and private debt in the peripheral countries, regaining sustainability will mean a combination of lower living standards and higher production, especially in the tradable sector. Economic policy should be geared, first and foremost, towards implementing domestic reforms to increase employment and productivity. However, even if successful, these will take time to produce results. In the meantime, growth will remain subdued and debt, though reduced, will remain high. Private and public sector efforts to pay off their debts will have a negative impact on growth, and low growth will it make more difficult to reduce debt levels. These countries are also confronted with the risk of debt deflation, because restoring competitiveness in the tradable sector will require low price increases and perhaps even deflation.

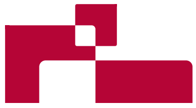
In order to break this vicious circle, peripheral countries need to first stabilise and then reduce their debt levels while accelerating the pace of economic reform. The EU can and should help with this by fostering reforms and growth in these countries.

We have already emphasised the potential role of better terms for conditional financial assistance and the implementation of comprehensive measures to exit the debt deadlock. Currently, private investment is being held back and public borrowing costs are high due to lingering uncertainty about banking sector resolution and sovereign defaults.

But the EU should also do more with the instruments at its disposal. We strongly advocate a temporary refocusing of the structural funds earmarked for the peripheral countries, with monies mobilised to support new growth strategies. As argued in Marzinotto (2011), this requires front-loading EU structural spending (without changing its distribution by country), so that it can contribute to fostering reform and growth during the most acute phase of the adjustment. This also requires a joined-up, coordinated approach, including with the EU-IMF programme, instead of the current silo approach. We suggest the March 2011 European Council adopts a programme along these lines.

In the longer term the EU can also help by making better use of its

10. The Hungarian government launched in July 2009 a five-year euro-denominated bond with a coupon of 6.75 percent. Following the success of this issuance it has not drawn anything from the remaining portion of the assistance programmes. The Latvian and Romanian governments have also not drawn the full available amounts.



budget. The discussion on the next 2014-20 multiannual financial framework is an opportunity for fresh thinking about new ways to foster investment in the four countries and other crisis-affected countries, especially in central and eastern Europe.

CONCLUSION

For several weeks there has been an expectation among political observers and market participants that the March European Council will deliver measures amounting to a comprehensive solution to the euro-area crisis. This expectation was reinforced by the 4 February 2011 European Council, where euro-area heads of state and government announced their intention to finalise in March a 'comprehensive strategy to preserve financial stability'.

We argue that a comprehensive approach must start by recognising two basic facts. First, peripheral countries face a huge challenge in adjusting their weak economies and avoiding a vicious circle of high private and public debt and low growth. Second, banks and sovereigns throughout the euro area are closely interdependent.

Starting from these two facts, which we have documented in this policy brief, we propose a comprehensive strategy comprising three components: the cleaning up of banks, wherever needed and simultaneously throughout the euro area, based on the results of a rigorous stress test given added credibility by the involvement of the IMF and possibly the BIS; revision of the conditions of EU assistance programmes, further empowering the EFSF and the reduction of the public debt in Greece, the only euro-area country which has become insolvent; fostering adjustment and growth in peripheral countries through budgetary consolidation and competitiveness-enhancing measures, and through mobilisation and better implementation of EU structural funds.

Too much time has been lost, too much confidence has been dented and too much credibility has been squandered in the past year. Building on important decisions already taken, EU leaders should move decisively and agree on a comprehensive package along these lines at the March 2011 summit. This would be a major contribution to the cohesion and the revival of the euro area.

The authors are grateful to colleagues inside and outside of Bruegel for comments on earlier versions of this paper, and to Christophe Gouardo for excellent research assistance.

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