NO WAY OUT?

The Short term options for the eurozone

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EXECUTIVE SUMMARY

The most feasible option for tackling the immediate and medium term crisis remains a restructuring of Greek, Portuguese and possibly Irish debt, combined with a full, but staggered recapitalisation of European banks. Such a combination will not deal with the eurozone's long-term structural flaws, such as the massive gaps in international competitiveness between member states, but merely serve as a temporary firebreak.

However, at this stage, establishing even an effective temporary solution remains a huge challenge. We propose the following steps:

Restructure: EU leaders' current attempts to manage a write-down of Greece's debt under the umbrella of the second bailout package, worth €109bn, will merely waste more valuable time – the bailout's complexity and limited impact on bondholders will reduce the country's overall debt by a very small amount. Instead, as priced in by the markets, Greece should undergo a 60% write-down on its debt. The second bailout should be scrapped and replaced with a transition fund, split 50-50 between eurozone countries and the IMF, giving the latter a greater say in a managed default.

We estimate that such a fund could be limited to around €45bn, meaning that a significantly smaller share of the risk will fall on European taxpayers than under a full bailout. This could also further limit the UK's share in the rescue package as the absolute amount of IMF contributions would decrease. In parallel, and under existing bailouts, Portugal should take a 25% write-down on its debt, while a 15% haircut for Ireland should be considered – but could potentially be avoided.

Recapitalise eurozone banks: Alarmingly, we estimate that 65 banks across the EU would fail serious stress tests, falling below an 8% tier one capital threshold. This stands in stark contrast to the European Banking Authority's most recent tests where a mere eight banks failed. We estimate that in order to withstand the above restructuring plan, the EU banking system would need to be recapitalised by between €260bn and €372bn, depending on an 8% or 9% threshold, in conjunction with sovereign defaults. This should happen in three stages:

- First, an effective stress test, which takes account of the suggested debt restructurings and marks Italian and Spanish debt to market prices (writing down holdings of Italian and Spanish bonds by around 20%), should be followed by a six month period, in which banks with a particularly low capital ratio following the stress tests (under 5%), should be pushed to recapitalise immediately. Other vulnerable banks should be given an extended period to raise funds and meet the 8% threshold, possibly 12 to 18 months, in order to avoid inadvertently pushing some healthy banks into the red by drastically and suddenly increasing their costs.
- Secondly, if banks fail to raise private funds under the defined timeline, national treasuries should recapitalise these banks using public funds, but in return receive preferential shares and equity warrants. Banks would also be required to sign a "living will", including a plan for how to wind up trading books within days should the crisis deteriorate. These measures impose conditionality on the funds and reduce moral hazard.

- Thirdly, if the cost of recapitalisation exceeds 4% of GDP for a national government, then the eurozone bailout fund, the EFSF, should step in, but with the same strong conditionality. Combining private funding with the remaining loan guarantees and IMF contributions, could give the EFSF enough money to backstop vulnerable banks. The decision to allow the EFSF to fund a recapitalisation would need unanimous consent from all members. If the option is declined, then winding down the bank should be considered and possibly put into motion. Therefore, in parallel, EU leaders must make it an absolute priority to establish credible wind-down mechanisms for banks, at the national as well as EU level.

Reform: Significant structural reforms in Greece and Portugal, but also Italy and Spain, will need to be stepped up, with a better balance between pro-growth measures and austerity. However, even with such reforms it may well prove impossible to close the huge gap in economic competitiveness between eurozone members, leaving break-up or a whole new level of eurozone fiscal integration as the only two options in the medium to long-term.

Unworkable or ineffective options:

ECB purchasing massive amounts of bonds: Favoured by many banks and economists, this option would involve the ECB purchasing hundreds of billions worth of government bonds, including Spanish and Italian debt, effectively becoming the eurozone's lender of last resort. However, although such a move could serve to stabilise the market in the short-term, as the ECB could in theory massively expand its balance sheet very quickly, it would also mark a pyrrhic victory for the euro's long-term survival. Forcing the ECB to play this role would radically undermine its credibility by removing the barrier between fiscal and monetary policy, therefore denting financial market confidence in the ECB's ability to effectively manage inflation.

The ECB's balance sheet is already in a vulnerable state, and is taking on more risky assets at a worrying rate. We estimate that the ECB now has an exposure of around €590bn to PIIGS, up from €444bn only this summer – and it remains unclear how the ECB would cover any losses. If the ECB continues to compromise its independence, credibility and finances, German support for the entire euro project could evaporate.

Radical increase of the EFSF: We estimate that in order for it to act as a credible back-stop for the eurozone, the EFSF would need to be equipped with €2,000bn in effective lending capacity (underwritten by Triple-A countries), with the total size of EFSF guarantees around €3,220bn. This would require most Triple-A countries to guarantee loans amounting to more than a third of their respective GDPs, with France providing 36% and Germany 38% of their GDP. As this would threaten the credit rating of both France, and as a consequence, the EFSF itself, this is a politically and economically impossible option.

All options for leveraging the EFSF, without increasing actual guarantees, also fall on two key hurdles: ECB and German reluctance to leverage the fund through the central bank's balance sheet, as well as the huge level of correlation between the EFSF guarantees and any scenario in which they would be invoked. For example, it has recently been proposed that the EFSF be used to insure a percentage of Spanish and Italian debt against default.

However, this may prove ineffective, since these countries would essentially be partly guaranteeing themselves through their membership of the fund and unable to make good on these guarantees if under threat of default – the exact time when those same guarantees would be invoked. In addition, if these two countries did face a serious default risk, the losses would be much greater than the proposed 20% insurance, potentially rendering the scheme irrelevant.

Muddle through to 2013 followed by debt restructuring and/or fiscal union: It is highly unlikely that EU leaders can postpone a comprehensive debt restructuring, at least in Greece, until 2013, when a new mechanism to deal with sovereign default comes into force - given the almost hopeless state of Greece's finances and the small chance of agreeing a bailout fund big enough to carry the eurozone over to that date. On the other hand, while fiscal union of some sort may be necessary for the eurozone to survive in the long-term, any proposals which seem economically credible look to be politically impossible at this point in time.

INTRODUCTION

As EU leaders look to square an almost impossible circle, the window of opportunity for even having a chance to save the eurozone is closing quickly. The most feasible option for tackling the immediate and medium term crisis in the eurozone remains a debt restructuring in Greece, Portugal and possibly Ireland combined with a full, but staggered recapitalisation of European banks. However, this would deal only with the most immediate sovereign debt and banking crisis. Clearly, significant structural reforms to improve competitiveness in the PIIGS need to continue – beyond ad hoc austerity programmes – to correct some of the divergences within the Single Currency. Given the huge gaps between the strong and weak in the eurozone, however, such reforms are unlikely to go far enough. And though a restructuring of Greece's debt could allow the Eurozone to muddle through a lot longer than many expect, in the long-term, the Single Currency will need a radical overhaul of some sort, as the structural flaws in its construction will come to the fore once again. In this paper, apart from discussing briefly the option of Eurobonds, we do not consider such long-term reforms. We do cover four options for tackling the immediate crisis including: recapitalise, restructure and reform, ECB purchases of government bonds, EFSF top up and muddling through. Option 1 is our preferred proposal, since the others do not look viable.

OPTION 1: RESTRUCTURE, RECAPITALISE, REFORM

Although there is no perfect solution to the immediate crisis, an arrangement involving a write down of 60% on Greek debt, possibly combined with a milder restructuring of Portugal and possibly Ireland and boosting the capital of banks, remains the least painful and most effective option. It may sound costly on the surface, however, it will tackle the on-going banking crisis and the immediate sovereign debt crisis. It is also likely to be cheaper in the longer run than continuing fiscal transfers or bailouts and stops the shifting of debt from the private sector to the taxpayers.

The main challenge under this option is to avoid triggering a negative loop in which banks are faced with overly burdensome capital requirements, forcing them to seek government assistance. This, in turn, could put new strains on governments as some of them – France and Spain for example – may not be able to afford underwriting their banking sectors. As a consequence, the credit rating of these countries could be downgraded, which, eventually, could negatively impact the rating of the EFSF, which would then be even less effective in acting as a backstop for sovereigns and banks. However, with careful planning and a bit of luck, such a scenario could be avoided. Below we set out the steps involved in such a 'solution'.

1.1 Restructure:

Greece

It has been clear for some time that Greece will need to restructure its debt. Currently, markets look to be pricing in a write-down of around 60%, which should bring Greece back towards a sustainable level of debt (around 60% of GDP). Given the time constraints, this will need to be an involuntary write down across the board on Greek debt (i.e. on all debt, not just that held by European banks).[1] We propose the following course of action:

- Given that the second Greek bailout is hugely complex and favours bondholders, it should be scrapped completely, with the remaining funds in the first bailout being used to tide Greece over during the restructuring negotiations and implementation. Ideally, the IMF would play a significant role here, given its experience with sovereign defaults.

- Given the level of write downs needed to achieve debt sustainability in Greece it is only logical that the significant official sector loans are also included in the restructuring. Only the IMF loans are senior and therefore should not face losses, however, the official sector loans which have already been dispersed (around €47.1bn in bilateral loans) along with the ECB holdings of Greek debt, should face a haircut. Based on the level of loans already dispersed the write downs would total €28.26bn (see Annex for full break down of these costs). It would likely cost the banking sector €54.1bn, although much of this would fall on Greek banks.

- However, since Greece is likely to still be running a budget deficit for the next year or two, even with reduced interest payments, it will still require a second bailout of some form. Following a restructuring this could be much smaller, probably around €45bn maximum (see Annex for details on this figure). This approach also has the benefit of leaving much less of Greece's debt owned by European taxpayers.

- The IMF should take the lead in working out a new bailout framework to carry Greece through a restructuring. A 50-50 funding split for the bailout would allow the IMF a greater say, but would also go some way to appeasing electorates in core eurozone countries, which have grown tired of the continuing guarantees offered to Greece and other countries. Given that the overall size of the bailout would be much smaller, this would not necessarily involve an increase in the UK's indirect contribution to the Eurozone rescue packages.[2]

- A second, limited bailout also allows some level of conditionality to be imposed, meaning that the EU/IMF can ensure that Greece continues with the necessary reforms and fiscal discipline even after a debt reduction. In turn, this limits the moral hazard involved in a debt restructuring.

- The Greek privatisation plan could continue, although again on a smaller scale and with less time pressure. In combination with the spectre of default no longer hanging over

[1] The details and formation of the restructuring will obviously come down to the negotiations with creditors. The proposal could involve swapping out current bonds for new ones with a lower principal and interest rate. It is important the necessary level of write down is achieved and that taxpayer funds are not used to offer collateral. It may be tricky to include debt held outside of Europe in the restructuring, however, the aim should be to include as much of the debt as possible. Simplicity and speed are both of the essence here. Another issue here is the whether the bonds are written under Greek or English law, with the English law ones possibly presenting more legal issues in terms of restructuring, although some may include collective action clauses. In any case the majority of Greek debt still seems to be issued under Greek law, making a restructuring easier.

[2] For example, the UK's share of the IMF guarantees would be lower under a 50-50 split €45bn, than it offered under the first Greek bailout, where the IMF provided €30bn.

Greece, demand for Greek assets (and therefore the revenue Greece receives) would likely increase under this scenario.[3]

- The Greek banking sector may need to be partly nationalised and definitely consolidated. However, this is already a requirement and will be vital for the long term health of the Greek economy. As a recent report by UBS points out,[4] the additional cost of dealing with the defunct Greek banking sector could reduce the benefits of the debt restructuring. If Greece is forced to face this burden alone, it would likely increase its debt level significantly again. The EFSF and the IMF should therefore shoulder the responsibility of recapitalising Greek banks in addition to the bailout which they will have to offer in order to help fund the Greek budget deficit in the short term. The EFSF and the IMF could also offer assets to Greek banks which could be used as collateral for gaining liquidity from the ECB.[5]

- Following a debt restructuring and consolidation of the banking sector, the ECB should continue to provide unlimited liquidity to Greek banks to help avoid a credit crunch in the Eurozone. However, as we have argued elsewhere, the ECB's role in this crisis – which has seen it take on billions in risky assets and meddling in fiscal policy by buying government bonds – is now itself a risk to the long-term viability of the Eurozone. Therefore, the ECB should quickly cease its bond purchasing programme, while reforming and clarifying its collateral requirements, particularly relating to sovereign debt. It must also move back to auctioning liquidity as soon as possible.[6]

Portugal

Given a Greek debt restructuring it is likely that Portugal will also need some form of debt reduction, not only due to potential contagion but also since it would likely be unacceptable to the Portuguese electorate that one bailed out country receives debt relief while another does not. As Portuguese Prime Minister Pedro Passos Coelho, recently said, "If [a Greek default] were to happen, we cannot exclude that Portugal's assistance plan would have to be reinforced."[7] As such it would probably be cheaper, more effective and more politically palatable to accept a small write down instead of another bailout and further austerity.

Furthermore, the experience in Greece, where an early debt restructuring would have been beneficial, suggests that the Portuguese bailout may not be effective. A write down of around 25% should allow Portugal to maintain debt sustainability despite low growth prospects. This could be done in conjunction with the Greek restructuring, although is obviously less urgent. The current Portuguese bailout should be maintained and fully implemented to ensure

[3] Admittedly, given the rest of our proposal as will become clear, there could be a potential flood of assets onto global financial markets from Europe, in terms of bank recapitalisation, EFSF bonds and Greek assets. Keeping this in mind will be important when timing the issuance of all of these instruments, and significant coordination between the various actors will help to maximize the pool of potential investors (which given the global economic downturn may be dwindling to some extent).
[4] UBS Investment research, European Weekly Economic Focus, 14 October 2011.
[5] Once Greece has defaulted, the ECB has stated that it will no longer accept its sovereign debt as collateral for loans. This will deny the Greek banking sector of a huge amount of its eligible collateral. There may be ways around this, depending on the judgement of credit rating agencies, but in all likelihood Greek banks will need additional support to gain the necessary liquidity to stay afloat. EFSF or IMF bonds could help provide this.
[6] Under normal conditions, the ECB does not provide unlimited liquidity but auctions off its loans on a weekly basis to those banks which require it most.
[7] Cited by Reuters, 'Portuguese PM says country vulnerable under a eurozone default', 28 September 2011: http://www.reuters.com/article/2011/09/28/portugal-vulnerable-idUSL5E7KS6J720110928

access to necessary funding. If the government fails to meet deficit targets, then a move towards privatising government assets should be made quickly. As with Greece, the ECB should continue to provide banking sector support but with a clear view to winding down this liquidity provision as quickly as possible.

Ireland

Since receiving a bailout last year, Ireland has been the most successful of the struggling economies, seeing its borrowing costs drop significantly (back down to around 8% on ten year bonds recently). However, even with this success there are still significant risks in the economy, from the high levels of private debt to the fact that real estate prices still have further to fall in certain areas. The availability of credit is also a concern. The main problem remains the Irish banking sector, meaning that a sovereign debt restructuring is not seen as a necessity. However, in the case of a Greek default, Ireland would probably experience similar problems to Portugal, involving both the risk of contagion and domestic political fallout. A reduction in debt would also allow the government some more room to enact pro-growth policies, while also absorbing any future banking sector costs. A write down of around 15% (close to current market prices) would probably be sufficient, however, given that the case for and against is finely balanced we will leave this part of the plan open ended. The Irish government in negotiations with the EU/IMF could push ahead with a restructuring of around 15%, or they could instead collectively decide, after consulting the banking sector, to just mark its debt to market levels as we propose for Italy and Spain.

The government should continue to push forward with a stringent consolidation and deleveraging of the Irish banking sector – a process which may be aided by the recapitalisation proposal examined below. This may need to involve write downs for certain Irish bank bondholders, although the ECB's on-going opposition to this may make it difficult.

1.2. Recapitalise:

Ensuring the stability of the European banking sector is vital for the survival of the eurozone and if Europe is to avoid a long and painful recession. As has been touted by Germany and, recently the European Commission, a three-step plan for recapitalising Europe's banks remains the most feasible option: private sector funding, national funding and EFSF funding as a last resort. The key here is that the bank recapitalisation plans should be enacted alongside the debt restructuring plans in the Eurozone, with only those banks with particularly low capital ratios, being required to recapitalise immediately, to avoid imposing disproportional costs on the banking sector as a whole and creating a flood of assets onto the market.

We propose the following steps:

1) *New stress tests followed by private market recapitalisation*: The first step to shoring up banks will be to, finally, conduct an effective stress test, which fully takes account of the restructuring plans laid out above but also marks Italian and Spanish debt to market prices, so that investors are convinced that there are no more surprises lurking round the corner. This involves marking down holdings of Italian and Spanish bonds by around 20% (not

realised losses, only write downs in terms of book prices).[8] The results of these stress tests can be kept private by the European Banking Authority (EBA) if deemed necessary to limit market impact, although as much transparency as possible would naturally be desirable. The capital requirement set would need to be much higher than in the recent stress tests, with the 8%-9% threshold, recently rumoured, looking necessary.[9]

	Cost of bank recapitalisation			
	€ millions		**% of GDP**	
	Core tier 1 ratio		*Core tier 1 ratio*	
	8%	*9%*	*8%*	*9%*
AT	1,787	4,456	0.60	1.50
BE	0	425	0.00	0.12
CY	4,816	5,364	26.55	29.58
DE	37,270	52,221	1.45	2.04
DK	0	0	0.00	0.00
ES	65,688	85,504	6.07	7.90
FI	0	0	0.00	0.00
FR	32,243	54,590	1.61	2.73
GB	24,424	52,273	1.41	3.02
GR	37,081	39,383	16.85	17.90
HU	0	0	0.00	0.00
IE	1,399	2,243	0.89	1.42
IT	42,994	54,969	2.69	3.44
LU	0	55	0.00	0.13
MT	0	0	0.00	0.00
NL	437	4,609	0.07	0.75
NO	0	42	0.00	0.01
PL	0	0	0.00	0.00
PT	11,880	14,406	6.96	8.43
SE	0	394	0.00	0.10
SI	462	669	1.27	1.83
Total	260,482	371,602		

Source: EBA and Open Europe calculations

As the table above shows, under our scenario we expect European banks will require recapitalisation of between €260.5bn - €372bn. These are definitely an upper bound estimate, since some of the holdings of sovereign debt will already be marked to market or

[8] Cited by FT Alphaville, 'Taking the stress test to nine', 12 October 2011: http://ftalphaville.ft.com/blog/2011/10/12/700116/taking-the-stress-test-to-nine/
Time permitting, the new stress test should involve a more distressed macroeconomic climate, given that the previous versions have been shown up to be overly optimistic. For the purposes of our estimates we have applied the sovereign debt write downs to the adverse scenario level of tier one capital from last EBA stress test. This at least takes some account of the likely uncertain macroeconomic conditions under the debt restructuring and bank recapitalisation scenario.

[9] The exact threshold would depend on the definition used for tier one capital, and which version of the Basel rules it is taken from. In our estimates we use the same definition as under the recent EBA stress tests, for simplicity, since we are working from data provided during the EBA's investigation. If the newer Basel III rules were used, a lower threshold of around 7% may be acceptable.

have taken some level of write down given the risk in the eurozone.[10] These levels may seem high, however, it is important to remember that in many ways this plan is simply a mechanism to move up some of the Basel III requirements. As such, it will help form the basis of a stable European banking system for the foreseeable future.

Following these results, those banks which fail the stress test, by our estimates 65 at the 8% threshold, should be encouraged to recapitalise via private financing, although they should be set a deadline of between six and eighteen months to do so, after which governments will take over the job of recapitalisation. Those banks with a particularly low capital ratio (under 5%) following the stress tests, should be pushed to recapitalise immediately. They should be required to reach the 5% threshold within six months and provide plans for how to increase their capital ratio by another 2-3% in the near future. Other vulnerable banks should be given an extended period to raise funds and meet the 8% threshold, possibly 12 – 18 months, although regular progress assessments may be necessary, as may setting banks targets of incremental increases in their capital ratio every six months (possibly in 0.5% blocks).

The advantage here is that markets should recapitalise the most efficient banks and those which represent the best value for money.[11] One downside to this approach is that a significant number of banks will be entering the market at the same time looking for new investors. Given the slowdown in global growth this task will be even more difficult. However, our staggered approach, the details of which can be flexible depending on necessity, should help limit the flood of assets and also avoid inadvertently pushing some healthy banks into the red by drastically and suddenly increasing their costs.

2) *National recapitalisation:* If banks fail to recapitalise themselves through private financing within six months, then governments should step in and forcibly recapitalise them using public funds.[12] This should be orchestrated by national treasuries and financial regulators. In return for backstopping the banks, governments should receive preferential shares (probably non-voting) and equity warrants, to ensure that they are able to recoup the funds as soon as possible (similar to the structure of US TARP).

Clearly it is vital that such recapitalisation via governments come with strict conditions. To prevent abuse of taxpayer funds, all banks receiving public funds should be forced to enact a ‘living will’. These would involve:

- Details of how banks would wind up trading books in a matter of days and protect and split off fundamentally important processes (e.g. retail banking and payment systems) in the case of a far-reaching, systemic crisis.
- Focus on recovery and resolution, but also provide basis for consistent examination of interconnectivity of banks and how this should be monitored (links to the economic

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[10] Credit Suisse produced similar estimates recently; see: Credit Suisse, Equity Research, ‘European Banks’, 13 October 2011. We have excluded Dexia from our calculations since a plan is already in place to deal with it and it has received national backing, meaning it should be able to withstand the restructurings and be able to recapitalise.

[11] This may be hampered if the stress test results were kept private, but would still be determined by the banks demands in negotiations with financers.

[12] There could be some leeway introduced here if banks demonstrate credible plans for recapitalisation, although these would need to be applied uniformly across the eurozone by national regulators and may be subject to politicisation. As such the threshold and limits should be as tightly defined as possible.

governance proposals to some extent, but should be handled by national regulators).[13] This process should help banks consider their structures and business models.

- The wills should include plans for the bank to reduce its reliance on ECB liquidity and how best to return public funding as soon as is viable. Obviously, these documents should be confidential between national regulators and banks.

These proposals are already in the pipeline in many member states but should be moved forward to add conditionality to public funding. The 'living wills' proposals are not without their problems – they may lead to a false sense of security and will have high administrative costs. But the latter risk illustrates the need for politicians and regulators to really focus on intervening in areas that matter, and leave the rest alone. The European financial system still suffers from a huge number of unnecessary regulations that impose unwarranted costs.

On balance, these wills still come with a huge benefit: it attaches some strict conditionality to taxpayer-backed bank loans. Unfortunately, having failed to manage their business properly, banks will simply have to accept this inconvenience and the added costs. If carried out properly, these wills could also serve as the basis for future regulation and risk management, leading to a better regulatory regime for Europe's banking system.

One of the key incentives for recapitalising banks is that it should encourage them to lend more and help support economic growth in the eurozone. As previous experiences during the financial crisis have shown, ensuring banks continue to lend is difficult and also risky since they must engage in the correct type of lending. Governments must continue to apply political pressure to banks which receive funding, although far from an ideal scenario, since making funds conditional on lending could be dangerous and self-defeating. The recapitalisation combined with ECB liquidity should be enough to avoid a credit crunch in the eurozone.[14]

What is the impact on UK banks?

Our scenario of write downs and mark to market would undoubtedly have a big impact on UK banks. Our estimates suggest they could require between €24bn and €52bn in new capital, although between €14bn and €21bn falls on RBS, which already has a guarantee from the UK Treasury and should be able to steadily recapitalise itself with the UK government's assistance. HSBC passes even our stringent tests, while Barclays still manages a capital ratio of 6.7% and Lloyds a ratio of 7.7%. Given that they do not fall significantly short of the increased requirements it is unlikely that they will need government support.

An approach which we would want to avoid is the issuance of blanket guarantees for banks at a national or eurozone level. As the experience in Ireland has shown this can be detrimental to debt levels and comes with significant moral hazard. Protecting depositors is important and should be done using depositor insurance schemes. Issuing unlimited and

[13] Cited in FT, 'Living wills force banks to think unthinkable', 4 October 2011: http://www.ft.com/cms/s/0/232db554-e2cc-11e0-93d9-00144feabdc0.html#axzz1aYSMfaSX and FT, 'All UK banks told to draw up living wills', 9 August 2011: http://www.ft.com/cms/s/0/84a3915e-c28e-11e0-9ede-00144feabdc0.html#axzz1ZdVg4VZl

[14] There have been substantial calls for the creation of a Euro TARP. There are some advantages to such a proposal which we attempt to draw on with our plan. However, the political obstacles to changing the framework of the EFSF into a TARP like programme are such that it seems more effective and efficient to attempt to replicate the results as much as possible without needing the change the underlying structure of the EFSF (thereby avoiding another round of voting in national parliaments).

unfunded guarantees would not stem the problem in the eurozone. Some limited guarantees could be used to encourage private investment or to help boost access to liquidity.

3) *EFSF recapitalisation*: Given the size and exposure of some European banks, especially those in Spain and France, it is possible that their governments would not be able to recapitalise them without a detrimental impact on the countries's finances and/or credit rating. If this is the case then the EFSF can step in to aid with the recapitalisation.

However, the decision to transfer the job of recapitalisation to the EFSF must not be an easy one; otherwise all countries will go for this option as it passes on the costs to other governments (and European taxpayers). For the EFSF recapitalisation phase, we propose the following:

- The decision to move from national to EFSF recapitalisation should be made at the eurozone level through an intergovernmental process, requiring unanimous consent amongst the EFSF members. However, there also need to be some set criteria relating the impact a bank recapitalisation would have on a country's debt and deficit sustainability. We suggest that if the recapitalisation costs exceed 4% of GDP, it be strongly advised that the EFSF take on the majority of the costs. Discussions with credit rating agencies over the potential impact on a country's rating should also take place. The judgement of these criteria should involve the ECB and the IMF, although they will not have a direct vote.

- Given these criteria we estimate that between €120bn - €145bn of the recapitalisation costs will fall onto the EFSF (depending on the 8% or 9% threshold). This is an upper bound given that up to €39bn relates to the Greek banking sector, which as mentioned will need to be completely restructured and consolidated. As such the smaller, more efficient banking sector, may not require such a huge injection of capital.

- A similar level of conditionality should be applied to the EFSF lending as at the national level. However, in this case the EFSF would get control of the preferential shares and the decisions relating to conditionality. Voting and shares of proceeds would be weighted according to EFSF guarantees. This allows those who put up the largest guarantees through the EFSF, notably the remaining triple-A countries, to maintain a significant say on how the funds are spent and to be able to fully and quickly recoup their guarantees. One potential problem is that the EFSF lends to governments which then recapitalise banks, making the transfer of shares to the EFSF tricky. One way to solve this would be for the government to acquire the preferential shares first, then pledge them as collateral for the loans from the EFSF which would cover the cost of recapitalising the bank (ideally all done simultaneously). There would also need to be a mechanism through which any profits from the shares would be returned to EFSF members.

  This may cause conflict, since a situation could arise where a large national bank is substantially backed by numerous eurozone governments. However, this is not necessarily a bad thing, since it acts as a disincentive for countries to resort to the EFSF rather than national recapitalisations.

- Lastly, there is a clear need to establish a Europe-wide bank wind down mechanism. This could provide a continent-wide framework through which the living wills could be enacted if necessary, but could also be used to apply a judgement over whether it is correct for a bank to receive EFSF funding. Insolvent banks that have failed to correct their bad business models (sometimes referred to a zombie banks) and only rely on ECB liquidity to stay alive – must be wound down. Under such a wind-down mechanism, Eurozone leaders should, via the EFSF, and in coordination with the ECB and IMF, take a decision on whether to provide the funds to recapitalise a bank. If the capital need is too high, or the ability to gain liquidity over the short or long term is in question, then Eurozone leaders should refuse to recapitalise. This will transfer the decision back to the national regulator, which can then decide whether to recapitalise the bank anyway, or to begin the wind down process (with the option of asking the EFSF/IMF/ECB for input and support).

- For the any large multinational banks, the Commission proposal of 'resolution colleges' could be used. This is where the main countries in which the institution acts come together to organise its wind down (lead by the HQ country). In this instance this could be done to help create the living wills as well if necessary, making sure that any issues relating to conflict over different national resolution mechanisms or national interests are already sorted before any crisis strikes.[15]

Admittedly, however, a wind-down mechanism will take some time to negotiate and implement and may not be an option for the short-term.

How best to leverage the EFSF

Given the significant cost of restructuring it may be necessary to maximize the size of the EFSF. Following the scrapping of the second Greek bailout, the EFSF will have a remaining lending capacity of €396.5bn. Given the political and legal constraints, the easiest way to leverage the EFSF would be on the private markets. This may only allow a leverage of around 1.5x, giving a new lending cap of €595bn. (As we point out under option 3.2 there are drawbacks to this plan, however, importantly under our proposal it is only a small part of a much wider proposal and is a means rather than an end).

The IMF should also fully commit the €250bn which was originally earmarked for tackling the eurozone crisis to helping recapitalise the banks (of which €171.5bn is left). It is possible this level could be boosted slightly if the BRICS and the US deem it necessary, this would help increase the power of the financial backstop to the eurozone. This is also the perfect opportunity for China and other countries, which have been keen to aid the eurozone, to finally invest in a long term solution to the crisis (particularly given the added transparency, something which the Chinese have been calling for).

Combining this slight leverage and the IMF commitments gives a lending cap of €766.5bn. This will be more than enough to absorb the maximum bank recapitalisation of €372bn, the €45bn transition fund for Greece and still allow room for any purchases of sovereign debt.

[15] DG for Internal policies, Dept. A, draft briefing note, 'Bank resolution schemes', see: http://www.europarl.europa.eu/document/activities/cont/201103/20110316ATT15696/20110316ATT15696EN.pdf

1.3 Reform:

The final stage in this plan is to implement significant structural reforms in Greece and Portugal, but also Italy and Spain, all of whom now suffer from a lack of international competitiveness and poor growth prospects. As has been repeatedly pointed out, the focus of these reforms should be reforming the labour markets in these countries, many of which suffer from a two-tiered system and a high level of long term unemployed.[16] For Greece and Portugal these reforms should be linked to bailout funding, while for Italy and Spain the prospect of needing to convince financial markets of their fiscal sustainability should be reason enough.

The added budgetary scope which will be created by the debt restructurings, should allow these countries to pursue more pro-growth policies. Although fiscal discipline and correction is still necessary, it is just as important for these economies to return to growth to restore financial market confidence in their debt sustainability.

Policies could include:

- Income and corporate tax rate cuts to boost spending and investment
- Restructure labour market, use additional funds to absorb costs of increase in transitional and structurally unemployed (claiming benefits)
- Increase programmes for retraining long term unemployed
- Improve education, especially higher education
- Offer incentives to boost privatisation take up and encourage shift away from state backed enterprises

Another part of this will be rebalancing the eurozone economy, in particular the German economy. Germany will unfortunately foot a large amount of the bill for this eurozone crisis, whatever policy is implemented. Boosting domestic German demand (possibly through wage increases and tax reductions) is a necessary part of rebalancing the eurozone economy away from a German export lead zone. Since global growth is slowing the flaws in this model are being highlighted, while the eurozone crisis means that demand for German goods in the struggling eurozone economies will be limited for decades. Previously, the cheap credit and flows of money into the peripheral economies helped funded their purchases of German export and helped established the current system, however unless these are replaced by permanent fiscal transfers from Germany, the demand will no longer be present. This may be politically difficult, especially due to the influence of the exporters lobby, but that simply highlights the significant obstacles to reforming the eurozone over the longer term.

To do its part, therefore, the German government will likely have to push for domestic demand to increase, while allowing wages to rise to aid this. It is probable that this would happen over time, however, the demands of the eurozone suggest it needs to happen sooner rather than later.[17]

[16] Ireland has the most flexible labour market and open economy of all the struggling eurozone economies. It is telling that it has been the most able to enact the necessary internal devaluation and restore confidence quickest out of all the economies.

[17] The impact of rebalancing the German economy is, however, far from certain. There are no guarantees that the additional demand will feed through to the struggling eurozone countries, as it could easily go elsewhere, particularly given their lack of competitiveness. Despite this it is unlikely that the German export focus can

OPTION 2: ECB PURCHASING BONDS ON A MASSIVE SCALE

What would it involve?

Another of the more widely considered options is the use of the ECB's Securities Markets Programme (SMP) to purchase sovereign debt on the secondary market to keep government borrowing costs down. To some extent, this option has already been put into practice. The SMP was created in May 2010 and purchased Greek, Irish and Portuguese bonds up until early 2011, at which point the purchases were almost completely scaled back. However, it was recently revived on 7 August to purchase Italian and Spanish debt after an alarming increase in the costs of borrowing for these two countries.

How large could the SMP become at current rates?

ECB purchases of IT and ES bonds	€ billions	
	lower	*upper*
Current daily rate	2.00	2.15
6 months (at current rate)	261.00	279.92
1 year (at current rate)	522.00	559.85

Source: ECB and Open Europe calculations

The ECB has bought €90bn of Italian and Spanish bonds over the past nine weeks (due to the settlement procedure it could actually be over anywhere between 42 – 45 days, this accounts for our range). At this pace, as the table above shows, the ECB could end up holding significant amounts of Italian and Spanish debt in a fairly short amount of time.[18] This is far from certain however, and is more of an illustrative number to show how large the ECB's commitment would be if it were continue down this path. Given the ECB's reluctance so far, we expect that the actual total spent would not reach these figures.

In its previous SMP forays, the ECB bought approximately 18%, 12% and 12.5% of outstanding debt (mostly last year), although these purchases had very little impact. If the ECB were to make purchases of a similar magnitude for Italy and Spain, although scaled up to around 20% to account for the lack of previous success, it would need to buy around €360bn in Italian bonds and €120bn of Spanish.

In regards to a long-term solution to the crisis, this option essentially requires the ECB to willingly become the full lender of last resort for the Single Currency by buying up the bonds of struggling sovereigns wherever the need arises, and expanding its balance sheet accordingly. In parallel, it would continue to provide liquidity to banks across the eurozone. The logic behind this solution, which has been touted by the likes of Paul Krugman[19] and many banks, is that since Italy and Spain are fundamentally solvent, unlike Greece, Ireland

continue in the long run given the eurozone's problems, and rebalancing will just be another cost which Germany would have to accept if it wishes to make the eurozone viable over the long term.

[18] There have been some attempts to estimate how large the SMP would become, RBS recently estimated an annualised amount of €600bn, and stated that it expected that the ECB could end up holding €850bn on Italian and Spanish debt, if it were to fully act as a backstop to these economies.

[19] Cited by *NYTimes*, 'A Self-fulfilling Euro crisis', 7 August 2011: http://krugman.blogs.nytimes.com/2011/08/07/a-self-fulfilling-euro-crisis-wonkish/ and http://krugman.blogs.nytimes.com/2011/08/08/wonking-out-about-the-euro-crisis-very-wonkish/

and Portugal, the ECB can use the SMP to stave off any liquidity crisis. By purchasing bonds and keeping the yields down, the ECB can ensure that debt remains sustainable and a self-fulfilling solvency problem doesn't arise.

In theory, the ECB has an unlimited capacity to lend, and can even do so to some extent without triggering inflation, due to control over future money supply. It can also expand its balance sheet by increasing the monetary base, i.e. by printing money. Crucially, the ECB benefits from flexibility, as it can move quickly in a crisis situation, unlike the EFSF which has to gain approval from national governments and parliaments. The ECB therefore has both the tools and the flexibility to act as lender of last resort. However, there are also a number of conflicts and structural flaws which make this an unlikely – and undesirable - option for the euro in the long-term.

Why is it unlikely to work?

1) The ECB's balance sheet is looking increasingly opaque and risky: As we have showed elsewhere, the ECB currently has a massive exposure to the PIIGS. We estimate that the ECB now has exposure of around €590bn to these countries, up from €444bn this summer. In other words, the ECB has increased its exposure by €146bn in only 4 months, off the back of the purchases of Italian and Spanish debt, and increased lending to these countries' banks. In addition, it holds around €500bn in asset backed securities on its balance sheet, although with no clear breakdown of where these burdens lie for the most part. Taking on huge amounts of Italian and Spanish debt would only further this problem and increase questions over the financial strength of the ECB.[20] It could also lead to calls for an increase in the capital and reserves of the ECB, funds which would need to be provided by national central banks (NCBs) and as such would place additional costs onto eurozone taxpayers. This also highlights how in reality, the use of the SMP is simply a massive transfer of risk away from the banking sector and onto the ECB's books which are ultimately taxpayer backed.

ECB exposure (€m)	Greece	Ireland	Portugal	Italy	Spain	Total
Govt. Debt (SMP nominal)	60,000	18,000	20,000	90,000		188,000
Govt. Debt (SMP purchase price)	42,000	14,400	18,000	90,000		164,400
Bank Lending	96,300	100,355	46,090	104,683	77,800	425,228
Total	138,300	114,755	64,090	149,683	122,800	589,628

Source: ECB, National Central Banks and Open Europe calculations[21]

2) It would risk a massive backlash in Germany: While, as mentioned, this option comes with clear benefits, a key thing to remember is that it is viewed as an absolute non-starter in Germany. As we discuss below, this option would compromise the ECB's credibility,

[20] See Open Europe's paper 'A House built on sand', for a fuller analysis of this issue and the problems facing the ECB. Figures represent exposure up to end of August 2011, except for lending to Greek banks which is up to end of July 2011.

[21] For Italy and Ireland the lending figures are for 31 September 2011, while the rest are for 31 August. All data is taken from the national central bank balance sheets see: Greece (http://www.bankofgreece.gr/BogEkdoseis/financialstat201108_en.pdf), Ireland (http://www.centralbank.ie/polstats/stats/cmab/Documents/ie_table_a.2_financial_statement_of_the_central_bank_of_ireland.xls), Italy (http://www.bancaditalia.it/statistiche/SDDS/stat_fin/Aggregati_riserve/ris0911/ris201110en.pdf), Portugal (http://www.bportugal.pt/en-US/Estatisticas/PublicacoesEstatisticas/BolEstatistico/Publications/B2.pdf), Spain (http://www.bde.es/webbde/es/estadis/infoest/aa101b.pdf).

independence and financial position – all of which are perceived in Germany as undermining price stability and risking inflation. The strength of feeling was illustrated by the dramatic resignation in September of Juergen Stark, the German representative on the ECB's executive board, allegedly over the bank's decision to start buying Italian and Spanish government bonds. Turning the ECB into the lender of last resort could therefore prove a pyrrhic victory: it would backstop the eurozone, but could also see German support for the entire euro project evaporate.

Perhaps, it is no surprise therefore, that this is a solution shunned by the ECB itself, and numerous members of the ECB Governing Council, including Jens Weidmann, Bundesbank President, who voted against the decision to re-enter the markets under the auspices of the SMP. If this policy were dragged out over the long term it would also likely put the ECB on a collision course with the central banks of many of the Triple-A countries.[22]

3) Engaging in fiscal policy: By propping up the debt markets for the PIIGS, even just indirectly, the ECB is coming perilously close to engaging in fiscal policy.

This matters for two major reasons. First, a central bank that is perceived as being influenced by politics, could compromise its ability to effectively transmit monetary policy, including managing inflation expectations (see below). This goes to the heart of the already vocal German criticism of the SMP.

Secondly, such a practice risks putting unelected central bankers, rather than democratically elected politicians, at the heart of fiscal policy-making. This became worryingly clear with the letter sent by ECB President Jean-Claude Trichet and his announced successor Mario Draghi to Italian Prime Minister Silvio Berlusconi, outlining the necessary economic reforms and austerity measures which Italy needed to implement to gain the backing of the ECB.[23] Objecting to central bankers telling politicians what to do is not only a principal point, but a practical one. Policies dictated by technocrats often lack legitimacy and therefore tend to be unsustainable.

4) Perceived risk to price stability: The above links with another risk. If Spanish and Italian bonds are bought on the scale necessary, this could hamper the effectiveness of the ECB's monetary policy transmission. First, the policy relies on any bond purchases being 'sterilised' the following week,[24] so as to avoid the impact of increasing the monetary base. However, there are questions over the effectiveness of this procedure since the deposits which the ECB takes in to cancel out the liquidity they have injected can essentially still be seen as part of base money.[25] Furthermore, there have also been times where the ECB has struggled to fill its quota for 'sterilisation', meaning there are serious concerns about the level to which this mechanism can be used effectively, particularly since supporting Italy and

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[22] There are questions over the legality of the bond buying. Although it goes against the spirit of the ECB statue, the actual wording only forbids direct purchases of government debt but not those on the secondary market.
[23] Cited in *Il Corriere della Sera,* 8 August 2011: http://www.corriere.it/economia/11_agosto_08/lettera-trichet_238bf868-c17e-11e0-9d6c-129de315fa51.shtml
[24] Sterilisation – The idea here is that the ECB takes in 1-week term deposits every week amounting to the total level of the SMP, thereby removing the same amount of liquidity as it has injected.
[25] Citi Global Economics View, 'Games of 'Chicken' Between Monetary and Fiscal Authority: Who Will Control the Deep Pockets of the Central Bank?', 21 July 2010.

Spain would require huge bond purchases given their combined debt market of €2.2 trillion.[26] If sterilisation fails at larger levels then the ECB will be seen to have monetised huge amounts of debt, which would likely have boosted inflation and damaged price stability.[27] This brings us back to support for the euro in Germany – a country allergic to inflation – with countries such as the Netherlands and Austria also very nervous about inflationary effects.

5) Undermined credibility: It is true that the ECB could act with negative equity or a heavily burdened balance sheet, but markets, politicians and voters would undoubtedly begin to question its financial strength, should the ECB rapidly expand its balance sheet, and may well lose faith in the bank's ability to deal with any future crisis down the road. This illustrates how, in combination, the above factors would land a heavy blow to the ECB's credibility, as financial markets – and voters – struggle to understand its motivations and decision making process.

We should also remember the U-turns that the ECB has been forced to conduct during this crisis, either as a consequence of politicians' indecision or even of direct political pressure. Such U-turns have included the decision to re-open the SMP itself (which was understood to be closed), the original decision to purchase government bonds (which Trichet said had not even been discussed only a few days before) and to accept lower rated Greek, Irish and Portuguese bonds as collateral (which had previously been ruled out).

The extension of the SMP could open the ECB up to even more influence of this kind. Furthermore, there could also be more indirect influence or pressure, since the level of debt the ECB is required to buy to keep the PIIGS solvent is ultimately closely correlated to these countries' fiscal policies. Any failure to meet debt and deficit targets would feed through to market instability, which the ECB would be responsible, monetarily, for correcting.

[26] May threaten ECB's separation principle – the separation between standard and non-standard monetary policy measures, especially if start trying to tighten monetary policy while providing unlimited liquidity provision etc. At the moment, the two are running in same direction, but not guaranteed over the medium/long term.

[27] Currently, this doesn't seem to be a problem with recent sterilisation's seeing solid demand despite the recent bond purchases. The problem would likely arise when the interbank rate rose above the rate of interest which the ECB is willing to pay on these deposits, currently 1.5%.

OPTION 3: EFSF TOP UP

3.1 Increasing member state guarantees:

What would it involve?

For some time financial markets and investors have been calling for the size of the EFSF to be increased and its scope extended, in order for it to serve as an effective backstop for struggling eurozone governments and banks, including Spain and Italy. The idea here is that making the EFSF large enough to allow it to act as a lender of last resort, you decrease the risk of it ever actually being tapped, as its very size is a comfort to the market. Eurozone leaders recently gave into demands to expand the scope, meaning that the EFSF can issue "precautionary lines of credit" (under strict conditionality), aid in the recapitalisation of struggling banks (via loans to governments) and purchase government bonds on the secondary market (under analysis by the ECB).

However, it has become clear that, with contagion threatening to engulf Italy and Spain in recent months, the EFSF falls far short of providing an adequate backstop to these countries' debt markets, which equate to €1.6 trillion and €600 billion respectively. In order to serve as an effective backstop for Spain and Italy, as well as for Greece, Portugal and Ireland – and to convince markets that the eurozone can withstand further economic shocks - the lending capacity of the EFSF would need to be increased to between €1,765bn - €1,943bn,[28] with the total size of EFSF guarantees around €3,220bn. Somewhere close to this figure may provide some relief but it is only a very temporary solution to an enduring problem and as such will not convince investors for long.[29] It is important to separate between effective lending capacity and the total size of the EFSF. The former is what matters. However, the latter is also important because to be effective a fund of this size would need to maintain its Triple-A rating.[30]

Currently this means that the guarantees from Triple-A countries must fill the entire lending capacity.[31] Therefore, to be able to lend €1,950bn, the Triple-A countries (Germany, France, Finland, Netherlands, Austria and Luxembourg) must provide 102% of the lending capacity in guarantees, equal to €1,989bn.[32] Furthermore, Non-Triple-A countries would have to provide additional guarantees of €1,230bn (bringing total guarantees up to €3,220bn, 165% of lending capacity as is currently specified).[33]

[28] Although this does cross the period with the changeover from EFSF to the European Stability Mechanism, we focus on the EFSF since the ESM will have little capital during its first year (2013-2014) and as such may have a limited lending capacity. It will also take time to be fully implemented and ready to lend. We are also investigating the financial backstop role over the current period, any EFSF bailouts or packages which are underway by the time the ESM comes into force would still be completed under the EFSF.

[29] Additionally, markets do not test the Lender of Last Resort ability of Central Banks as they generally accept that it is backed up by an essentially unlimited balance sheet and capacity to intervene. If a limited fund attempted to do this over the medium and long term it is possible markets may test the fund and limit its impact or at least make its operation more difficult, particularly if its capacity is small.

[30] Without a Triple-A rating the borrowing costs of the fund would increase, these would need to be passed onto those who borrow from the fund making it less effective. There would also be some substantial reputational damage to the Eurozone.

[31] This was the structure created when eurozone leaders agreed to increase the lending capacity of the EFSF to €440bn. We assume this structure would be maintained for future increases.

[32] Given the uncertainty over countries' ability to meet their deficit targets, most estimates focus on the upper bound to ensure the effectiveness of the EFSF.

[33] Cited by *FT Alphaville,* 'Europe calibrates its bailouts, comforts markets', 21 June 2011: http://ftalphaville.ft.com/blog/2011/06/21/600681/europe-calibrates-its-bailouts-comforts-markets/

Why is it unlikely to work?

1) Democratic constraints and political risks: boosting the EFSF to the necessary size would involve EU leaders once again going cap in hand to their national parliaments to ask them to approve a huge increase in contingent liabilities. In five out of the six Triple-A countries, the additional burden could top 33% of GDP, with the ultimate risk underwritten by taxpayers.

It is true that these guarantees would only be realised if the money were lent out by the EFSF and that losses would only be incurred if a borrowing country or bank did default. However, it would still involve taxpayers underwriting a whole new level of foreign debt held by governments they cannot vote out of office, while also transferring risks away from the private sector to bodies backed by public money. This is an almost impossible political sell and the crisis would have to get a lot worse before national politicians would even dare to put such a proposal to their electorates. And given that an EFSF increase would need the unanimous consent of all 17 member states, this seems like a highly unlikely option at the moment.

	Share of new EFSF	New EFSF guarantees	
	(%)	€ bn	% GDP
Austria	2.99	96.24	33.89
Finland	1.85	59.54	33.02
France	21.89	704.87	36.18
Germany	29.15	938.62	37.54
Luxembourg	0.27	8.66	20.82
Netherlands	6.14	197.67	33.42

Source: EFSF and Open Europe calculations[34]

2) Jeopardising the financial health of France and others: Apart from clear political obstacles, as the table above clearly shows, the additional economic burden on the Triple A economies from an EFSF top-up would be substantial, particularly for France (through contingent liabilities). Over the past few months, concerns over French debt and deficit have surfaced with rumours of a downgrade abounding. In combination with dismal growth in the previous quarter and the uncertainty of an upcoming presidential election, it becomes clear that the French economy could itself face a credit downgrade, should it be forced to provide over a third of its GDP in contingent liabilities through the EFSF.[35] There is a similar risk for other Triple-A countries as well, not least since recent Eurostat rules state that countries must account for EFSF guarantees in their gross debt figures.[36] This is a similar dynamic to that which threatens sovereigns should they be asked to inject capital into their banking sector which markets perceive they cannot afford.

[34] The figures differ slightly from those provided by the EFSF since they take into account that Greece, Ireland and Portugal no longer contribute to any programmes since they are currently receiving bailouts. We assume that the aim would be to maintain the total lending capacity which as such increases the Triple-A countries shares slightly. The same effect could be achieved by keeping the shares steady and increasing the total size of the fund.

[35] Additionally France already has huge contingent liabilities from its bloated pension system. Concerns over the size of these liabilities have been raised by the credit rating agencies already.

[36] Eurostat, news release, 27 Jan 2011: http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/2-27012011-AP/EN/2-27012011-AP-EN.PDF. The actual impact depends on the lending of the EFSF, however, if it were to be used to the full amount or even close the impact on member states gross debt would be huge.

3) *Jeopardising the health of the EFSF itself:* Since the EFSF's Triple-A rating relies on Triple-A countries, a French downgrade would also mean a downgrade for the EFSF itself. For such a downgrade to be avoided, the remaining Triple-A countries would need to substantially increase their share of the guarantees, transferring even more of the burden on the already reluctant German taxpayer – while also threatening Germany's own rating. In all likelihood, under the increased EFSF scenario, a downgrade of France would trigger a downward spiral of ratings cuts due to the extra EFSF liabilities which would make the entire fund completely unworkable.

Even without a downgrade, the extra burden could have some negative impacts on the eurozone as a whole. It would most likely cause markets to become more hesitant about the gross debt of even Triple A countries which could feed through to higher borrowing costs for some countries, though this could be offset by the boost in confidence that comes from an enlarged EFSF. There would also be a huge influx of EFSF debt onto global bond markets, which would be in direct competition with national Triple-A eurozone bonds. In turn, this could decrease demand and further add to any increased national borrowing costs.

4) *Increased moral hazard:* Giving such huge backing to the fund which can now engage in precautionary lending and bond purchases, radically increases the risk of moral hazard. There is an unfortunate mix of conditionality – the need for strict requirements and conditions to accompany any disbursement of funds – attached to the EFSF. On the one hand, there seems to be too little conditionality to fully remove the moral hazard of this lending but, on the other, too much to allow the fund to be as flexible and responsive as a lender of last resort needs to be. In contrast, we believe that the mix of sovereign restructuring and new sources of conditionality (i.e. living wills and losing shares in banks) that we outline above would go some way to address the risk of moral hazard.

3.2 Options for leveraging the EFSF:

1) *EFSF as an insurer:* In the past week another proposal for leveraging the EFSF without the ECB or any increase in guarantees has emerged (forwarded strongly by German insurer Allianz).[37] The idea here is that the EFSF funds are used to insure against losses on peripheral sovereign debt of between 20%-40%, thereby leveraging the fund substantially. This plan suffers from many of the same problems as mentioned below, but the key issue is again the correlation between the strength of the guarantees and the scenario in which the fund will be used. If the EFSF is insuring 20% of Italian and Spanish debt and a default of either becomes possible, given the significant share of guarantees which each country has and the fact that either's default could threaten the eurozone as a whole, the insurance offered by the EFSF becomes close to worthless.

Additionally, in the case of a full default, insurance of 20% would mean very little, since expected recovery rates would be very low. In many cases, the fine print of proposals based on this idea is that the insurance would only apply to new bonds, which clearly does little to address the massive debt burdens and already insolvent countries in the eurozone.

2) *EFSF as a backstop for the ECB:* Under this proposal the EFSF would essentially be leveraged through the ECB. The ECB would expand its balance sheet to purchase

[37] Cited by *FT Alphaville*, 'EFSF-a very European monoline', 12 October 2011: http://ftalphaville.ft.com/blog/2011/10/12/700196/efsf-a-very-european-monoline/?updatedcontent=1

government bonds and backstop the European banking sector, however, the EFSF would use its guarantees to insure the first 20% of losses from these actions, essentially allowing its current lending capacity to be increased fivefold (around €2 trillion).[38] There are, however, a significant number of problems with this proposal.

Firstly, the plan would require a radical reworking of the EFSF framework, since it is not designed to be leveraged or be subordinate to the ECB in terms of covering losses – clearly under the plan the EFSF would essentially become junior to the ECB in terms of creditor status. Let's not forget that it took until October to ratify the summer agreements on increasing the lending capacity of the EFSF to €440bn and expanding its scope to act – more substantial changes would probably take even longer.

Secondly, using the ECB's balance sheet to top up the EFSF would further expose the former to even more risky debt (see option 2 for breakdown of exposures). As we have already observed the ECB has, in theory, a nearly unlimited lending capacity, but attempting to enact this would put it on a collision course with Germany, while also pushing it towards fiscal policy. This is critical for a number of reasons. The ECB's freedom to act in the absence of political influence affords it the trust of financial markets, and allows it to effectively transmit monetary policy, including managing inflation expectations.

This links with another crucial question: who, exactly, would be in charge? The advantage of using the ECB as lender of last resort for the eurozone is that it can act quickly without seeking a democratic mandate from voters, which is a slow process. Combined with its capacity to massively expand its balance sheet, this is one of the reasons why the ECB is, in theory, the one institution that can move markets. But since it hinges on EFSF loans, this mechanism would presumably still be subject to approval by each member state (and various national parliaments), meaning that we would be stuck with the same political bottlenecks as now.

Furthermore, this problem would likely spill over from being a purely political one to being a legal one, with the ECB statute defending the independence of the central bank against the German Constitution which states that any German taxpayer funds must ultimately be controlled by the Bundestag (at least according to the recent ruling by the German Constitutional Court).[39]

There are also, it should be said, familiar economic risks involved. Leveraging the EFSF's lending capacity, which is mostly backed by six triple-A states, could negatively impact on the credit ratings of the member states, most notably France as we pointed out under option 3.1. Although leveraging the fund would not necessarily require an increase in EFSF guarantees, it would still increase the exposure of the Triple-A countries to the eurozone crisis. This, combined with the fact that the EFSF may be seen as a junior creditor, would undoubtedly increase the cost of borrowing for the EFSF, costs which would need to be passed onto those countries which tapped the fund, thereby limiting its effectiveness.

[38] For more discussion of the issue see, *FT Alphaville*, 'Let them eat EFSF equity tranches', 26 September 2011: http://ftalphaville.ft.com/blog/2011/09/26/685361/let-them-eat-efsf-equity-tranches/

[39] German Constitutional Court Press release, 'Urteilsverkündung in Sachen „Griechenlandhilfe / Euro-Rettungsschirm"', 23 August 2011: http://www.bundesverfassungsgericht.de/pressemitteilungen/bvg11-054.html.

In fact, the whole scheme conjures images of Collateralised Debt Obligations (CDOs), a protection mechanism which was shown to be glaringly inadequate during the financial crisis, with the tranche structure failing to suitably absorb losses when financial market turmoil hit. Moreover, the highly correlated nature of the underlying assets which would be held (distressed peripheral sovereign debt and lending to troubled European banks) as well as the link between these assets and the effectiveness of the guarantors (eurozone economies) suggests that the tranche structure would be even more inadequate in this instance.[40]

Not much of a surprise then, that politicians and central bankers in Triple A countries have lined up to criticise this proposal, with Bundesbank President Jens Weidmann saying, "If [the EFSF were to finance government bond purchases] through the central bank, it would be monetary state financing. Whether you do it directly or whether you do it via the detour of a special purpose vehicle makes no difference economically."[41] Therefore, this proposal looks to be a non-starter for numerous political, legal and economic reasons.

3) *EFSF as a bank*: Another widely mooted method for leveraging the EFSF, first proposed by Gros & Mayer in a paper published by CEPS, is to turn the fund into a bank to allow it to access the ECB's liquidity provision.[42] Gros and Mayer suggest that the EFSF be turned into a European Monetary Fund (EMF), with two sections, one which offers direct sovereign bailouts backed by the bonds it issues and the guarantees of eurozone member states and another section which can purchase government bonds and can use these bonds as collateral to obtain loans from the ECB. In recent weeks, given the escalating crisis, this idea has been generalised into the EFSF as a whole issuing bonds, as per usual, using the proceeds to purchase sovereign debt and using these bonds as collateral at the ECB, then repeating the process as necessary, thereby leveraging its original endowment.

The proposal by Gros and Mayer is sensible as it does envisage significant debt reduction and some form of debt restructuring in the eurozone.[43] It has to some extent been corrupted by others who see a leveraged EFSF as the end point rather than a means to an end (to help facilitate a debt restructuring).

The main obstacle to this proposal seems to be one of legality. Even if it were legally possible to issue the EFSF with a banking licence to make it an eligible counterparty (which is as of yet uncertain), by obtaining funding from the ECB to be used for bailouts the EFSF would certainly contravene the no bailout clause in the EU treaties and would amount to direct monetary financing of states by the ECB, something prohibited by the ECB statute. Gros and Mayer claim to get around this with their divided EMF structure, with ECB funds only being used to take over the role currently fulfilled by the SMP.[44] This argument does

[40] Cited in *FT*, 'Supercharged eurozone fund won't solve crisis', 28 September 2011: http://www.ft.com/cms/s/0/f722c2c0-e8f1-11e0-ac9c-00144feab49a.html#axzz1Z2nY2b47
[41] Cited by Reuters, 'ECB should stay out of EFSF leveraging', 17 September 2011: http://us.mobile.reuters.com/article/businessNews/idUSTRE78G17B20110917?irpc=932
[42] Daniel Gros & Thomas Mayer, CEPS, 'Refinancing the EFSF via the ECB', 18 August 2011: http://www.ceps.be/book/august-2011-what-do-when-euro-crisis-reaches-core
[43] On page 3 Gros & Mayer do suggest that their proposal relies to some extent on "assuming that the ECB insists on top quality assets it takes for collateral". However, looking at the exposure of the ECB present under Option 2 and the fact that it continues to accept low rated Greek, Irish and Portuguese debt, suggests that this assumption looks very unlikely to hold, and would result in the funds being, at least partly used to throw more money at already insolvent states.
[44] There are of course significant questions already over the legality of the SMP, which would likely be transferred to the EMF if it were created. See Option 2 for more of a discussion on this issue.

have some merit, especially since the European Investment Bank (EIB) and some publicly owned banks are allowed to access the ECB's liquidity provision. Unfortunately, the creation of the EMF and the restructuring of the EFSF would likely require approval from all eurozone parliaments, a lengthy and difficult process (as already discussed in this paper).

These problems are further compounded by the ECB's clear opposition to such a proposal, along with Germany and the Netherlands, all of whom seem see such a plan as de facto illegal under the ECB statute if not de jure illegal. Furthermore, many of the issues discussed above, such as the increased exposure for the ECB and for eurozone member states to risky sovereign debt, potentially threatening the financial strength of both.

4) EFSF borrowing from the markets: Similar to borrowing from the ECB except that the EFSF would use the bonds it has purchased to borrow from other financial institutions, alternatively the EFSF could issue partly-guaranteed or non-guaranteed debt.[45] Unfortunately, private sector willingness to lend to the EFSF in this form is likely to be limited, meaning the fund could only be leveraged around two times. One of the key problems would be the uncertainty regarding debt above and beyond the guarantees which eurozone states offer under the EFSF.[46] Combine this with the fact that the EFSF will be almost exclusively holding the low quality sovereign debt which no-one else is willing to buy and that the default risk of these bonds will be highly correlated with the quality of the guarantee given by the EFSF backers, and it's easy to see why financial markets may be hesitant to lend to the EFSF.[47]

Under this scenario it is also likely that the fund will lose its triple-A rating, making its market access even more uncertain. These issues will feed into high funding costs for the EFSF, which will inevitably have to be passed onto those countries it lends to, hampering its effectiveness.[48] Furthermore, these problems demonstrate that under this scenario the ability to leverage the EFSF would be limited compared to use of the ECB, possibly only allowing the fund to double in size. However, despite these problems, this option does probably represent the easiest option for leveraging the fund in terms of political and legal obstacles.

OPTION 4: MUDDLE THROUGH TO 2013, FOLLOWED BY DEBT RESTRUCTURING OR FISCAL INTEGRATION

What would it involve?

Historically, taking bold decisions and finding lasting solutions has not been in the EU's nature, rather some middle path, which appeases a variety of members, has been found and allows the Union to muddle through and emerge from a crisis intact. In one sense, all the above options involve a huge degree of muddling through, as they will not solve the deep structural flaws in the Eurozone – only a fundamental restructuring of the Single Currency

[45] This would involve the EFSF issuing bonds to raise funds, although instead of the usual full guarantee they receive from EFSF members they would receive only a partial guarantee, with the rest pledged against the portfolio of bonds already held by the EFSF. Could also issue subordinated debt.
[46] Nomura has very a good discussion of this issue, see, Nomura European Rates Insight, 'EFSF 2.0, 3.0 and beyond', 29 September 2011.
[47] Cited by *WSJ*, 'Who needs the ECB', 26 September 2011: http://blogs.wsj.com/brussels/2011/09/26/who-needs-the-ecb/?mod=WSJBlog&mod=brussels
[48] Cited by *WSJ*, "EFSF leverage a rundown', 27 September 2011: http://blogs.wsj.com/brussels/2011/09/27/efsf-leverage-a-rundown/?mod=WSJBlog&mod=brussels

itself, involving greater fiscal integration, would on paper make the euro economically sustainable (though risking huge political fallout as voters are unlikely to approve of it).

In the past, there have been suggestions, not least by Angela Merkel, that any debt restructuring will need to take place once the European Stabilisation Mechanism (ESM) comes into force in 2013. The ESM is the successor of the EFSF, which is also meant to provide clear rules for sovereign defaults. [49] The question is, could the Eurozone kick a sovereign default into the long-grass until the ESM comes into force – and until after the French and German general elections?

Why is it unlikely to work?

Most of the problems under this option stem from the muddling through process. As our favoured option 1 demonstrates, we support a debt restructuring, however 2013 will be far too late. By 2013 not only will the level of write downs need to be significantly higher to bring countries such as Greece back to debt sustainability, but as a result of the muddling through process an even larger amount of debt will be held by taxpayer backed institutions. This means that the eventual write downs will likely impose some cost on taxpayers, making this scenario politically and economically far less desirable.[50]

First, this option hinges on radically boosting the size of the EFSF, which, as we note above, is unlikely to happen, whether through increased guarantees or some form of leverage.

Secondly, as we have noted in previous reports, and as has become clear over the last few months, Greece is in an impossible situation and will not be able to meet its austerity and deficit reduction commitments.

Thirdly, as we also have noted elsewhere, the cost of a Greek default will only continue to increase the longer EU leaders wait to restructure, with more of the ultimate cost falling on taxpayers. In 2014, to achieve the same impact as a 60% write down now, a 70%+ write down may be needed. Additionally, since the muddling through process is likely to involve more bailouts and greater purchases of Greek debt from official sources, more and more Greek debt will be held on the books of taxpayer backed institutions.

4.1 What about Eurobonds?

Muddling through without debt restructuring has been seen by some as a way to give EU leaders space to press ahead with some sort of fiscal union, for example Eurobonds. The idea is that in 2013, following the next German election, Berlin will have a fresh mandate to push forward with greater eurozone integration. Eurobonds could be structured in numerous ways, with the majority of proposals falling into two broad camps: partial Eurobonds or full Eurobonds. The key distinction is naturally that the former offers only partial mutualisation of

[49] The ESM contains legal and structural mechanisms which will provide a framework for a debt restructuring. See here for more details: http://ec.europa.eu/economy_finance/articles/financial_operations/2011-07-11-esm-treaty_en.htm

[50] The public sector could avoid taking losses, however this would result in huge haircuts for the small group of remaining private sector bondholders, further punishing those who invested or maintained their exposure at the behest of eurozone leaders during the muddling through process. The huge write downs for these bondholders would likely be unsustainable and cause significant market distortions in a focused areas.

debt, usually in an attempt to avoid full fiscal and political union while still imposing fiscal discipline.[51] The latter essentially scraps national bonds all together.

Open Europe will examine the prospect of Eurobonds more closely in a forthcoming paper. However, below we set out the basic reasons why we think that partial Eurobonds – which is what is being discussed – look highly unlikely to work in practice. Instead, we suggest that the only economically viable form of Eurobonds would be through full mutualisation of debt – which looks politically impossible at the moment.

Proposals for partial Eurobonds usually involve a limit on the Eurobond debt, around 60% of GDP, with any excess debt covered by national bonds. While attractive intellectually, such proposals fall on massive practical hurdles:

- The key issue with partial Eurobonds is the implementation. A staggered introduction would have minimal impact in terms of reducing refinancing costs and would offer little help to already insolvent states. There is also yet to be a fully credible plan for how to integrate existing debt markets and debt burdens under this scenario – it is likely they would become incredibly volatile. An outright swap would be impossible to structure with partial Eurobonds, as determining which debt became euro guarantee and which stayed nationally guaranteed would be nearly impossible. This could require a huge debt restructuring, including larger nations, which the eurozone or global economy could not handle.

- In many proposals involving partial Eurobonds, there is an emphasis on making the remaining national debt costly and undesirable, usually in an attempt to maintain fiscal discipline. However, this often goes too far, meaning the higher cost of borrowing for national debt may outweigh the benefits of lower cost Eurobonds. Again given the existing level of debt in the eurozone, many countries would immediately hit the threshold for Eurobond debt, meaning they were still reliant on national debt for financing. Therefore, the new structure would offer little benefit.[52]

- Additionally, given the problems of implementation and remaining national debt, it's likely that a sizeable eurozone bailout fund would still be required, not least because the eurozone would still lack a credible lender of last resort.[53] Given the joint debt guarantee this fund would also need to include some form of euro-wide deposit insurance and bank guarantee scheme (since states' fiscal manoeuvrability would now be limited in a crisis). Furthermore, the additional guarantees offered by core countries under partial

[51] The prime and probably most widely referenced example of such a structure is Bruegel's 'Blue Bond' proposal, as such many of our points relate directly to their plan. This is far from a direct attack on Bruegel's plan, which is undoubtedly original and well thought out, and given that it was proposed in early 2010, well ahead of the curve. In fact, since it has been so widely cited it seemed the logical plan to work from for this section of the paper.

[52] For example, in Bruegel's 'Blue bond' proposal, it is suggested that red/national debt should not be allowed to be used as collateral for borrowing from the ECB, cannot be used to meet capital requirements and would have strong collective action clauses. These constraints beg the question: who would want to hold such an asset? Furthermore, such a structure would also deprive the banking sector of a huge source of liquidity and capital, the knock on effects of which would be unknown, but could filter through to economic growth.

[53] This also raises the huge issue of the legality of Eurobonds, given the no-bailout clause in the EU Treaties. If any form of Eurobond were to be introduced this would likely need to be removed or adjusted significantly, presenting another sizeable obstacle to the introduction of any debt mutualisation.

Eurobonds, could threaten some of their credit ratings, which would undermine the whole framework.[54]

- There are also huge political constraints, even with partial Eurobonds. Any country issuing sizeable guarantees, even under partial Eurobonds, will expect some control over the budgets which they will be backstopping. The divisions already arising in the eurozone over the implementation of bailout conditions show that such an arrangement is extremely difficult to sell to national electorates. Even if Eurobonds were administered and controlled centrally, the EU's history of politicising supposedly independent institutions suggests this approach may not be successful. Most importantly though, given these concerns, without full democratic backing it is unlikely that any Eurobond proposal could ever be durable or stable over the long run, not to mention desirable.

- Overall, it seems that the only really economically sustainable method for introducing debt mutualisation in the eurozone would be through full Eurobonds. However, as the previous point suggests this would be politically impossible in the near future. Not only would it require a lengthy public debate on the issues, there would a substantial revision of the EU treaties (though it could possibly be achieved through a separate eurozone Treaty) in addition to a series of conditional referenda to ensure widespread democratic backing. Eurozone electorates are still a long way from providing this.

[54] See option 2 and the expansion of the EFSF for a discussion of similar problems.

ANNEX: FIGURES AND METHODOLOGY

Option 1:

1.1 Restructure: *Cost to official sector loans*

	Greece		Portugal			Ireland			
	Dispersed	Write downs	Dispersed		Write downs	Dispersed		Write downs	Total write downs
	Bilateral		EFSF	EFSM		EFSF	EFSM		
AT	1.38	0.83	0.17	0.32	0.12	0.11	0.32	0.06	1.02
BE	1.72	1.03	0.22	0.41	0.16	0.13	0.40	0.08	1.27
CY	0.13	0.08	0.02	0.02	0.01	0.01	0.02	0.00	0.09
DE	13.19	7.91	1.65	2.87	1.13	1.01	2.83	0.58	9.62
DK	0.00	0.00	0.00	0.28	0.07	0.00	0.27	0.04	0.11
EL	0.00	0.00	0.00	1.18	0.30	0.00	1.17	0.18	0.47
ES	5.80	3.48	0.73	0.21	0.23	0.44	0.20	0.10	3.81
FN	0.91	0.55	0.11	2.30	0.60	0.07	2.27	0.35	1.50
FR	9.91	5.95	1.24	1.99	0.81	0.76	1.96	0.41	7.16
HN	0.00	0.00	0.00	0.26	0.07	0.00	0.26	0.04	0.10
IE	0.81	0.49	0.10	0.11	0.05	0.06	0.11	0.03	0.56
IT	8.70	5.22	1.09	0.15	0.31	0.66	0.15	0.12	5.65
LU	0.16	0.10	0.02	1.78	0.45	0.01	1.75	0.26	0.81
MT	0.08	0.05	0.01	0.03	0.01	0.01	0.03	0.01	0.06
NL	2.80	1.68	0.35	0.01	0.09	0.21	0.01	0.03	1.80
PL	0.00	0.00	0.00	0.68	0.17	0.00	0.67	0.10	0.27
PT	1.25	0.75	0.16	0.41	0.14	0.10	0.41	0.08	0.97
SK	0.00	0.00	0.00	0.18	0.05	0.00	0.18	0.03	0.07
SI	0.26	0.16	0.03	0.39	0.11	0.02	0.39	0.06	0.32
UK	0.00	0.00	0.00	0.04	0.01	0.00	0.04	0.01	0.02
Total	47.10	28.26	5.90	14.10	4.88	3.60	13.90	2.55	35.69

Source: EFSF, EFSM, European Commission and Open Europe calculations[55]

'Credit events'

- Key reason for structuring second Greek bailout in such a complex way, but is inevitable in Greece, so makes sense to take account of it during the bank recapitalisation so it is no longer hanging over the eurozone.
- Avoiding one is risky in itself, since it completely undermines the finances of institutions which have used Greek Credit Default Swaps (CDS) as a hedge against risk.
- Undermines the CDS market, which will have negative impacts on sovereign bond markets.
- Figures from DTCC and elsewhere do not suggest there will be huge 'cascade effect' or massive unknown costs in eurozone. If the markets can cope with bond write-downs should be able to absorb CDS costs.
- May be worth avoiding in Ireland, due to larger financial sector.

[55] European Commission, ECOFIN, EFSM: http://ec.europa.eu/economy_finance/eu_borrower/efsm/index_en.htm

A new Greek bailout

Estimating the potential financing needs following a debt restructuring is fairly tricky given the huge level of uncertainty. However, our estimate of €45bn is based on figures from our previous paper assessing Greek financing needs (Abandon Ship: Time to stop bailing out Greece).[56] We assume that the 60% write down will be applied to all bonds expiring over the next three years and that this will filter through to a 60% reduction in the interest payments which constituted the bulk of the Greek deficit. Since treasury bills (short term debt) are excluded from any debt restructuring and Greece will have a significantly lower debt burden, we assume it will be able to fully refinance and rollover the €82bn in expiring t-bills up to the end of 2014.

For longer term debt Greece will probably be shut out of the market for at least three years or so, requiring around €56bn in debt to be refinanced and around €30bn in deficit to be covered. Taking away the remaining disbursements of the original Greek bailout, this leaves a funding gap of around €45bn. This does not include any privatisation receipts even though our plan stipulates that the privatisation should continue. This is due to uncertainty over timeline and scale following a debt restructuring, however, any proceeds could be used to reduce the bailout or to enact some pro-growth policies (such as tax cuts and infrastructure improvements).

Bank recapitalisation costs

To estimate the cost of bank recapitalisation we used the most recent stress test data from the EBA. We applied write downs of: 60% Greece, 25% Portugal, 15% Ireland, 20% Italy and 20% Spain (with the last two being in terms of marking debt to market prices). For the capital ratios, we used the adverse 2012 tier one capital ratios from the stress tests as the starting point, then applying the impact of the write downs to the capital holdings. This was due to the fact that we did not conduct a full stress test and apply our own adverse macroeconomic conditions. Although those in the stress tests are far from perfect, this at least gives some consideration to the potential for a more negative macroeconomic climate. Since we used the stress test data the capital ratios were defined under the same conditions and same version of the Basel rules.

Option 3:

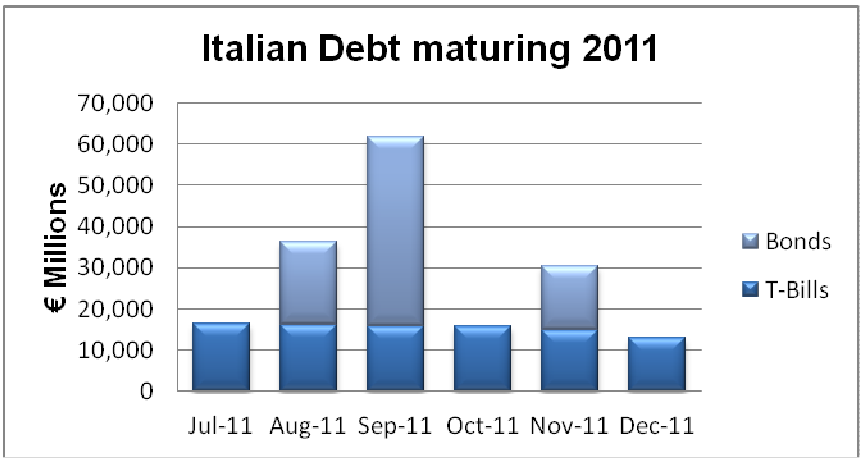
In order to fully backstop Italy and Spain the EFSF would need to be able to cover their funding needs over the next three years (standard timeline for a bailout). See below for a full breakdown of these funding requirements:

Italy

Italy has €173.3bn in short term and long term debt expiring for the rest of this year. Between 2011 – 2014 Italy has €656.4bn in debt maturing. Additionally, the Italian deficit over this period is estimated to be €128.5bn, this requires the full implementation of the latest budget package which will result in a nearly balanced budget by 2014. However, if this is not achieved and Italy continues along its current deficit path, it is possible the deficit over the next three years could be €210.6bn. The IMF estimates that Italian banks need €40bn in

[56] Open Europe, 'Abandon Ship: Time to stop bailing out Greece', 21 June 2011: http://www.openeurope.org.uk/research/greece2ndbailout.pdf

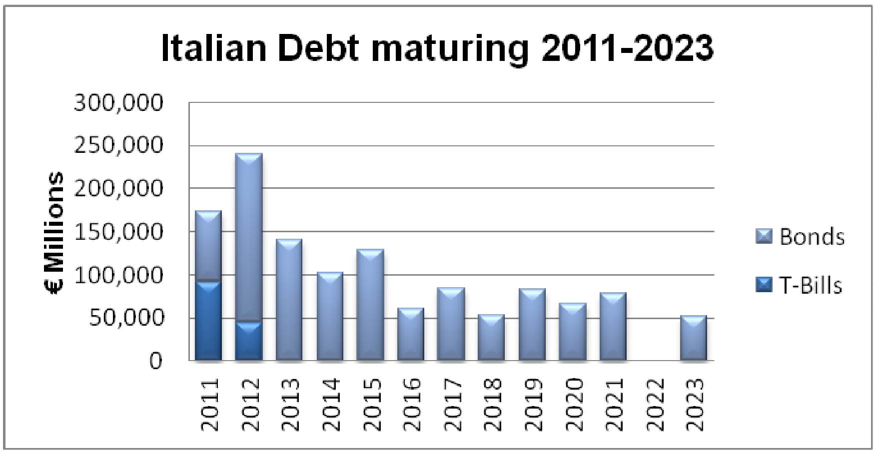
new capital in the short term. This could rise following a downturn in the wider Italian economy and will probably increase as banks attempt to meet the new Basel III requirements. All in all, this puts Italy's funding needs over the next three years at €825bn - €907bn. In order to fully provide a backstop the EFSF would need to be able to cover most if not all of these needs in order to maintain the expectation and role of lender of last resort.



Source: Italian Ministry of Finance

	Italian Deficit 2011 - 2014	
	New Budget est.	**BAU**
2011	60,403,824,000	63,501,456,000
2012	41,818,032,000	49,562,112,000
2013	23,232,240,000	49,562,112,000
2014	3,097,632,000	48,013,296,000
Total	128,551,728,000	210,638,976,000

Source: Italian Ministry of Finance, IMF and Open Europe calculations



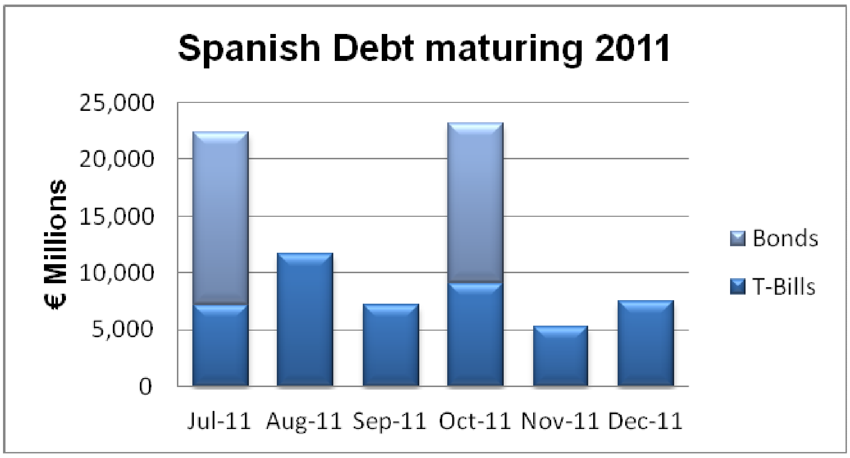
Source: Italian Ministry of Finance

Spain

Spain has €77bn in short term and long term debt maturing in the rest of this year.[57] Between 2011 – 2014 Spain has €275bn in debt maturing. The Spanish deficit is estimated

[57] Spain has already issued extra debt earlier in the year so actually only needs to issue €44bn more to cover these maturing debts, but extra money may or may not have been used elsewhere, so we assume it will need to refinance the full allotment.

to be €165bn over this period, however, this requires full implementation of the latest spending cuts as well as all regions adhering to their deficit targets. If Spain lags behind on either of these issues, continuing on its business as usual deficit path, then the deficit could be closer to €207bn. Moody's estimates that Spanish banks need €60bn to be recapitalised, but this could rise to as much as €120bn in an adverse scenario. All in all, this puts Spanish funding needs between now and the end of 2014 at between €500bn - €602bn.



	Spanish deficit 2011 - 2014	
	Budget est.	**BAU**
2011	63,755,460,000	65,880,642,000
2012	46,754,004,000	54,192,141,000
2013	31,877,730,000	45,691,413,000
2014	22,314,411,000	41,441,049,000
Total	164,701,605,000	207,205,245,000