

The future of the euro

The Eurozone at the tipping point

- In our view, the European debt crisis has moved into a worrisome new phase.
- Market concern is no longer focused entirely on individual countries, but on the ability of EU policy makers to finally stop the contagion once and for all.
- This report addresses three key questions: Will the debt crisis become worse, what are the possible and likely options for containing it, and what does this all mean for the future of the Eurozone?

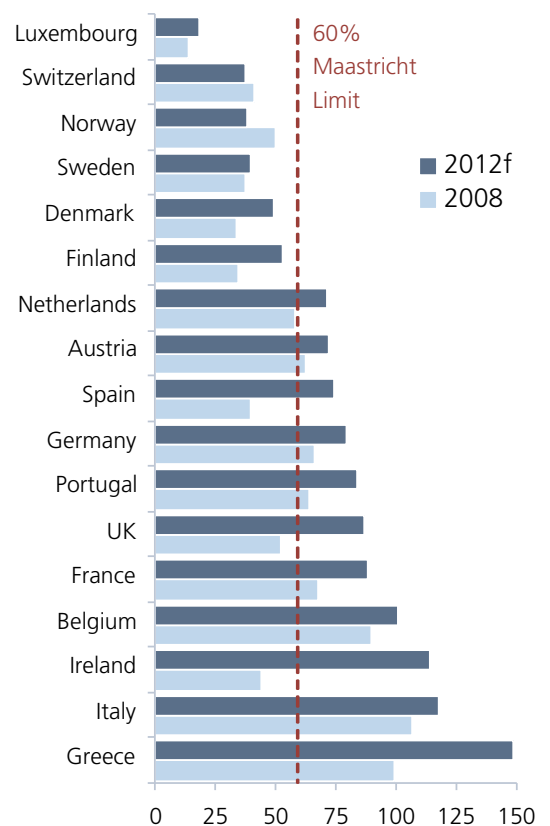
Summary and conclusions

- The euro crisis is likely to flare up again. Markets are no longer focusing on the fundamentals of single countries: Instead, they are questioning EU policy makers' very ability to deliver an effective solution.
- In the coming weeks and months, we expect to see more ECB interventions (liquidity provisions and bond purchases). Importantly, the ECB is currently unwilling to respond to the crisis preemptively. Instead, the ECB is trying to push EU politicians to come up with a sustainable solution. We expect the EFSF to be increased, and we think there will be loan agreements for Portugal and possibly also for Spain.
- EMU countries are likely to tend towards more fiscal integration in the coming months and years. Yet, we don't think there is sufficient political will to move to a full-scale fiscal union – especially not over the next two to three years.
- The ECB could switch to an outright monetization of debt, i.e. increase the volume of bond purchases and stop sterilizing them, which would erode the real value of the debt through inflation. However, this would not solve the underlying disparities within the EMU. Also, inflation may not be an acceptable option for some inflation-adverse core countries. We think that any such measures would have to be accompanied by fiscal integration measures.
- Greece remains a clear candidate for a near- to medium-term debt restructuring, especially once the problem of contagion to the European banking sector appears manageable.

Related WMR publications

- *UBS research focus*: The future of the euro, Aug 2010
- If Germany were to leave the euro, 14 Dec 2010
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Fig. 1: Debt/GDP levels in Europe
 Compared to precrisis levels (in %)



Source: UBS WMR, Estimates of Fitch Ratings, December 2010

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- The long-term outlook is highly uncertain. We do not agree that the introduction of the euro marked a point of no return and a breakup would now be impossible. We think some form of disintegration, e.g. an orderly exit of some countries, is much more likely than a fiscal union in the longer run.

Section 1: A dysfunctional alliance

Europe is in the grips of a sovereign debt crisis. What makes the European crisis more complex than other sovereign crises is that its origins stem from the common currency itself. The euro is shared by the 17 member countries that make up the European Economic and Monetary Union (the EMU, or the Eurozone).

Why is the Eurozone dysfunctional? Countries joining a monetary union relinquish their autonomous control over exchange rates and interest rate policy in return for perceived economic and political benefits. For this arrangement to work, the members must share broad policy preferences on interest and exchange rates. Common policy preferences would logically imply extensive economic and structural similarities among the member states, a precondition clearly not met in the EMU. The founders of the EMU had hoped – erroneously as it turns out – that once the union was established, the economic conditions necessary for it to function properly would evolve over time.

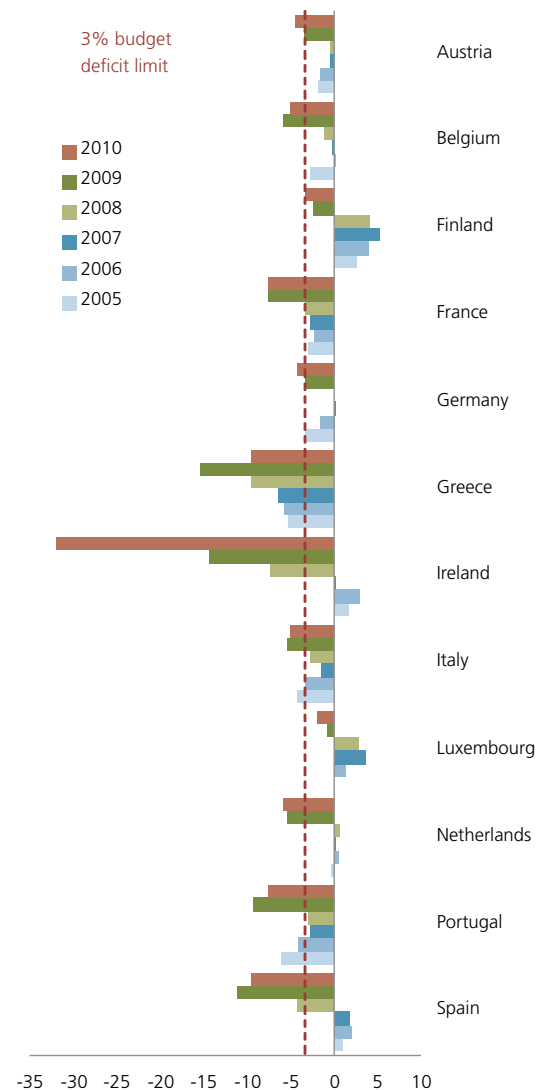
Inadequate adjustment mechanisms

Despite the challenges, monetary unions can succeed if powerful adjustment mechanisms can compensate for the member states' lack of individual adjustments of interest and exchange rates. These mechanisms include free-flowing cross-border mobility of labor and a highly flexible price and wage system that allows for swift downward adjustment of prices and, in particular, wages.

The Eurozone does possess these mechanisms but they are clearly inadequate, especially when compared to monetary unions such as the US. We think it unlikely that the necessary degree of mobility, flexibility and political integration can ever be achieved in Europe's kaleidoscope of languages and cultures.

Lacking structural and cyclical coherence, and equipped with inadequate adjustment mechanisms, a monetary union is doomed to dysfunction, in our view. In principle, such a hobbled union will evolve in one of two directions, either disintegrating or achieving greater integration. A true fiscal union would involve a system of fiscal transfer payments from the richer to the poorer members to smooth out any structural and cyclical divergences. Indeed, economists generally agree that political union is a prerequisite for most monetary unions to function sustainably. Successful examples include the Swiss Confederation and the Federal Republic of Germany. Interestingly, in today's context, when Germany reunified in 1990, it had to integrate a large, economically weak region with a much more prosperous one. Full-scale integration required a prodigious effort and many billions of euros. And even with the massive fiscal transfer payments, a complete parity of income levels and living standards between the two former German states has not been achieved.

Fig 2: Budget deficits in the EMU (in % of GDP)
Almost all countries have violated stability criteria

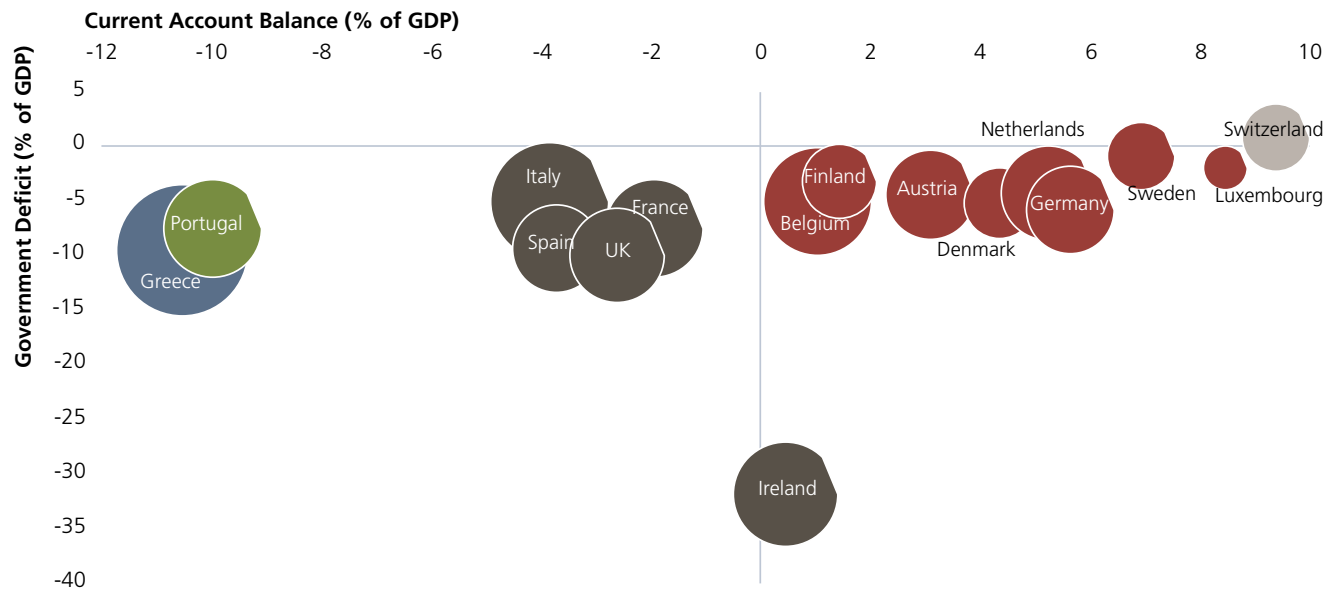


Source: UBS WMR, Fitch Ratings

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Fig. 3: Competitiveness is reflected in the current account balance

Bubble size represents debt to GDP ratio; all figures as of 2010



Source: UBS WMR, Fitch Ratings

Section 2: The debt crisis – symptom of the Eurozone's malaise

The EMU's founders understood that structural similarities and economic convergence among members were prerequisites for a functioning monetary union. The Treaty of Maastricht, signed in 1992, stipulated a set of membership conditions and the Stability and Growth Pact (SGP), adopted in 1997, was established to ensure that the public finances of individual member countries remained sound. The groundwork for stability was on hand, but as it turned out, the union's actual and prospective members found many ways to bend these rules. Greece's manipulation of fiscal deficit figures is only one example – albeit the most notorious one. By early 2003 Germany and France, the union's two largest members, had already violated the SGP's deficit limits.

Austerity is important, but not a cure-all

Strict adherence to the Maastricht Treaty and the SGP's rules would not have prevented the current crisis, in our view, as the examples of Spain and Ireland illustrate. This is an important and often overlooked point in discussions about the EMU's problems. Most of the political discourse on how to achieve an orderly resolution of the crisis focuses on budget discipline and fiscal governance. Yet, while these measures are important, they are surely not sufficient to ensure the long-term survival of the Eurozone.

Private debt going public

Behind the public debt crisis, there is a private debt crisis that fiscal rules and public budget discipline could not have prevented. The EMU's common interest rates were unsuitable for several of its members. When initial steps towards the common currency were taken in the early 1990s, interest rates for prospective member countries started to converge toward the low rates of the stronger members like Germany. For many of the economically weaker countries, these interest rates were simply too low, driving up inflation, consumption and housing booms and encouraging the rapid accumulation of private-sector debt.

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At the same time, wages rose rapidly in these booming economies, sharply cutting into their price competitiveness internationally. Spain and Ireland are the most prominent examples here.

When the global recession struck in 2008, much of the debt accumulated mostly (but not exclusively) in the private sectors of some EMU countries became unsustainable. This private debt was quickly "nationalized" as governments faced falling tax revenues, rising social outlays and costs for supporting their economies and their failing financial institutions. Public debt-to-GDP ratios in the EMU rose by around 20 percentage points on average. The weaker and most severely affected countries saw their annual public deficits swell to double-digit levels as a percentage of GDP. Holders of government bonds grew increasingly nervous about their investments, triggering today's sovereign debt crisis in Europe.

The first lines of defense

Greece's problems are twofold: exceptionally poor public finances and a sharp loss in international competitiveness. In 2009, the country's fiscal deficit reached a staggering 15% of GDP and it was ultimately cut off from the financial markets in April 2010.

The crisis response included a EUR 110 billion rescue loan package to prevent a debt default, fiscal austerity measures to regain investors' confidence and structural reforms to improve competitiveness. Nominal exchange rate devaluation would be a quick and relatively painless way to regain competitiveness, but is generally not an option for member countries of monetary unions like the EMU. Furthermore, defaulting and restructuring debt was not seriously considered for fear of spreading Greece's problems to other high-debt/high-deficit countries and the western European banking sector that holds large chunks of Greek debt.

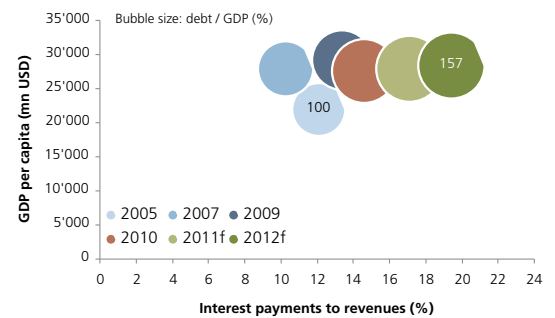
To restore competitiveness within the EMU, Greece will need to undergo several years of real deflation, including price and wage cuts. This is likely to keep the Greek economy in deep recession in the coming years.

We think Greece will be forced to undergo these painful and protracted adjustments as long as it remains within the straitjacket of the monetary union. And yet none of this will solve the country's long-term problems, let alone the underlying problems of the Eurozone, in our view. Much of the Greek fiscal deficit is of a structural nature, meaning that even restructuring its debt would not solve the deficit burden, and the country would in fact start accumulating new debt immediately after its default. This scenario is especially likely if other forms of fiscal transfer are not forthcoming. Hence, Greece needs to grow its economy to solve its debt problem, but this too will be extremely difficult as long as it remains inside the EMU. Greece could ultimately find itself stuck between a rock and a hard place, and leaving the union may become the only viable option.

The reaction to the Greek crisis

In the wake of the Greek sovereign debt crisis, other countries have also faced high deficit and debt levels that forced them to implement strong measures to bring their budgets under control. Spain, Portugal and particularly Ireland took drastic action to reduce their deficits and prove their creditworthiness to the financial markets. Longer-term measures such as pension reforms were also adopted to put the states' financial conditions on more solid ground.

Fig. 4: Greece's debt deterioration
On an unsustainable path



Source: UBS WMR, Fitch Ratings, December 2010

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European governments also took action, creating the European Financial Stability Facility (EFSF), initially backed by member state guarantees of EUR 440 billion. The EU Commission set up the European Financial Stability Mechanism (EFSM), amounting to EUR 60 billion, and the International Monetary Fund (IMF) agreed to provide loans equivalent to up to 50% of the total EU contribution of EUR 500 billion (EUR 440 + EUR 60), i.e. EUR 250 billion.

Importantly, the creation of the EFSF and EFSM undercut the EU's "no-bailout clause" enshrined in Article 125 of the Treaty of Lisbon, which was intended to prevent countries from guaranteeing each other's debt and which had been a cornerstone of the monetary union in Europe. The EFSF was created under Article 122 of the Treaty on the Functioning of the EU (formerly the Treaty of Rome), which allows assistance only under exceptional circumstances. The EFSF will expire on 30 June 2013.

Finally, the European Central Bank (ECB) has taken several steps to ease the consequences of the Greek crisis. It stepped up its liquidity provisions for the financial sector and created the Securities Markets Program (SMP), which allows it to buy public and private debt in order to stabilize financial markets and ensure that the monetary policy transmission mechanism functions properly. The liquidity provisions have been widely used, especially by banks in high-debt and high-deficit countries, indicating that they are also being used to facilitate the refinancing of public debt. This puts the measures in danger of infringing on the ECB statute that lays out strict rules to prevent the central bank from financing government debt. The ECB also lowered the collateral standards and waived the minimum credit rating for Greek sovereign debt, so that it remains eligible as collateral in ECB funding operations.

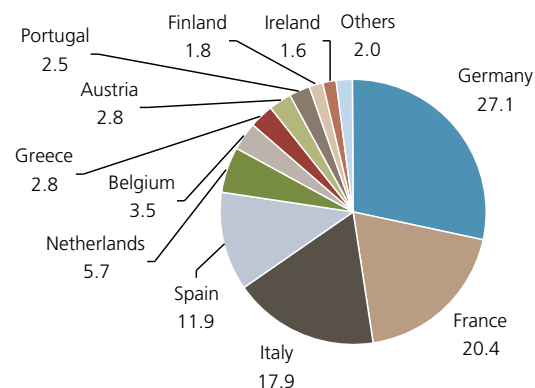
With the exception of some structural reforms, these measures are by and large temporary stopgaps rather than long-term solutions. To provide a more permanent solution, EU governments agreed on the European Stability Mechanism (ESM) in December 2010 to safeguard the financial stability of the EMU as a whole. We discuss the ESM in greater detail below.

Ireland – the latest episode in the debt crisis

The crisis flared up again in November – this time in Ireland. In contrast to Greece, Ireland's fiscal profile had been among the soundest in the Euro-zone and its competitiveness had not eroded substantially since it joined the euro. Instead, low interest rates provided by the ECB (and also influenced by the US Fed) sparked a veritable credit binge and one of the world's biggest housing bubbles, financed in large parts by Irish banks. Since this bubble burst in 2008, the Irish banking system has been in serious disarray.

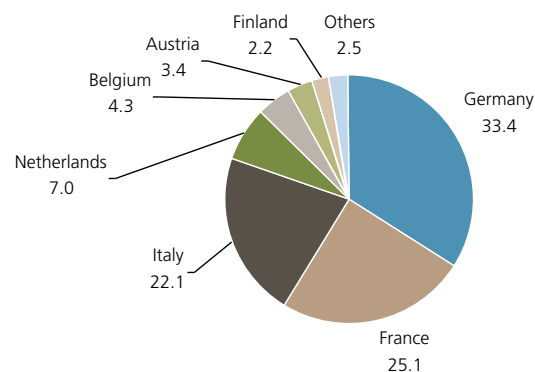
Holders of Irish debt became increasingly nervous about the situation and the country applied for a loan program totaling EUR 85 billion. However, the plan to restore Ireland's finances does not expect all funding to come from outside (see Table 1): The Irish budget plan foresees economic growth of 1.7% in 2011 and more than 3% in 2012. In light of the severe budget cuts planned for the coming years, such a growth outlook seems decidedly overoptimistic to us. With unemployment currently above 13%, we think the economy is likely to remain very sluggish in the coming years. Deflation has set in already, thus increasing the real value of debt, and the debt-to-GDP ratio is likely to rise further in the next few years.

Fig. 5: Initial guarantors of the EFSF
Share of guarantee amount (in %)



Source: UBS WMR

Fig. 6: EFSF guarantors after it is tapped*
Share of guarantee amount (in %)



Source: UBS WMR. * Accounts for Greece and Ireland having opted out, and assumes Portugal and Spain will also opt out.

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Public debt crisis likely to recur

The immediate market reaction to the Irish rescue package was anything but reassuring. In fact, the markets' concern appears to be spreading – and not just to the more obvious candidates like Portugal and Spain, but also to Italy, Belgium and even France. The ECB has taken measures to stabilize the situation, but neither the ECB nor the EU national policy makers have delivered a decisive solution, as we discuss in more detail below. We thus believe that investors are well advised to expect further flare-ups of the debt crisis in the near future.

Section 3: Who will be next?

When it comes to the progression of sovereign debt troubles, we see Portugal – and, more importantly, Spain – as possible candidates.

Portugal may come under pressure

Portugal's long-standing problems stem from very low productivity and a lack of competitiveness. The country has mustered an average annual growth rate of only 0.8% over the last 10 years, making it the worst performer of all EMU countries. Despite its historical and cultural links to Brazil, Portugal has minimal trade connections to high-growth regions, with three quarters of its exports going to other EMU countries. We expect demand from neighboring Spain, the prime destination of Portuguese exports, to remain sluggish in the coming years. For 2011, the government expects a dip back into recession, contracting 0.2% on average after 1.5% growth in 2010 and a -2.5% contraction in 2009. The unemployment rate is now 11%, compared to 8% in 2008.

Given Portugal's limited growth prospects, the country's bloated private sector debt is of particular concern for investors. At the end of 2008 it stood at 240% of GDP, higher than Spain's 210% and nearly twice as high as in Germany, France and Italy. This has not yet resulted in a sharp rise in delinquencies, but if the economy falls back into recession next year, this may change and cause problems for the banking sector.

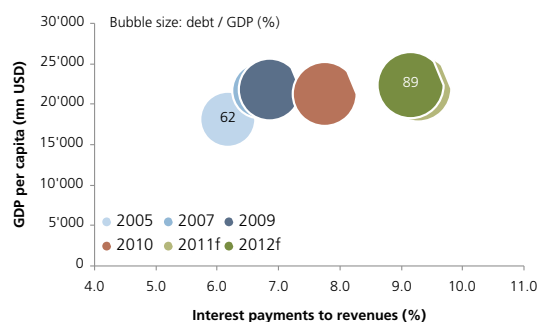
Portugal's public sector debt jumped to 76% of GDP in 2009 and is likely to rise to 83% by the end of 2010 (see Fig. 7). The public deficit stood at 9.4% of GDP in 2009, and the government had planned to reduce the deficit to 7.3% in 2010 and 4.6% in 2011. However, progress has been very slow and the 2010 deficit is likely to settle around 8% of GDP despite various one-time measures. We expect further progress to be just as slow, given Portugal's weak growth outlook and the unstable political situation it shares with Ireland and Greece. The far left has gained support during the crisis, challenging the fragile cooperation between socialists and conservatives. Elections could be held in spring 2011, which would coincide with strong refinancing needs for both its banks and its government, creating ample opportunity for market conditions to deteriorate again in coming months. Indeed, other EMU governments may seek to limit the risks of contagion by pressuring Portugal to apply for external help preemptively.

Table 1: The Irish rescue package

| Use of funds | |
|--------------------------------------|---------------|
| Immediate bank recapitalization | 10bn |
| Contingency fund for banks | 25bn |
| Sovereign funding needs | 50bn |
| <i>Total package</i> | <i>85bn</i> |
| Source of funds | |
| Irish National Pension Reserve Fund | 12.5bn |
| Irish Treasury cash reserve | 5bn |
| <i>Irish share of rescue package</i> | <i>17.5bn</i> |
| EFSM | 22.5bn |
| EFSF | 17.7bn |
| IMF | 22.5bn |
| United Kingdom | 3.8bn |
| Sweden | 0.6bn |
| Denmark | 0.4bn |
| <i>Total outside contribution</i> | <i>67.5bn</i> |

Source: UBS WMR

Fig. 7: Portugal's debt deterioration
Debt costs rise significantly



Source: UBS WMR, Fitch Ratings, as of December 2010.

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Spain may trigger an increase of the EFSF

As the fourth largest economy in the Eurozone, Spain is in a different league altogether compared to Greece, Portugal and Ireland. Its total outstanding public bonds amount to EUR 586 billion, compared to EUR 134 billion for Portugal and EUR 97 billion for Ireland. Thus, Spain may well fall into the "too big to fail" category – but the more pressing question is whether it is also too big to rescue. We think the current EFSF would be large enough to support both Portugal and Spain for three years, but once Spain has tapped the fund it will almost certainly have to be increased to provide credible shelter for other candidates.

Spain's macroeconomic conditions are by most measures more favorable than those of Portugal, Ireland and Greece. Not only is Spain's economy much bigger, it is also more diversified, with substantial exposure to fast-growing regions in Latin America. Also, at 63% of GDP in 2009, Spain's debt level is much lower than that of the other three countries and comfortably below the EMU average of 79.2%. Spain's public deficit jumped to 9.3% in 2010, well above the EMU average, but the government has since made a significant effort to reduce this figure.

The Spanish economy was running at a good clip prior to the global downturn, growing 3.7% annually. This growth was driven primarily by strong immigration and one of the most extreme housing booms in Europe, which saw house prices rise some 200%. Now that the housing and construction boom has gone bust, Spain is left without a functioning growth model. Its price competitiveness has also fallen substantially since it joined the Eurozone in 1999, which practically guarantees weak economic growth in the coming years.

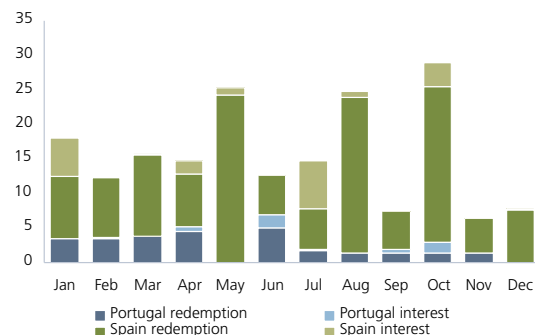
The unemployment rate has hit a worrying 20%, and many households are at risk of falling into poverty when unemployment benefits expire. So far, low interest rates have helped to offset the effects of high unemployment on consumer spending: Since most homeowners in Spain hold variable-rate mortgages, low rates have boosted their spending power. Substantial interest rate increases would in turn represent a burden on household consumption.

Spain's main commercial banks weathered the global financial crisis remarkably well, thanks to stringent capital requirements, diversified business models and little US exposure. However, the country's regional savings banks invested heavily in the country's real estate boom, amassing substantial exposure to non-performing construction and mortgage loans. Spain's banks are now basically cut off from the money markets, relying heavily on the ECB for short-term financing.

House prices in Spain have only declined about 15-20% so far, suggesting that homes remain overvalued. Also, the share of construction investment in GDP is still above its long-run average, adding credence to the view that adjustments in the housing and construction sector have to continue in the coming years. Delinquency rates on construction and mortgage loans have remained moderate to this point. Further drops in house prices could trigger a surge in non-performing loans, which would force the government to inject more capital into the banks.

Fig. 8: Bond redemptions and interest payments in 2011 (in EUR bn)

A challenging first half



Source: UBS WMR, Bloomberg, as of December 2010

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We think that if Portugal were to require financial assistance under the EFSF, this would most likely spill over to Spain. Their economies are deeply interconnected, with Spanish banks and corporations owning in excess of EUR 100 billion of Portuguese assets. At EUR 6.5 billion, Spanish banks have the largest net exposure to Portuguese sovereign debt of any banks in Europe. While Spain’s fundamentals look better than those of Ireland, Portugal and Greece, this is no guarantee that the country will not be hit by a further outbreak of the financial crisis.

How far the contagion could spread

Recently, there has also been a marked increase in risk premiums for Belgium, Italy and France. It is fair to argue that those countries would be next according to credit quality, economic strength and vulnerability on the funding side.

Belgium and Italy were already carrying high debt levels before the financial crisis, and things have only gotten worse since then. Regional tensions between Flanders and Wallonia in Belgium make it more difficult for the country to stage a decisive political response to external pressure. Italy’s large debt has been taken up mainly by domestic investors, which makes the country less vulnerable to funding stress. However, Italy has persistently higher funding needs than Germany, for example, and we think credible consolidation efforts will be required to avoid losing investor confidence over the next few years.

France is the second largest economy in the Eurozone, but we think its economic and credit profile rank behind those of the strongest countries. In the efforts to rescue struggling member countries, France could impair its credit profile if it were to take on a burden similar to Germany’s. This could also lead to a higher risk premium versus German Bund for its bonds. Having said this, we cannot imagine France being cut off from bond market funding or requiring external support.

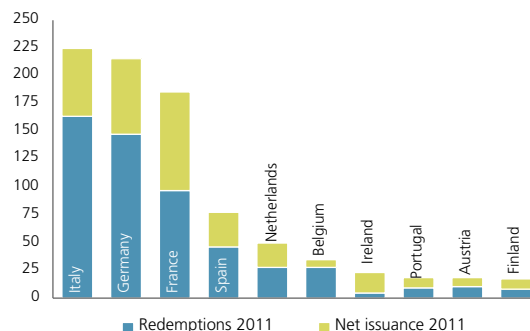
Section 4: Options to save the Eurozone

In the absence of near-term progress on sustainable EMU reform, we believe Portugal and possibly Spain will come under pressure from financial markets – and that EU policy makers’ options to stem the crisis will dwindle. The power of fiscal austerity to reassure the financial markets may already be exhausted by then. Additional budget cuts and tax hikes could in fact be counterproductive, as they risk evoking popular resistance while undercutting economic growth prospects. Importantly, the austerity measures currently being imposed on weaker, high-deficit countries cannot solve the underlying problems of the Eurozone.

Very likely: increasing the size of the EFSF

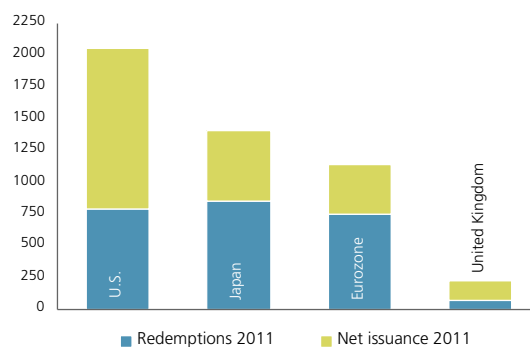
One course of action already in high demand is to increase the volume of the EFSF. The EFSF initially provided EUR 440 billion of guarantees, but any country requesting support needs to opt out as a guarantor of the EFSF, which reduces its guarantee volume. As Greece and Ireland have opted out, the actual guarantee volume has already been reduced. A number of credit enhancements needed to be considered since the facility is supposed to refinance loans by issuing own bonds in the market, which effectively reduced its possible lending volume to EUR 255 billion even before Ireland applied for support.

Fig. 9: EMU medium- to long-term sovereign bond funding in 2011
In EUR bn



Source: UBS WMR, Barclays Capital, as of December 2010

Fig. 10: Global medium- to long-term sovereign bond funding in 2011
In USD bn



Source: UBS WMR, Barclays Capital, as of December 2010

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Loan packages for Portugal and Spain over a three-year horizon are nevertheless still possible, in our view, considering the current size of the EFSF as well as the IMF and EFSM facilities (see Fig. 11). Beyond this, little potential funding support would remain, which we think would trigger the need to increase the amount of guarantees. Germany currently refuses to increase the EFSF guarantees, which is politically reasonable, as it would signal that Germany believes problems will go further than Spain. However, we think this attitude would change if necessary.

As a way of demonstrating their complete commitment to overcoming the debt crisis, Eurozone leaders could decide to increase their maximum guarantee amounts for the facility. Even if unanimous agreement cannot be reached, we think the three to five largest AAA-rated nations could decide to increase their commitments independently. Ultimately, only guarantees from AAA-rated countries really increase the fund's possible lending volume. In the near term, we think the EFSF's guarantee amount is likely to double, and the IMF's maximum loan amount will then be adjusted accordingly. Bilateral loan commitments by non-EMU countries could also be added, as seen during the Irish bailout, which would demonstrate political solidarity even if their absolute size were negligible.

Less likely short term, but possible longer term: a liquidity pool

In the current difficult environment, certain countries that face difficulties refinancing their debt are otherwise solvent with sustainable fiscal metrics. In such cases, an explicit liquidity program could be appropriate. Whereas the ECB's Securities Market Program only buys bonds in the secondary market, a liquidity pool would provide liquidity directly, i.e. invest in the primary market. If set up outside the ECB, it would not even be considered quantitative easing. Most importantly, the pool would not be subject to the stringent conditions of a Loan Facility Agreement like the EFSF, which effectively results in countries applying for support only once they have no other options.

However, such a pre-emptive liquidity facility would be difficult to position alongside the existing measures. It may turn out to be politically impossible to draw the line between countries that are in fiscal difficulties and those that are just looking for cheaper refinancing. We think an additional liquidity facility is currently a remote possibility, but we can imagine it being used as a complementary tool to the ESM after 2013, if the ESM were always to require a haircut on existing debt.

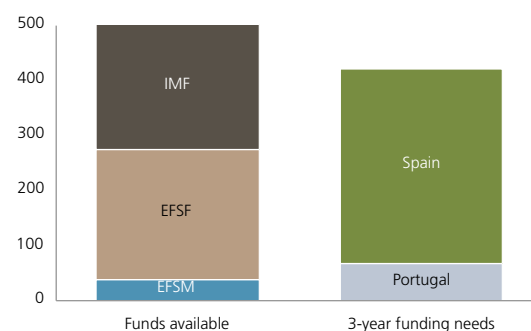
Sure to come, but with uncertain details: the ESM

As things stand, the ESM will provide financial assistance packages to Eurozone countries once the ESFS expires in 2013, based on the principles of the ESFS and subject to similarly strict conditions. According to the proposal, the ESM should have preferred creditor status similar to that of the IMF, making its claims senior to those of private holders of sovereign bonds.

However, we believe that introducing a larger loan class that is senior to existing bonds – or even just opening the door for this – could create substantial pressure on credit ratings and risk premiums of existing bonds. German officials have stated that they want to see explicit provisions for such a senior loan class included in bond prospectus language of all member states' new government bonds as soon as possible. We think this would lead to potentially severe rating downgrades for weaker countries, and the subsequent rise in yields could force those countries to accept ESM support just because of this provision.

Fig. 11: Rescue funds sufficient for Portugal and Spain

Accounts for the Irish rescue and includes both short- and longer-term debt funding needs



Source: UBS WMR

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Germany has even gone one step further, demanding that private investors share the burden of any permanent relief provided to a borrowing government. Including provisions in government bond prospectuses to allow for bondholder bail-ins may have even worse effects than only providing for seniority of support loans. The German proposal excludes existing bonds, meaning that old bonds would effectively become senior to new ones – or, put differently, that governments would need to issue subordinated bonds in the future. We think this idea is almost impossible to implement as long as the crisis persists: We do not see how troubled nations will be in a position to issue subordinated bonds in the future if they already struggle to issue safer normal government bonds today.

Clearly, such subordinated securities would demand higher risk premiums. Yet, since we do not know the details of these provisions, it is hard to make any estimates at this point about the possible interest rate differential. Looking at the financial sector, where such instruments are common, additional risk premiums for subordinated bonds rise exponentially with deteriorating credit profiles. As a consequence, we doubt that any of the peripheral high-debt and high-deficit countries would currently be in a position to issue such bonds at reasonable yields. Indeed, we think that any attempt to adopt such changes to the conditions of new debt risks exacerbating the crisis.

In principle there can be no doubt that bond holders should shoulder some of the losses if the issuing sovereign becomes insolvent. After all, interest rates need to reflect credit risk appropriately, which in turn operates as a disciplining force preventing governments from issuing too much debt. If bailouts or expected bailouts lower or remove the credit risk, this leads to artificially low interest rates, which encourage the excessive accumulation of debt. In general, these measures have significant merit, and would have been all the more effective if they had been introduced years ago. However, while the euro crisis may flare up again at any time, the treaty changes requiring unanimous ratification by all EU members will take years to effect.

Too early: common Eurozone bonds

A further course of action currently under discussion is the issuance of common Eurozone bonds (E-bonds). These bonds would be guaranteed by all EMU countries, meaning that their credit quality would be very high. Also, E-bonds would likely be highly liquid, similar to German Bunds and US Treasuries, which would further reduce financing costs. According to current proposals, E-bonds would cover debt of up to 60% of GDP for each country, with any debt beyond this level financed with lower-ranking standalone bond issues.

However, we see several serious drawbacks to E-bonds. Firstly, although they would reduce the financing costs of weaker countries, the stronger countries that previously enjoyed lower risk premiums would most likely end up paying higher refinancing costs. An interest rate increase of just 1 percentage point would raise Germany's debt financing costs by about EUR 500 million per year. These costs can be regarded as a permanent fiscal subsidy for the weaker countries. Thus, it would be dangerous to issue E-bonds before an agreement is reached on a fiscal union, including common debt management.

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E-bonds also risk reducing the incentive for weaker countries to improve their financial positions. Indeed, without proper control mechanisms in place, E-bond issuance could ultimately prolong the situation where weaker countries' yields are too low. Thus, in our view, E-bonds should only be issued if there is some form of centralized European fiscal authority that has at least some control over the fiscal policy of individual countries. This would again mean that common E-bonds should only be issued after the creation of a fiscal union, not before.

What is more, we see serious problems with the idea of introducing a subordinated bond class to cover debt exceeding the maximum amount eligible for E-bond refinancing. Considering current debt levels, weaker countries in particular would need to refinance a large portion of their debt using these subordinated instruments. It is unreasonable to assume that a weaker country could issue subordinated bonds with higher default probabilities and lower expected recovery values if they already struggle to issue senior bonds.

Another aspect that the existing proposals have not yet addressed is the relative position of existing government bonds versus new E-bonds. If E-bonds were made senior to existing bonds, this would most likely trigger government CDS contracts and could lead to a sell-off in existing bonds.

Indeed, considering all of these aspects, the aggregate refinancing costs for the Eurozone may well be higher if E-bonds are implemented without establishing a fiscal union first. In the current setup, we think EFSF bonds are the better option to issue bonds backed by the Eurozone.

Germany and other stronger countries are fiercely opposed to this idea, which is currently being spearheaded by Luxembourg Prime Minister Jean-Claude Juncker and Italian Finance Minister Giulio Tremonti. The ECB council appears to be divided on the subject. Some members, including ECB President Trichet, appear open to the idea, while others – most notably German Bundesbank President Axel Weber – emphasize the disadvantages. Overall, we think E-bonds are unlikely to be introduced in the near term, but their proponents will probably keep the discussion going if only to use it as a bargaining chip to get other concessions from Germany, such as the extension of the EFSF.

The ECB prefers to stay on the sidelines

With politicians disagreeing openly over the appropriate course of action, financial markets looked to the ECB to deliver a decisive solution to the crisis. However, at its December council meeting the ECB made it clear that it does not want to take a leading role in supporting the weaker countries. Instead, the ECB is of the opinion that the fiscal crisis has to be solved by fiscal measures rather than monetary policy.

We think that the ECB will try to play a reactive role as much as possible, providing liquidity and stabilizing market conditions. In line with this role, when faced with the increasing bond yields of Ireland, Portugal, Spain, Italy and Belgium, the ECB agreed to extend its special liquidity programs and announced that it would continue to buy bonds under the existing SMP. These measures have narrowed the interest rate differentials between weaker and stronger countries, but they cannot address the root cause of the problem.

The future of the euro

So far, the ECB has bought bonds of the high-deficit countries worth roughly EUR 70 billion, far less than the bond purchases made by the US Fed and the Bank of England. Importantly, unlike the EFSF, the ECB's bond purchases under the SMP do not require the weaker countries to undertake a clear set of measures. Therefore, the ECB does not regard the SMP as a substitute for the EFSF, and probably will not expand its use very much as long as funds are available from the EFSF, EFSM and IMF.

Quantitative easing in Europe

ECB President Trichet has made it clear that the ECB will continue to sterilize SMP purchases, i.e. it will issue one-week term deposits as a way to neutralize the injection of money entailed by the bond purchases. That distinguishes the SMP from the quantitative easing of the Fed and the Bank of England, which actually increases the money supply and thus fuels the risk of inflation.

However, we think it is conceivable that the ECB would at some point agree to start monetizing the debt of EMU countries. This would mean that the bank would buy up government bonds with newly created money – that is, to stop sterilizing SMP purchases – thus using currency debasement to allow countries to devalue their debts. This course of action would generate inflation and help to erode the real value of all euro-denominated debt, including government debt. Thus, high-debt and high-deficit countries would be better able to bear their nominal debt thanks to a debased euro.

We see at least three major problems here. First of all, this plan would risk generating runaway inflation. Secondly, while it would help the debt problem, it would do nothing to solve the underlying problems of the Eurozone, meaning that the EMU would essentially remain as dysfunctional as before. Thirdly, such measures would require the unanimous consent of all EMU members, and we think that Germany in particular would mount considerable resistance to the idea. Overall, we think that a further outbreak of the debt crisis could force the ECB to step up its support for weaker countries, but that outright debt monetization and inflation options are still unlikely, especially in the near future.

The ECB is likely to continue playing a reactive role, leaving fiscal problems to fiscal policy makers. Thus, a sharp extension of the SMP is unlikely in the absence of stronger commitment from EU politicians. We think that quantitative easing may be possible within the context of decisive steps to form a more integrated fiscal union, but the ECB would most likely demand very clear commitments before going this route.

The future of the euro

Section 5: The euro's uncertain future

We now turn to the third and most important of the three questions that we posed in the beginning: What are the euro's long-term survival prospects?

Structural reforms to improve competitiveness, increase labor mobility and price flexibility would certainly help strengthen the Eurozone. Given the region's diversity, however, problems could quickly arise due to ethnic, cultural and linguistic boundaries. We think European leaders will make serious efforts to form a more closely integrated union, but political support may weaken if leaders fail to achieve a consensus on crucial questions, including limitations on national sovereignty. There will most likely be a limited fiscal union at first, with many exceptions and imperfections.

In our view, crucial elements of reform include strong fiscal policy coordination and transfer payments from stronger to weaker countries to adjust for differences in living standards. In the longer run, we think fiscal integration cannot be done piecemeal. Instead, it will probably trigger a tendency to further harmonize and centralize policy, leading to a fully fledged political union – i.e. a United States of Europe. It would be historically unprecedented for a large number of sovereign states to peacefully and voluntarily relinquish much of their sovereignty in this way.

Importantly, we think that full fiscal integration may not be desirable in the long run, as it risks breeding conflict among the member countries. National tensions are a powerful centrifugal force in any conflict over the distribution of resources. The Swiss Confederation is an example of a functioning multicultural political union. However, in Belgium, which includes two major cultural groups, questions about the distribution of resources have become nearly insurmountable. Beyond its economic benefits, the euro was introduced to foster peace and understanding in Europe. If the EMU starts looking like it generates the exact opposite effect, this would clearly compromise its *raison-d'être*.

Thus, there does seem to be a credible risk that the Eurozone could break up if faced with certain adverse circumstances, and we think this risk should not be neglected just because it appears unthinkable right now.

The future of the euro

Appendix

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