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# POLICY PLATFORM | White Paper

## The Greek Sovereign Debt Crisis and ECB Policy

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## **Abstract**

The Greek sovereign debt crisis has delayed the ECB's exit from its current highly expansionary monetary policy stance. It has also complicated it since the ECB now hold considerable quantities of Greek public debt, which exposes the ECB to considerable credit risk. Moreover, the delay of the exit means that it has to take place in a situation on which public debts are even larger. There is still risk of contagion.

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## **Introduction**

The Greek financial crisis, which may well be the first of a number of sovereign debt crises that the euro area will endure in the next few years, has had a severe impact on the economic and financial environment in Europe by unexpectedly introducing a massive amount of uncertainty about economic prospects and future fiscal and monetary policy. The uncertainty arises for at least three reasons.

First and most importantly, the Greek imbroglio has shown that sovereign debt crises are indeed possible in the euro area. While public debt in some euro area countries has admittedly been uncomfortably large since, in some cases, the 1970s, none of them has experienced a public debt crisis in modern history. The fact that large public debts have been shown to be manageable for a long time no doubt led many observers to feel that a sovereign debt crisis was exceedingly unlikely, and that the concerns underlying the Stability and Growth Pact were exaggerated and too hypothetical to be relevant. They were wrong.

Recent research has established that financial crises are often associated with very large rises in public debt – as much as 50% – and therefore may lead to a sharp increase in the likelihood of a fiscal crisis.<sup>1</sup> Several factors explain this.

First and most obviously, financial crises typically lead to a severe and persistent economic weakness that depresses tax revenues. An increase in spending on the social safety net may also result. The resulting fiscal deficits can be very large, say 10% of GDP per year or more. Such sharp business cycle downturns, and therefore the resulting deficits, can last for several years, leading to a massive increase in debt. Furthermore, the sharp decline in real GDP increases the debt-to-GDP ratio directly. Finally, financial crises may also require large-scale support of financial institutions.

Second, the crisis has shown that, when push comes to shove, the rule prohibiting bail outs in the euro area cannot be enforced. The reason for that is straightforward: the need for a bailout only arises if there is a serious risk of a sovereign default (or, equivalently, of a forcible restructuring of the public debt). However, such an event would provide an immediate threat to financial stability in the euro area, making it impossible for other governments and also for the ECB not to provide support.

Furthermore, the fact that the no-bailout rule was circumvented and financial support for Greece has been agreed upon also introduces uncertainty in financial markets. How will the support be financed? What part of the burden will be shouldered by bond holders? Will any part of the burden be assumed by the ECB? How will monetary and fiscal policy be adjusted in the years to come?

Third, the revelation that policy makers apparently had not prepared contingency plans to deal with risk of sovereign defaults has also introduced uncertainty. If policy makers have made no preparations to deal with a sovereign crisis, what other contingencies have they failed to consider? What would happen if a country decided to leave the euro area? Could a country be forced to leave the euro area? Is there any risk that, at the end of the day, if public debts became too large, the debt of a number of euro area governments would be restructured? Or could the consequences of an outright bankruptcy of a euro area country move the ECB to purchase parts of its debt, at the risk of higher inflation?

This note discusses a number of questions that market participants, policy makers and concerned members of the public will have asked themselves in recent months:

- How has the Greek sovereign debt crisis affected ECB's policy decisions?
- Is there a need to adjust the ECB's exit strategy in light of the Greek crisis?
- What role, if any, should the ECB play in stabilising market conditions for Greece?
- How great is the risk of contagion?
- Is there a worry about the quality of collateral deposited with the ECB? If so, what steps are taken to address this problem? Should the collateral requirements take into account sharp swings in market sentiments?

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<sup>1</sup> See Reinhart and Rogoff (2009).

## Greece and the ECB's Policy Decisions

As noted in the introduction, the Greek crisis has had a large impact of economic sentiment in euro area. Figure 1 shows the Purchasing Managers' Index for the euro area.<sup>2</sup> The graph shows that following the onset of the financial crisis in August 2007, economic sentiment area started to worsen. During 2008 the rate of deterioration increased sharply, particularly after the collapse of Lehman Brothers on September 15.

Subsequently, economic sentiment stabilised towards the end of 2008. From early 2009 on, the PMI rose every month until May 2010, when the Greece sovereign debt crisis erupted and it suddenly fell.

The ECB policy decisions have to date been influenced in two ways by the Greek crisis. First, the ECB has repeatedly adjusted its collateral requirements to ensure that Greek public debt remained eligible.<sup>3</sup> Most recently, the ECB announced on May 3, 2010 its decision "... to suspend the application of the minimum credit rating threshold in the collateral eligibility requirements ... in the case of marketable debt instruments issued or guaranteed by the Greek government."<sup>4</sup>

The ECB went on to explain this decision by asserting that:

"The Greek government has approved an economic and financial adjustment programme, which has been negotiated with the European Commission, in liaison with the ECB, and the International Monetary Fund. The Governing Council has assessed the programme and considers it to be appropriate. This positive assessment and the strong commitment of the Greek government to fully implement the programme are the basis, also from a risk management perspective, for the suspension announced herewith."

However, a more immediate interpretation is that unless the ECB accepts Greek debt as collateral, Greek financial institutions would be unable to maintain their positions in a whole range of financial markets since their access to interbank funding would be severely restricted. This would force them to engage in fire sales of assets, which would transmit the crisis to other countries and risk the collapse of some financial institutions.

The second decision was taken on May 10, 2010, when the ECB announced a series of "measures to address the severe tensions in certain market segments which are hampering the monetary policy transmission mechanism."<sup>5</sup> This decision included the announcement of "interventions in the euro area public and private debt securities markets ... to ensure depth and liquidity in those market segments which are dysfunctional."

While the announced objective of this programme was to ensure the proper functioning of securities markets that play a crucial role in the monetary policy transmission mechanism, it is debatable whether the interest rate paid on the public debt of Greece and a few other countries play a sufficiently important role in the transmission mechanism to warrant

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<sup>2</sup> The PMI is produced by Markit ([www.markit.com](http://www.markit.com)).

<sup>3</sup> See Cheun, von Köppen-Mertes and Weller (2009) for a discussion of the ECB's collateral policies.

<sup>4</sup> See <http://www.ecb.int/press/pr/date/2010/html/pr100503.en.html>.

<sup>5</sup> See <http://www.ecb.int/press/pr/date/2010/html/pr100510.en.html>.

such an intervention. Furthermore, the decision to purchase public debt issued by the Greek and other governments was arguably a first example of the monetisation of public debt in the euro area.

While monetisation in the past has been a crucial component of all episodes of high inflation, there are two reasons to doubt that it will be inflationary at the current juncture. First, the ECB announced that in “order to sterilise the impact of the above interventions, specific operations will be conducted to re-absorb the liquidity injected through the Securities Markets Programme. This will ensure that the monetary policy stance will not be affected.”

Second, economic conditions in the euro area are still so weak that it is implausible that this limited monetisation of public debt will have much of an effect on inflation pressures. The measures adopted so far do therefore currently not constitute a threat to price stability in the euro area. However, should economic conditions strengthen, this assessment could change rapidly.

Overall, the Greek crisis has influenced the ECB’s policy decisions in two crucial ways. It has decided to accept Greek public debt as collateral irrespectively of its credit rating in order to prevent the financial tensions in Greece from erupting in a full-blown financial crisis. And it has purchased public debt in order to facilitate the functioning of those financial markets that play a crucial role in the funding of the Greek and a few other governments. While these actions may or may not have been appropriate, they had arguably had little to do with monetary policy.

## **Greece and the ECB’s Exit Strategy**

The Greek crisis has had immediate implications for the need for a current tightening of monetary policy and the form of the exit from the current extremely expansionary monetary policies of the ECB. Before the most recent crisis erupted, it seemed plausible that the euro area economy would continue to recover with sufficient speed and strength that it would become necessary for the ECB to tighten monetary policy sometime in 2010 or 2011. Furthermore, it appeared that the tightening could be achieved simply by raising the repo rate which is the ECB’s main monetary policy instrument. Issues about the size and composition of the ECB’s balance sheet did not arise.

The most recent developments may have led this thinking to be modified in at least three important ways.

First and as already noted, economic confidence in the euro area has worsened as a consequence of the Greek turmoil. One reason for that is that the risks that the crisis will be amplified, or that it will spread to other euro area members with large public debts, remain considerable.

The state of economic confidence is important for the exit since it is strongly correlated with the growth rate of real GDP. Thus, the weakening of confidence suggests growth is slowing. Furthermore, economic confidence appears to be a crucial determinant of the ECB’s interest rate decisions.<sup>6</sup> The fall in confidence thus suggests that the need for a

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<sup>6</sup> See Gerlach (2007) or Orphanides (2010).

tightening of monetary policy in the near future has fallen, implying that the exit will be delayed.

It deserves to be noted that if confidence would recover while Greece still experiences problems rolling over its debt, it will be difficult for the ECB to raise interest rates since higher rates across the euro area will reduce investors' appetite for Greek debt.

A second way in which the Greek crisis has affected the exit from the current highly expansionary stance is that, when it comes, it will involve potentially complicated issues regarding whether to sell Greek debt, and other assets purchased as a part of the measures announced on May 10, 2010, or to hold them to maturity. One concern is that the markets for this debt may remain under severe stress. If so, it may be difficult for the ECB to unwind its purchases. This risk may be amplified if the ECB, as seems plausible, is required to increase the scale of its debt purchases beyond the current relatively modest size. Indeed, ECB's direct purchases of debt during the crisis have been much smaller than those of other central banks, as shown by Figure 2. Thus, the task of selling government bonds back to the markets may still be of manageable scope at present, this may change if purchases are stepped up.

A third consequence of the Greek crisis is that, as time passes, the exit will become increasingly complicated by the need for the ECB to consider the implications of tighter monetary policy on debt dynamics. Higher interest rates make it more difficult to reduce debt-to-GDP ratios since debt-servicing costs rise, real GDP growth slows and primary budget deficits increase. Attention needs to be paid to the euro area as a whole but also to its most highly indebted members for whom the need for restructuring remains an issue.

One particular complication is that, since the maturity of public debt in the euro area is typically relatively long, medium-term capital market rates are crucial determinants of countries debt-service costs. While central banks control short-term interbank rates closely, capital market rates are outside the direct control of central banks and are highly sensitive to inflation expectations.

To see why this matters, note that the need to exit only arises when economic conditions start to strengthen. But, given the long period of exceptionally expansionary monetary conditions, this is precisely the moment when inflation expectations might start to rise. An exit therefore risks being seen by market participants as evidence that the ECB is concerned about the inflation outlook. This could raise inflation expectations and therefore interest rates along the term structure, increasing the cost of debt service. The sharp rise in bond yields in the US following the Federal Reserve's unexpected tightening of monetary policy in early 1994 is a case in point. Of course, exiting the current policy stance will become a more delicate exercise as time passes and stocks of public debt increase.

Overall, the Greek crisis has delayed and complicated the ECB's exit from the current low interest rate stance in several crucial ways.

## **Stabilisation of Market Conditions**

What role should the ECB play in stabilising financial market conditions for Greece? The ECB's overriding objective is to maintain low and stable inflation in the euro area. Thus,

any measures that it takes to calm financial markets are only acceptable to the extent that they are compatible with that objective.

While that objective constrains the ECB's options, an episode of financial instability would exert deflationary pressures and therefore put the achievement of price stability at risk. The ECB can thus legitimately argue that it may take measures to ensure that monetary policy in the euro area is properly transmitted to the broader economy, since its ability to reach its objective is crucially dependent on the effectiveness of the monetary policy transmission mechanism.

So far the ECB has attempted to help stabilise market conditions by launching the Securities Markets Programme on May 10, 2010.<sup>7</sup> The Programme is intended as a temporary measure (although no details have been provided) to ensure that monetary policy measures are transmitted to the broader economy. The ECB introduced the Programme because the turbulence had caused the markets for public debt of some highly indebted euro area members to function poorly.

The ECB felt that this deterioration in market functioning was problematic and made three arguments for why intervention was warranted. First, sovereign funding conditions often provide a floor for private sector borrowing. The rise in sovereign yields for some countries could thus trigger a rise in lending rates and thereby cause a credit crunch in these countries. Second, government bonds are used as collateral for banks' refinancing operations. The ECB thus judged that there was a risk to the proper functioning of interbank markets. Third, higher bond yields imply valuation losses on bonds and thus worsen the balance sheets of the financial and non-financial sector, weakening the transmission mechanism.

While these arguments may be correct in theory, several practical considerations suggest that they may not be fully relevant in practice. For instance, there is no fundamental reason for why sovereign yields should provide a floor for private sector borrowing rates. This is solely so because governments, in particular when borrowing in the domestic currency, have historically been seen as more creditworthy than other borrowers. But there is no reason for this to be the case and one can well imagine that this would change if government debt was seen as risky.

Similarly, it is difficult to see how turbulence in public debt markets for a limited number of borrowers could have an impact on the cost at which private sector borrowers elsewhere in the euro area attract funds.

It is also difficult to motivate the intervention by appealing the role of public debt as collateral for borrowing from the ECB. Indeed, one reason for accepting Greek debt as collateral is that this serves as a substitute for a well-functioning market.

Overall, rather than strengthening the transmission mechanism, it seems more plausible that the intervention was intended to stabilise market conditions since there was a clear risk that the financial crisis would deepen and broaden, thereby increasing the risk of unleashing deflationary pressures. Moreover, the objective of facilitating public debt

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<sup>7</sup> See the discussion in Trichet (2010) which serves as a background for this and the next paragraph.

management by Greece and other countries that had disregarded the Stability and Growth Pact almost surely played a role.

## **The Risk of Contagion**

There is little doubt that the risk of contagion has been an important consideration in the ECB's policy decisions. How likely is the crisis to spread? Answering this question is difficult because it depends so much on market participants' expectations and the fact that "multiple equilibria" are possible.

To see this, consider an economy with a large stock of public debt, such as Greece before the crisis. Since the public debt typically has a maturity of five years or so, a large part of the debt matures every year and must then be rolled over. An investor that expects other investors to participate in the roll over by purchasing new debt will be willing to do so too. Indeed, if the demand for debt of the country in question is strong, interest rates will be falling generating capital gains on bond holdings and perhaps attract more investors. Thus, if sentiment is good, a roll over will be possible.

But an investor who comes to believe that other investors will hesitate roll over the debt will not want to participate in the refinancing. The demand for the bonds in question then falls and the interest rate rises.

Overall, if investors think that a country will face little problem rolling over the bonds, then the country will indeed be able to do so, even if economic fundamentals are weak. And if investors believe that a debt roll over will be difficult, the country will experience problems rolling over the debt, even if economic conditions are in fact good. This implies that there are several possible outcomes – "multiple equilibria" – and that self-fulfilling confidence crises are possible.

In turn, this has several implications for policy. First, it is possible that countries with weak fundamentals are able to borrow excessively in good times. This arguably happened in the case of Greece, which was able to borrow at rates marginally above those of Germany before the crisis. This is one reason why other constraints, such as the Stability and Growth Pact, are needed to avoid an excessive debt accumulation.

Second, there is always a possibility of contagion and that a confidence crisis will spread. It is sometime argued that "country X has much stronger fundamentals than country Y" and that a spreading of the crisis is not warranted. True or not, this information can be irrelevant to an investor: what matters is whether other investors agree. There is therefore an inherent risk that a sovereign debt crisis will spread.

Overall, it seems likely that a deepening of the Greek sovereign crisis may lead it to spread to other countries that have seemingly similar economic weaknesses – that is, large public deficits and a large public debt – even if these economies in fact enjoy much better fundamentals.

## **The Quality of Collateral**

The ECB's acceptance of Greek debt as collateral raises important questions about the consequences for the ECB's balance sheet if Greece requires a restructuring of the public

debt, which seems quite possible. Under “ordinary” conditions, the risk of such an event would be reflected in the haircut the ECB would impose on the collateral in question.

However, given that the reason for accepting Greek debt as collateral appears to be to improve market liquidity, insisting on a large haircut would be counterproductive. Thus, it seems that the ECB’s objective of promoting the liquidity of Greek debt will unavoidably expose it to the risk of capital losses on that debt. Consequently, it can at best hope to obtain compensation after any such losses are sustained.

One possibility would be for it to be reimbursed for any losses sustained by the euro area governments. This would be reasonable since the decision to accept Greek debt as collateral plainly was the ECB’s contribution to the support operations for Greece launched by these governments.

The size of the losses is of course important. If the losses are small, the ECB can absorb them and rebuild capital by temporarily not distributing future profits. Since the ECB’s profits are paid to the national central banks of the euro area, which in turn redistribute them to the national governments, this is tantamount to a (gradual) recapitalisation by the euro area governments.

If the losses are large, then an immediate recapitalisation might become necessary. One reason for that is that any such capital losses on the ECB’s holdings on Greek debt must arise from a default, or restructuring, of the Greek debt. Such an event is likely to lead to widespread speculation in financial markets about the viability of the euro. Such a loss of confidence in the euro and in the ECB could become catastrophic. To ensure the credibility of the euro, an immediate recapitalisation of the ECB would be crucial in restoring confidence.

## **Conclusion**

The historical evidence suggests that episodes of financial instability are frequently associated with subsequent sovereign debt crises, largely because the burst of a financial bubble leads to many years of weak economic activity and therefore to low tax revenues and high social spending. The Greek sovereign debt crisis is merely yet another illustration of this pattern.

The crisis has had a large impact on the ECB’s policy decisions in three ways.

First, the weakening of economic sentiment in the euro area caused by the crisis has delayed the exit from the ECB’s currently very expansionary policy stance. Second, the ECB has accepted Greek debt as collateral irrespectively of its credit rating. The main reason for doing so is that it supports the demand for Greek public debt and thus facilitates the Government’s debt management. Third, the ECB has decided to purchase bonds issued by the Greek government and some other borrowers in order to promote liquidity of the underlying markets.

The acceptance of Greek debt of questionable value as collateral, coupled with direct purchases of Greek debt in secondary markets, raises risks for the ECB’s balance sheet. Moreover, The ECB will face difficult questions when economic conditions improve regarding how to dispose of the assets it has purchased.

Going forward, several important concerns remain. Most importantly, there are obvious risks of contagion to other economies with large fiscal deficits and large public debt, unfortunately also in cases in which they enjoy much stronger fundamentals than Greece.

Furthermore, the fact that Greece and other governments are now running exceptionally large fiscal deficits means that the ECB will have to worry about adverse debt dynamics resulting from a tightening of monetary policy. A particular concern is that such a tightening of policy will be interpreted by financial markets as evidence that inflation is rising. This could trigger large increases in the medium-term capital market interest rates that the Greek government pays on its debt, therefore worsening market sentiment and potentially triggering another run on the country.

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Figure 1  
Euro area purchasing managers index

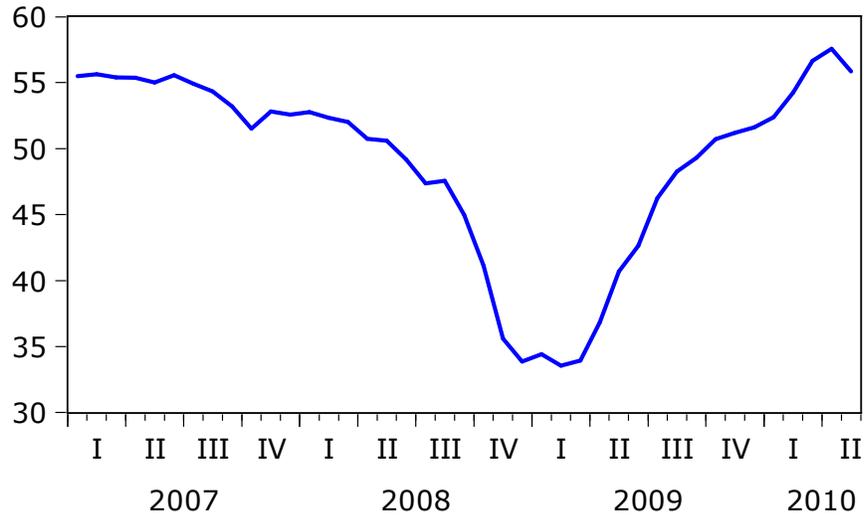
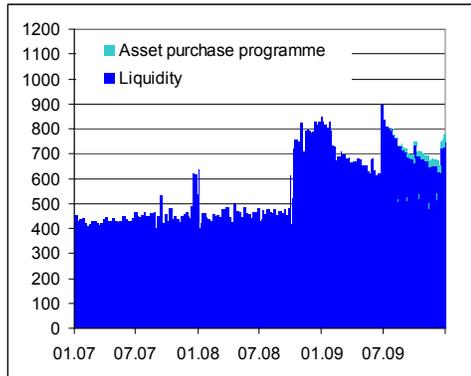
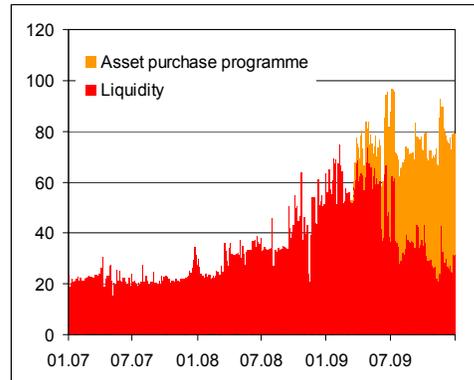


Figure 2  
Asset purchasers by selected central banks

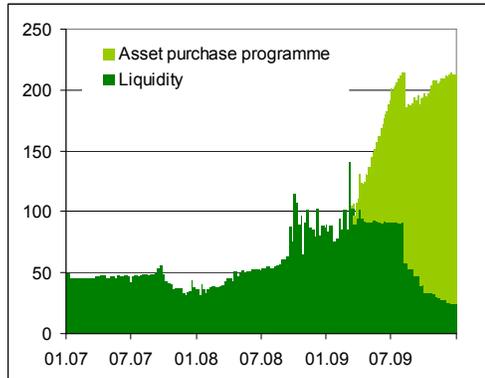
Euro area



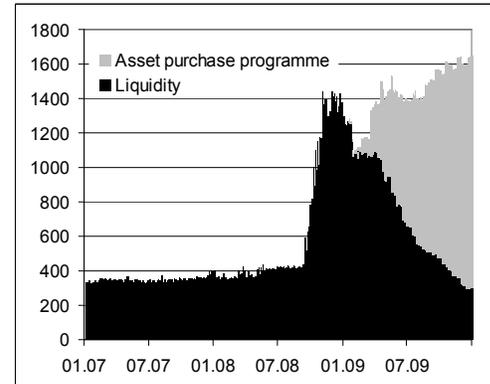
Switzerland



United Kingdom



United States



Note: In billions local currency. Source: Gerlach-Kristen and Kugler (2010).