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JEL Classification: E52, E61, E63

Keywords: Five Presidents' Report, eurozone crisis, Monetary policy, Fiscal policy, financial markets, pricing risk

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Is there an alternative way to avoid another eurozone crisis to the Five Presidents' Report?

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The EU Commission's Five Presidents' Report proposes new rules for the eurozone covering fiscal policy, banking and financial markets designed to avert another eurozone crisis. This paper examines the causes of the current eurozone crisis and discusses whether the Report's proposals are likely to succeed. It is argued that the main causes of the crisis were EMU and the failure of financial markets to price risk correctly. It is claimed that the Report may not solve these problems. Having already lost their monetary policy instrument, the Report's fiscal proposals would remove their fiscal policy instrument too and deprive countries of the means of economic stabilisation. The proposals would also transfer to an undemocratic and unaccountable Commission important national competences.

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1. Introduction

The introduction of European Monetary Union in 1999 was intended as a fundamental and permanent change to the economic and political systems of member countries. It was designed to promote economic growth, price stability, full employment and political integration. So far it has achieved none of these. To the contrary, it has made them all worse; it has resulted in major policy conflicts between member countries, fiscal crises, unsustainable sovereign debt, large current account imbalances, unstable and near insolvent banks, a volatile financial system and the ECB adopting highly controversial monetary policies outside their original remit which border on fiscal policy. The Five Presidents' Report - "Completing Europe's Economic and Monetary Union" (2015) - which was prepared by the President of the European Commission, in close cooperation with the President of the Euro Summit, the President of the Eurogroup, the President of the European Central Bank, and the President of the European Parliament, contains a set of proposals aimed at remedying all of this and, in the process, making the single currency sustainable. It suggests giving up even more national independence and introducing a fiscal union supervised by an unelected EU officials, a banking union and a capital markets union.

This paper considers to what extent monetary policy and the financial markets have contributed to the eurozone crisis, the lessens that may be learned from this and whether there might be a market solution that could obviate the need for further intrusive legislation that erodes national independence. This entails examining the effects of a common monetary policy on real borrowing rates in the eurozone, both prior to the crisis and afterwards, and the role played by financial

markets in abetting the mispricing of risk. In the light of this discussion we ask whether the Economic Commissions's Five Presidents' Report and its proposals for a fiscal, banking and capital markets union provides a viable solution to the problems of the eurozone.

To summarise the argument of this paper, the single currency with its one-size-fits-all monetary stance set interest rates prior to the eurozone crisis that were too low for high inflation countries, the main eurozone crisis countries. As a result, these countries were able to borrow at negative real interest rates and so accumulated too much private debt (Ireland, Portugal and Spain) and sovereign debt (Greece, Italy and Portugal). This caused either a banking crisis, or a fiscal crisis, or both in these countries. Subsequently but, in part mistakenly, the ECB pursued - and is still pursuing - a highly expansionary monetary policy in order to prop up the eurozone banks and to restore the rate of eurozone inflation to its pre-crisis level.

Fatally, financial markets failed to identify the crisis or the risks that were building up prior to the crisis and continued to lend to the crisis countries at interest rates appropriate for Germany, a low-risk country. Only after the crisis did borrowing rates reflect the true risk of lending to the crisis countries which, of course, only made the risk of default in these countries greater and the crisis deeper. Despite this mispricing of risk, the ECB through its aggressively expansionary monetary policy (it is even contemplating setting negative *nominal* rates) is driving borrowing rates to levels that are even lower than before the crisis, thereby offsetting any pricing discipline provided by financial markets. The intriguing question is whether, by pricing risk correctly, future crises might be avoided without the need for the sort of procrustian proposals contained in the

Five Presidents' Report.

2. Origins of the eurozone crisis

The principal aim of the euro was to facilitate the development of a single market in goods and services by removing foreign exchange transactions costs through sharing a single currency. The problem, which was foreseen by many economists, was that the eurozone was not an optimal currency area having, for example, different fiscal stances, capital markets, labour laws and rates of inflation. This was downplayed in official circles as it was widely assumed that eurozone economies would rapidly converge, thereby creating an optimal currency area. For countries facing high interest rates an even more persuasive argument was the expectation that in future they would be able to borrow at much lower rates, such as those of Germany. This expectation was due to Article 105 of the Maastricht Treaty which requires the ECB to maintain a weighted average eurozone inflation rate not greater than 2 percent, where the weights reflect the size of the members' economies. The success of the ECB in achieving this target meant that Germany, being a large country with low inflation, would exert a strong influence on rates.

As a result, many countries found their borrowing costs were much lower and so they borrowed heavily. Figure 1 shows that following the start of EMU, and until the crisis in 2008, the nominal cost of borrowing was the same for all of the crisis eurozone countries as for Germany. (NB Greece joined in 2002.) Prior to EMU rates, were different, but they rapidly converged once EMU began. After the start of the eurozone crisis rates diverged again.

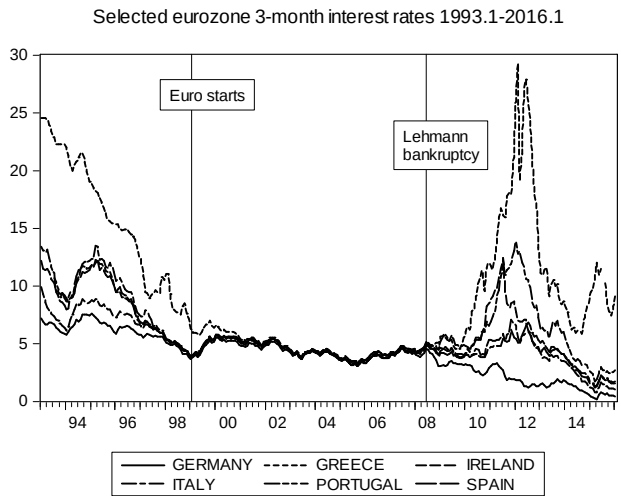


Figure 1

Figure 2 shows the real rates of interest of these countries. Although in 1998, prior to the euro, real interest rates were positive for each of these countries, during the period 2001-2007 real rates for the crisis countries fell some way below those of Germany. At different times during this period Ireland, Portugal and Spain had negative real rates.

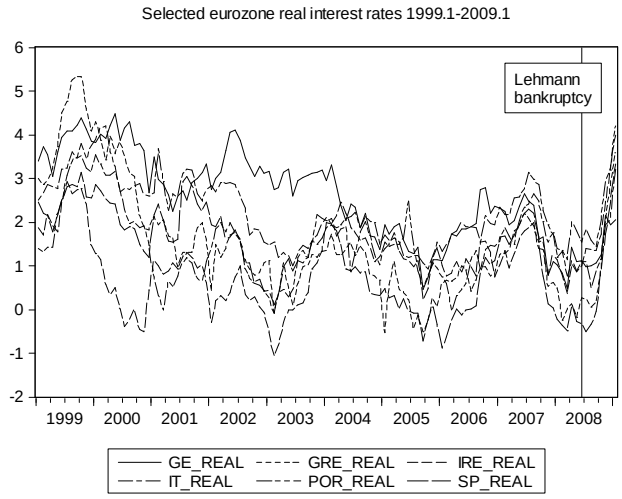


Figure 2.

Prior to the crisis the divergence of real interest rates was not seen as a problem as economic growth in all of these countries was strong. Figure 3 shows the growth of real GDP in eurozone countries over the period 1998-2014. For the period 1999-2007, the GDP of Ireland grew by 57%, that of Greece and Spain grew by 35%, while that of Germany only grew by 20%. After the crisis all countries except Germany have stopped growing; the collapse of output in Greece has been dramatic, if not catastrophic.

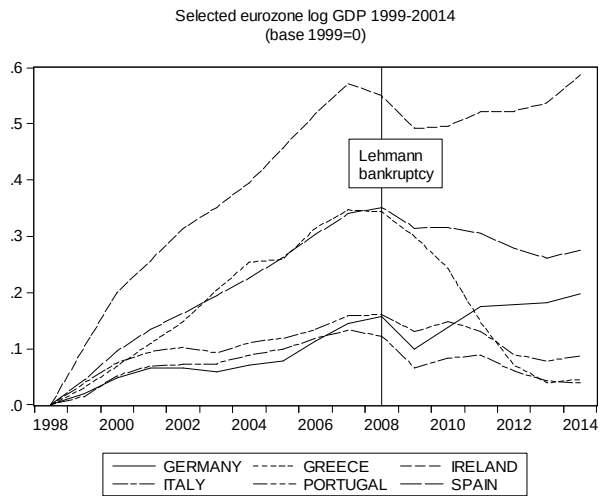


Figure 3

This stimulus to economic activity following the start of EMU caused price levels to rise sharply, especially in the countries with low real interest rates. Figure 4 shows the rise in the price level (HICP) over the period 1998-2013. It reveals considerable dispersion. Thus, while the price level in Ireland increased over the period 1999-2008 by 32%, that of Greece by 31%, that of Portugal by 28% and that of Spain by 30%, Germany's price level only increased by 16%. This entailed a significant loss of competitiveness compared to Germany for the countries that would prove to be the main crisis countries of the eurozone.

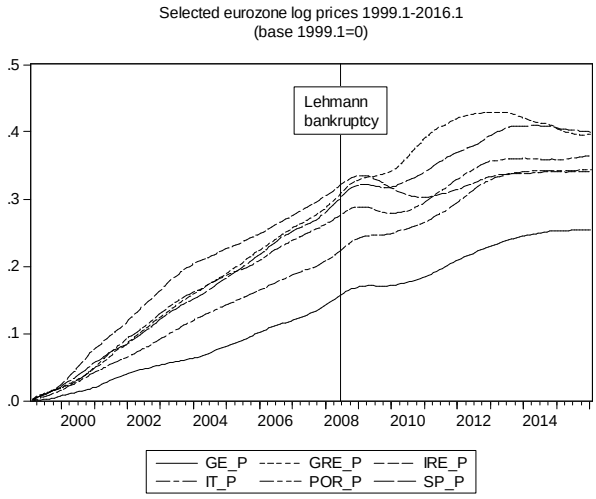


Figure 4

The connection between low real interest rates and the stimulus this provided for economic activity and higher inflation is shown in Figure 5 which plots the growth in the price level over the period 1999-2007 against the average real interest rate over that period for selected eurozone countries (Germany, Greece, Ireland, Italy, Portugal and Spain). The graph suggests that the lower the real interest rate, the higher is inflation.

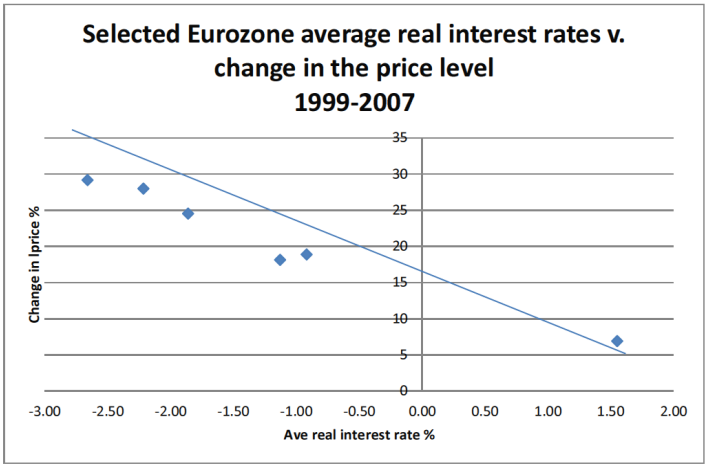


Figure 5

The expectation that eurozone economies would converge is not supported by the evidence provided by Figure 6 which shows that countries with higher inflation in 1999 also had greater inflation in the following years.

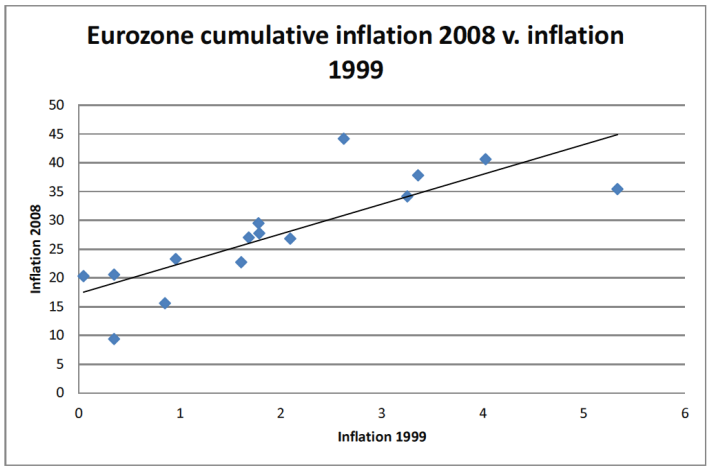


Figure 6

To summarise, following joining EMU, and prior to 2008, the main crisis coun-

tries experienced the highest rates of inflation, negative real interest rates and the highest rates of economic growth. As a result, they had the greatest loss of competitiveness, the largest current account deficits and levels of debt (private or public) that proved crippling. Far from converging as expected, there was a divergence of output and price levels. The scene was set for the eurozone crisis that began in 2008.

3. The eurozone crisis

A prime cause of the crisis is the single currency and a one-size-fits-all interest rate policy based on targeting the average eurozone rate of inflation while country inflation rates differed considerably. Although monetary policy was an important cause of the crisis, given its inflation mandate, in one sense the ECB is not to blame as it was very successful in keeping eurozone inflation close to target. However, in its official publications it showed no awareness of the increasing divergence of eurozone economies and the impending problems this might cause.

The eurozone has sought to alleviate the crisis through monetary policy. After a delay, in 2012 the ECB followed central banks in, for example, the US, the UK and Sweden, by pursuing unconventional monetary policies designed to expand credit creation in the private sector. The ECB announced the Outright Monetary Transactions (OMT) scheme, a government bond purchasing programme. Even more controversial was its Public Sector Purchase Programme (PSPP) under which the ECB committed itself to buying on the secondary market without sterilization at the rate of €50 billion per month sovereign bonds (88%) and bonds of supra-national institutions (12%). Both programmes were objected to in Germany. The German Federal Constitutional Court considered whether the ECB purchasing

programs of public bonds was an act of economic rather than monetary policy. The European Court of Justice, however, ruled that the ECB's bond purchasing programmes were legal as they might be capable of contributing to the stability of the euro area, which is a matter of economic policy.

More relevant from an economic perspective is that, like the unconventional monetary policies of the US and the UK, that of the ECB does not appear to have been successful in bringing about an increase in credit. Evidence on this failure of unconventional monetary policy to stimulate credit expansion in the eurozone, the UK and the US is provided by Richard Koo and is shown in Figure 7. Although, as a result of quantitative easing, the monetary base has expanded hugely since 2008 in all three monetary jurisdictions, bank credit has, if anything, declined.

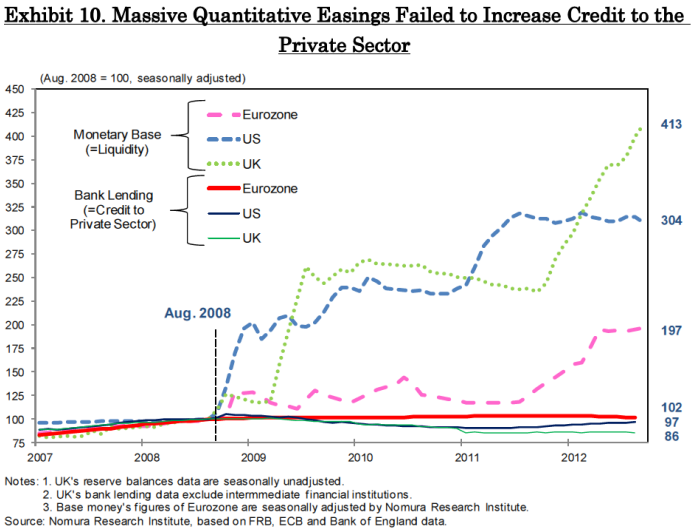


Figure 7

The official reason given by the ECB for its unconventional monetary policy is in order to raise the rate of eurozone inflation from close to zero back to its 2 per

cent target level. Credit creation is just the means of achieving this. In theory, monetary policy based on inflation targeting is designed to offset demand shocks by manipulating demand via interest rates. The low inflation in the eurozone after the crisis, like that in the UK and the US, is however due not to negative demand shocks, for which a monetary stimulus would be the appropriate response, but positive supply shocks brought about by externally-determined falling commodity prices, notably the price of oil. Low inflation brought about in this way is broadly beneficial for the EU and not harmful, and so does not need to be counteracted by expansionary monetary policy.

Another important cause of the crisis is the policies of the crisis countries, both fiscal policy and the benign neglect of private sector borrowing, especially for building. In the cases of Ireland and Spain nothing seems to have been done to damped their private sector housing booms that were fuelled by low borrowing rates. When rates rose following the crisis (see Figure 1) mortgage defaults increased and the banks found they had large numbers of non-peforming loans. The Irish banks had borrowed short and lent long, and found that they were facing a liquidity crisis as they tried to roll over their short-term debt. To prevent bankruptcy the Irish government stepped in to recapitalise the banks, putting this on its balance sheet with the result that the Irish public deficit rose to over 32 per cent of GDP in 2010. A banking crisis had then become a fiscal crisis. The governor of the Irish central bank said that the crisis had been "one of the most expensive banking crises in world history". A similar situation arose in the Spanish banks, except that the bank bailout was not put on the government balance sheet.

In Italy and Portugal, and especially in Greece, the crisis was due to excessive government borrowing which, as can be seen in Figure 1, became highly expensive

when borrowing rates at last began to reflect the sovereign risks involved. This is still putting considerable strains on their fiscal stances, to the extent that even though some of Greece's debt was written off, it is still unclear whether Greece will be able to remain solvent or stay in the eurozone without further bailouts.

The financial difficulties of Greece have revealed more deep-seated flaws in the euro system. A key role of a central bank is to act as lender of last resort to the private banks. The European Central Bank has been politically constrained in carrying out this function. It even suspended support for the banks thereby bringing some of them to the point of collapse. Only a political agreement at heads of government level prevented this. A constraining factor for the ECB was whether Greek banks satisfied Bagehot's condition that a bank should be solvent in order to be bailed out. This depended on the market value of their large holdings of Greek government bonds and whether the Greek government would default on its debt. Consequently, the lender of last resort function of the ECB became tied to the solvency of the Greek state, which is largely a political issue related to the bigger problem of the rules that apply to eurozone countries on which there appears to be no agreement.

Article 127 of the Lisbon Treaty sets out further responsibilities for the ECB. This Article requires any country leaving the eurozone to also leave the EU. But it does not set out rules governing country bailouts. Both articles imply that the ECB has responsibility only for monetary policy. However, it appears that in the financial crisis the ECB extended its reach to fiscal policy as it set out four fiscal reforms that Ireland had to undertake before receiving loans.

The fiscal rules contained in the Maastricht Treaty would, if adhered to, avoid the need for bailouts. Significantly, Germany and France were the first countries

to break the rules. Contary to the rules, they did so without penalty. The rules themselves impose a 60 percent limit on a government's debt-GDP ratio and a 3 percent limit on the ratio of the government deficit to GDP. Both of which have been exceeded since the financial crisis by most eurozone countries, especially Greece. These limits imply that the fiscal stance would be permanently sustainable only with the additional condition that the nominal rate of growth exceeds 5 percent. Since the financial crisis the rate of nominal growth of any eurozone country has rarely exceeded 5 percent; therefore even the Maastricht conditions do not provide a viable rule.

The issue of bailout rules remains to be determined by eurozone countries. The difficulty has been that bailouts imply a fiscal transfer between countries and further loans imply a transfer of risk between countries. This is why Germany, the country in the forefront of bearing these costs and supported by its federal courts, has strongly resisted bailouts. Switzerland, which has a clear no-bailout condition for its cantons that it has adhered to, provides a model for a eurozone policy of no bailouts. The eurozone has shown itself reluctant to impose a no-bailout rule due to concerns about the precedent this would set: receives a bailout other countries would also expect one, and once one country has left the euro the fear is that others may be more inclined to do so. At the same time the eurozone has failed to set rules determining the conditions for the write-down of loans. As may be seen from the results reported below, it is unlikely that the agreement reached in July 2015 will allow Greece to stay in the euro without a further substantial write-down of debt.

To summarise, belonging to the eurozone seems to have been a primary cause of the financial crisis. Existing rules governing the eurozone failed to avert the

financial crisis and it is far from clear whether the uncoventional fiscal and monetary policies implemented after the crisis have led to much improvement. Being in a fixed exchange rate system is highly likely to significantly increase the cost of adjustment following negative economic shocks. Deciding how best to rescue countries in severe financial difficulties has proved highly politically contentious. The Five Presidents' Report "Completing Europe's Economic and Monetary Union" (2015) prepared by the President of the European Commission, in close cooperation with the President of the Euro Summit, the President of the Eurogroup, the President of the European Central Bank, and the President of the European Parliament, is a major attempt to formulate a new framework for the euro area and is designed to avoid a repeat of the crisis in the future.

4. The Five President's Report

The central idea of the Maastricht Treaty is that the EC countries should move towards an economic and monetary union, with a single currency managed by an independent central bank. As this was the only new institution proposed, the implication is that either the system would be self-regulating or could be managed by independent national governments. The Five Presidents' Report can be seen as a fundamental rejection of the ideas behind the Maastricht Treaty and an attempt to overcome its flaws. The report envisages far greater convergence on national economies and shifting "from a system of rules and guidelines for national economic policy-making to a system of further sovereignty sharing within common institutions". It proposes a Fiscal Union, a Banking Union, a Capital Markets Union and much closer political integration among eurozone countries.

Fiscal Union

The Fiscal Union is designed to control excessive public sector borrowing and hence prevent a sovereign debt crisis and eurozone bailouts that transfer resources between countries. It envisages responsible national fiscal policies which guarantee that public debt is sustainable and ensure that fiscal automatic stabilisers can operate to cushion country-specific economic shocks. In case of a very severe crisis, it recognises that national fiscal stabilisers might not be enough to absorb shocks and provide an optimal level of economic stabilisation. As this could harm the whole euro area, it proposes a euro area-wide fiscal stabilisation function supervised by an advisory European Fiscal Board which would coordinate and complement the national fiscal councils. Such a proposal would clearly entail a considerable loss of fiscal, and hence political, independence. The Fiscal Board would, in effect, be determining the fiscal stance of member countries as it would be able to veto national fiscal policies that it thought might have spillover effects on other countries.

An important role of fiscal policy is economic stabilisation, especially in recession. The Report states that it is important to create in the longer run a euro area stabilisation function to cushion large macroeconomic shocks and make EMU more resilient. The aim is to strengthen the current surveillance activity of the Macroeconomic Imbalance Procedure by a more interventionist mechanism. In principle, a fiscal stimulus may either be bond financed or funded by printing money. As members of the eurozone have surrendered their control of the money supply to the ECB, they can only use bond finance. The proposed Fiscal Union with its focus on controlling deficits and the level of government debt is therefore in direct conflict with the use of fiscal policy as a stabilisation tool. Eurozone countries would then have neither monetary nor fiscal policy instruments to stabilise their economies. This is a recipe for the prolonged stagnation of a country. Even worse,

it is not clear how a recession affecting the whole eurozone could be alleviated as the Report, having constrained what individual member countries can do, has left the formulation of proposals for dealing with this for the future.

Banking Union

The Banking Union seeks a recovery and resolution mechanism for the banks supported by bridge financing. Its aim is to transfer risk and the cost of bailouts from the public to the private sector. It envisages a credit line from the European Stability Mechanism to a Single Resolution Fund that would be fiscally neutral over the medium term by ensuring that public assistance is recouped by means of ex post levies on the financial industry. And as the current set-up with national deposit guarantee schemes remains vulnerable to large local shocks (in particular when the sovereign and the national banking sector are perceived to be in a fragile situation), it proposes common deposit insurance scheme privately funded through ex ante risk-based fees paid by all the participating banks in the Member States and devised in a way that would prevent moral hazard.

The Report states that "in a monetary union the financial system must be truly single or else the impulses from monetary policy (e.g. changes in policy interest rates) will not be transmitted across its Member states". It is not clear exactly what this means. If it means that interest rates should be the same in all eurozone countries, or that the response to changes in the policy rate should be the same in each country, then a single financial system would not be desirable. One of the problems of eurozone monetary policy has been that the ECB has sought to create a uniform interest rate across member countries irrespective of their different financial risks. It would be far better if borrowing rates reflected country risk rather than be uniform. Financial markets should be fully integrated

– i.e. capital movements should be free – but monetary and financial policy should not aim set a single interest rate.

Capital Markets Union

A Capital Markets Union is sought so that companies can gain access to capital markets and other sources of non-bank finance in addition to bank credit. It is argued that this would strengthen cross-border risk-sharing through deepening integration of bond and equity markets and it would provide a buffer against systemic shocks in the financial sector and would strengthen private sector risk-sharing across countries. A single European capital markets supervisor is proposed. This greater regulation is designed to avoid the insolvency of the private sector banks and financial intermediaries that bear these risks. Taken together, the Banking and Capital Markets Unions aim to provide a larger and more mutualised bailout fund for the banking system and would help financial markets to spread the risk of holding government debt.

An assessment

The aim of all three Unions would be to share the burden of economic and financial distress more widely and to impose common rules on member countries. All three Unions entail a considerable loss of national independence and transfer of responsibilities to an unelected and largely unaccountable body, the Commission. Democratic controls would therefore be greatly weakened and the current democratic deficit increased. The likelihood of conflict between the Commission and national governments would be considerable and its method of resolution is unclear.

Even with such centrally imposed rules it is not clear that the Report's proposals are viable. First, they do not deal with the existing causes of the crisis.

If, for whatever reason, member countries have different rates of inflation then the existing problem with a one-size-fits-all monetary policy remains. Moreover, if the ECB continues to squeeze interest rate spreads then the discipline provided by financial markets will be undermined as risks will still not be priced correctly. Second, the proposed rules for fiscal policy, which focus on avoiding debt default, constrain the use of fiscal policy as a stabilisation instrument in recession. And it remains unclear how the eurozone as a whole could deal with area-wide recession.

5. Is there an alternative market-based solution?

The premises on which the Five Presidents' Report is based is that having given up their monetary policy instrument, and given the constraints on the use of independent fiscal policy, further regulation in the eurozone is required to make the single currency work and that a market solution is not possible. This is becoming a widely-held view, but is it correct? In particular, might there be a market solution that would not require these additional regulations and the need for much more political integration?

Under current arrangements markets are expected to provide the necessary fiscal discipline. If a fiscal stance is deemed unsustainable then this should be reflected in the country's sovereign credit rating and the size of the sovereign risk premium. The evidence prior to the eurozone crisis is that financial markets failed to do this: neither credit ratings nor sovereign risk premia anticipated the ensuing crisis.

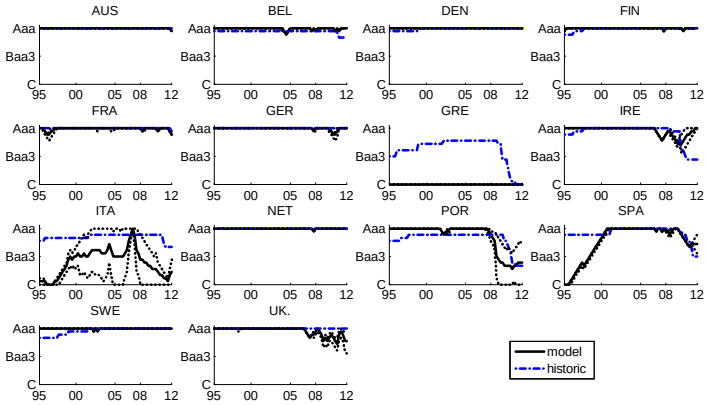
This can be seen in Figure 1. Prior to the collapse of Lehmann Brothers all of the crisis countries were able to borrow at the same interest rates as Germany - between 3 and 5 per cent per annum. It was only after the crisis arose that rates

diverged, reflecting differences in country riskiness. While Germany's interest rate fell after 2008, the rates for the other crisis countries rose sharply. The rate for Greece rose to 28 per cent, for Ireland to 13 per cent and for Portugal to 14 per cent. After 2012 these rates began to fall sharply reaching less than 2 per cent. Even for Greece rates fell to 9 per cent. As the threat of default was still present for some of these countries, especially for Greece, an explanation for this is required. The most likely explanation is ECB monetary easing and its asset purchasing policy which reduced the cost of borrowing. This was the intention of the policy. Unfortunately, by reducing the cost of borrowing, even for countries with a strong risk of default, the ECB is also directly undermining market discipline. Once more, the risk of default is no longer being priced by the financial markets. It could be argued that, due to undermining market discipline in this way, a justification is provided for seeking non-market ways to control borrowing such as in the Five Presidents' Report. But it does not refute the argument that market discipline, were it imposed, could also provide a mechanism for achieving fiscal constraint.

Further evidence on the failure of financial markets to price risk correctly prior to the eurozone crisis is provided by Polito and Wickens (2015) who derived fiscally-based sovereign credit ratings for the eurozone countries prior to and after the crisis and compared these with the official credit ratings. The ratings given by the credit rating agencies are shown in Figure 8 (blue/dashed line). It is only after the crisis that Greek debt is downgraded to junk bond status. Irish, Spanish and Portugese bonds were also downgraded, but to non-investment status.

Figure 8 also shows the credit ratings calculated by Polito and Wickens. The model-based credit ratings are obtained by estimating the probability that sovereign debt will in the future exceed a level that is fiscally sustainable as deter-

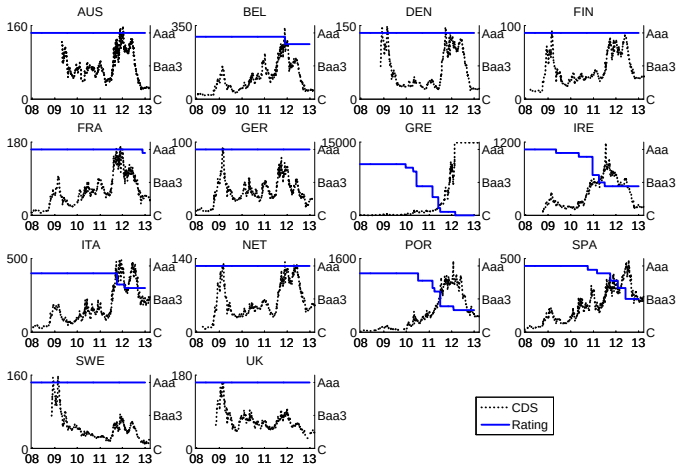
mined by a calibrated DSGE model of each economy. These probabilities are then mapped into credit ratings using Moody's tables. The dotted lines refer to different assumptions about future debt limits.



EU credit ratings (5-year ahead)
Figure 8

These credit ratings are similar to the official ratings for most eurozone countries, but for the crisis countries they show a lower credit rating. The credit rating for Greece is calculated to be junk bond status thoughout the whole period 1995-2013, and even before Greece was admitted to the eurozone in 2002. Italy too is given a much lower credit rating than the official rating since the start of EMU. The ratings for Ireland, Portugal and Spain are similar to the official ratings with downgrades not occurring until after the start of the crisis. The reason for the differences between the ratings for Greece and Italy and those for Ireland, Portugal and Spain is that these credit ratings are based purely on the fiscal stances of countries. Whereas the debt crises in Greece and Italy are due to unsustainable fiscal policies, those for Ireland and Spain are due to the private, and not the

public, sectors; Portugal's seems to be due to both. These results suggest that the official credit ratings failed to anticipate the harmful effects of the fiscal stances of Greece and Italy. The CDS prices for eurozone countries are shown in Figure 9 together with their official credit ratings for the period 2007-2013. Starting near zero at the beginning of 2008 for all eurozone countries, CDS prices for all eurozone countries rose in 2009, and again in 2011-12 before falling in 2013. (Note the difference in scales across countries.) In contrast, the credit ratings remained largely unaffected for most countries, and only fell for the crisis countries in 2010 or 2011. Even CDS prices for Greece did not rise much until 2010, which is when its official credit rating started to be steadily downgraded. This suggests that, like the official credit ratings, market CDS prices failed to anticipate the eurozone crisis.



Credit ratings and CDS prices
Figure 9.

It is interesting to compare the apparent failure of financial markets to antic-

ipate the eurozone crisis with the academic literature on financial frictions, see for example Bernanke and Gertler (1989) and Gertler and Kiyotaki (2011). This literature attempts to fill a gap in macro-finance by analysing the effect on interest rates of default, especially default in the inter-bank market. The main result is that banks should charge a credit premium - an external finance premium - to borrowers that might default. As banks are assumed to be risk-neutral in this literature this credit premium (the external finance premium) is not strictly a risk premium. It just compensates banks for any expected loss in income due to possible default on their loans to the inter-bank market and the private sector.

Although the financial frictions literature may provide an explanation of the rise in borrowing rates following the financial crisis, and why the subsequent recession was so deep and prolonged, it does not explain the financial crisis itself because, as we have seen, borrowing rates before the crisis failed to anticipate the crisis in the way envisaged in the financial frictions literature.

6. Conclusions

This paper has argued that the eurozone financial crisis was in large part the result of a common monetary policy not being suitable for individual countries. Aided by poor policy choices, this created excessive private and public borrowing and a balance sheet recession in which expansionary monetary policy has had limited success. The financial markets failed to identify the crisis beforehand and continued to lend to the crisis countries at the same interest rate as Germany.

In an attempt to deal with the spillover effects to eurozone member countries of the costs of the resulting potential bank and sovereign default, the EU Commission's Five Presidents' Report has proposed increased supervision of national

fiscal policies, the banking system and European capital markets. These proposals entail a significant loss of national independence and a transfer of powers to the unelected and largely unaccountable Commission. Moreover, by focusing on the control of debt, the Report greatly limits the use by member countries of fiscal stabilisation policy when in recession. Having given up their monetary policy instrument, member countries are also being deprived of their fiscal policy instruments. Nor does the Report deal with euro area-wide recession. Furthermore, the Report does not eliminate one of the original principal causes of the eurozone crisis, namely, the mispricing of risk. A one-size-fits-all monetary policy would remain and could continue to cause inappropriate real interest rates for eurozone member countries. This would undermine financial market discipline by again mispricing country risk.

The ultimate goal of the founders of the European project - namely, political union - seems closer today due to a failure of the steps taken so far - notably monetary union (but also the Schengen arrangements of unfettered movements of people) - rather than their success. In order to rescue monetary union from the pressures put on it by unsustainable fiscal policies, banking and sovereign debt default, and losses of national competitiveness, the EC Commission is proposing new rules that entail ever closer union and a loss of national sovereignty. If financial markets continue to misprice financial risks, as they have in the past, there may be little alternative to the Commission's proposals, however imperfect they may be. The price for sustaining monetary union would then be very high.

7. References

Bernanke, B. and M. Gertler. "Agency costs, net worth, and business fluctuations." *American Economic Review.* 1989. 79: 14-31.

Gertler, M. and N. Kiyotaki. *Handbook of Monetary Economics vol 3.* (eds. B.M. Friedman and M. Woodford). Elsevier. 2011. Ch 11, 547-599.

Juncker, J-C. "Completing Europe's Economic and Monetary Union", *European Commission.* 2015.

Polito, V. and M.R. Wickens. "Sovereign credit ratings in the European Union: a model-based fiscal analysis", *European Economic Review.* 2015. 78, 220-247.