

Future of eurozone

SUMMARY

When it was created, it was reasonable to think that the architecture of the monetary union was not perfect. It was also likely that the imperfections would lead to difficulties, possibly even crises. This article identifies six flaws, most of which had been identified even before the launch of the euro. It starts by pinpointing why the Eurozone, a bold and unprecedented experiment, is inherently fragile. It is not conducive to the convergence of national inflation rates, it is not an optimum currency area, and it is not a federal state. Taking these characteristics as given, the article argues that the Eurozone needs to address their implications. It observes that it has not been the case so far, hence the six flaws: fiscal discipline has not been achieved; the need for a Banking Union, which has finally been recognized and only partly implemented; the ECB is not a complete and fully independent central bank; some member countries need a sovereign debt relief; structural reforms are badly needed but intrusiveness cannot be the solution; the governance of the Eurozone is not designed for crisis management.

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—Charles Wyplosz

The six flaws of the Eurozone

Charles Wyplosz¹

The Graduate Institute, Geneva and CEPR, Geneva, Switzerland

1. INTRODUCTION

When it was created, it was reasonable to think that the architecture of the monetary union was not perfect. The founding fathers could not rely on previous identical experiments, so they had to innovate. Innovations, we all know, are but a blueprint of the object that is being invented, just think of the first electric bulb or the first constitution of a country. The Global Financial Crisis, which started *mezzo voce* in 2007 and erupted in September 2008, directly hit many Eurozone countries but there was nothing specifically European about it. By late 2009, however, that crisis was morphing into the sovereign debt crisis that selectively affected the Eurozone. Six years later, the crisis is not over.

A fast-growing literature examines the Eurozone crisis, its causes and main features. The present paper does not attempt to review this literature. Anyway, the crises have differed from one country to another. Greece and Portugal faced a public debt crisis. These are countries that never balanced their government budget at least since the

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mid-1970s, as did France or Italy among others. On the other hand, Ireland and Spain had been fiscally disciplined for several years before the crises, but they allowed a housing price bubble to grow unchecked, as did the Netherlands. Cyprus was largely a collateral victim of the Greek debt relief. Several other things had gone wrong since the creation of the euro. Wages outpaced labour productivity gains in many countries, including Italy. Current account deficits first reached abysmal levels in the crisis countries. They were easily financed until a sudden stop triggered the crisis.

Most interpretations tend to focus on one or two of these pre-crisis imbalances. Given that the imbalances grew over a few years preceding the crisis, formally backing any interpretation is at best fragile because sample sizes are small. Moreover, several of the identified culprits are not obviously exogenous. This includes price and wage developments, as well as trade and capital flows. Identifying truly exogenous shocks, including policy mistakes, is a tall order of requirement.

This paper does not attempt to clarify this maze of controversies. Rather, it argues that the crisis was an accident waiting to happen because of fundamental flaws in the architecture of the Eurozone. It identifies three inherent challenges faced by any multinational monetary union. First, the 'Walters Critique' asserts that a monetary union is fundamentally unstable because initially heterogeneous conditions tend to lead to increasing divergences. The second challenge is for a monetary union to spontaneously adjust to divergences; this is one way to look at the Optimum Currency Area (OCA) theory. The third challenge is to build an architecture that promotes adequate policy responses, using fiscal federalism principles. These three challenges are grounded in different literatures that are not tightly connected, yet they are logically related. In an OCA, labour mobility is the response to asymmetries, so that the Walters Critique ceases to hold and there is no need for stabilizing policies. In a union that is not an OCA, adequate policies can counteract the Walters Critique. The three challenges are presented in Section 2. They serve as a framework for the rest of the paper.

The initial design of the Eurozone failed to deal with these challenges. The paper identifies six critical flaws that made it possible for shocks either to occur or to be lethal once they occurred. The flaws are presented in the next six sections. Section 3 notes that fiscal discipline, well identified as a key requirement, has not been achieved because the solution adopted in the treaties is flawed. Successive efforts at making the Stability and Growth Pact work have failed because the nature of the flaw is not being recognized. Section 4 looks at the Banking Union, the only successful reform adopted in the wake of the crisis. This reform is incomplete, though. Section 5 argues that the ECB is not a complete central bank. Its famed independence is superficial because the bank faces an array of national constituencies that have different interests and do not share a common understanding of central banking. Section 6 argues that some member countries need a sovereign debt relief. Section 7 notes that structural reforms that stand to improve the functioning of the monetary union are not adopted but it stresses that intrusiveness cannot be the solution. Section 8 looks that the sixth flaw, the governance of the Eurozone, which is not designed for crisis management. The last section concludes.

2. THREE CHALLENGES

2.1. The Walters Critique revisited

2.1.1. Relevance. Walters (1986) was concerned with the European Monetary System, the fixed exchange rate arrangement that existed from 1974 to 1998. He observed that inflation differentials require exchange rates to be adjusted but capital mobility will trigger currency crises when realignments sporadically come to be seen as imminent. Rigidly fixing the exchange rate, instead, will result in endless inflation rate divergence. Indeed, with nominal interest rates equalized, the real interest rate will be lower in countries where inflation is higher and, conversely, they will be higher where inflation is higher. As a result, the common monetary policy is more expansionary in the higher inflation countries, further driving inflation up and real interest rates down and so on. The exact opposite should occur in the initially lower inflation countries, where inflation will keep declining. The system is unstable.

The Walters Critique is often summarily dismissed as irrelevant to the Eurozone because it concerns fixed exchange rates, not a monetary union. This is incorrect. The critique explicitly considers the case when the exchange rate is never changed, which corresponds to a monetary union. Even though exchange rates no longer exist within the Eurozone, it still makes sense to think of national real exchange rates. Price and wage developments remain 'domestic things' because of a myriad of institutional arrangements such as segmented labour markets and wage setting arrangements, nationally regulated prices (electricity, gas, public transportation, etc.), independent fiscal policies and taxes, nontraded services that make up 50% or more of GDP, etc.

It is also asserted that there is no empirical support for the critique since the instability that it identifies is not visible in existing monetary unions. This too is incorrect, for two reasons. First, as explained below, there exist mechanisms (largely absent in the Eurozone) to stabilize a monetary union. Second, history provides examples. For instance, Fraas (1974) describes the instability during the early stages of monetary unification in the United States in the 1820s. 'Inside' territories experienced lastingly inflation rates, significantly above those on the East Cost, and displayed large current deficits. For a while the predecessor of the Fed, the Second Bank of the United States, operated a system similar to today's Target II. When it stopped doing so, because of concern for accumulating imbalances, the US Treasury stepped in, as it was keen to extend its federal powers.² Thus, the history of the United States can be seen as the gradual adoption of policies designed to stabilize the monetary union. This is also the conclusion that emerges from the survey of monetary unification in Italy and Germany by Bordo and Jonung (1999).

² I am indebted to Michael Bordo for pointing to this reference.

2.1.2. A simple model of the Walter Critique interpretation. The Walters' Critique is formally studied in Miller and Sutherland (1990), who use a New Keynesian Phillips curve along with an IS curve. The model is saddle-path stable and agents are assumed to select the unique convergence path. This is not surprising given the forward-looking nature of price setting.³ In this section I take the opposite route. In order to reproduce Walters' own description, I use a very simple one-good model that includes a backward looking Phillips curve.⁴ The purpose is to start with an unstable model and then ask what is needed to make it stable.

The model, borrowed from Mongelli and Wyplosz (2009), ignores uncertainty and assumes perfect foresight. The Phillips curve equation, which assumes a zero inflation target, is complemented with an open-economy IS curve:

$$\dot{\pi} = ay, \quad (1)$$

$$y = -b(i - \pi - \bar{r}) + c(\lambda - \bar{\lambda}), \quad (2)$$

where y is the output gap, π is the inflation rate, λ is the real exchange rate and $\bar{\lambda}$ its equilibrium level, i is the nominal interest rate and \bar{r} is the natural real interest rate. Within the monetary union, the domestic nominal interest rate i is equal to the union-wide interest rate i^* . For simplicity, in line with the zero inflation target assumption and assuming zero inflation abroad, I assume that $\bar{\lambda} = \bar{r} = 0$. Finally, with an irrevocably fixed exchange rate, the real exchange rate is driven by the inflation differential. This is formalized in Equation (4).

In Equation (2), the first part captures the usual negative impact effect of the real interest rate on domestic demand for domestic goods while the second part represents the current account, which declines when the real exchange rate appreciates (i.e. when λ declines). The model boils down to two equations:

$$\dot{\pi} = \alpha\pi + \beta\lambda, \quad (3)$$

$$\dot{\lambda} = -\pi, \quad (4)$$

with $\alpha = ab$ and $\beta = ac$. In Equation (4), the exchange rate is assumed to remain unchanged and foreign inflation is nil.

The determinant of the corresponding matrix is $\beta > 0$, which means that the product of the eigenvalues is positive, so they have the same sign. The trace is $\alpha > 0$, which means that the sum of the eigenvalues is positive. This implies that they are both positive and the model is unstable. If we start with a positive inflation differential ($\pi > 0$) and/or

³ Instability occurs when the financial and labour markets form different, heterogeneous expectations.

⁴ Another reason to use this formulation is that the empirical evidence supports the presence of a backward looking component. An intermediate hybrid Phillips *à la* Gali curve would raise the complexity of the model and prevent an analytical resolution, but we know that the forward looking component would work towards model stability while the backward looking component would work towards instability.

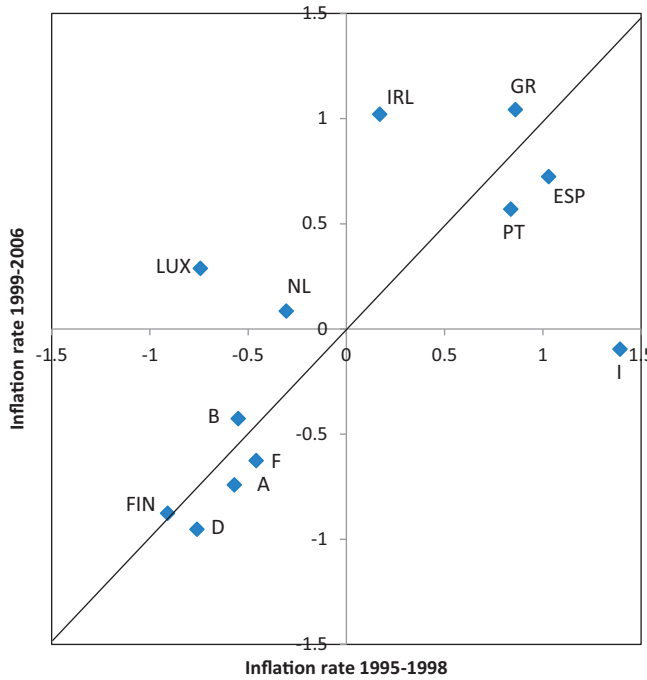


Figure 1. Differences from Eurozone average (%)

Notes: Inflation is measured with HICP. For Luxembourg: 1996–8. Greece joined in 1991 so the periods are 1997–2000 and 2001–06.

Source: International Financial Statistics, IMF.

an overvalued real exchange rate ($\lambda > 0$), inflation rises indefinitely and the real exchange appreciates indefinitely as well, leading to an ever-widening current account deficit. Conversely, if we start with $\pi < 0$ and/or $\lambda < 0$, the outcome is continuous deflation, exchange rate depreciation and current account surpluses. The only stable equilibrium is $\pi = 0$ and $\lambda = 0$. This is the Walters Critique.

Note that, in this model, the feedback from rising inflation to real appreciation and a reduction of net foreign demand for domestic goods (a deterioration of the current account) cannot provide enough stabilization to prevent instability. This is not a multiplier story, whereby changes in net foreign demand are a fraction of changes of domestic demand. Indeed the coefficients b and c in Equations (1) and (2), and therefore the coefficients α and β in Equations (3) and (4), are independent of each other. It is truly a systemic feature.⁵

An immediate objection is that an ever-widening current account deficit violates the budget constraint so that, with forward-looking consumers, domestic demand would decline. This is indeed why models with proper forward-looking Phillips curves are

⁵ If the current account effect were to dominate in Equation (2) so that the output gap would decline, Equation (1) implies that inflation would decrease and the real exchange rate would depreciate, raising the output gap, which is a contradiction.

(saddle-path) stable, as previously noted. Yet, that is not what was observed. Continuous, often widening, current account deficits in several Eurozone countries over 1999–2006 along with zero spreads, indicate that markets were not concerned with the budget constraint, or assumed that it would be somehow taken care of. It suggests that the expected budget constraint can be violated for a long time when foreign financing is abundant. The zero spreads until late 2008 suggest the kind of myopia assumed here.

2.1.3. The critique at work. The critique predicts that if inflation rates ever differ, they will increasingly diverge. Figure 1 shows that this prediction of the Walters Critique is only partially verified. For the 12 initial Eurozone member countries, the scatterplot compares the average inflation rates over two periods, after the creation of the euro and before the crisis (1999–2006) and before the creation of the euro (1995–8). For each sub-period, the inflation rates shown are the difference from the average of all 12 countries. Only five countries (Ireland and Greece on the up side, Austria, France and Germany on the down side) have increasingly diverged from the Eurozone average. Four other countries (Portugal and Spain; Belgium and Finland) have retained their above or below average status. In the remaining three countries (Italy, Luxembourg and Finland) inflation rates have converged towards the mean.

An interpretation of this observation is that higher inflation erodes external competitiveness and therefore demand for domestic goods. In turn, the lower demand should weaken inflation and, therefore, mitigate the divergence and even possibly promote convergence. Figure 2 reveals a tight link between pre-euro inflation and the current account after the creation of the euro. The current accounts deteriorated after 1999 in all countries that started with above average inflation. With three small exceptions, they improved where inflation had been below average. Widening current accounts imbalances raises the question of their sustainability.

2.1.4. How to deal with the Walters Critique. Given the systemic nature of the Walters Critique, something fundamental must be changed to make the model stable. Formally, either the determinant β must be made negative so that we have two eigenvalues of opposite sign and a saddle path equilibrium, or α must be negative so that we have two negative roots and full stability.

2.1.4.1. Countercyclical fiscal policy 1. From the start, it was well understood that the countercyclical role of domestic fiscal policies would have to become more important to make up for the loss of the monetary policy instrument. Could it stabilize the model? An easy way to check this presumption is to add to domestic demand Equation (2) a countercyclical term. Let Equation (2) become:

$$y = -br - cl - ky, \quad (5)$$

where ky captures countercyclical fiscal policy. Now $\alpha = ab/(1+k)$ and $\beta = ac/(1+k)$, and the model remains unstable. The reason is the same as the one given in Footnote 6.

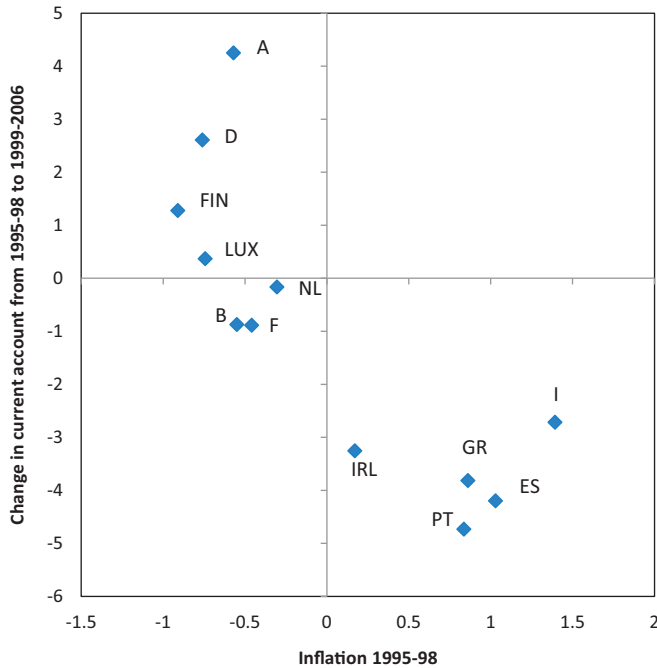


Figure 2. Inflation and the current account

Notes: Horizontal axis – difference between average country inflation and average Eurozone inflation over 1995–8; inflation is measured with HICP. For Luxembourg: 1996–8. Vertical axis – change in the average current account balance (% of GDP) between 1995–8 and 1999–2006.

Sources: International Financial Statistics, IMF and Economic Outlook, OECD.

2.1.4.2. *Countercyclical fiscal policy 2.* Another possibility is for countercyclical fiscal policy to respond to inflation or, equivalently to the real interest rate instead of the output gap. When inflation rises, the real interest rate declines, which boosts domestic demand. A possibility, therefore, is for fiscal policy to respond to the real interest, e.g. being contractionary when it declines. In that case Equation (2) becomes:

$$y = -br-cl + kr, \tag{6}$$

with $k > 0$. We now have $\alpha = a(b-k)$, which is negative if $k > b$. If fiscal policy is sufficiently counter-inflationary, the eigenvalues are both negative and the model is stable. In effect, fiscal policy substitutes for the lost monetary policy instrument.

According to Figure 3, which plots the average cyclically adjusted balance against the average inflation rate over the pre-crisis years 1999–2006, fiscal policy has tended to be pro-cyclical in the sense that the balance has been lower where inflation was higher. This means that $k < 0$ and therefore the disequilibrium is exacerbated.

2.1.4.3. *Countercyclical fiscal policy 3.* Instead of responding to inflation or the interest rate, fiscal policy could aim at stabilizing the real exchange rate around its equilibrium

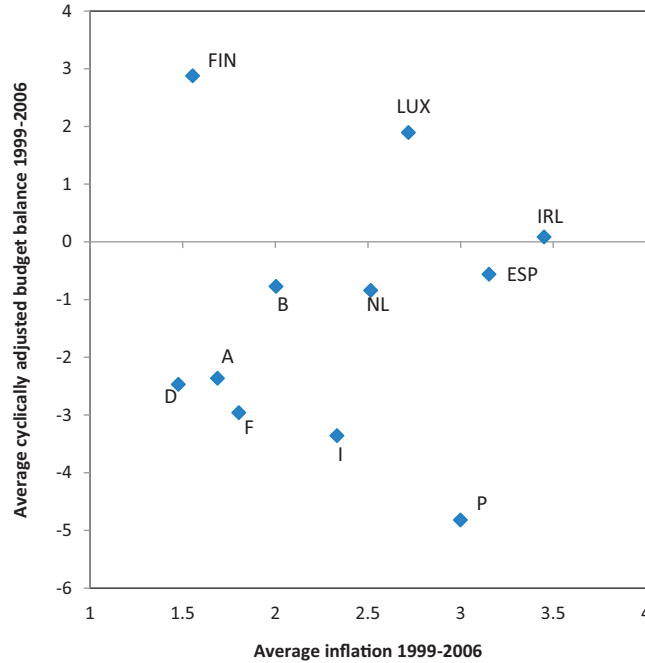


Figure 3. Fiscal policy and inflation

Notes: Cyclically adjusted balances in percent of trend GDP. Inflation is measured with HICP. For Luxembourg: 1996–8. Greece is excluded for lack of data availability.

Sources: International Financial Statistics, IMF and AMECO online, European Commission.

level. This means that domestic demand for domestic goods now declines when the real exchange depreciates as shown in Equation (7):

$$y = -br + c\lambda - k\lambda. \quad (7)$$

In that case $\beta = a(c - k)$ and then the two eigenvalues are of the opposite signs if $k > c$. The system is now saddle-path stable. For this solution to be effective, with backward looking, slow-moving inflation, reaching the stable convergence path requires that the price level must decline discretely to achieve a one-off adjustment of the real exchange rate. Put differently, internal devaluations must be swift enough.

2.1.4.4. Adjusted monetary policy. Another possibility, purely theoretical, is that the ECB sets its interest rate to deal with the high inflation country. This can be captured by a Taylor rule focusing on the home country:

$$i = (1 + u)p + vy, \quad (8)$$

with $u > 0$ and $v > 0$. In that case, $\alpha = -abu/(1 + bv) < 0$ and $\beta = ac/(1 + bv) > 0$, the two eigenvalues are negative and the model is stable. This result merely confirms the Walters Critique: it is the absence of domestic monetary policy that creates instability.

2.1.4.5. Interest rate risk premia. In the years preceding the crisis, it was noted widely that nominal interest rates were almost completely equalized within the Eurozone. With hindsight, it now appears that the financial markets failed to anticipate the sovereign debt crisis and that they believed that no country would be allowed to leave the Eurozone, which meant no default and no redenomination risk premia. Would risk premia have prevented instability?

To see this, assume that there exists an interest rate risk premium that is driven by inflation. Note that it is the closure of this channel that lies at the heart of the Walters Critique. In that case we replace the previous assumption that $i = i^*$ with $i = i^* + h\pi$. This means that we now have $\alpha = ab(1-h)$. If the risk premium is sufficiently responsive to the wage differential, that is if $h > 1$, the model becomes stable and the critique no longer applies. This apparently paradoxical result – the Walters Critique fails to apply when markets strongly believe in it – simply occurs because the real interest rate now rises with (expected) inflation.

This is what happened after 2009. By the end of 2008, the interest rates started to rise in the crisis countries, and risk premia that massively exceeded the inflation differentials ($h > 1$). As a result, inflation declined where it was higher than the Eurozone average, as can be seen in Figure 4. Taken literally, this means that the Eurozone was on its way to correct the Walters Critique when the crisis erupted. An early OMT program, focused on the redenomination risk but not on the debt default risk, might have prevented the crisis.

2.2. The OCA theory reinterpreted

A wholly different approach, with a different objective, is offered by the OCA analysis. It is designed to determine whether a number of political units should share a common currency, yes or no. In practice, the answer is rarely yes or no. The general conclusion from the literature, aptly summarized in Bayoumi and Eichengreen (1997), is that Europe is not an OCA because labour mobility is too limited, both within and across countries. However, most Eurozone countries are found to be quite open and diversified, fulfilling two other OCA criteria. This means that a sharp conclusion is reached only if we want a yes or no answer.

Granted that the Eurozone is not an OCA, we know that asymmetric shocks are bound to be painful. The costs can be sizeable but they also are temporary whereas the benefits from the single currency – hard to evaluate, but very real – accrue permanently. Absent hysteresis effects, it is difficult to imagine that one-off costs, even large ones, can exceed permanent benefits, even though the benefits may be small on a day-to-day basis. The proper conclusion is not yes or no. Instead, it is that the single currency does not come for free and that policies must aim at limiting the costs, which may decline over time (Frankel and Rose, 1998). The OCA theory further indicates that the costs will materialize through unemployment and recessions. Labour market flexibility stands to

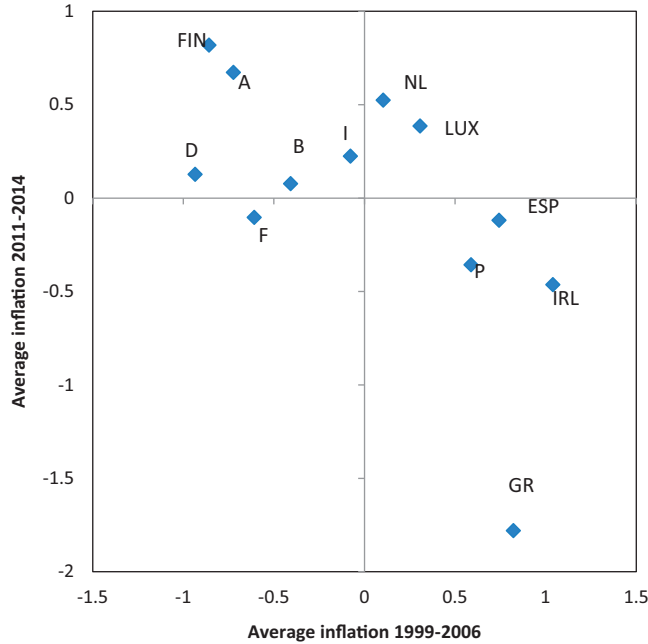


Figure 4. Inflation differential before and after the crisis

Notes: Differences from Eurozone average (%). Inflation is measured with HICP.

Source: International Financial Statistics, IMF.

mitigate the costs, hence the calls for reforms in countries with notoriously rigid labour markets. Reforms, however, take time to be enacted and even more time to produce their effects. Meanwhile, unemployment and recessions must be contained. This need is even more compelling if hysteresis effects are likely to arise, which is likely to be the case in labour markets (Blanchard and Summers, 1986; Ball, 2009). Hysteresis, which stands to make the costs of a temporary shock permanent, thereby worsening the trade-off on a non-OCA monetary union, strengthens the view that fiscal policy has to substitute for the lost monetary policy instrument.

2.3. Institutional design: Fiscal federalism principles⁶

Both the Walters Critique and OCA theory call for specific policies. The monetary union is not just about sharing a central bank, it also requires institutions that make it possible to enact policies designed to deal with its fundamental instability and with its failure to meet all the OCA criteria. Should these tasks be a Eurozone-wide responsibility or do they belong to individual member countries? That the adoption of adequate policies is a common concern does not imply that they must all be carried out at the

⁶ A fuller treatment is in Wyplosz (2015b).

Eurozone level. Conversely, if some policies are carried out at the national level, there must be guarantees that member countries will live up to their responsibilities.

The rich literature on fiscal federalism (Wildasin, 1999; Rodden *et al.*, 2003; Oates, 2006) is designed to deal with these questions. It emphasizes that the choice of assigning responsibilities to government levels involves trading off a number of pros and cons. In the Eurozone, the question is framed as whether national sovereignty should be maintained or not mirrors the choice of allocating policies to the central or subcentral governments in federal states. With a common currency, the Eurozone has some features of a federation, but it is definitely not there yet. This is precisely what led many observers to doubt that the monetary union could work (Feldstein, 1997). Yet, it is misleading to assert that the Eurozone must resemble existing federations. Its own unique characteristics are bound to lead to original conclusions.

The fiscal federalism literature identifies four main criteria:

The first one is the existence of non-pecuniary externalities. When a policy undertaken at the subcentral level significantly affects other subcentral units, there can be costs and inefficiencies not mitigated by the markets. If the effect is favourable to other subcentral units, the origin unit will not act forcefully enough for the common good and conversely. Moving the responsibility to the central level makes it possible to internalize the externalities and therefore leads a collectively better use of the relevant policy instrument.

The second criterion is the existence of returns to scale. When a policy is more efficient the larger is the economic space to which it is applied, moving the responsibility to the central level will make it possible to reap the benefits from increasing returns.

The third criterion rests on the existence of information asymmetries. Designing policies may require a detailed knowledge of the local conditions. If this knowledge is easier to acquire at the subcentral rather than at the central level, the policy will be better designed, and therefore more efficient and less costly, at the subcentral level.

The fourth and last criterion recognizes that policy preferences may differ across subcentral units. This may be due to different geopolitical conditions or to different cultural preferences, possibly the result of history. In that case, one policy may be seen as desirable in some subcentral units, but not in others. Decentralization is the solution.

It is unlikely that all four criteria will always go in the same direction, possibly leading to conflicting trade-offs. In these cases, one solution is the subsidiarity principle, which recommends leaving the decision power at the subcentral level. Another solution is to choose one level and try to mitigate the effects of those criteria for which the choice is undesirable. The single currency can be justified by the presence of exchange rate externalities (beggar-thy-neighbour effects), increasing returns to scale on money and limited information asymmetries. However, asymmetric shocks and heterogeneities of preferences argue against the single currency.

An important caveat is that the reasoning so far assumes that, at every level of centralization, the authorities act selfishly in the best interest of their citizens. The presence of political failures calls for caution. A frequent conclusion is it argues in favour of

decentralization because political competition is expected to raise incentives towards better policies (Tommasi and Weinschelbaum, 2007). This result, however, assumes away collusion among Member States.

3. SYSTEMIC FLAW NO. 1: FISCAL DISCIPLINE

3.1. The Eurozone approach

According to both the Walters Critique and OCA theory, active fiscal policies are likely to be a key ingredient of monetary union stability. This conclusion, however, overlooks the dynamics of public debts, yet another source of instability unless bounded by the transversality condition. Note the distinction between fiscal *policy* and fiscal *discipline*, which is the issue under consideration here. The European treaties leave fiscal policy as a decentralized instrument but identify fiscal discipline as an absolute collective requirement. This creates a tension. An additional difficulty is the familiar rule versus discretion problem that exists at the national level. No rule can be fully state-contingent, so it is necessary to allow for some escape clauses that, unless cleverly crafted, may well undermine the rule.

The Stability and Growth Pact fails to deal with both difficulties. It initially combined a rule for deficit and debt levels with an escape clause. The rule – the 3% deficit and 60% debt limits – was incorrect because it did not deal with the transversality condition.⁷ The quantitative limits were arbitrary, which meant that they would be hard to enforce against predictably powerful resistance. The escape clause was unrealistic; Eichengreen and Wyplosz (1998) suggest that the kind of recession required was far too restrictive. The result was too much of a rule, too little of discretion. Indeed, in 2004, the pact had to be put ‘in abeyance’ to meet the wishes of the two largest countries, France and Germany. It was also a clear signal that fiscal discipline centralization was not acceptable. The event led to a first revision of the pact to introduce some flexibility (mainly shifting to cyclically adjusted figures), opening the way to too much discretion. When the sovereign debt crisis erupted, predictably miffed policymakers reacted by wanting to strengthen the rule.

This led to a second revision in 2012 of the pact, which grew in complexity. The aim was to strengthen the rule and to allow for more discretion by allowing for more exceptions, as well as to introduce a trade-off between budget improvements and structural reforms. The reform also dented fiscal policy sovereignty as it gave the European Commission the power to decide how to adjust the rule. In an optimal world, the Commission would become a benevolent dictator evaluating the quality of economic

⁷ An operational approximation of the transversality condition is a debt path. The recent changes have started to consider debt paths but with a short horizon that bears no relationship with the infinite – a.k.a. long run – nature of the transversality condition.

policies and using the strictures of the Stability and Growth Pact to provide incentives to carry out structural reforms. Since both budgets and structural reforms are intensely political in any country, the Commission is now immersed in political considerations that undermine its ability to act as a benevolent dictator. Linking fiscal discipline and structural reforms makes it impossible for the Commission to reliably practice discretion without undermining the rule. Box 1 provides a telling example.

Box 1. The evaluation of fiscal discipline in France in 2014–5

France was declared in breach of the Stability and Growth Pact and put in the Excessive Deficit Procedure (EDP) in 2009. It was then asked to bring its deficit back to 3% of GDP by 2013. By early 2013, it became clear that the objective would not be reached. France was given 2 more years to reach the 3% deficit objective, with year-by-year targets, as shown in Table 1.

By end 2014, the Commission observed that France was not on its way to achieve a deficit of 3% by 2015 and asked for remedial action. Faced by strong political opposition, even in the ranks of its own majority, the French government refused to tighten fiscal policy further and asked instead for a 1-year extension. This was a rare occasion when a country in the EDP openly rejects Commission's instructions. Anxious to avoid a confrontation with the Union's second largest country, the Commission agreed to delay the process, asking for reforms. The French government proposed some limited reforms and token budget improvements. In return, even though it observed that 'the quantification of [the reforms'] impact by the authorities seems overestimated', the Commission proposed to approve a 2-year extension for the deficit. The Council approved this proposal in March 2015.

3.2. Back to principles

It is not surprising that the Stability and Growth Pact is failing. Its rule is from an old vintage, inspired by the German experience, which has failed repeatedly (Seitz, 1999; Wyplosz, 2012). Since then, Germany has written in its constitution a different, modern rule, the so-called debt brake (Federal Ministry of Finance, 2009), which cleverly combines rule and discretion. Under the name of Golden Rule, the debt brake was adopted in 2012 in the Eurozone as part of the Treaty on Stability, Coordination and Governance (TSCG). The rule is meant to be a complement, not a substitute to the Stability and Growth Pact. Piling up different budget rules on top of each other undermines both the older and newer rules by creating complexity and quite possibly confusion. In addition, the TSCG only partially implements the debt brake rule so that a number of governments have adopted different rules and did not write them into their constitutions as recommended by the TSCG.

Table 1. France in the EDP: deficit targets and outcome

Date of review	2010	2011	2012	2013	2014	2015	2016	2017
Outcome	6.8	5.1	4.8	4.1	4.0	3.8*	3.5*	
December 2009				3.0				
June 2013				3.9	3.6	2.8		
March 2015						4.0	3.4	2.8

Note: *, the outcomes for 2015 and 2016 are Commission forecasts at mid-2015.

Source: European Commission.

What do fiscal federalism principles tell us about fiscal discipline? The Eurozone crisis has shown beyond doubt that fiscal discipline generates crucial externalities through contagion and very sizeable potential transfers. This is the case for centralization. Working against centralization are strong information asymmetries and national preferences. Public budget decisions are so entrenched in the working of democracies that, in the absence of a European-wide polity, fiscal discipline can only be enforced at the national level. The trade-off between the externality criterion and the criteria concerning information asymmetries and heterogeneous is acute. Even though decentralization is all but unavoidable, the externality is so strong that it cannot be overlooked. Finding the proper answer is bound to be difficult.

There is also a legal twist. Advocates of the pact argue that Member States have given up *de facto* fiscal discipline sovereignty. If that is so, Member States face two incompatible obligations: one obligation to their citizens who entrust their parliaments with the undivided authority to vote on budget laws, and another obligation to their Eurozone partners, who have the right to issue binding recommendations. A widely held view is that any government forced to choose between external obligations and its voters always chooses the latter.

The conflict between national sovereignty and Eurozone obligations would be immaterial if a rigorous implementation of the TSCG, which includes provisions for the decentralization of fiscal discipline, were to make the centralized Stability and Growth Pact redundant in practice. This is not the intent of policymakers, quite the opposite. A growing number of proposals aim at shifting the balance towards reducing national fiscal policy sovereignty. The proposals include jointly guaranteed Eurobonds, a fiscal union or even a political union. Making the Eurozone more of a federal arrangement is appealing because federalism has been tested over and again. Adequate centralization would make things considerably easier. However, sovereignty transfers seem unrealistic at a time when anti-Europe political parties are on the ascent in every member country. It is also intellectually lazy because it ignores the unique features of the monetary union that made it (barely) politically acceptable two decades ago, when 'Europe' was still

popular.⁸ The euro is an original experiment, not an off-the shelf project. The real intellectual challenge is how to make it work without currently unreachable truly federal arrangement, not to run a well-trodden experiment. The answer cannot be to assume away the difficulty.

3.3. The solution

Currently fiscal discipline rests on two obligations: the Stability and Growth Pact, which has failed repeatedly, and the no-bailout clause, which has been over-run, amazingly without any legal challenge. Both have precedents from federal countries. The Stability and Growth Pact is inspired by the older German arrangement. The no-bailout clause exists in the United States, among others. Following a seemingly unending string of state bailouts, the US Congress established a precedent in the 1840s when it refused yet another one. Since then, for almost two centuries (except for a couple of cases in the wake of the Civil War), there has been no state default in the United States (Inman, 2003; Henning and Kessler, 2012). The German model has failed (Burret *et al.*, 2014), the US model is successful.

These observations accord well with the principles developed in Section 2. They argue for abandoning – or just ignoring – the Stability and Growth Pact and focusing on the TSCG. Fiscal discipline would become a national obligation. It would be based on a modern rule, the debt brake and involve independent national fiscal councils, both of which are mandated by the TSCG.⁹ As for the strong externality of fiscal discipline, it calls for centralizing the obligation, not the instruments. Fully implementing the TSCG and reinstating and rigorously enforcing the no-bailout rule can achieve this.

An objection to this is that the Eurozone lacks a federal budget that can play an important stabilizing role in the face of cyclical swings. The objection is weak, however. As is well known, the degree of cyclical stabilization via the federal budget is quite small in the United States. A recent update by Poghosyan *et al.* (2015) concludes that 5–10% of state shocks are buffered through federal transfers. Borrowing and lending achieve the same purpose as collective insurance via federal transfers. If fiscal discipline is established and debts are low enough, governments can borrow – and eventually pay back – as much as, and probably more than what is available through automatic federal transfers.

A few other objections to the decentralization of fiscal indiscipline have been raised but are unconvincing. It is argued that it would be wrong to encourage fiscally

⁸ Guiso *et al.* (2015) show that public opinions have turned against the Union's institutions, not really against 'Europe'.

⁹ The logic for combining a rule and fiscal council is developed in Wyplosz (2013a).

undisciplined countries to borrow, in bad and good times alike. The combination of a fiscal rule, which aims at stabilizing or reducing the public debt in the long run, and of the no-bailout requirement can deliver fiscal discipline.¹⁰ Another objection that those countries that currently hold excessive debts probably are unable to borrow their way out of a recession. This fails to recognize that the current situation is the legacy of past fiscal indiscipline, and of the debt crisis. Collective debt restructuring is the proper response; this is argued in Section 6.

A valid objection is that the no-bailout rule has lost any credibility since it was trampled upon on the first occasion when it became binding. Restoring its credibility requires a very formal re-commitment. One possibility is to rewrite more precisely the treaties to rule out any easy loophole. If this is deemed impossible or unlikely to be successful, some other, very solemn action is required. As it stands, the European Stability Mechanism (ESM) established in 2012 represents a violation of the no-bailout clause, yet another inconsistency of the Eurozone architecture. Indeed, the ESM provides for a European institution to lend to a government in financial difficulty in contradiction of Art. 125. Its closing down, or its transformation, would be a powerful signal. As explained in Section 4, the ESM could usefully be transformed into a fund to be used exclusively for resolving banks, bypassing the current transfer mechanism.

The holy grail of fiscal discipline is to rely on financial markets. Since Bayoumi *et al.* (1995) we know that markets impose risk premia on subcentral government debts, that these premia increase with the size of the debt and that the relationship is non-linear and time-varying.¹¹ They tend to be too small for too long and then to become excessive. This well matches the Eurozone experience; following the creation of the euro, risk premia disappeared and then soared during the crisis. One reason is that the ECB was accepting at face value all member country sovereign debts. Another possible reason is that markets never believed in the no-bailout clause. Once the crisis started, the ECB found itself in the highly uncomfortable position of deciding to impose haircuts on some of its members. This has to be avoided.

The natural conclusion is that the ECB should be forbidden to deal in member country sovereign debt instruments and, more generally, in any bond issued by national institutions and corporations. This is the case in the United States, where the Fed is strictly prohibited from holding subcentral (state and municipalities) debt instruments. In the Eurozone two solutions are possible. The ECB can issue its own debt instruments or it may deal exclusively in Eurobonds. Comparing these two solutions is beyond the scope of the present paper.

¹⁰ This is indeed what is directly implied by the transversality condition, see footnote 14.

¹¹ For evidence in Europe see Bernoth *et al.* (2004).

4. SYSTEMIC FLAW NO. 2: THE BANKING SYSTEM¹²

The single currency was never expected to eliminate banking crises. When a crisis arises, the relevant authorities must instantaneously decide whether they consider the bank(s) as solvent and intervene accordingly, see Section 5. Interventions of this kind are known to require sizeable resources, measured in several percents of GDP. Central banks are the only institutions that can provide such amounts in a matter of hours. Usually, the central bank and the government agree on a sharing rule regarding potentially large losses. Since the central bank and the treasury are both state institutions, the sharing rule matters little for the taxpayer who will foot the bill no matter what. Even so, there are serious implications concerning income redistribution, which is why elected governments must take ultimate responsibility. (There is also the issue of policy dominance, which is not pursued here.) In the end, dealing with a domestic bank crisis requires a lender of last resort, a bank resolution authority and clear rules of engagement.

The situation is considerably more difficult within a monetary union. The question of who bears the risk of potentially huge costs is no longer about domestic income redistribution but about burden sharing among taxpayers of different countries. In the absence of an elected European authority that can take responsibility, burden sharing becomes politically contentious. Two polar cases can be envisioned:

The first one is centralized. A single European authority regulates banks, another one supervises them and yet another one carries out resolution. Authority is collective and so must be the risk burden. This makes it possible for the ECB to intervene as lender of last resort, with a guarantee that possible losses will be taken over by member governments under a burden-sharing rule agreed upon *ex ante*.

The decentralized case leaves the authority for regulation, supervision and resolution at the national level. Then the ECB can only intervene if protected by an unambiguous and binding burden-sharing rule. Alternatively, lending in last resort is carried out by national central banks so that the costs are borne locally. Whichever procedure is chosen, central bank independence requires a national sharing rule.

Fiscal federalism principles shed light on this choice. The first criterion, the presence of externalities, is highly relevant. Bank crises can be contagious as a consequence of open cross-border positions of banks *vis-à-vis* each other. Preserving the European-wide interbank market where the ECB conducts its refinancing operations is an essential requirement of the common currency. In addition, bank crises are known to lead to severe

¹² The proposal to add a Capital Market Union alongside the Banking Union is not examined here. Two remarks, however. First, it is an implication of the Single Act, which has been put aside for too long. As such, it is a must. Second, it is useful to develop other channels for saving and borrowing in Europe where banks assume a proportionately larger role than in the United States. The case that capital-based funding dominates bank-based funding is weak at best, throwing doubts on the expected windfalls of the Capital Market Union. As such, it is not a major issue.

recessions, which are transmitted through trade. The second criterion concerns returns to scale. When banks are interconnected, a centralized approach is bound to be more effective than separate interventions. The third criterion is the presence of information asymmetries. The authorities must have a precise and up-to-date knowledge of the situation of the banks to be dealt with. In this respect, the two polar cases are both consistent. This criterion rules out any intermediate arrangement. However, the decentralized solution may well favour protectionist tendencies to promote national champions, since adequate information is not available at the collective level. Finally, heterogeneous preferences may arise and plead for the decentralized solution. Then, we need to factor in policy failures, the capture of authorities by banks, which may result in the transfer of risks from banks to taxpayers.

All in all, therefore, there is a strong case for the centralized solution, because the externality is overwhelming and because information asymmetries can hide capture and protectionist support for national champions. In practice, initially, the Eurozone has adopted the decentralized model, with a few mixed centralized/decentralized features. It merely kept the pre-euro *status quo* in place, thus avoiding painful debates about burden sharing and protectionism. Common bank regulation, mandated by the Single Market, was combined with national supervision and resolution. It also included Emergency Lending Assistance (ELA) whereby the national central banks could act as lender of last resort to their banks but only within an explicit ceiling set by the Governing Council of the Eurosystem. Under ELA, all potential losses are kept at the national level. The mix of centralization of rules and decentralization of supervision and resolution was bound to be ineffective.

The disadvantages of the decentralized model were long ignored¹³ until they became all too obvious during the crisis. This is one of the few lessons learned so far, which has led to the Banking Union. At this stage, the Banking Union is a partial move to the centralized solution. As explained in *Institute of International and European Affairs* (2014), it includes a Single Rule Book, a Single Supervisory Mechanism (SSM), a Single Resolution Mechanism (SRM) and a Bank Recovery and Resolution Directive (BRRD). The Single Rule Book establishes common rules and requirements. The SSM creates a Single Supervisor, part of the ECB, hopefully less prone to capture by banks. Yet, it only supervises the banks deemed to be systemic, currently 134 banks. The remaining banks are supervised locally, under the oversight of the Single Supervisor.

The SRM establishes that resolutions are to be carried out at the national level under the oversight of the Single Resolution Board. Authority is split between the Board and national institutions, a complex arrangement for carrying tasks under emergency conditions. Resources will be provided by the Single Resolution Fund, to be gradually built up from bank contributions to reach 1% of all bank deposits, i.e. some €55 billion. Will

¹³ They are spelled out e.g. in Begg *et al.* (1998) and Goodhart and Schoenmaker (2006). A rebuttal is Padoa-Schioppa (1999).

it be sufficient in case of a crisis affecting simultaneously several large banks? There is no simple answer. Two observations suggest that the answer is negative. [International Monetary Fund \(2010\)](#) recommends resolution funds of 2–4% of GDP. For the Eurozone, this amounts to €200–400 billion, of the same order of magnitude as the amount spent during the crisis by the US Troubled Asset Relief Program (TARP), some \$400 billion, of which 370 billion was used for capital injections.¹⁴ On the other hand, [de Groen and Gros \(2015\)](#) conclude that the planned amount is sufficient. If, in the event of a major crisis, the SRM's resources are insufficient, the ECB will have to intervene as a lender in last resort. However, the ECB will need a guarantee for potential losses and it is unclear who would provide the guarantees.

The BRRD establishes clear lines for resolution, with an emphasis on bailing in shareholders and large creditors, a desirable feature designed to protect taxpayers. Depositors are protected up to €100,000 by national resources, to be provided by a Deposit Guarantee Scheme, but this scheme is not funded. In case of need, it will have to collect resources from banks and borrowing on the markets, which resembles the US FDIC. However, the FDIC is directly backed by the US Treasury. Arranging for a collective backing of the Deposit Guarantee Scheme is necessary.

The current intermediate solution is incomparably better than the previous one. Yet, it shares the disadvantages of both polar cases and, as such, cannot be the final step in the construction of institutions required to deal with a widespread banking crisis. Some of the limits of the Banking Union have already been visible in 2015 during the latest surge of the Greek crisis. The ELA arrangement has been effective in keeping the banking system afloat but the sudden freezing of fresh lending has led to a 3-week closure of banks along with an Argentinean-style *corralito* system, which is known to be destructive ([Wyplosz, 2015a](#)). During this time, the SSM has remained stubbornly silent, presumably because it did not see how bank resolution would be funded. The result is that the recapitalization costs of Greek banks was eventually borne through Greek government borrowing. The 'Irish solution', which directly triggered the country's debt crisis, was adopted again.

The Banking Union must be completed. A strong case can be made for full centralization, provided that the limits of this solution are simultaneously taken care of. The logic of the SSM – to be extended to all banks – is that bank resolution must be centralized because bank failures will be the result of imperfect central oversight, which is unavoidable. This means that the Single Resolution Board must be given exclusive authority and must have access to required resources. As noted above, the Single Resolution Fund may not be sufficient to deal with every possible crisis. One possibility is that the ECB be given the authority and the guarantees required to act as a lender of last resort to banks, as explained in [Gros and Schoenmaker \(2014\)](#). Another possibility is to revamp the ESM which, as argued in Section 3.3, should not be maintained in its present form. With a lending capacity of €500 billion, the ESM could take over the

¹⁴ TARP is not a resolution fund as it supports solvent banks.

Single Resolution Fund. Instead of lending to governments to rescue or resolve banks, the ESM could directly lend to banks under instruction from the Single Resolution Board. This would break the diabolic loop between banks and governments.¹⁵

Currently under discussion, another way of breaking the diabolic loop is to limit bank exposures to national public debts. It also would increase market-based discipline, as foreign investors are less likely to be swayed to acquire public debts. Such a measure would need to be accompanied by a debt resolution mechanism, in order to avoid the conflicts of interest that have been prominent during the sovereign debt crisis, see Section 6.3.

5. SYSTEMIC FLAW NO. 3: AN INCOMPLETE CENTRAL BANK

5.1. The state of play and the principles

The ECB is traditionally considered as the world's most independent central bank because an impossible-to-change treaty guarantees its statutes. Its officials enjoy long appointments of 8 years with no possibility of renewal and its mandate is relatively straightforward. Similarly, on paper, monetary dominance is pretty much guaranteed. The ECB is not allowed to buy bonds directly from governments and governments are strictly prohibited to give – or even suggest – instructions to the central bank. Yet, in practice, the matter is less clear-cut than it seems.

Central bankers are fond to observe that independence must be associated with communication in order to garner the popular support necessary to stand up to pressure (Issing, 2005). In the Eurozone, the situation is complicated because the ECB is an international institution with (currently) 19 constituencies that have different views of what a central bank should do, not to mention interests that rarely coincide and that often clash with one another. Guiso *et al.* (2015) show how national Taylor rules have diverged from the ECB actual policy rates. Beyond language barriers, this means that it is impossible for the ECB to produce a script that fits all.

This is both an implication of the OCA theory and the starting point of the Walters Critique. Fiscal federalism principles further explain these tensions. The centralization of monetary policy in a closely integrated area is justified by the presence of strong externalities and sharply increasing returns to scale. From the start of the Common Market, exchange rates have been identified as a key externality. Experience with beggar-thy-neighbour manipulation of exchange rates has long plagued Europe. Dispensing with the exchange rate is the way to eliminate the externality once and for all. Money is

¹⁵ Such a procedure would probably have avoided the Irish and Cypriot debt crises. Gros and Schoenmaker (2014) provide an interesting comparison between Ireland and Nevada in the aftermath of the 2008 crises. These are two 'countries' of similar size, many of whose banks were fatally wounded. The Irish bank rescue directly led to the debt crisis, a stark illustration of the diabolic loop between banks and their governments. Banks in Nevada were resolved by the FDIC without affecting state finances.

also subject to increasing returns. This is a consequence of its network characteristics: the more people use a currency, the more useful it is. These are the essential benefits offered by the euro. However, the single currency does not fare well with the two other criteria. Information asymmetries are presumably extensive. Additionally, as noted above, preferences are bound to differ, at least in the presence of asynchronous business cycles. From the fiscal federalism vantage point, as well, the adoption of a common currency is not compelling. Now that the euro exists, the question is whether it can be made to work. The principles laid out in Section 2 can help.

Before seeing how that can be done, it is worthwhile to examine how the ECB has been dealing with the situation. Regarding asynchronous economic conditions, the ECB officially disregards the economic situation in individual countries, focusing instead of Eurozone-wide aggregates. This strategy recognizes that monetary policy cannot address substantial concerns in every single country. Realism, however, can only go that far. Intentionally ignoring valid concerns undermines independence. Inevitably, these concerns must surface within the Governing Council, which formally takes decisions.

The Council includes 25 members, the 6 members of the ‘federal’ ECB Board and 19 central bank governors, who share 15 voting rights on a rotating basis. Formally, the central bank governors are explicitly required to only focus on Eurozone aggregates. Quite naturally, however, they have a special sensitivity to economic conditions in their home countries. They too need domestic popular support to buttress their own independence. Even if they do not ignore their ‘Eurozone-wide aggregates only’ mandates, their analyses and statements cannot depart from the views that dominate the policy debate at home. This can be a *plus*, as it reduces the risk of group think that has occasionally blinded MPCs. It can be a *minus* if it injects conflicts based on national concerns within, and outside, the Governing Council. The *minus* case has been pretty crippling during the crisis, as evidenced by three major examples.¹⁶

5.2. The ECB during the crisis

5.2.1. Initial bailout. Article 123.1 of the Treaty on the Functioning of the European Union (TFEU) prohibits the Eurosystem from financing governments, without qualification.¹⁷ The explicit ban of primary market purchases of government debts is disingenuous since secondary market purchases amount to the same in practice, at least as long as

¹⁶ In addition, the size of the Governing Council precludes in-depth analyses of the kind performed in MPCs. Governors of smaller countries seem to carry less weight, independently of the quality of their analyses.

¹⁷ Article 123.1 reads as follows: ‘Overdraft facilities or any other type of credit facility with the European Central Bank or with the central banks of the Member States (hereinafter referred to as “national central banks”) in favour of Union institutions, bodies, offices or agencies, central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of Member States shall be prohibited, as shall the purchase directly from them by the European Central Bank or national central banks of debt instruments.’

a government has market access and, if not, as long as a market for its debt instruments still exists.

In May 2010, on the same day as the Greek program was set up, the ECB announced its own Securities Market Program (SMP). In the first wave of the program, the ECB acquired on the secondary market Greek, Irish and Portuguese debt instruments for a total amount of €70 billion, most of it front-loaded over the first 2 months. In the second wave, which started in August 2011, it acquired €147 billion of Italian and Spanish debts. Other ‘nonstandard’ interventions, the Covered Bonds Purchase Programme and the Long-term Refinancing Operations (LTROs), were not targeted at particular countries but led to substantial purchases.

The striking feature of these interventions is that they failed to stem market panic, as [Figure 5](#) illustrates for the case of Greece. The spreads on Greek over German bonds kept rising. Central banks normally fear any semblance of fiscal dominance and, yet, they purchase public debt instruments on secondary markets when needed to stabilize the markets. To that effect, they must be ready to conduct interventions of indefinite size. Any finite, or small intervention is promptly absorbed by the markets whose pockets are deep, but not infinite as those of the central bank that can create potentially unlimited amounts of money ([Jeanne and Wyplosz, 2003](#)). Infinity is a central bank’s unique strategic advantage.

The ECB eschewed this advantage. When it announced the SMP, it did not specify any amount. It then proceeded to carry out its interventions under a shroud of secrecy.¹⁸ The amounts involved were far too small to impress the markets and stop the relentless rise of spreads. Evidently, strong German opposition to such interventions concerned the ECB. This is probably why the ECB indicated that the purchasing would be fully sterilized. As a result, the half-hearted program failed to stunt market panic.

5.2.2. The long road to open market transactions. As can be seen from [Figure 5](#), by late 2011, the spreads on Greek (and Irish and Portuguese) bonds dwarfed their May 2010 levels. Significant spreads were building up on Italian and Spanish bonds. Furthermore, the European bond market – and therefore the interbank market – had become segmented country by country as national public debt instruments had migrated to the books of the respective national banks. The euro was losing its common currency status. This led the ECB to announce LTROs, providing 3-year loans at full allotment.

‘Full allotment’ means that the central bank is ready to provide unlimited liquidity, a pre-condition for controlling markets, as note above. Indeed, the amounts (€1 trillion) of liquidity injections turned out to be of a different order of magnitude from those of the previous interventions. The markets were impressed, but only for a while. By mid-2012,

¹⁸ The ECB published total SMP acquisitions by country only *ex post* in 2013, and then not the monthly intakes. The data used in [Figure 5](#) have been visually copied from [Trebesch and Zettelmeyer \(2013\)](#) who use data ‘guessed’ by banking sources.

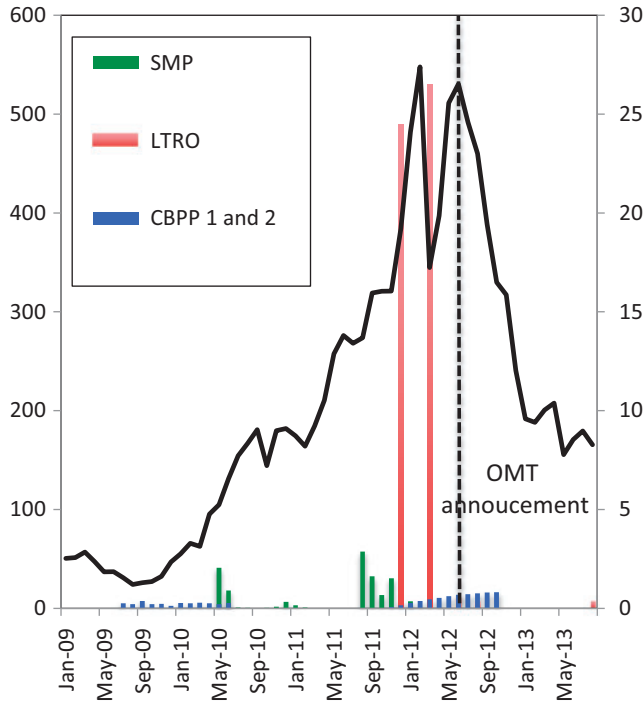


Figure 5. ECB interventions and interest rate spreads on the Greek debt

Notes: ECB interventions, €billion, left scale; spreads in percent, right scale.

Sources: ECB, IMF and Trebesch and Zettelmeyer (2013).

the crisis was back and still spreading. Why did LTRO at full allotments fail to durably quiet the markets down? A first reason is that unlimited interventions by central banks can only achieve the stated intentions. The ECB indicated that LTRO were aimed at supporting bank lending. Because it carefully avoided referring to public bond turmoil, the ECB interventions could not see the debt crisis away. A second reason is that, in contrast to the Quantitative Easing (QE) operations then conducted in the United States and the United Kingdom, the amounts injected were determined by commercial bank demand, not by ECB supply. Thus, the ECB could not dwarf the market. Was it a technical mistake? An alternative interpretation is that the ECB was concerned by the implied large-scale acquisition of government bonds, which was frowned upon by a number of non-crisis member countries. If so, it would be an instance of curtailed independence.

In July 2012, Mario Draghi, the President of the ECB, finally made his historical ‘whatever it takes’ speech. This was code word for unlimited interventions in support of public debts. Even before the Outright Monetary Transactions (OMTs) program was formalized in September 2012, spreads started to decline (Altavilla *et al.*, 2014), and they have continued to decline until the change of government in Athens in early 2015.

The OMT program had four key characteristics. First, it was explicitly unlimited. Second, the stated intention was to buy government bonds, and only government bonds.

Third, it was not a program of asset purchases but a promise to intervene if the spreads remained unreasonable, this being defined as implying a redenomination risk, i.e. the possibility that a country could leave the Eurozone. Fourth, the program only concerned bonds issued by countries receiving support from the EFSF or ESM, i.e. subject to conditionality.

The first two characteristics amount to a guarantee for public debt instruments, precisely what the markets needed to stop panicking. The last two conditions somehow undermine the first two as they ignore default risk, a key market concern, and they inject conditionality, which hampers the unlimited nature of the announcement. Even so, that was enough to bring the sovereign debt crisis to a long-lasting respite. Still, the two restrictive aspects are important because they reveal the limits of the ECB's willingness to act fully independently.

From the beginning of the crisis, it was clear that the willingness of the ECB to act as lender of last resort to besieged governments was a necessary condition to quiet markets down (De Grauwe, 2011; Wyplosz, 2011). It took a long time for the ECB to act. During that time the markets malfunctioned, the economic situation deteriorated and contagion spread. The reason for this costly delay must have been opposition from governments and public opinions in some of the unaffected countries. These national concerns may have been voiced within the Governing Council. The fear turned out to be justified since some German scholars took the ECB to their Constitutional Court. After 2 years of deliberations, the Court issued a mixed verdict, which banned the notion of unlimited interventions. It also sent the case to the European Court of Justice, which declared OMT compatible with European laws. Yet, the German Court has not closed the case as regard compatibility with the German constitution. Whether because of self-censorship or the threat of legal action, the ECB has emerged from the crisis as a central bank with surprisingly limited independence.

5.2.3. Quantitative easing. Faced with dire forecasts and the interest rate at the zero lower bound (ZLB), the Federal Reserve started its QE operations at the end of 2008. The Bank of England did the same in early 2009. The ECB started 6 years later. Figure 6 shows that the situation was not any better in 2008–09 in the Eurozone than in the United States or the United Kingdom. This raises the question of why the ECB took much longer to reach the ZLB, as can be seen in Figure 7, and even more time to start its version of QE. This has led many critics to assert that the ECB has been 'behind the curve'. Figure 6 also shows that the Eurozone GDP suffered from a double dip.

Of course, monetary policy alone cannot explain the divergence between the Eurozone and the two other countries, if only because the latter did not suffer from a sovereign debt crisis. On the other hand, the previous section suggests that the severity, and possibly even the occurrence of the sovereign crisis are related to delayed action by the ECB. At any rate, the dismal growth performance of the Eurozone could have elicited more determined action by the ECB, both with the interest rate and QE. Also at stake was forward guidance that the ECB has long shunned.

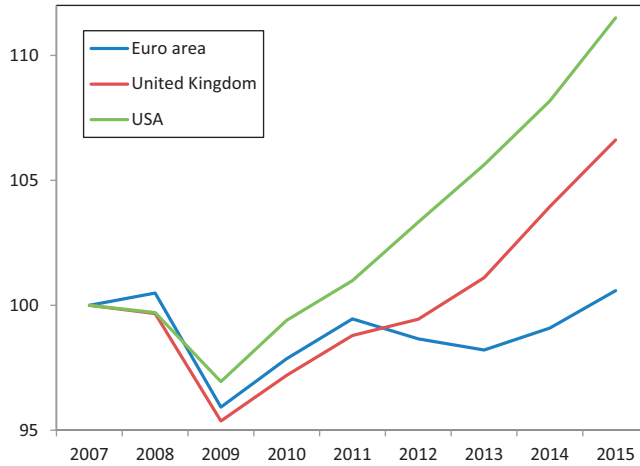


Figure 6. Real GDP (2007 = 100)

Notes: GDP at 2010 reference levels normalized to 2007 = 1000; data cover the whole euro area, not just the original members.

Source: AMECO online, European Commission.

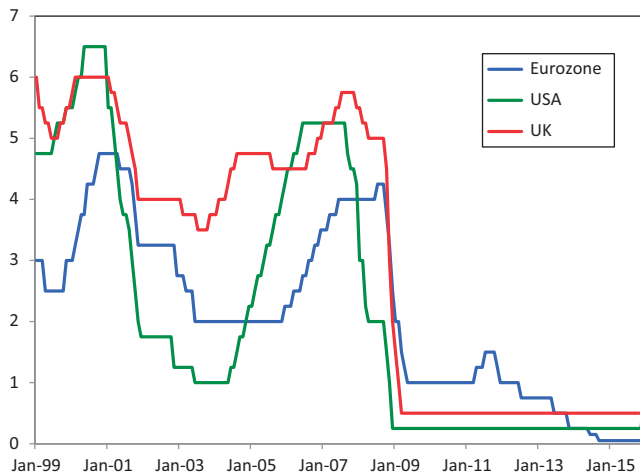


Figure 7. Policy interest rates

Notes: Eurozone – main refinancing rate; United Kingdom – bank rate; United States – Fed Fund rate.

Sources: ECB, Bank of England, Federal Reserve.

Responding to the critics, the ECB has often suggested that its LTRO program is a form of QE, which is incorrect. As already noted in Section 5.2.2, QE involves a sustained commitment to keep purchasing large quantities of assets, along an explicit purchase schedule. LTRO was a one off program that was explicitly not aiming at economic recovery. The QE program was finally launched in March 2015. It commits the ECB to monthly money supply increases of €60 billion until March 2017 or until inflation rises up to close to 2%.

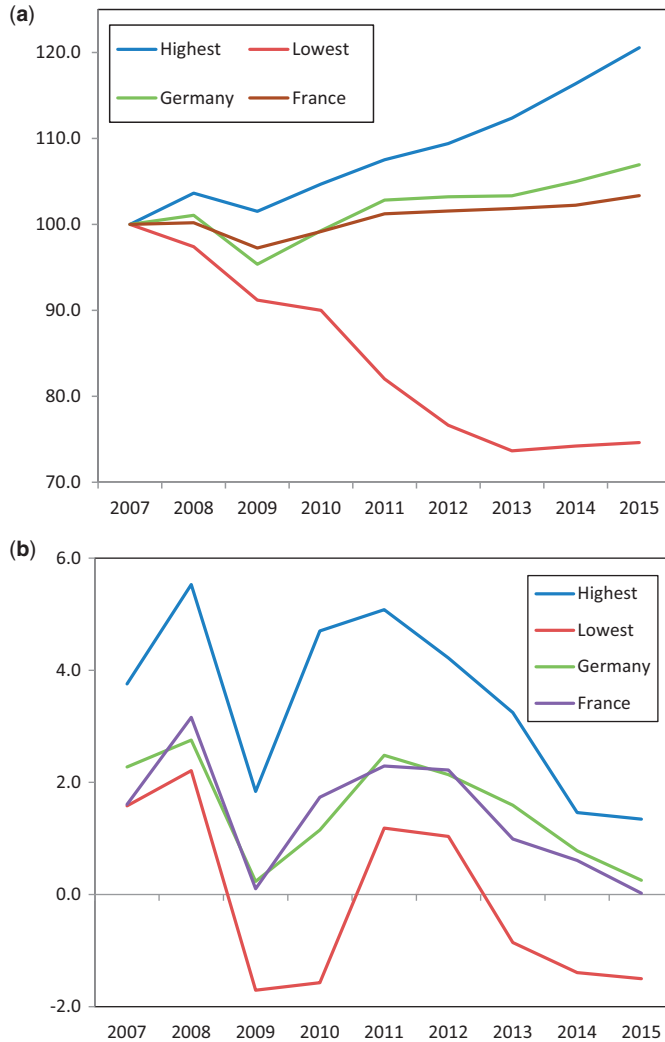


Figure 8. GDP and inflation in the Eurozone

Notes: Composition of Eurozone changes to reflect new membership. Lithuania, which joined in 2015, is excluded. GDP at 2010 reference levels normalized to 2007 = 1000. Inflation measures with HICP.

Source: AMECO online, European Commission.

As for previous episodes, the most likely explanation for the ECB's delayed action seems to be related to its concern for the extreme reluctance expressed by some governments. With some countries in a deep recession and others growing at a satisfactory pace, the single monetary policy could not fit all needs. The left panel in Figure 8 readily confirms that the evolution of GDP has differed quite dramatically across Eurozone member countries since the onset of the crisis. The right panel shows that inflation rates, and therefore real interest rates and the impact of the single monetary policy, have also differed across member countries.

In addition, QE means that upward of €1.5 trillion worth of public debts will be on the book of the ECB, for an indefinite period until the purchases are reversed. During that time, these debts are effectively erased since interest payments are rebated *pro rata* to member countries. This feature of central bank acquisition of public debts in effect blurs the distinction between monetary and fiscal policies. The concern is that this can be the back door to fiscal policy dominance (Greenlaw *et al.*, 2013) since bond buying, even in the secondary market, is a form of debt monetization.

Such fears have been voiced in strong terms, especially in Germany (Weidmann, 2014; Sinn, 2015) and also in other Northern European countries. Since their economic situation did not require QE, it is understandable that these countries had a different perception of the trade-off between continuing recession and the risk of fiscal dominance. Risk perceptions, however, are one thing, the price stability mandate is another one. The ECB's own definition of price stability is a rate of inflation between 1.5% and 2%. At the aggregate level, as well as at national levels, the inflation rate has been below 1.5% since 2013, and declining towards zero ever since. Since it takes at least 1 year for monetary policy to affect inflation, with hindsight monetary policy should have eased since at least 2012. Delays in bringing the policy rate to its lower bound and then to adopt QE can therefore be seen as a policy mistake in breach of the central bank mandate. The most charitable interpretation, therefore, is that the ECB held off policy actions because it was reluctant to confront criticism, even though it might – or should – have been fully aware that the critics were mistaken.

5.3. Solutions

Structural instability, asymmetric shocks and heterogeneous preferences potentially affect all large federal states. This has led them to the setting up of adequate institutions, often in the aftermath of acute crises. From the start, the ECB was well aware of these challenges. Its management of the Eurozone crisis indicates that improvements are required. The ECB has a vital interest in limiting the extent of economic divergences among its Member States. With just one instrument, there is nothing that it can do about it. One solution is for Member States to use their fiscal policy instrument, as shown in Section 2.1.4. However, the ECB has promoted the view that fiscal discipline trumps countercyclical action. Of course, the ECB needs to worry about fiscal dominance, but its mandate and the treaties provide adequate protection against that threat.

The fiscal dominance threat has become acute because the ECB has violated the spirit, if not the letter, of Article 123.1 of the TFEU, as explained in Section 5.2.1. In presence of an acute sovereign debt crisis, it had no choice but to act as lender in last resort to governments. This is confirmed by the success of the 'whatever it takes' declaration. It was the correct policy action, it just came far too late. In order to avoid

facing again such a dangerous situation, the ECB must promote effective fiscal discipline. Because independence must go both ways, the solution is not to comment on fiscal policies, as the ECB systematically does. Rather it is to promote effective fiscal discipline institutions. Its continuous and highly vocal support for the failed Stability and Growth Pact is short sighted. Its call for a ‘fiscal compact’ (Draghi, 2011), which led to the TSCG, is a perfect example of what position it should take. It should now insist that the TSCG be fully implemented, as outlined in Section 3.3, and that it replaces the Stability and Growth Pact. It should also argue that debt restructuring is required for national fiscal policies to be used when needed. Given its large inventory of public debts, it may reasonably fear losses, but solutions exist, see Section 6. In the future, it should stop using sovereign public debts as its main policy instrument. In the absence of Eurobonds, it should instead issue its own debt instruments, to be exclusively used on the interbank market.

The crisis has also revealed how profoundly views about monetary policy differ across Member States. This partly reflects divergent economic and financial situations, and also the lasting impact of different national preferences and historical experiences. The history of the United States, including the revolt led by William Jennings Bryan in defence of rural against industrial interests, reminds us that it takes a lot of time to disentangle views about monetary policy from regional interests. It also indicates that the ‘federal’ central bank should not be subject to ‘regional’ lobbying in its decision-making institutions. It took 22 years, the Banking Act of 1935, to remove the link between regional Reserve Bank Presidents and their constituency interests, often seen as a cause of the mistaken policies that led to the Great Depression. With 25 members, the policy-setting Governing Board of the Eurosystem is far too large and reportedly divided by similar tensions as those seen in the early years of the Fed. The current structure will have to follow the same evolution as in the United States (Burda, 2013).

Finally, the legal challenges to the ECB reported in Section 5.2.2 severely restrict its independence. A particular Member State’s Court should not be able to intimidate the ECB. As any other institution, the ECB must be held responsible for the legality of its actions, but as a European institution, it should be under the exclusive supervision of a European court. More generally, the ECB must be accountable to European citizens. While the NCBs should be precluded from catering to local interests and whims, the ECB’s oversight by the European Parliament should be strengthened. The current ‘dialogue’ between the ECB and the relevant committee is ineffective. It is in the ECB’s own interest to transform its President’s quarterly statements to the 61 members of the Committee for Economic and Monetary Affairs into robust hearings in front of a small size and well prepared subcommittee. In the same spirit, the ECB Board members should devote time to address public opinions – not just elite groups – in every Member State. Language barriers matter, but it should not lead Board members to mostly address fellow nationals.

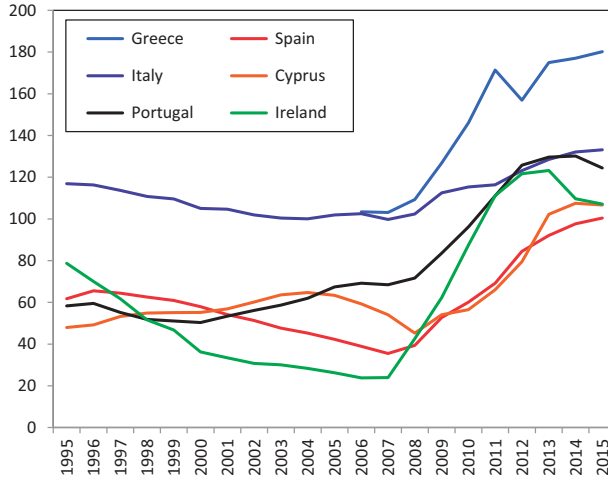


Figure 9. Gross public debts (% of GDP)

Note: General government consolidated gross debt, excessive deficit procedure (based on ESA 2010).

Source: AMECO online, European Commission.

6. SYSTEMIC FLAW NO. 4: SOVEREIGN DEBT RELIEF

6.1. Debt sustainability: The trend setting Greek case

Debt sustainability has become a crucial issue. Before the crisis, debt levels in Cyprus, Ireland and Spain were moderate and had been declining over the previous decade (Figure 9). Concerns existed for Greece as well as Italy, which had barely managed to stabilize its debt to GDP ratio over a ‘lost decade’ of no growth. As the crisis unfolded, Portugal joined the group of countries with uncertain debt service prospects.

Debt relief was identified early on in the crisis as a key strategic issue, but the ECB is reported to have refused to discuss, even privately, this possibility (Blustein, 2015). In May 2010, the IMF Staff refused to certify that there was a ‘high probability’ that the Greek debt would be sustainable within the assistance program (Wyplosz and Sgherri, 2016). Debt relief was ruled out because of a perceived systemic risk. Greek bonds were almost entirely privately held, including by some large French and German banks. It was felt that it was not the time to rock the boat, just 1 year after the collapse of Lehman Brothers and the subsequent market panic that had prompted large-scale public interventions in support of banking systems. The French and German governments weighed in heavily, as did the US Treasury.¹⁹

¹⁹ Former Bundesbank President Karl-Otto Pöhl explained the first Greek bailout as follows: ‘It was about protecting German banks, but especially the French banks, from debt write offs. [...] You can see what this was really about – namely, rescuing the banks and the rich Greeks.’ *Der Spiegel*, 18 May 2010. <http://www.spiegel.de/international/germany/former-central-bank-head-karl-otto-poehl-bailout-plan-is-all-about-rescuing-banks-and-rich-greeks-a-695245.html>.

No one will ever know whether a preliminary debt relief would have triggered a renewed banking crisis. No one has explained either why the proper response was not for the French, German and US authorities to face the cost of dealing directly with banks that had lent excessive amounts, gambling that there would be some form of rescue. The consequence of this policy choice has been to try and make the debts of bailed-out countries sustainable by requiring highly ambitious and front-loaded fiscal stabilization measures, which led to deep recessions and ever growing debt to GDP ratios.

By 2012, the European governments could not deny any more that a Greek debt relief was necessary. The result was Private Sector Involvement (PSI), a 'voluntary' haircut of 53.5% of the face value imposed on private bondholders. By that time, the non-Greek banks had sold most of their bonds, in part to official creditors, especially to the ECB through the SMP program, and in part to Greek and Cypriot banks. As a result, PSI mostly hurt Greek and Cypriot banks, which forced Greece to borrow to recapitalize its banks and led to the 2013 Cypriot bank crisis. In addition, [Gulati *et al.* \(2013\)](#) make a convincing case that the private bondholders received a sweet deal at Greek taxpayer's expense.

As [Figure 9](#) shows, PSI barely made a difference to the ever-rising path of Greek indebtedness since it was combined with more lending by the Troika. When, in late 2012, it became clear that the assistance program was not working and that the debt had reached alarming levels, much of the Greek public debt was owed to official creditors. This led to a new 'stealth' write down that reduced the net present value (NPV) of the Greek debt by the equivalent of 49% of GDP through a combination of interest rate and fees reduction, a 10-year grace period on interest payments, an extension of loan maturities, as well ECB repayment on interest earnings.

6.2. Further needs for debt relief

Arguably, the Greek case is a study of denial followed by partial measures that resulted in the socialization of what should have been private losses. This is history, but not only. The public debts of several countries have now reached levels that can be considered as unsustainable or threats to growth. One piece of evidence is [IMF \(2011\)](#), which attempts to determine when a public debt is so high as to be unsustainable. While acknowledging that there is no one fits-all single threshold, this study puts it at between 80% and 192% of GDP for the advanced economies and at 35% and 77% for the emerging market countries. Another piece of evidence is provided by studies that ask when a debt is so large as to be crippling for future growth. Large debts require quasi-permanent large primary budget surpluses, hence heavy tax burdens, and create a vulnerability when interest rates rise. The seminal, yet somehow controversial, answer of [Reinhart and Rogoff \(2009\)](#) sets the threshold at 90% of GDP for the developing countries.

Many Eurozone public debts are now in the excessive range. Debt relief remains on the agenda.²⁰ Many, but not all, of these debts have been accumulated as the result of the assistance programs. This means that any debt relief will have to involve both private and official creditors. Dealing with private debt holders requires negotiations with a great number of stakeholders, which is complicated in the absence of an agreed upon mechanism. Dealing with official bondholders is by definition a political exercise, which may help (e.g. the 50% reduction of Poland's debt in 1991) or hurt the process (e.g. the current discussions about Greece).

6.3. Principles

Even though debt relief is not envisaged in the treaties, there is no incompatibility between Eurozone membership and debt relief, at least as long as it does not violate any explicit provision. One such provision is the no-bailout clause, even though it has been lightly circumvented already. In the absence of legal guidance, precedents matter and the 2012 relief of the Greek case, presented in Section 6.1, is a precedent. Explicit debt relief was ruled out and replaced by conditional financial assistance, which further increased indebtedness. European countries provided much of the funding, either bilaterally or via the EFSF/ESM. As a result, the European Commission, under supervision by the Council, drove the process. Once a significant share of the Greek debt had migrated to official books, a clear conflict of interest arose. The creditors had become judge and party. When the issue could not be ignored any more, relief took the form of restructuring, reducing the NPV rather than the face value, as explained above.

Why are the creditors willing to reduce debt's NPV and not its face value? This could be a political gimmick aimed at public opinions in the creditor countries.²¹ It can also be a way of circumventing again the no-bailout clause, upholding the principle that all debts must be nominally repaid. From an economic viewpoint, it does not make any difference. Still, the first aim of assistance programs is to allow a country to recover market access. In principle, markets should see both approaches as equivalent. Yet, NPV reductions cannot be computed with much precision. Uncertainty does not help with the markets.

²⁰ As argued by Eichengreen and Panizza (2016), based on history it also is politically unrealistic to expect highly indebted countries to run large primary fiscal surpluses for many years as foreseen in official projections and programmes.

²¹ These numbers are quite moderate. The Greek debt owned by European creditors amounts to about 2% of their collective GDP (Sbaihi, 2015). The average maturity is about 17 years, so the undiscounted annual loss is 0.13% of current GDP. The country with the largest exposure in terms of its own GDP is Slovenia, at 3%; over 17 years this amounts to 0.18% of its current GDP per year. A more satisfactory calculation would include discounting and taking into account future nominal GDP growth.

This is why nominal debt reductions are preferable. Core principles have long been developed (IMF, 2013). Within a monetary union, however, special considerations apply:

If the no-bail out clause prevents debt write-downs on instruments held by European governments and institutions, then the clause should also prevent financial assistance by the same European governments and institutions.

This applies to the ECB. It is another reason for the ECB to deal with its own debt instruments and thus not hold public debt instruments. This means that the ECB will not act anymore as lender in last resort to governments, which requires an effective fiscal discipline mechanism, as discussed in Section 3.3.

The politicization and conflicts of interest that marred, and continue to mar, the situation this time around must be eliminated. A solution would be to combine exclusive reliance on the IMF in case of loss of market access with a hard-wired re-dedication to the no-bailout rule.

There should be no doubt that a sovereign default does not raise in any way the issue of Eurozone membership.

These conditions would achieve two objectives. The probability of debt relief being needed would be considerably reduced in the future. Still, if the need arises, it would be possible to apply the standard core principles developed for countries that are not members of a monetary union.

Meanwhile, however, relief is needed for the debts inherited from the past, part of which are owned to European governments and institutions. A never-again clean up of the past seems formidable because of the refusal by the official creditors to suffer losses and the fear that the private creditors from the financial sector are still too fragile to bear the hit. To be feasible, a relief must therefore protect the debt holders, rule out any transfer from creditors to debtors and clearly not be repeated again so that no moral hazard is created. Pâris and Wyplosz (2014) offer a solution that meets these conditions. It consists in swapping marketable treasury bonds into zero-interest perpetuities. The Eurosystem undertakes purchases on the secondary markets. The costs remain borne by each country, which formally gives up its share of central bank seigniorage profits until full repayment in NPV terms. Moral hazard is dealt with since there is no inter-country transfer. The Eurosystem is protected from fiscal dominance through a covenant that provides for the automatic reverse swap of perpetuities into marketable bonds; a progressive process is designed to provide adequate incentives for the concerned country to abide by strict fiscal discipline. Other debt relief proposals have been advanced, e.g. Corsetti *et al.* (2015). This shows that solutions exist and must be evaluated. Denial of the need for a framework cannot remain the main policy line.

7. SYSTEMIC FLAW NO. 5: SURVEILLANCE INTRUSIVENESS

As previously argued, a monetary union requires much more than giving up monetary policy sovereignty. This is a consequence of the Walters Critique and of the fact that the

Eurozone is not an OCA because labour mobility is insufficient. This means that the labour markets must be flexible enough for prices – i.e. wages – to adjust in lieu of quantities – i.e. movements of the labour force. More generally, the more flexible are its economies, the easier it will be for the Eurozone to become an OCA. In other words, the Eurozone Member States must adopt structural reforms. This conclusion has not been lost on policymakers. Structural reforms have been discussed at least ever since the adoption of the Lisbon Strategy in 2000 and its formalization into the Treaty of Lisbon signed in 2007. During the crisis structural reforms have been promoted within assistance programs. The *Five-President Report* (2015) reaffirms that every country's reform is a matter of collective interest. Looking at existing procedure, this section argues that these concerns are misplaced and that they lead to economically ineffective and politically dangerous intrusions into national sovereignty.

7.1. Current account imbalances

There is much controversy on whether current account imbalances caused the sovereign debt crisis. Promoters of this view look at real appreciation (Sinn and Valentinyi, 2013), exogenous capital flows (Lane and Maria Milesi-Ferretti, 2007) or ill use of foreign borrowing (Giavazzi and Spaventa, 2010). Yet, the real exchange rates and capital flows are endogenous, which strongly suggest that they are merely symptoms of other developments (European Commission, 2009; Wyplosz, 2013). Still, there is nothing wrong with monitoring a wide array of early signals. The Macroeconomic Imbalances (MIBs) procedure is designed to spot current account imbalances and cost divergences early on. The procedure is in line with the Walters Critique presented in Section 2.1, which identifies these variables as part of a possible systemic disequilibrium. The problem with the MIB starts when, in violation of fiscal federalism principles, it leads to policy recommendations with a sanction threat.

From an economic viewpoint, it must be recognized that governments do not have instruments directly affecting current accounts and production costs. In general equilibrium, both are determined by a broad array of factors, most of which are not policy instruments. With monetary policy lost as a domestic policy instrument, the most likely lever is fiscal policy, which is already subject to the Stability and Growth Pact. The MIB procedure allows the Commission to open up the fiscal policy box, going beyond aggregates into the details of public spending and taxation. In addition, inside a monetary union, what matters are divergences from other member countries. The long-vexing asymmetry issue means that countries with surpluses and/or favourable production cost are unlikely to take counter-acting measures.

From a fiscal federalism viewpoint, there is no return to scale. Externality exists in the trivial sense that, when the overall current account of the Eurozone is balanced, which has been approximately the case until the crisis, one country's deficit is the others' surplus. Policy recommendations do not follow, however. Regarding the two other fiscal

federalism criteria, both information asymmetries and the heterogeneity of preferences are present, undermining the case for centralized control. Furthermore, imposing sanctions, to be paid by taxpayers is irrational, which means that sanctions are unlikely to be ever imposed. The piling up of macroeconomic procedures that lead to Council directives and sanctions is a step in the wrong direction. Yet, stepping back is unlikely to happen. So far, Europe has proven unable to abandon the flawed procedure. The tendency instead has been to address flaws in existing procedures by making them ever more complex and bureaucratic.

7.2. Structural reforms

The European Commission delves into structural reforms in two ways. Its *Annual Growth Survey* includes detailed evaluations of member countries. Advice, of course, is useful, especially when it includes successful examples drawn from other member countries. However, as noted in Section 3, the Two Pack-Six Pack revision of the Stability and Growth Pact allows the Commission to explicitly trade off fiscal discipline against structural reforms. For instance, a country that fails to achieve its budgetary objectives can win a reprieve from the Commission if it commits to ‘ambitious’ structural reforms. Furthermore, the financial assistance programs set up during the crisis have increasingly emphasized structural reform obligations chosen by the Troika.

There is no doubt that most European countries suffer from deeply ingrained impediments to growth. Structural reforms stand to provide a much-needed boost to growth. Yet, this does not make a case for centralization on the basis of fiscal federalism principles. It is hard to think of increasing returns to scale. Externalities do exist, but they are unlikely to be non-pecuniary and therefore to justify collective policy interventions. Indeed, countries that conduct successful structural reform benefit from lower production costs and better market performances, as well easier adjustments in presence of asymmetric shocks. Those that do not reform themselves, face the exact opposite outcome. This means that there are economic rewards to be reaped by conducting reforms. In addition, the costs suffered by a non-reforming country grow when other countries adopt reforms. These are important externalities but they are pecuniary, so markets provide the correct incentives. Thus, these two fiscal federalism criteria do not support the case for centralization. The two remaining criteria, information asymmetries and heterogeneous preferences, support the case for decentralization. Indeed, structural reforms are arguably the most politically delicate undertaking of a government because. Even if they are Pareto-improving, they inevitably involve income transfers. They pit narrow but well organized interest groups against the usually amorphous collective interest. To make things worse, payoffs are normally slow to materialize, thus politically benefitting future governments while eating into the political capital of reforming governments. This is all well known (Thimann, 2015) and explains why structural reforms are continuously delayed.

Obviously, this conclusion was lost on the Troika when it required a very large number of reforms, most of which dig very deep into national sovereignty. Its defence has been that, if exacting budget corrections may be contractionary, the proper response is to impose growth-enhancing reforms. This justification is troubling. Taking as given the need to frontload fiscal corrections – a consequence of the rejection of debt relief – reforms are presented as counter-cyclical policies. It ignores the fact that demand contractions come quickly while supply-side reforms take much longer to produce their effects. Meanwhile the treated countries suffer a deep recession and face intrusive income redistribution without any possibility to appeal to elected officials. One wrong decision cannot justify another, ill-timed decision.

7.3. The faulty logic of intrusion

As observed in Section 2.3, conclusions from fiscal federalism principles stand to be qualified in the presence of important political failures. When powerful vested interests prevent desirable reforms, an external agent of change may be desirable. Most of the structural reform conditions imposed on the crisis countries have economic merit and have long been identified. In fact, policymakers often welcome an external agent of change. They see external pressure as an argument to confront vested interests.

Thimann (2015) argues that it is inevitably counter-productive and the IMF, a long-time adept of structural conditionality, has struggled to display success. In the early 2000s, following the East Asian fiasco, the Fund undertook a ‘streamlining initiative’. A subsequent review by the [Independent Evaluation Office \(2007\)](#) emphasized (p. 1) ‘the need to reduce the volume of structural conditionality. As a practical first step, a notional cap could be set, possibly at four or five conditions per year. [...] The use of structural benchmarks should be discontinued and measures with low structural content should not be part of conditionality’.

Using an external agent as a scapegoat is dangerous. The IMF accepts being resented for that. The Commission too creates resentment. However, in contrast to the IMF, which leaves the country once its mission is accomplished, the Commission is a permanent feature in Europe. In many respects, it is a symbol of Europe. Resentment saps the foundation of European integration. [Guiso *et al.* \(2015\)](#) show that, within the Eurozone, public support for European integration has declined during the crisis while support for the euro has not.

In addition, foreign-imposed reforms are rarely successful, because of information asymmetries. The IMF experience shows that governments pretend to accept the reforms but deliver little. They know how to navigate the domestic political landscape and how to defang and delay unpopular reforms. Once the program is over, they stop pretending (IEO 2007). Furthermore, as one reform calls for another one, mission creep brings about anti-establishment backlash. [Hobolt and Wratil \(2015\)](#) indicate that the political elites are becoming increasingly constrained. As noted by [Thimann \(2015\)](#), the

construction of the EU, and of the Eurozone as well, was explicitly based on a promise that 'national economic and social identities would be maintained, and diversity was stressed as an essential European characteristic'. Intrusive policies reject this promise and generate mounting resistance to 'Europe'.

Summing up, with no significant non-pecuniary externalities and returns to scale and in the presence of critical information asymmetries and national preferences, fiscal principles strongly argue against the trend towards ever rising Commission intrusiveness in areas like MIBs and structural reforms. This conclusion is not modified when special interest politics are taken into account.

8. SYSTEMIC FLAW NO. 6: GOVERNANCE

For decades, the democratic deficit in Europe has been accepted as an undisputed fact. It has led to various treaty changes, for example the co-decision process of the Commission and the European Parliament, the creation of a President of the European Council or the Spring Semester designed to involve national parliaments in the annual procedure of the Stability and Growth Pact. Calls for an elected President of Commission have resulted in his *de facto* nomination by the party that won most votes in elections to the European Parliament.

The sovereign debt crisis has sharpened the traditional debate about the relative merits of the community method, whereby the European Commission is in the driving seat, and the intergovernmental method, which relies on decision-making by member governments. It has challenged the Franco-German leadership long seen as the *sine qua non* of European management. Under pressure, the European Commission did not take any initiative and the European Parliament did not play any role either. The governments of the Eurozone were left to manage the crisis. Among divided governments, Germany took over (Schimmelfennig, 2015).

With hindsight, this is not surprising. Both the Walters Critique and OCA theory implied that some crisis was unavoidable. Furthermore, 'history shows that exceptional shocks and crises will eventually hit any monetary area' (Bordo and Jonung, 1999, p. 29). Crises involve massive externalities, both pecuniary and non-pecuniary, calling for the centralization of crisis management. Unfortunately, there was no provision for crisis management in the Eurozone, so procedures had to be invented on the go. The Commission has significant technical knowledge of European economies, but as a rule-based institution it is not equipped to deal with an unplanned economic and financial crisis. For reasons discussed in Section 5, the ECB remained behind the curve.

On the other hand, information asymmetries and conflicts of interest among Member States argue against centralization. Indeed, European institutions have no crisis management mandate to deal with the unavoidable redistributive consequences that can only be decided by democratically elected politicians. Authority naturally befell on the European Council and Eurozone ministerial meetings, which had to face the acute

trade-off between centralization and decentralization. These meetings could not make quick and complex decisions.

In the power vacuum that emerged, the most powerful country acted as the natural hegemon. In doing so, it protected its interests and projected its vision; this is what hegemons do. The German hegemony was welcome by the Northern countries, which share Germany's interests and, to some extent, economic vision. It was badly perceived in Southern European countries, most of which fell victim of the crisis (Greece, Portugal, Cyprus, Spain) or vacillated on the brink (Italy). It is an open question whether a different management would have prevented the crisis from spreading and lasting so long. What is undisputable is that the democratic deficit has risen to levels never seen before.

The acute trade-off between centralization and decentralization indicates that developing a crisis management framework will be very difficult. The intergovernmental method cannot be the answer because conflicts of interest imply highly divisive politicization. The Commission has no mandate for rapid decisions that disturb domestic political equilibria. A political union would work if backed by democratic legitimacy but there is no European polity at this stage. As argued in Section 3.2, calls for a political union are the intellectually lazy solution, a sure way of preserving the currently unstable *status quo*. This points to the need for institutions and processes that can deliver a better response next time around.

9. CONCLUSIONS

The European monetary union is an original experiment in progress. It was carefully prepared but the sovereign debt crisis has revealed many flaws in its architecture. Many of these flaws had been detected and described beforehand, a few others were revealed by the crisis. The conclusion that the experiment goes much further than establishing a common central bank will not come as a surprise; it is an obvious implication of well-established principles. Another implication is that correcting the flaws cannot be done in a piecemeal way. Removing one flaw alone may well make the other flaws more damaging.

Policymakers have responded with a mix of partial solutions and grand plans. They have strengthened the Stability and Growth Pact and openly talk about a fiscal union, but they do not tackle the legacy of large debts inherited from the past. They have created a (partial) Banking Union but balk at providing it with an adequate common resolution fund. They have expanded the range of mutual surveillance but have not removed sovereignty in the relevant areas. Apparent pragmatism – solving problems where they appear – does not lead to a consistent handling of existing flaws.

This paper is an attempt to provide an encompassing view of the fragilities of the Eurozone based on a systematic framework to analyse the flaws and to sketch solutions. It is both ambitious and modest. Ambitious, because it moves away from partial diagnoses and solutions to focus on institutions. Modest, because it shuns grand plans that

require more popular support and political will than are currently available. A key theme is that we need to accept these constraints and look for the solutions available within them.

Viewed from this angle, it may be worrisome that most of the flaws that led to the crisis remain either intact or poorly treated. Optimists will be comforted by the observation that the euro is a very young experiment of historical proportions. As noted by [Bordo and Jonung \(1999\)](#) ‘we are not aware of any case in history in which a monetary union commenced with all the institutions required to function as prescribed by the modern view on monetary policy. Such institutions develop over time’. Patience, in other words, is a great problem solver. Pessimists will note that, in previous cases, either lessons were learned following crises or the experiments failed. Patience may not be enough when new crises may erupt at any time and when each crisis creates considerable suffering, which leaves wounds that will remain open for generations.

Discussion

Marcel Fratzscher

DIW Berlin

The euro area is still in a deep economic and institutional crisis. It is suffering from an economic crisis, with a strong decline in economic activity and deep structural changes taking place in many regions, a financial and banking crisis, reflected also in mounting pressures for a consolidation of the banking system, and a debt crisis of many sovereigns, corporates, and private households throughout the euro area. There is broad consensus that the euro area needs to undergo fundamental changes of its institutional framework in order to both overcome the current crisis and to ultimately make monetary union sustainable.

The present paper, which is stimulating, clear, and thought provoking, by an author, who has made important contributions to these issues, looks at the question of what these required institutional changes have to be. It addresses six major flaws of the institutional structure, or rather what the author sees as major flaws, of the euro area architecture.

The paper starts from the assertion that the Walters critique on the inherent instability of fixed exchange rate systems also applies to the European Economic and Monetary Union (EMU). However, this criticism is misguided. The euro is NOT a fixed exchange rate system, but a single currency. This difference is important. The mechanism described applies to each and every monetary union. And, as the author notes, it is not clear that the result is a persistent divergence across states and regions within a monetary union. Quite on the contrary, we don't see a persistent divergence in large monetary

unions, such as the United States. And there is also no evidence of a persistent divergence within the euro area – there has more recently been a convergence in current account positions as almost all euro area countries have started registering surpluses since 2014. Hence, the starting point that the EMU creates an inherent instability and divergence pattern is inconsistent and contradicted by the data.

The second weakness is the conclusion of the author that this instability should be solved through countercyclical fiscal policy. Certainly most of the OCA literature shows that a deep common market, a single capital market, and labour mobility are crucial for a monetary union to function. But why does the author focus so narrowly on fiscal policy, ignoring the other elements? In particular, as capital market union is in the planning, a discussion of this element, as well as the role of the labour market, is important.

A first ‘flaw’ the paper considers is that the euro is a ‘foreign currency’ for each member state because the ECB does not function as a LOLR. However, this argument is unconvincing and contradictory. The ECB has acted decisively during the crisis. There is no convincing argument or proof that the ECB did not stand behind governments. The OMT program is the strongest proof for this. The assertion of the paper is that a central bank of a functioning monetary union should monetize debt of its government(s) in crisis times. This seems a wrong assertion as no major credible central bank has acted in such a manner, including the Federal Reserve and Bank of England mentioned by the author.

A related argument of the author in this regard is that the ECB has kept its monetary dominance and not accommodated a more expansionary fiscal policy. Again, this is an assertion and the paper does not make this argument convincingly. The ECB has certainly lost its monetary dominance. Throughout several episodes, including the Greek drama of 2015, the ECB supported several probably insolvent banks because the European governments did not deal with the crisis quickly and decisively.

Also the arguments of the paper concerning the second flaw on fiscal policy are not consistent. The author concludes that the two prescriptions to achieve fiscal discipline – the SGP/EDP/common rules and a credible no bail-out – did not function and should therefore be abandoned. If we agree that the goals of the SGP and the no-bail-out clause are plausible, why give up on them and not find a mechanism to enforce these rules? One option for this is a European finance minister (with a budget) and the rights and institutional instruments to enforce those rules. This has been under discussion for some time and it is striking that the author does not raise this issue.

On the bail-out, I can’t follow the reasoning that to make a no-bail-out credible, we should abolish the ESM. The ESM is a crisis resolution and risk-sharing mechanism, a joint insurance mechanism against crises. It does not follow that a functioning crisis-resolution mechanism function should be abolished because its very existence may lower incentives to pursue sensible policies of crisis prevention. The solution should rather be to implement mechanisms that ensure sound policies also in tranquil times. Such solutions could be the creation of a sovereign restructuring mechanism – with an automatic

bail-in of private creditors in case of fiscal insolvency – and the risk-weighting of government assets in banks' balance sheets.

In fact, the author seems to dismiss giving financial markets a bigger role in crisis prevention and resolution. For instance, changes in the regulation of banks in order to limit their sovereign exposure, domestic and foreign, have been discussed and can be just as useful to improve fiscal discipline as risk-weighting government debt in banks' balance sheets.

On a third flaw, concerning banks: why is it crucial to mutualize deposit insurance? Are the risks for failing to do so really so big? Moreover, what seems important is the question of how to deal with small and medium-sized banks which don't fall under European legislation. The biggest challenges in Europe today seem to lie with these banks, which are still mostly under national supervision, and not with banks under joint supervision.

On a fourth flaw, about the ECB, there is a fundamental inconsistency in the reasoning of the paper. The paper argues that the ECB has made policy mistakes – by acting too late and doing too little on QE – and then jumps to the conclusion that the ECB's 'ability to act as lender of last resort to governments' does not exist. This inference is not valid. Even if the ECB had made these mistakes (which is questionable along several metrics, including considering the size of the ECB balance sheet compared with that of other central banks, and the fact that banks are more important in the euro area), it does not follow that the ECB cannot be a LOLR to governments. The ECB has a monetary financing prohibition, but the ECB still has (and partly because of this prohibition) sufficient room for maneuver as it can and does purchase sovereign debt in secondary markets. As the author likes the work of Bagehot (as I do), he should acknowledge that the ECB has gone much beyond what Bagehot recommended – the ECB never applied penalty interest rates and has been highly generous even concerning the haircuts on collateral. In short, the institutional arguments for this claim are missing or unconvincing.

Finally, on intrusiveness and governance: a deepening of the argument would be helpful. Monetary union, by definition, means giving up sovereignty in some areas. Why is intrusiveness then something that should be avoided at all cost? Another way to look at the problems of the euro area architecture is that it has an underlying inconsistency in that sovereignty is national in crucial areas, such as fiscal policy, but responsibility and liability are joint/European. Intrusiveness is thus necessary to bring both to the same institutional level, to avoid moral hazard and to achieve a required level of policy coordination.

Ethan Ilzetzi

London School of Economics

The euro area was hit particularly hard by the global financial crisis and its recovery has been sluggish. Euro area GDP is still below its pre-2009 peak and is alone among major

industrialized economies in this fate. What are the reasons for this poor performance? Is the euro an inherently fragile arrangement, was the euro area particularly vulnerable, or were policy errors made? 'All of the above,' answers the author of this interesting paper. The author takes us on a whirlwind tour through the causes for the Eurozone crisis and the impediments to its resolution.

In this paper, Charles Wyplosz lists a long number of systemic flaws in the design of the Eurozone, and causes of the Eurozone crisis, ranging from a critique of its fiscal targets to over-intrusiveness by Brussels in the affairs of sovereign members. Most items on the list are familiar to observers of the debate, but Wyplosz contributes in bringing them together and elaborating on each. There are many insights in the paper and I learned much from reading it.

Nevertheless, it was hard not to feel overwhelmed on reading this paper. Is this merely a laundry list of complaints, or is there an underlying framework to understanding the crisis? Why, for example, are fiscal discipline and the lack of a mechanism for sovereign debt resolution two separate flaws, rather than a single weakness of the Eurozone's fiscal framework? Are there three separate challenges or is this a general matter of the Eurozone failing as an optimal currency area? It is hard to evaluate the claim that the European Central Bank is 'incomplete' without clarity on what (the author believes) constitutes a 'complete' central bank.

Short of providing a framework of my own, I'll attempt to organize the author's claims in three general categories. First, the author argues that the Eurozone is not an optimal currency area (the three 'causes' fall into this category). Second, the author appears to feel that the scope and federal level for monetary, fiscal, and financial policymaking is inappropriate in the current institutional arrangement (flaws 1–4 are all of this nature). Finally, the author has some concerns about the political economy of the union (flaws 5 and 6, and to some extent 3 have this flavour).

Beginning with the argument that Europe is a sub-optimal currency area, I generally agree with this claim. Given the asymmetry of shocks in the currency union, an imperfectly integrated banking system, and absent a system of fiscal transfers to compensate for these, the Eurozone is certainly more vulnerable to crises than the currency union of the United States. I think most observers would by now concede this point, but I feel that the case is overstated in this paper.

It is of interest that inflation can diverge in a currency union in the very stylized setting of the model proposed by the author. But one wonders why the Eurozone is different than any other diverse economy in this regard. If the author's argument is that the EU is a particularly bad area for a currency union then this is the case that needs to be made. The author, like [Mundell \(1961\)](#), emphasizes the symmetry of shocks and mobility of labour as important factors. I'm not sure these are the fundamental difference between the United States and the EU. Lack of labour mobility, partially due to homeowners locked in to underwater properties, was a factor in the US crisis as well. In terms of asymmetry of shocks, unemployment in Nevada was 13.5% in 2010, but only 3.8% in North Dakota, and this despite large automatic stabilizers that redistribute across

regions. Even today, as the Fed is possibly embarking on a tightening cycle, there are three major MSAs in California with unemployment at 9% or above. Instead, I would prescribe to Kenen's (1969) view that fiscal transfers are critical for the functioning of a currency union. But this raises the question of the appropriate (geographical and functional) scope of fiscal policy.

The global financial crisis has exposed a certain naiveté in our thinking about the independence of monetary, fiscal, and financial policy. The six flaws enumerated by the author are certainly relevant, but a deeper conceptual framework is needed if we are to understand how to avoid crises of this sort in the future. It may have been good policy for the Bank of England to purchase 20% of its country's GDP in government-issued Treasuries as part of Quantitative Easing. But some have suggested that such policies violate the principle of monetary dominance. Labelling the ECB an 'incomplete' central bank because it was slow in following suit deserves elaboration on the author's view on how far a central bank may go in pursuing quasi-fiscal actions before it has crossed a red line. The Federal Reserve now holds close to \$2 trillion in mortgage-backed securities alone. I am sympathetic with the view that this may have been necessary for the conduct of monetary policy when the Fed Funds rate hit zero while risk premia remained high. But this certainly smacks of what Markus Brunemeier has recently labelled 'financial dominance'. The Bank of England has consistently argued that such actions go beyond its mandate. Does the author view the Bank of England as less 'complete' than the ECB, which has recently expanded credit directly to the private sector?

The boundaries between monetary, fiscal, and financial policy have been muddled in every major economy and the crisis has opened big questions on the appropriate scope of each of these. The Eurozone augments this problem with some particularly thorny questions. But many of the ECB flaws the author enumerates fall into these grey areas. The author expresses far more certitude than I can share on the appropriate scope for central bank action.

Many of the flaws this paper points to regard the appropriate federal levels at which monetary, fiscal, and financial policy are set. But the actual recommendations on the level of government are at times *ad hoc*. Wyplosz finds the Stability and Growth Pact to be inappropriate, ineffective, and in violation of sovereignty. He bemoans the violation of the bail out clause, but later sounds positive on Outright Monetary Transactions that are a *de facto* guarantee of monetary financing. He thinks that fiscal policy at the federal level is impracticable, but doesn't provide a recommendation on resolving the time inconsistency of *ex ante* commitment to monetary dominance and the *ex post* desire for stabilization.

Wyplosz is clearer on the necessity of bank resolution authority pushed up to the European-wide level. But bank resolution can be enormously costly, as the Irish example illustrates. In banking, the boundary between illiquidity and insolvency is often difficult to ascertain. More clarity is needed on who should bear the fiscal burden arising from bank rescues. It appears that the burden ultimately always falls on the shoulders of the ECB, being the only truly transnational authority with the means to act. But this puts monetary policy in a subservient role once again.

The political developments in Europe are no less concerning than the economic ones, and the author is right to point out the rifts that this crisis have opened on this front. The notion that monetary and financial policy, let alone fiscal policy, could be made by technocrats above the political fray is another exemplar of pre-crisis naiveté. Wyplosz raises a fair question of whether the desire to make the ECB board representative is not at odds with the desire to make it independent. Budgetary policy is the main instrument politicians wield and they are unlikely to depart with it without putting up a fight. Despite large cross-border capital flows, banks in Europe are still largely national institutions and in some cases enmeshed in local politics. The next generation of European institutions should be robust to, rather than oblivious of, national politics. The insights in this paper are good point of departure towards a discussion of their design.

Panel discussion

Charles Bean criticized the comparison of the size of the TARP with the size of the resolution fund and said that this is like comparing apples and oranges. He also said that the definition of Bagehot's principle in the paper is not correct; it is not to lend freely at high rates but to lend freely against reliable collateral at a penalty rate. Kevin O'Rourke noted interest rates cover a multitude of sins so market discipline raising interest rates may be desirable. Ester Faia said that people do not want resolutions made by taxpayers but by bail-ins and said that only if the bail-in is not enough, we should have to go to the bank resolution fund, which is funded by banks.

Thorsten Beck made three points. First, he said he does not understand how the author wants the ECB to treat sovereign debt since the author stated that during the crisis the ECB should buy the debt, but at some point he said it should not buy any national debt. Beck said that there might be a distinction between crises and normal times and asked if there is a consistent regime where we switch from one to another. Second, he wondered whether there is any role for macroprudential regulation. Third, he agreed with the author about governance and intrusiveness issues and asked if we can use market discipline as a solution. He wondered whether that would be consistent with the social contract in Europe.

According to Evi Pappa, austerity or countercyclical fiscal policy will not be the solution. She and Marcel Fratzscher emphasized the need for more integrated markets. Pappa suggested making changes in the institutional system, in the legal system in every country so that markets deepen, including both the capital markets and the banks. She said that there would be no bank run in Greece if Greek citizens knew that banks were open. She further said that going to a more integrated Europe requires political will that does not currently exist.

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