EURO IMBALANCES AND ADJUSTMENT: A COMPARATIVE ANALYSIS
Leszek Balcerowicz

This article deals with the main problems and proposed solutions with respect to the euro. I start with what I perceive to be confusion in the debate on the euro. The next section shows a large variation in the growth performance in the eurozone, and more broadly in the European Union (EU). This should make us skeptical when hearing about the crisis of the euro, or of Europe. I then proceed to discuss what the problem countries in the eurozone suffer from. The next section deals with a more difficult question: What are the links between the euro architecture and the accumulation of these problems—that is, the imbalances and structural barriers to economic growth in some members of the eurozone? I then proceed to discuss the adjustment under the euro after 2008, focusing on the weaknesses of the policies of the crisis management. The article ends with a critical discussion of the problems and solutions put forward in the debate on the euro.

Against this background and based on the previous diagnosis, I sketch what I consider to be the right approach to solving the problems of the eurozone. Throughout the article I discuss the euro as a monetary arrangement, the weaknesses of which have to be identified by taking a comparative perspective—namely, that of other currency unions.
Confusion in the Debate on the Euro

There is a lot of confusion in the debate on the euro. First, problems that have appeared in the eurozone are often confused with those caused by the euro. As a result, the euro is blamed for almost everything bad that emerged after the introduction of the Economic and Monetary Union (EMU). In discussing the impact on the euro, little effort is usually dedicated to spelling out what would have been the developments in the eurozone under alternative monetary arrangements—that is, if EMU had not been introduced.

Second, more general issues are mixed up with those specific to the eurozone, often without a clear separation between the two categories. The first group includes discussions on hard (fixed) pegs versus free floats and on the causes of the financial crises. It also includes some newer issues like the proper fiscal policy during a financial crisis and the consequences of unconventional monetary policy. Obviously, one cannot avoid considering general issues in discussing the problems in the eurozone. However, general arguments are not enough for the proper diagnosis and the proper therapy with respect to the euro. In addition, one must isolate and analyze the specificities of the eurozone—for example, why differences in risk premiums between such different countries as Greece and Germany were so small until recently, and why fiscal constraints in the member countries of the eurozone have proven so weak. Moreover, to isolate and discuss these specificities, one must compare the EMU with other types of hard-peg arrangements.

Third, there is a lot of verbiage in the debate on the necessary solutions to the euro’s problems, exemplified by such popular, but unclear, expressions as “fiscal union” or “political union.” That rhetoric, used by the proponents of the further centralistic integration in the eurozone, reflects, I think, wishful thinking and an unreflective belief that a monetary union necessarily requires a political union.

Finally, there are excessive generalizations in the discussions on the euro which mask a huge variation in the economic performance of the member countries, especially since 2008. (The same goes for the rest of the EU.) Not every member has turned out to be a problem country. The division into the center and the periphery has emerged.
The Variation in GDP Growth in the EU, 2008–13

Table 1 shows the large variation in the growth performance in the EU during 2008–13. The cumulative growth in the eurozone over 2008–13 ranged from 5.2 percent in Slovakia to −23.6 percent in Greece; among the non-euro EU members, it ranged from 12.5 percent in Poland to −4.1 percent in Britain. It is interesting to compare economic growth in the respective EU countries with that in the United States over the same period. As one can see, nine countries have outperformed the United States in terms of GDP per capita, and three of them (Poland, Slovakia, and Sweden) in aggregate GDP growth. The nine best performers included free floaters (Poland and Sweden), countries with hard pegs, that is, members of the euro (Germany and Malta), and four countries with euro-based currency boards (Bulgaria, Estonia, Latvia, Lithuania—known as the BELL).

The worst performers included the problem countries in the eurozone (Portugal, Italy, Ireland, Greece, and Spain—known as the PIIGS), along with Cyprus and Slovenia. However, the free floaters (Britain and Hungary) did not fare very well either. An interesting contrast is visible between the growth performance of the BELL and the PIIGS as well as other problem countries in the eurozone. The example of the BELL shows that a hard peg (i.e., not being able to use the nominal devaluation of the domestic currency) does not necessarily prevent a country from having a relatively good growth performance. The contrast between the BELL and the PIIGS is even more interesting because all of the BELL and most of the PIIGS (Greece, Ireland, Spain) developed the credit booms that went bust, and the boom-bust episodes in the BELL were more intense than among the PIIGS. This raises the question of what had allowed the BELL to outperform the PIIGS by such a wide margin. I will discuss that issue shortly.

What Problems Do the Problem Countries in the Eurozone Suffer From?

In this section I will discuss the types of problems that appeared in the PIIGS. As those problems are not specific to the PIIGS, I will also touch upon some broader issues.

The problems that appeared in the PIIGS were (1) the financial booms that resulted in large imbalances and declining price
### TABLE 1
**Cumulative Changes in GDP per Capita**

<table>
<thead>
<tr>
<th>Group 1</th>
<th>2008–13</th>
<th>2008 Trough</th>
<th>2013 Trough</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>12.5%</td>
<td>1.6%</td>
<td>10.8%</td>
</tr>
<tr>
<td>Slovakia</td>
<td>5.2%</td>
<td>-5.1%</td>
<td>10.9%</td>
</tr>
<tr>
<td>Lithuania</td>
<td>5.2%</td>
<td>-14.0%</td>
<td>22.2%</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>3.6%</td>
<td>-5.0%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Sweden</td>
<td>3.4%</td>
<td>-5.8%</td>
<td>9.8%</td>
</tr>
<tr>
<td>Germany</td>
<td>3.0%</td>
<td>-4.8%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Malta</td>
<td>2.7%</td>
<td>-3.0%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Estonia</td>
<td>2.5%</td>
<td>-14.0%</td>
<td>19.3%</td>
</tr>
<tr>
<td>Latvia</td>
<td>1.6%</td>
<td>-16.4%</td>
<td>21.5%</td>
</tr>
<tr>
<td>United States</td>
<td>1.2%</td>
<td>-4.0%</td>
<td>5.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 2</th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>0.3%</td>
<td>-4.1%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Romania</td>
<td>-2.5%</td>
<td>-7.3%</td>
<td>5.2%</td>
</tr>
<tr>
<td>France</td>
<td>-2.6%</td>
<td>-3.7%</td>
<td>1.1%</td>
</tr>
<tr>
<td>EU-27</td>
<td>-2.6%</td>
<td>-4.6%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Belgium</td>
<td>-2.7%</td>
<td>-3.5%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>-2.8%</td>
<td>-5.1%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Euro area -17</td>
<td>-3.5%</td>
<td>-4.7%</td>
<td>1.3%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>-4.1%</td>
<td>-4.6%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Hungary</td>
<td>-4.4%</td>
<td>-6.6%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Denmark</td>
<td>-4.8%</td>
<td>-6.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Finland</td>
<td>-5.0%</td>
<td>-9.0%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>-5.1%</td>
<td>-4.2%</td>
<td>-1.0%</td>
</tr>
<tr>
<td>Ireland</td>
<td>-5.7%</td>
<td>-7.5%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Spain</td>
<td>-7.4%</td>
<td>-5.1%</td>
<td>-2.4%</td>
</tr>
<tr>
<td>Portugal</td>
<td>-7.5%</td>
<td>-3.0%</td>
<td>-4.6%</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>-8.1%</td>
<td>-5.8%</td>
<td>-2.5%</td>
</tr>
<tr>
<td>Italy</td>
<td>-9.0%</td>
<td>-6.1%</td>
<td>-3.1%</td>
</tr>
<tr>
<td>Slovenia</td>
<td>-11.8%</td>
<td>-8.7%</td>
<td>-3.4%</td>
</tr>
<tr>
<td>Cyprus</td>
<td>-20.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>-23.6%</td>
<td></td>
<td></td>
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</tbody>
</table>

**Other**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea 1997</td>
<td>22.1%</td>
<td>-6.4%</td>
<td>30.5%</td>
</tr>
<tr>
<td>Turkey 2000</td>
<td>17.1%</td>
<td>-7.0%</td>
<td>25.9%</td>
</tr>
<tr>
<td>Sweden 1990</td>
<td>2.4%</td>
<td>-4.4%</td>
<td>7.1%</td>
</tr>
<tr>
<td>Finland 1990</td>
<td>-5.3%</td>
<td>-11.4%</td>
<td>-5.3%</td>
</tr>
<tr>
<td>Chile 1981</td>
<td>-11.7%</td>
<td>-18.7%</td>
<td>8.6%</td>
</tr>
</tbody>
</table>

**Note:** the figures for 2013 are based on the European Commission’s spring forecast. Trough = 2009, if not stated otherwise.

**Source:** European Commission Annual Macroeconomic Database (AMECO).
Euro Imbalances and Adjustment

competitiveness of the affected economies, and (2) the accumulations of microeconomic distortions, which together with chronically stressed public finance, have acted as a break on economic growth.

Let me start with the boom-bust episodes. A sustained accelerated spending fuelled by credit and foreign capital inflows produced booms that tended to go bust. There is no bust without a previous boom.

The booms differed in their intensity and structure depending on the extent to which the accelerated spending was financed by domestic or foreign sources, and in the composition of funding—that is, in the share of FDI, portfolio investment, and debt finance. Finally, the booms differed depending on the sectors the extra spending was directed to—for example, the stock market, real estate and housing, consumer durables, fixed investment outside housing, and the fiscal sector. Differences in the intensity, structure, and location of the booms influenced the probability they would go bust and determined the consequences of such busts for subsequent economic growth, especially in the long run. This is an important and largely unexplored subject that I must leave aside here.

Among the PIIGS, Greece, Ireland, and Spain developed intensive booms that were largely financed by foreign portfolio and debt capital, mostly coming from more advanced eurozone economies (Ebner 2013). In addition, Greece accumulated massive microeconomic distortions.

One can distinguish two types of boom-bust episodes that appeared in the eurozone (and more broadly): (1) fiscal to financial and (2) financial to fiscal. Those episodes differ in their sequence and root causes (Balcerowicz 2012b).

The fiscal-to-financial crisis is dramatically exemplified by Greece. It typically starts with a sustained budgetary overspending that spills over to the financial sector, as financial institutions are big buyers of government bonds. Moreover, domestic financial firms often own a disproportionately large part of their country’s sovereign debt—witness the problems of the Greek banks. This “home bias” has been due to official regulations such as the Basle risk-weighted capital requirements and to the informal links between the government and the banks. It is, of course, especially strong when the banks are stated-owned (Gonzales-Garcia and Grigoli 2013).

The fundamental question that goes beyond Greece and the eurozone is: What are the root causes of the tendency of modern
political systems to systematically overspend, which results in fiscal-to-financial crises or in chronically ill public finances that act as a brake on economic growth? This hugely important issue belongs to public choice and cannot be discussed here at greater length. I can only point to the interaction of the destructive political competition (i.e., competing for votes with spending promises) and the weak, if any, fiscal constraints. The solutions consist, therefore, in making political competition fiscally more responsible and strengthening the fiscal constraints on governments. On the first issue, there is ultimately no good substitute for more active and effective engagement of those members of society who understand that freedom and economic growth require keeping the size of government in check. On the second issue, constitutional constraints on the budget may be of help. However, in order to introduce and maintain them, a strong participation of civil society is again required. This is especially important in the larger EU countries, as they are less susceptible than the smaller ones to European pressures; indeed, they are largely behind them. The European rhetoric should not mask the realpolitik in the EU. The story of emasculating of the Stability and Growth Pact by Germany and France in 2005 is a case in point.

The financial-to-fiscal crisis in the eurozone had occurred in Ireland and Spain. The spending boom in the housing sector fuelled the growth of their economies and created a deceptively positive picture of their fiscal stance. Once the housing boom stopped and reversed, the economy went into a deep recession, the situation in the banks sharply deteriorated, and large budget deficits appeared.

There is little doubt that fiscal-to-financial crises have political roots. In contrast, there has been a heated debate about the underlying reasons for the financial-to-fiscal boom-bust episodes. Much of the mainstream literature superficially blames “unregulated” financial markets and financial institutions. In the same vein, conventional analysts point to “market failures,” without mentioning that the markets that they blame for various failures have been distorted by various government interventions. More careful researchers stress the inherent fragility of the traditional fractional reserve banks and the

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1I do not mean to suggest that the right solution is to abolish open political competition (i.e., democracy). Rulers in nondemocratic regimes also tend to pacify their societies by increasing budgetary spending, and political power in most of those regimes is less constrained than in most democracies.
Euro Imbalances and Adjustment

pro-cyclicality of financial systems. These are empirically relevant observations. However, the invariant features they refer to cannot explain huge differences in the incidence and depth of the financial crises over time and across countries. Rather, as Calomiris (2009) has noted, the important contributing factors to the financial crises are bad policies—both macroeconomic policies, strictly speaking, and those that result in bad laws, regulations, and organizations that distort market price signals.

While serious errors were committed by private financial firms, an especially high share of wrong decisions were made by government sponsored enterprise—for example, cajas in Spain, Länderbanken in Germany, and Fannie Mae and Freddie Mac in the United States. In Slovenia, one of the worst performers in the eurozone, state-owned banks accounted for 70 percent of overall banking assets and led to a politicized misallocation of credit. These are examples of “enclaves of socialism” in capitalistic economies—and capitalism is often blamed for the operation and outcomes of these enclaves. Vast experience shows that direct politicization of firms, both financial and nonfinancial, distorts incentives and leads to bad decisions, corruption, and waste. Thus, any serious reform that aims at reducing the risk of financial crises should include the elimination of the organizational enclaves of socialism from the financial sector.

Many laws and regulations contributed to the recent financial crisis by encouraging private investors to take excessive risks and by distorting the operation of financial markets. These laws and regulations included: perverse credit weights in the Basle capital accords that encouraged domestic banks to lend to their sovereigns; tax regulations that favored debt relative to equity financing; subsidized mortgages that encouraged excessive borrowing; federal deposit insurance that eliminated an important source of market discipline; and bailout policies that resulted in the “too big to fail” syndrome—that is, the flagrant distortion of financial markets (Balcerowicz 2012a). Most of these policies are still in place.

Finally, the monetary policy of the leading central banks deserves a special mention. The contribution of Federal Reserve policy to the U. S. housing boom and, indirectly, to the global financial crisis has been shown in many articles (e.g., Taylor 2013). For an early warning, see Niskanen (2006).
the monetary policy of the ECB (Taylor 2009). However, the post-crisis official discussion on how to prevent another serious financial crisis has focused on regulations, with little time dedicated to the contributory role of monetary policy. The typical framing of the debate on central banks is how they can prevent the buildup of serious financial crises facing inherently fragile and unstable financial markets, while the relevant question is how to prevent central banks from occasionally “leaning with the wind,” thus fuelling asset bubbles and destabilizing financial markets. This is all the more important because, in response to the crisis they contributed to, the central banks of the largest OECD economies have shifted to unprecedented policies of ultra-low interest rates and massive interventions in financial markets. By heavily influencing the expectations, and thus operations of those markets, these policies amount to a massive macroeconomic statism—to be distinguished from the microeconomic statism of direct politicization of firms and anti-market regulations.

These remarks point to more fundamental issues of an institutional nature—namely, (1) the present fiat money regime and the related large role of central banks, and (2) the fractional reserve banks with the related official regulations and the reduced role of market discipline. There are many important problems regarding each of these two institutional systems and their potential alternatives. For example:

- What is the relative role of the various kinds of monetary and financial systems in producing booms that often result in crises?
- What are the interactions between these two systems in generating instability?
- Can one effectively constrain the monetary policy of the central banks of large countries while preserving fiat money?
- And, if not, what would be the best alternative, assuming that it could be introduced and sustained?

These questions are fundamentally important but go beyond the scope of this article. I would only like to note here that while

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3The smaller countries can go for dollarization, euroization, introduce currency boards, or enter monetary unions. The main problem is with the large countries, especially the United States, as the Fed’s policies heavily influence the monetary policy and economy of all other countries.
working on them, one should not lose sight of the potential improvement within the framework of the present monetary and financial paradigm. A large variation in the incidence and magnitude of financial crises (and inflation) within this framework seems to suggest that this is not necessarily a hopeless task. But I grant that in observing the unprecedented expansion of the central banks’ activity during recent years, one does not get very optimistic about improving monetary policy under fiat money.

Finally, returning to the problems of countries in the eurozone, I would like to mention Italy, Portugal, and France—all of which have been growth laggards during 2008–13 (and Italy also much earlier). However, as distinct from Greece, Italy, and Spain, these countries did not suffer from acute boom-bust episodes after the introduction of the euro. Their slow economic growth resulted instead from the accumulation of regulatory distortions, lack of market reforms, and chronically stressed public finances. The question is whether those policies have anything to do with the introduction of the euro.

The Euro and Problems in the Eurozone

The previous section described the boom-bust episodes and bad structural and fiscal policies that appeared in some member countries of the eurozone. In this section I will discuss a more difficult question: whether the euro has contributed to these problems, and if yes—then how?

Speaking about the euro I have two things in mind: the original design of the EMU and its actual implementation. It matters whether problems can be linked to some features of the original design that have been implemented or whether they have been due to the fact that some design features remained on paper. The first case raises the question of what would be the better arrangements. For example, how can one change the modus operandi of the ECB to avoid an excessive suppression of the risk premiums across the eurozone countries? The second problem (persistent deviations of actual policies from the original design) raises the issue of whether this was just an accident of bad politics, which could be remedied thanks to the accumulated experience and increased pressure from more enlightened and powerful peers, or whether it has been unrealistic from the very beginning to expect that a given constraint could be respected. In the latter case, the arrangement in question would
suffer from incentive incompatibility and should be replaced by, or complemented with, some other mechanism. A candidate in this category is the Stability and Growth Pact whereby the European Commission and governments of the member countries (the actual or potential fiscal sinners) have been entrusted by all the members with enforcing budget discipline.

In searching for the links between the euro and the problems in some countries of the eurozone, one has to show through what channels the specific features of the euro might have contributed to these problems. And in doing this, it is not enough, of course, to show what has actually happened under the euro. In addition, one has to show what would have happened under some alternative monetary arrangements. This comparative scenario analysis is not easy and partly speculative. Therefore, what I can do in this short article is to put forth some hypotheses and ask certain questions.

Let me turn to the boom-bust episodes, which occurred in Greece, Ireland, and Spain after the introduction of the euro. Ample literature shows that financial crises have occurred under different monetary arrangements (see, e.g., Reinhart and Rogoff 2009). Recent history includes crises under fixed or hard pegs (Asian countries in 1998, Sweden and Finland in 1990, and the Baltics after 2008) as well as under freely floating exchange rates (Britain and the United States during the global financial crisis). However, this list shows only that no monetary regime is able to make a country immune to financial crises. It does not shed much light on a more important question: What explains differences in the incidence and depth of financial crises across time and space? Moreover, as a special case of this broad issue, one should ask: What features of the euro might have contributed to the booms and busts in some eurozone countries?

There is one feature I have already mentioned, and which deserves special attention in this respect, namely, the extreme suppression of credit spreads among eurozone members with very different fundamentals. Until 2008, the narrow interest-rate spreads had been widely welcomed as a sign of success of the eurozone being

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4 For example, Hellwig (2011) claims that if not for the introduction of euro and the ECB, the independence of the Bundesbank in Germany would have been undermined because of the constellation of political forces that had appeared in Germany in the 1990s.
a “true” monetary union. Only a few economists regarded this extreme suppression of the spreads as a reason to worry.

There are three questions related to the extremely suppressed credit spreads in the eurozone until 2008:

1. Why and how might they have contributed to the booms in some eurozone countries and to the ensuing problems? And why in these countries and not in other member states?
2. What were the reasons for these spreads and, more specifically, what features of the euro itself might have contributed to their suppression?
3. To what counterfactual monetary arrangements were the spreads in the eurozone especially low?

The first question is easy to respond to: The acute booms occurred in eurozone countries that had the largest declines in their credit spreads (ECB 2012). In discussing the consequences of this change in interest rates, we must return to the distinction between fiscal-to-financial versus financial-to-fiscal crises.

In the case of Greece, it was mostly the government that benefited from the narrowing of interest-rate spreads. Governments differ in their fiscal behavior depending on their socio-political system. However, one may safely assume that in the modern world governments tend to spend any windfall gains, unless there are sufficiently strong institutional or socio-political constraints. Such constraints did exist in many Western countries in the 19th century due to a belief in balanced budgets and the strong position of fiscally conservative voters among the electorate. This belief has been severely weakened by macroeconomic statism (Keynesianism) and the related changes in the composition of the electorate. Given the looming fiscal challenges in most Western economies, the key question has been how to restore the mechanisms of fiscal responsibility. In the eurozone, fiscal constraints turned out to be much weaker than envisioned, and led to an acute fiscal-financial crisis in Greece where the windfall gains obtained by some countries in the eurozone were a special case of a broad category of the availability of easy money to the governments. Other examples include aid to the poorer countries and new funds derived from the discovery of natural resources (Fernandez-Villaverde, Garciano, and Santos 2013). Research suggests that the distortive impact of various kinds of windfall gains on politicians’ behavior depends on how strong the institutions are that constrain the government.
balance between fiscal populism and fiscal constraints was especially unfavorable. Looking forward, one must face the question of what changes in the eurozone countries, or at the level of the whole group, would permanently strengthen fiscal discipline.

A different mechanism—of the Wicksellian type—was present in the case of financial-to-fiscal booms in Ireland and Spain that led to radically lower interest rates. In this case, the gap between market (financial) rates and natural rates developed, fuelling a surge in the demand for credit by firms and households (Hellwig 2011). The borrowing spree was strengthened by policies that subsidized mortgage credit, making it even cheaper.

Many observers worried about the possible lack of fiscal discipline as a danger to the smooth functioning of the euro. However, it is puzzling that few, if any, warned against the danger of financial-to-fiscal booms, which turned out to be a serious problem in the euro area. Speculating about the reasons for this neglect, one can perhaps mention the popular conviction in the economics profession (until recently) that financial crises have been relegated to the less developed world. Another mistaken belief, specific to the eurozone, is the tendency to view the EMU as being immune to internal balance of payments problems (Merler and Pisani-Ferry 2012).

Further research should explain why among the countries that obtained the largest reductions in credit spreads, Greece developed the fiscal-to-financial boom-bust episode while Ireland and Spain suffered from the financial-to-fiscal crisis. In searching for the response to this question, one would have to look to cross-country differences in housing cycles, financial sectors, and political preferences of the ruling parties.

There is much more controversy and much less research regarding the second question: Why have credit spreads (until recently) been so drastically suppressed across the eurozone countries? Some observers regard this as just another instance of market failure. However, the behavior of market participants is shaped by many factors, and in the case of financial markets those factors prominently include actual and expected actions of policymakers. True, lenders in financial markets were late in recognizing the looming boom-bust problems in the eurozone, but they were still quicker than official monitoring agencies, including the IMF (Tran 2013). Indeed, even the most ardent proponents of rational expectations do not ascribe to markets the gift of perfect foresight. Rather, they only
claim that market participants do not make systematic errors in their forecasts. Lenders in the financial markets may have underestimated the risks that the booms they financed would turn into busts, or they may have been skeptical about the realism of the no-bailout clauses that were an important part of the euro’s institutional framework. If the latter was the case, developments in the eurozone have largely proven lenders right (the Greek exception notwithstanding). The assistance given to the problem countries, especially Ireland, was in fact a bailout of the creditors from the assisting countries, especially from Germany and France—and, in the case of Ireland, also from the United States. Therefore, in contrast to the United States in 1870, when the insolvent states were not bailed out by the federal government, the eurozone did not enforce its no-bailout constraint.

Two other factors are mentioned in the literature as having contributed to the extreme suppression of the credit spreads across the eurozone and the resulting boom in some member countries. The first one clearly constitutes a feature of the euro design and practice—namely, the modus operandi of the ECB. Buiter and Siebert (2005) were to my knowledge the first to point it out. As Harold James (2013) notes, “When the EC Committee of Central Bank Governors began to draft the ECB statue, it took the principle of invisibility and centralization of monetary policy as given. But this was not really justified either historically or in terms of economic fundamentals.” George Soros (2011) is more specific:

The European Central Bank treated the sovereign debt of all members as riskless and accepted them at its discount window on equal terms. Banks that were obligated to hold riskless assets to meet their liquidity requirements were induced to load up on the sovereign debt of the weaker countries to earn a few extra points. This lowered interest rates in Portugal, Ireland, Greece, Italy and Spain and generated housing bubbles.

A similar point was made by Steinmeier and Steinbrück (2010). Gill and de Souza (2013) pointedly remark that “by treating all sovereign debt equally, the ECB sent markets the wrong signal.”

However, it is an interesting question to what extent macroeconomic beliefs of major players in the financial markets are shaped by conventional macroeconomic doctrines.
Both nominal and real interest rates were suppressed in the future problem countries in the eurozone, thus fuelling the demand for credit. Until 2008 the PIIGS displayed persistently higher inflation than the core members of the eurozone (ECB 2012). This resulted from the boom and the various distortions in the PIIGS that hampered the single market and the tendency for the prices of tradeables to be equalized across the members of the currency union. Therefore, in considering the question of how to reduce the risk of serious boom-bust episodes in the eurozone, one must look at the causes of the extreme suppression of nominal credit spreads across the eurozone and the structural reforms necessary to complete the single market. Those reforms are also important for other reasons, especially for strengthening longer-term growth in the eurozone countries.

Let me finally discuss the third question: Whether the propensity to generate boom-bust episodes was especially strong in the eurozone compared to other hard-peg arrangements. If the main channel behind this tendency had been the radically suppressed credit spreads in the eurozone, then one should compare them with those under other hard-peg systems (e.g., in the large federal states, dollarized economies, currency board countries, and former Deutsche mark bloc under the gold standard) while taking account of differences in economic fundamentals among the members of the respective hard-peg areas.

There is no space here for such a comprehensive comparison. However, even a glimpse at the available literature strongly suggests that the credit spreads in the eurozone were extremely suppressed. First, “between 2004 and 2007 when European sovereign bond spreads were nearly eliminated, the average spreads between Aaa and Bbb state bonds . . . were in the range of 58 to 46 basis points” (Henning and Keesler 2012: 16). Second, Dellas and Tavlas (2013: 509) stress that under the gold standard “spreads were fairly large—in the range of 100 to 400 bp despite the small external and fiscal imbalances of the participating countries.” If we do not want to assume that lenders in 19th century were much more rational than those at present, we must conclude that special factors in the eurozone led to an extreme suppression of credit risks and the related financial crises in some member countries. Those special factors included the ECB’s treatment of debt of the various
Euro Imbalances and Adjustment
eurozone governments and distortions that produced persistent inflation differentials.\textsuperscript{7}

Finally let me consider the question whether there has been any link between the euro and the fact that many members of the eurozone have made little progress on structural reforms, and some of them accumulated anti-market distortions and delayed the necessary institutional improvements of their economies—especially Greece, Portugal, Italy, and France. The pace of institutional change results from the interplay of many factors, among which the political ones play a prominent role. The question is then: Has the euro influenced them and, thus, the quality of the institutional systems, in at least some members of the eurozone? The original expectation of the proponents of the EMU was that the euro would remove the easy way of coping with economic problems (i.e., nominal devaluation) so that their governments would be forced to use harder but more productive methods (i.e., structural reforms).\textsuperscript{8} This expectation has not been fulfilled. The pace of structural reforms in the member countries turned out to be very disappointing, except perhaps for Germany (Whyte 2010). The main reason for this state of affairs was that the introduction of the euro did not remove the easy ways of coping (or rather pretending to cope) with the countries’ economic problems. True, the option of nominal devaluation has been eliminated, but another easy way of tolerating distortions and delaying reforms was created: cheap credit and capital inflows, especially to the future problem countries. Those inflows not only fuelled financial crises in some member countries but also made bad structural policies more financeable.

Policies and Adjustment under the Euro

I have already shown the types of problems that appeared in some members of the eurozone: boom-bust episodes and bad structural and fiscal policies. I have also discussed the links between these problems and some features of the EMU, especially the ECB’s

\textsuperscript{7}In thinking about further research, I would note that the BELL developed an intense credit boom, even though they did not participate in the eurozone monetary system. One reason could have been their very small size, which made it easy to overwhelm them with external capital inflows.

\textsuperscript{8}See Fernandez-Villaverde, Garciano, and Santos (2013).
modus operandi that contributed to the extremely suppressed credit spreads across the eurozone, and, thus, via the financial booms to the financial crises and bad structural and fiscal policies. These tendencies were strengthened by the ECB’s easy monetary policy, international and domestic regulations that encouraged risky behavior of lenders and borrowers in the financial markets, and neglect of the agreed fiscal constraints by eurozone governments. As a result, the eurozone during the first 10 years of its existence did not have a mechanism for smoothly dealing with the emerging fiscal, financial, and structural problems. Rather, it had a mechanism for accumulating them and postponing their resolution. This is clearly visible when one compares the eurozone with the gold standard (see Dellas and Tavlas 2013).

Given the problems in the eurozone since 2008, what policies have aimed at dealing with them? We now turn to that question.

A huge literature has emerged on the post-2008 policies in the eurozone. Here I can deal only with a few selected issues. First, one should distinguish between policies designed to cope with a crisis (crisis management) and those intended to reduce the risk of a future crisis (structural reforms). The latter would make eurozone countries better able to cope with future shocks and strengthen economic growth. Both kinds of policies have been present at two levels: that of the eurozone and in the respective countries. I will focus on crisis management in this section. In the next section, I will discuss the actual and proposed structural reforms in the eurozone.

The practice and rhetoric with respect to the policies at the eurozone level have been dominated by what I would call a “bailout bias.” It is not specific to the eurozone; one can see it in the policy and policy debates in the United States, Britain, and Japan. Bailout bias results from the perceived benefits of some parties and the beliefs of others. As to the former, it is easy to understand why creditors prefer bailouts to debt reduction. Many politicians welcome official crisis lending as a way to ease market pressure. The media, meanwhile, thrive on news of incoming catastrophe, which they assume can only be prevented by governments and central banks.

The beliefs behind the bailout bias are expressed by the uninhibited use of metaphors like “contagion” or “domino effect.” The message is that once financial markets become disturbed, they become violent and undiscriminating. So that once investors lose confidence in one country, it is assumed that all other countries are in danger.
Consequently, it is taken as conventional wisdom that only a formidable countervailing power—a “big bazooka”—can break this presumed vicious dynamics of financial markets (Balcerowicz 2012a). But financial markets, even when distributed, are not blind. They do distinguish, however imperfectly and belatedly, between the macroeconomic situation of various countries. And when they are especially late in their assessment, one should look to some official interventions, as has been the case with the ECB’s policies that have contributed to the suppression of interest rates across the eurozone.

Another related fallacy is that reforms can generate benefits only in the longer run. It is assumed that bailouts are the only way affected governments can reduce sharply increased yields. However, well-structured and credibly implemented reforms produce both long-term and short-term benefits. The former include enhanced growth potential and increased resilience of the economy. The latter—call them “confidence effects”—consist in the lower interest rates a country’s agents have to pay. Financial markets do react to differences in reforms—even before they bear their longer-term benefits—provided the structure of reforms is correct and their implementation credible. This prediction has been illustrated by the divergent dynamics of government bond yields across the PIIGS and by differences between the PIIGS and the BELL.

In discussing the consequences of the official bailouts, one should consider the potential conflict between the availability and scale of official lending and crisis prevention. There is a huge literature on this topic with respect to IMF lending, but the problem exists in any kind of official bailout. Indeed, the very prospect of crisis lending can make countries less prudent (the moral hazard problem), thus increasing the number of policy-induced crises and bailouts. The realization that such a danger exists led to the non-bailout practice in the United States in the relation between the federal government and the states, and to the insertion of the non-bailout clause in the formal architecture of the euro. The problem is that this clause, as well as the earlier Stability and Growth Pact, largely have been ignored. These facts pose questions regarding how the eurozone’s institutional arrangements can be improved to prevent serious imbalances in member countries and, if they arise, how to deal with them in a better way.

Finally, the easy availability of official bailouts may prolong a crisis by reducing politicians’ incentives to engage in politically unpleasant
but economically necessary reform. Even if a country is blessed with a reformist leader who is immune to this danger, his political base may not be. The easy availability of crisis lending can therefore weaken political support for reformist leaders and delay the necessary adjustment policies, thus increasing their costs. We can see this effect when one compares policies and outcomes in the BELL and the PIIGS, and also among the PIIGS themselves.

Let me now turn to the practice of the bailouts in the eurozone. Much attention has been dedicated to the creation of the temporary, and then permanent, official assistance fund in the eurozone—the European Stability Mechanism (ESM). However, here I will only note that the issues that have been raised with respect to the IMF also apply to ESM. Moreover, the larger the financial capacity of the ESM, the more acute the moral hazard, the quality of the conditions demanded from the borrowers, and the ESM capacity to enforce them.

There have been two other related bailout mechanisms in the eurozone that turned out to be more important and more controversial than anticipated—namely, the policies of the ECB and the operation of the Target2 payments system since 2008. The first is a special case of a broader problem: the unconventional monetary policy (UMP) of the central banks of major OECD economies, especially the U.S. Federal Reserve. Therefore, I can’t help but mention some broader issues as well.

UMP is a huge and unprecedented experiment in monetary policy, possible only under a fiat money regime. Its proponents have been very vocal and have been using three main devices in the debate—the first two of purely rhetorical nature and the third more technical.

First, they presented the alternative to the UMP as a “catastrophe” or a “meltdown” of the financial system. However, whatever power this argument may have had in the beginning, it has sharply declined with the time. And the main problem is with a sustained UMP.

Second, they have stretched the concept of “lender of last resort” as though the central bank provision of liquidity to commercial banks was the same as its funding of governments via money creation.

Third, the proponents of continued UMP, especially in the central banks themselves, point to the models they use and claim that the UMP has produced positive net effects—not only for the countries
where it has been practiced but also for other economies. In other words, in their view, the net spillovers have been positive. However, the problem is that these models are fatally flawed: they tend to overestimate the positive effects of UMP and ignore the negative ones (see Cizkowicz and Rzonca 2012). And as the potential benefits of UMP are short term while its costs are a growing function of time, the net negative effect of UMP is likely to be reached rather early and to grow with time. Most of the omitted channels negatively affect the supply side of the economy. For example, the continued UMP creates uncertainty and, therefore, is likely to reduce investment in the fixed assets and the related “embodied” innovations. It may encourage forbearance in bank lending and thus slow the pace of restructuring in the economy. It is likely, as already mentioned, to weaken the politicians’ incentives for early reforms. In addition, prolonged UMP creates exit problems and reduces the value of information supplied by financial markets.10

The UMP pursued by the ECB has been very expansionary by historical standards, but not as expansionary as that of the Fed (Balcerowicz et al. 2013: 50–52). However, the UMP as implemented by the ECB produces some problems that are specific to the eurozone. First, this policy, especially buying up the bonds of the distressed governments, is akin to regional policies. To justify such measures in terms of monetary policy—that is, claiming that its purpose is to repair the broken transmission channels of the monetary policy—is not convincing, as one can justify in these terms any bailout financed by the ECB. And, of course, it begs the question of what formal and professional competence any central bank has in deciding which risk spreads are unacceptable and, thus, justify the bailout of the affected country financed by money creation. Second, the selective country bailouts are not compatible with the ECB’s

9These models and the conclusions they give rise to, remind me of the debate about the efficiency of socialism versus capitalism, where Oskar Lange was the main protagonist on the socialist side, while von Mises and Hayek claimed that socialism cannot be as efficient as capitalism. Lange was declared a victor in the debate in the mainstream literature in the West. However, he achieved his victory by using an analytical scheme that ignored all the weaknesses of socialism (Balcerowicz 1995).

mandate to maintain price stability. Undertaking such measures may be perceived as further undermining formally accepted treaties in a situation when restoring confidence in the rules of the game is crucial.

In the above discussion of the ECB’s unconventional policies, I have focused on its purchases of the PIIGS’ government bonds. However, there have been other elements of these policies, especially all of the refinancing operations with respect to the eurozone banks. These policies have helped or even encouraged banks in the problem countries to buy the bonds of their national governments. Therefore, even though they are officially presented as belonging to the traditional domain of central bank operations as a lender of a last resort with respect to the commercial banks, in fact they amounted to money creation that indirectly financed fiscally distressed governments. This applies especially to the ECB’s Long-term Refinancing Operation (LTRO) launched at the end of 2011. Italian and Spanish banks have used the cheap credits from the ECB to buy massive quantities of their governments’ bonds.

The changes in refinancing consisted in radically lowering collateral requirements since 2008, and moving to a full allotment regime. In addition, the Emerging Liquidity Assistance (ELA) has been introduced, whereby the national central banks have been authorized to create money in order to extend credit to commercial banks in their countries when the banks face a shortage of collateral acceptable by the ECB. The ELA has been extensively used by the PIIGS, especially Ireland and Greece (Merler and Pisani-Ferry 2012).

These changes, especially the first two, have been accompanied by massive expansion in refinancing credit flowing to commercial banks in the PIIGS and the massive expansion in the Target 2 balances owned by Germany, the Netherlands, and Finland that are kept at the ECB. The latter change, first highlighted and analyzed by Sinn and Wollmershauser (2011), has sparked a heated debate about what have been the underlying causes of these processes, whether the Target 2 has contributed to the accumulation of these imbalances,

\[^{11}\] Target 2 is the eurosystem’s operational tool whereby national central banks of the eurozone provide payment and settlement services for trade and capital transactions. There is no limit to the transactions that can be processed by the system and, therefore, the size of the Target 2 position (Merler and Pisani-Ferry 2012: 3–5).
and how to deal with them (Mayer 2011, 2012; Sinn 2012; Merler and Pisani-Ferry 2012; Auer 2012).

The most concise summary of this discussion would be the following: First, there is a basic agreement that the expansion of the refinancing credit and the related rapid accumulation of Target 2 balances have been related to a sudden stop, and then partial reversal, of the private capital flows to the PIIGS, which had previously funded the expansion of current account imbalances in these countries. The flows that declined the most and were strongly negatively correlated with the growth of Target 2 imbalances were changes in the cross-border positions of the national banking systems (i.e., inter-bank market) and the reductions of the banks’ holding of foreign government debt (Auer 2012). To put it simply, banks from the center of the eurozone, especially Germany and France, reduced their exposure to the banks and governments of the PIIGS.

Second, the discussants agree that the expansion of the refinancing credit flowing to the PIIGS had been made possible by the radical relaxation of the refinancing standards by the ECB. Some of them point out that an additional reason for that expansion was the fact that there has been no limit on the Target 2 balances. Correspondingly, the proponents of this view suggest that a limit should be placed on them (see Sinn, 2012).

Third, it is difficult to deny that the flows of official funds to the PIIGS, reflected in the accumulation of Target 2 imbalances, were filling in the gaps created by the declines in the flows of private capital and as a result delayed the reduction of the current account deficits in these countries. However, there has been sharp disagreement in the assessment of the eurosystem’s policies that produced these compensatory flows. Proponents of the UMP (e.g., Merler and Pisani-Ferry 2012) claim that these policies have been necessary in order to avoid the collapse of the banking sectors and maintain demand in the distressed eurozone economies. Meanwhile, the skeptics (e.g., Mayer 2011, 2012; Sinn 2012) stress that even if the extraordinary refinancing operations made sense early on during the global financial crisis, the ECB should have started to phase them out. This is the typical controversy between those who focus on aggregate demand and those who concentrate on the dynamics of market supply and demand.

Be it as it may, it is clear that the ECB’s extraordinary refinancing operations have substantially delayed the reduction in previously
inflated current account deficits in the PIIGS, a point granted even by some proponents of these operations (e.g., Merler and Pisani-Ferry 2012).

We have shown that the actual operational architecture of the euro enabled the accumulation of large imbalances in some eurozone countries. Moreover, the UMP policies pursued by the ECB provided ample extra financing to the PIIGS and delayed the reduction of these imbalances. The latter tendency is in sharp contrast to the adjustment mechanisms under some other types of hard-peg arrangements, such as the dollarized economies, currency boards, and the classical gold standard. In all these cases, there are no flows of official funds compensating for declining net inflows of private capital. Rather, these arrangements provide for automatic adjustment via changes in the quantity of money, and they strengthen policymakers’ incentives to improve conditions favorable to keeping and attracting private capital. It is doubtful these market-based mechanisms can be improved on by the peer pressure and official monitoring performed by such bodies as the IMF, European Commission, and European Systemic Risk Board. Those bodies suffer from informational and enforcement problems that are difficult to resolve.

Finally, let me take a brief look at the pattern of adjustment among the PIIGS relative to the BELL, which rely on euro-based currency boards. I have already mentioned that during 2008–13 the BELL belonged to the growth leaders in the EU in terms of cumulative growth in GDP per capita, while the PIIGS were at the bottom of this league. The question is whether this striking difference in performance had anything to do with differences in crisis management policies. One cannot help but notice such a link as reflected in the different time pattern of adjustment. In the BELL, the reduction in the current account deficit started earlier and was faster than among the PIIGS (except for Ireland). Both groups finally achieved a similar extent of external adjustment, but in the PIIGS it had been accompanied by a much deeper cumulative decline in GDP per capita. The BELL also achieved faster reduction in unit labor costs and inflation than the PIIGS.

Early radical adjustment by the BELL was rewarded by a faster decline in interest rates. It is hard to reject the hypothesis that this

\(^{12}\)In discussing this issue, I have drawn on Balcerowicz et al. (2013).
pattern of adjustment in the BELL was causally related to the fact that—as distinct from the PIIGS—they were not subject to the ECB’s unconventional monetary policy, including its hugely expanded refinancing operations. Financial flows that weaken policymakers’ incentives to launch proper policies are likely to be harmful, both during the stage of accumulating the imbalances and the stage of dealing with them. Striking differences also emerged in the pace and structure of fiscal consolidation between the BELL and the PIIGS, which may be partly linked to the fact that the BELL have been outside the eurosystem. They launched an early and radical fiscal adjustment largely based on reducing budgetary spending. Meanwhile, most of the PIIGS delayed fiscal consolidation and (except for Ireland) mostly relied on tax increases—a strategy more detrimental to growth than expenditure-based fiscal adjustments.

Euro: The Main Problems and Solutions

Two main objections are raised against the euro. The first is expressed in a popular statement “One monetary policy can’t fit all.” This implies that countries, especially larger ones, should have their own currencies and floating exchange rates. The second objection is contained in another popular saying, “Monetary union requires fiscal (political) union.” I will discuss these two objections and then present my own view as to what the main weaknesses of the euro architecture are and what should be done.

The first criticism harks back to the old discussion of fixed versus flexible exchange rates. The main protagonists in this debate—Milton Friedman and Robert Mundell (2001)—were much more nuanced than most of the proponents of monetary nationalism and free floats. Indeed, there is no shortage of criticism of the deficiencies of floating rates (e.g., see Dornbush 1976, 2001). National monetary policy can be very bad, as it was in many future members of the eurozone before they started their transition to the euro. Thus, while criticizing the deficiencies of the euro’s architecture one should not take it for granted that the counterfactual was bound to have been much better. Most importantly, a general comparison of fixed versus flexible rates is not very useful in addressing the specific problems of the eurozone. In addition, one does not start from scratch but from a situation in which the euro already exists. Therefore, any assessment of any proposed radical change would have to include the cost of
transition from the present arrangement to the new monetary regime.\(^\text{13}\)

Nominal devaluation as an adjustment device is certainly no panacea, even though it is usually politically easier than the internal one—namely, reducing the rate of growth of wages and prices relative to those in other countries of the hard peg area. But this fact must have been obvious before the euro was launched. What was not considered to a sufficient extent were the reforms necessary to remove the rigidities of wages and prices in the eurozone countries, and to make the internal devaluation quicker and less costly. Finally, the internal devaluation advanced in the PIIGS, and the comparison of their external adjustment with that of the BELL highlights the importance of wage-price flexibility and making the adjustment quickly (Balcerowicz and Łaszek 2013).

Greece, Spain, Portugal, and to some extent Italy have introduced reforms that made their labor and product markets more flexible (Balcerowicz et al. 2013). Such reforms would have been less likely if these countries stuck to their own currencies and allowed them to float. Therefore, the assessment of the euro should not be limited to deploiring the crises it contributed to. Rather, we also should consider the longer-term consequences of these crises in terms of improved policies.

Let me now turn to the second criticism of the EMU—that it is a monetary union without fiscal/political union. This implies that to save the euro one must turn the eurozone into a fiscal/political union. In commenting on this criticism, let me first note that the crucial terms “fiscal union” and “political union” are not clear. Fiscal union could mean the existence of effective fiscal constraints on members of the monetary union, but it could also mean large cross-regional fiscal transfers—or it could mean both of these. Meanwhile, it is unclear if political union is synonymous with fiscal union, and if it is, in what sense of the word? Or does political union by definition include fiscal union in addition to something else? And what is this addition?

It appears to me that behind the described rhetoric there are two different proposals. In the first case, fiscal and political union are code words for centralistic arrangements in the eurozone that would

\(^{13}\)For more on these costs, see Euro Intelligence (2009), Åslund (2012), and Blejer and Ortiz (2012).
Euro Imbalances and Adjustment

ensure fiscal discipline in member states. This was the original intention of the Stability and Growth Pact. This is also the intention of the newly introduced initiatives, like the “Six Pack” and Fiscal Treaty. However, can these top-down fiscal constraints be more effective than the Stability and Growth Pact, especially after the non-bailout clause has been violated? I doubt it. Indeed, I believe nothing can well substitute for increased monitoring of governments by financial markets and for increased civic pressure coming from fiscally conservative voters in the respective countries. Even in the United States, where the position of the federal government vis-à-vis the states is much stronger than that of the center of the eurozone with respect to the member states, certain states are persistently fiscally ill-disciplined—and the non-bailout clause allows pressure coming from the financial markets to bear upon them. The same has been recently true of Australia (Ergas 2011).

In the second case, fiscal or political union are code words for a federal state, with more emphasis on increased cross-country fiscal transfers and less focus on fiscal discipline. This position arises from a belief that the only guiding model for the eurozone is “one currency-one state.” There are two critical objections to this model: (1) it is not necessary to solve the euro’s problems, and (2) it is not politically feasible.14

Even a brief look at developments in the eurozone after the introduction of the EMU demonstrates that it was not the lack of larger fiscal transfers that caused the problems in the PIIGS. The analysis in the previous sections shows that the true reasons were completely different:

- Some elements of the original euro architecture generated—via easy money—financial booms and the financing of bad fiscal policies.
- After the consequences of those accumulated problems came to the surface, some policies, including those of the ECB, delayed adjustment, making it more costly.

It is these weaknesses that have to be removed through well-conceived and targeted reforms.

14One can add that the existence of a single federal state does not guarantee a good currency—witness the monetary history of Argentina.
Not only is the model of a federal state in the eurozone not a proper solution to the euro’s problems, but also it is not politically feasible (Issing 2013). Any attempt to rush it would be politically very risky—witness the heated debate about the EU budget (which hovers around 1 percent of the EU’s GDP) or political tensions generated by inter-regional fiscal transfers in Italy, Belgium, and Spain.

To see what are the proper solutions to the eurozone problems one must break with the idea that the only model for the eurozone is a federal state model and look to other types of hard-peg areas (or currency unions in a broader sense), including the classical gold standard and currency boards.\textsuperscript{15} The purpose of such an analysis is not to replicate them in the present eurozone but to see what have been the specific weaknesses of the euro architecture so far and how to eliminate them. In such a way, one arrives at the euro problems and the reforms one should aim at.

A more detailed discussion of these reforms is beyond the scope of this article.\textsuperscript{16} They have to address the two crucial weaknesses of the euro architecture discussed in this article. Regarding the first, the excessive suppression of the credit spreads across countries with different fundamentals, one has to consider changes in the modus operandi of the ECB. In addition, if the exit option from the euro is introduced as an ultimate sanction, as put forward by the prime minister and finance minister of the Netherlands, risk premiums need to better correspond to underlying risks (Rutte and de Jager 2011).\textsuperscript{17}

Furthermore, as I have already stressed, increased fiscal discipline requires stronger monitoring from fiscally conservative voters; it cannot be imposed from outside, especially in the larger countries. Finally, to reduce the risk of serious financial-to-fiscal crises, one has to eliminate perverse regulations and prevent central banks from fuelling the booms. These are politically difficult tasks that go well beyond the eurozone.

The same is true of the central banks’ unconventional monetary policies, which are even more risky in the eurozone than in the United States. The previous discussion suggests that a generous refinancing credit offered by the ECB to the PIIGS, together with the

\textsuperscript{15}For an early analysis of this type, see Hanke (1998).

\textsuperscript{16}I discussed them at length elsewhere (Balcerowicz 2012a, 2012b).

\textsuperscript{17}Various bail-in schemes could also be used.
deficient strategy of delayed and improperly structured fiscal consolidation and delayed structural reforms (especially in Greece), have postponed the external adjustment in the PIIGS and increased its costs. However, the crises in these countries have spurred labor and product market liberalization, which have improved their capacity to deal, when necessary, with negative shocks through internal devaluation.

References


