A sovereign debt crisis in the eurozone has morphed into a crisis of the euro itself, revealing three deep flaws in the euro’s design. Escalating inter-country debt is the predictable result of locking together the currencies of countries as different as Germany and Greece. There is no governance structure to make binding decisions about debt restructuring. Most importantly, the ECB itself holds so many risky assets that it is frightened at the otherwise logical solution of debt restructuring. Only radical action could save the common currency.
Introduction

The eurozone is in trouble. What began as a sovereign debt problem in a few countries has exposed major weaknesses in the euro project. On the face of it, the problem is familiar and resolvable: several governments have borrowed more than they can possibly repay. Such over-borrowing by governments is not unusual; it has happened repeatedly over the years and has one effective solution: the debt needs to be reduced.

Tragically, the eurozone leadership has for two years refused even to consider this most obvious of solutions. Instead, the leadership has been determined to raise ever-larger bailout funds to lend ever more to the stressed governments. While this might forestall default in the short term, it makes the longer-term problem far worse. If any borrower has too much debt, one does not help him by lending more – that only digs him in further. The defaults, when they come, will only be larger. The markets clearly see this, so that sovereign bond rates and CDS spreads keep climbing ever higher.

Why is the leadership acting in this dysfunctional way? Because at heart this is a crisis not of a few governments but of the euro itself. Three flaws are built into the euro’s design that impel the leadership to act in an economically wrong direction. The three flaws may be summarized as follows:

1. The eurozone is too large, and some countries in the euro are just too unlike each other. Germany and Greece should not share the same currency. If one locks them together, as was done in 2001, the predictable result is an accelerating payment imbalance between them. In technical terms, the eurozone is not an optimal currency area.
2. There is no effective governance system. The eurozone is a monetary union without a political union. Lacking effective governance, the leadership must secure separate consents for important actions from all 17 parliaments. This precludes taking decisive and appropriate actions, and causes the crisis to drift unresolved.
3. The European Central Bank (ECB), on a consolidated basis, holds over €1 trillion of loans and bonds owed by member states and their banks. The composition by country of this portfolio is not disclosed, but it surely includes a disproportionate number of stressed countries. The impact on the ECB of cascading defaults and restructurings with 40-50% haircuts is too frightening to contemplate. Who would bail out the ECB?

The interaction of these three flaws should be evident: accelerating payment imbalances are built into the system (1), driving ever-higher levels of stress. The system observes the stress but seems paralyzed in its efforts to deal with it (2). And the fragile state of the ECB (3) causes it to prohibit the mere mention of default and restructuring. The result is a tragedy about to happen. If debt reduction is not arranged in an orderly way it surely will occur in a disorderly way.

What is likely to trigger a disorderly crisis? Cracks are showing in both the north and the south. One or more northern countries could simply refuse to support the next round of bailouts – opposition parties are already seizing on this theme and nationalist feelings are rising. Or Greece could explode: street riots could get out of hand, and parliament could vote no confidence in the government and its
cooperation with the troika. This could quickly lead to bank runs. One or both of these events seem not just plausible but likely before much longer.

The euro is unlikely to survive in its present form. It could be salvaged, by attacking its underlying flaws, but this would require a whole new set of ideas and a radical change of direction, a most unlikely scenario. Instead, the endgame is likely to be the printing of euros and a burst of inflation.

**Country differences**

The first flaw is that the eurozone is too big, containing too many countries too unlike each other. A currency union can only succeed if its members are sufficiently like each other. In particular, they need to have a common rate of inflation. The currency of a more-inflationary country should and will gradually devalue relative to the currency of a less-inflationary country. Over many decades the countries of Europe’s southern periphery – Spain, Portugal, Italy and Greece – experienced greater inflation than more northerly ones. Their currencies steadily devalued relative to the U.S. dollar, while the economically stronger countries of northern Europe – Germany, Netherlands, and Austria – saw their currencies steadily appreciate.

These patterns are shown in Figure 1 for six relevant countries over 1985-2010. One can see clearly how the countries pulled apart and how Greece in particular separated from the rest. Over 1985-1999 the Greek drachma lost 82% of its value relative to the German mark, while the Portuguese escudo lost 47%, the Spanish peseta 37% and the Italian lira 35%, reflecting productivity and inflation differences in these economies. The currencies of Netherlands and Austria tracked the German mark almost perfectly, reflecting the similarities among these countries.

The steady changes in currency values played an important economic role: they enabled trade to expand among European countries without creating payment imbalances. The key measure of this is the current account surplus or deficit. If European currencies are priced at equilibrium levels, trade will clear without producing significant current account balances. Figure 2 shows the approximate payments equilibrium among the 17 countries from 1985 to 1999, when the euro was launched. In this diagram Germany, Netherlands and Austria are shown as one set of bars and the other 14 euro members are aggregated in the other set of bars.

After 1999, as Figure 2 shows, Germany and Netherlands began to build up large current account surpluses, more or less balanced by comparably large current account deficits in the other euro members. This represented a payments imbalance – increasing financial surpluses in Germany, Netherlands and Austria, increasing external debt of most others. Notice that this has nothing to do with government budgets. Even if the budgets of all governments were perfectly balanced, the banks and firms of the deficit countries would still be building up debt to the banks and firms of the surplus countries, and governments would soon have to intervene. The payments imbalance escalates with each passing year. The picture is quite similar to that of the United States and China in the last decade, and for a similar

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1 The theory of optimal currency areas was developed by Mundell (1961), McKinnon (1963) and Kenen (1969).
reason. Germany and its close neighbors have become the China of Europe because locking currencies makes their exports ever more competitive and the exports of the southern eurozone ever less competitive. Currency union among sufficiently-different countries predictably drives an escalating payments imbalance. The growth of deficit and debt cannot continue for more than a few years without raising doubts about the ability of the debtors to pay.

Of course, a central goal of the European project was to create convergence, to make the countries of Europe more like each other. The designers of the European Union understood that convergence is a gradual, stepwise project. They began by lowering trade barriers in the 1960s and 1970s, harmonizing product rules in the 1980s and promoting financial market integration in the 1990s. When barriers among countries are lowered so that goods, services, people, capital and ideas flow freely among them (globalization), countries generally do become more like each other.

But the eurozone countries have not converged. During 1985-2010 Germany substantially improved productivity, exercised wage restraint, liberalized regulations, and opened further to global competition, all of which boosted German productivity. Greece, Portugal and other southern economies continued to limit competition, supported local monopolies and left restrictive labor practices in place. The ultimate step of currency union should not have been taken until such country differences had been more substantially erased.

After currencies are locked together, trade equilibrium can no longer be achieved by devaluation and revaluation; instead it requires wages and prices to fall in the less productive areas and labor to move into the more productive areas. But this is an extremely painful process. If Greece could today devalue its currency it could in effect cut its wages and prices relative to the rest of Europe in one stroke. Lacking this ability, Greece must directly force wages down in local terms and encourage its people to migrate to where the jobs are in northern Europe. This is the true meaning of the present austerity in Greece: it is not at heart about government budgets but about declining competitiveness leading to falling wages.

Greece’s situation is highly reminiscent of Argentina’s in the 1990s. In 1991 Argentina created a currency board locking its peso very tightly to the U.S. dollar in an effort to end the hyper-inflation that had plagued Argentina in the 1980s. That effort succeeded: inflation immediately fell to a low level and economic growth accelerated. In the course of the next ten years, however, underlying inflationary pressures continued to build and the peso steadily became overvalued. Argentina’s current account fell into an accelerating deficit and its external debt built up exponentially. Meanwhile the real economy fell into a deep depression, much like Greece. Nervous Argentines began moving their money out of the country and in December, 2001 there was a run on the banks. The government defaulted on its external debt, closed the banks and seized the deposits, resulting in riots in the streets. The president resigned, a second president resigned and a third president resigned before the currency board was abolished and the peso restored. In the following five years Argentina’s economic growth was impressive.

In summary, a currency union among countries too different from each other is a mistake and predictably ends in a debt crisis. Stressed members of the eurozone should be offered an exit from the euro. Greece at least should exit as soon as possible and end its misery.
Governance

The second flaw in the euro design is the lack of effective governance. Any great enterprise is entitled to have a CEO with full authority to make decisions that bind all those connected with it. Instead, the eurozone needs to get 17 separate legislatures to agree to each and every significant initiative. This slows down the decision process to a crawl and leaves the world highly uncertain about whether the system will be able to make any effective decisions at all. Why was a better governance system not established? Why not establish it now?

In a word, the answer is sovereignty. From the beginning Europe lacked consensus on the ultimate goal of the unification project: was it an eventual United States of Europe to rival the United States of America? Or was there an endpoint short of political unification? Opinions have differed and no particular endpoint has been fully articulated. National sovereignty is a powerful force that does not go away easily. In recent years particularly, social stresses from extensive immigration have caused a resurgence of nationalist feelings in many European countries.

Furthermore, there are 27 countries in the European Union but only 17 of these joined the euro. The EU has substantial governance structure – the European Commission, the European Parliament and the Council of Europe among others – but none of these controls the euro. This is serious since adoption of a common currency is a partial transfer of sovereignty, and sovereignty requires governance.

Indeed a separate currency is one of the hallmarks of sovereignty. Without a separate currency a country does not have an independent monetary policy, cannot devalue and cannot inflate. By giving up these powers Greece, for example, has lost an important part of control over its destiny. Similarly Germany and other northern countries have gained more control over and responsibility for Greece than they may have realized. Lacking effective governance, the euro project seems immobilized, incapable of taking more than the minimum steps needed to avoid disaster. There is now talk of implementing a fuller fiscal union, illustrating how closely currency and sovereignty are interwoven. But it seems unlikely that such a union could be agreed in time enough to help resolve the crisis.

The ECB and sovereign debt

The third flaw in the euro design is more technical and less understood, but centrally important. It can be seen most clearly by contrasting Europe with the United States. The 50 American states finance themselves by selling bonds primarily to institutional investors such as insurance companies and mutual funds. These bonds are understood to be risky, and carry interest rate premiums reflecting the default risks of the various states. They are not much bought by banks, and are never held by the Federal Reserve. The Fed conducts its monetary policy by buying and selling U.S. Treasury bonds. While these are not totally free of default risk, they are the most nearly risk-free assets in the market.

The eurozone system is completely different. There are no centrally issued Treasury bonds, so the ECB conducts monetary policy by buying and selling the bonds of the separate governments. These governments finance themselves by selling their bonds to the ECB and to the eurozone banks. The banks
can take these bonds to the ECB and borrow, pledging the bonds as collateral, for very low rates. Attempting to maximize its own credibility, the ECB from the beginning treated all constituent governments as equally risk-free. It is as if the U.S. Fed filled its balance sheet with the bonds of California, Illinois and Alabama and pretended they were risk-free.

The result has been a very cheap and easy funding mechanism for the weaker euro states. They do not have to sell their bonds to skeptical investors who ask lots of questions and who charge a premium for risk. Of course, the constituent governments are far from risk-free; indeed three of them are currently struggling to avoid default. In the early days of the euro the bond markets accepted the “totally risk-free” illusion and priced the euro member bonds all at the same low rates. Those days are over, however. The market now discriminates aggressively among the credits.

The ECB publishes two sets of financial statements, one for the “holding company”, i.e. the ECB alone, and one for the consolidated euro system of the ECB plus its constituent central banks. The assets of the consolidated system at December 31, 2010 may be summarized as follows:

<table>
<thead>
<tr>
<th>ECB System Assets 2010</th>
<th></th>
</tr>
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<tbody>
<tr>
<td>Gold and foreign exchange reserves</td>
<td>€591.4</td>
</tr>
<tr>
<td>Loans to and claims on euro banks</td>
<td>592.4</td>
</tr>
<tr>
<td>Bonds of euro governments and banks</td>
<td>492.4</td>
</tr>
<tr>
<td>Other assets</td>
<td>326.0</td>
</tr>
<tr>
<td>Total assets</td>
<td>€2,002.2</td>
</tr>
</tbody>
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In short, the ECB system holds more than €1 trillion of debt of the banks and governments of the 17 member states. The state-by-state composition of this debt is not disclosed, but the events of the past year suggest that a disproportionate fraction of these assets are likely obligations of stressed countries. If a significant fraction of the €1 trillion were to be restructured at 40-60% discounts, the ECB would have a massive problem: who would bail out the ECB?

This is surely why the ECB has been so shrill in its antagonism to the slightest mention of default and restructuring. They need to maintain the illusion of risk-free sovereign debt because confidence in the euro itself is built upon it. Yet sovereign default is as common as rain, and has happened repeatedly over the years. From 1800-2000, for example, 11 European countries experienced 67 periods of default. Greece itself was in a state of default for half of the 182 years since its independence in 1829.

The last major period of multiple sovereign defaults occurred in 1982-90. In the 1970s, for a variety of reasons, U.S. and other international banks had lent hundreds of billions of dollars to the governments of Mexico, Brazil and many other developing countries in Latin America and elsewhere. Most of these loans went into default in late 1982. The resulting collapse of capital flows crushed the relevant economies for nearly ten years, a period known in Latin America as the “lost decade.”

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That debt crisis threatened the solvency of many large, international banks including particularly the large U.S. banks. Much like the ECB, and for the same reason, these banks denied that default losses were real, maintaining that prosperity was just around the corner. But prosperity did not return. The bank loans were traded by Wall Street firms, and their value sank to half of face value or less. Treasury Secretary James Baker proposed a plan in which the banks would lend the countries more in an effort to restore growth, but this plan failed. What finally worked was the plan of Baker’s successor, Nicholas Brady. The Brady Plan accepted the losses implied by the market prices and exchanged well-structured new bonds for the old loans at roughly their market prices. After its implementation, prosperity returned very quickly and growth resumed in Latin America.

This is what needs to happen to the stressed countries of the eurozone today. No one who has studied the Greek numbers, for example, seriously believes that Greece can grow its way out of its debt, which now totals 150% of GDP. Like Mexico and Brazil in the 1980s, Greek debt is now trading about at less than half of its face value. The losses already imposed by Greece on the other eurozone countries and on the ECB need to be accepted and paid for out of bank capital.

What does the future hold?

The current problems of the eurozone have all the elements of a classical tragedy: a brave and exciting hero launches into the world, but is marred by fatal flaws. The system seems paralyzed by its complex governance and its only plan is to do more bailout lending, which has made no progress whatever in solving the underlying problem of over-indebtedness. Denial is not a viable strategy. Realism is frightening. What can be done?

Greece is the urgent problem and Greece needs to have its debt reduced by at least 50%. The current austerity program is crushing its growth and patience with it is running very thin. The European leadership needs to organize an orderly debt restructuring immediately, but is afraid that if it does so, Portugal will be next in line and others will not be far behind. The best way to control this contagion is to require that any country granted a debt restructuring must leave the euro. There are obvious benefits for any debtor to lower its debts, but euro exit would impose a high cost that would give pause to other stressed countries. It would frankly be in Greece’s best interests to reestablish the drachma. I believe Greek debt restructuring and exit from the euro needs to happen in the near future and will happen with certainty in the medium future. It should not have been in the euro in the first place (See Figure 1).

A radical new departure could be imagined. The European Financial Stabilisation Mechanism (EFSM) can issue bonds are guaranteed by all 27 EU member governments using the revenues of the EU budget revenues as collateral. There is considerable talk of selling a jointly-guaranteed euro-bond, and the EFSM is set up to do this. These bonds need to be treated as a scarce resource, however. If the EFSM uses proceeds from euro-bonds to lend ever-larger bailout funds to the stressed countries, the last and best hope for the euro will have been wasted. Instead, the euro-bond should become the primary ECB asset – only if the ECB holds the least risky assets available can it be the foundation for a sound currency. The ECB itself needs to be bailed out, replacing its risky assets with EFSM euro-bonds to the extent that can be done at this late stage. Unfortunately, absent a governance structure, agreement on a bold new
course seems unlikely. Instead the EFSM will probably become another source of bailout lending to stressed countries, until the bond markets come to doubt its own solvency, at which point the game will finally be over.

What would happen then? At that point the entire EU would be at risk. Either some countries would begin withdrawing, or the ECB would agree to save the system by printing euros, or some of each would happen. Note that the new President of the ECB and its Vice President are both from stressed countries.⁴ Both are experienced and admirable men, but if the choice were between inflation and collapse of the system, inflation would probably be the preferred choice. It may not be an accident that Jürgen Stark of Germany recently resigned from the ECB Executive Board.

Inflation has a number of politically desirable properties. It constitutes a partial default, in that lenders get repaid in currency with less purchasing power than they invested, but is not a literal default on the debt instruments and so does not appear to be a default. It is a tax on the general population, in that rising prices lower everyone’s living standards, but does not appear to be a tax. It is a stealth tax. And so, in extremis, inflation will likely appear the best option. This would be an ironic end, since the euro was deliberately set up to try and avoid inflation.

It is already late in the game. Can the European leadership come up with something more realistic than throwing good money after bad? Time will tell.

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⁴ Mario Draghi from Italy and Vitor Manuel Constâncio from Portugal.
Figure 1
Value of Six Pre-Euro Currencies (Scaled to Year-End 1984)

Source: IMF International Financial Statistics
Figure 2
Current Accounts of Eurozone Countries
($ millions)

- Germany, Netherlands & Austria
- Other Euro Members

Euro era
Source: IMF International Financial Statistics. Data for several smaller countries are missing in some years before 1995.