The financial crisis gripping the eurozone countries seems incredibly complex, and although the reasons why their finances have come to grief are quite simple, the solution will not be easy. For the eurozone to resolve its crisis requires the political will to undertake painful measures, with serious distributional effects. As long as certain groups seek to avoid those costs, resolution of the crisis will be elusive.

The European financial crisis and the ensuing recession are of critical importance. The euro area is the world's largest economy; its trajectory has a powerful impact on the fortunes of Asia and even the United States. This effect is even stronger at a time when the world economy is so fragile.

The eurozone crisis is the result of at least two key weaknesses in the original project of European monetary integration. First, the common currency and its monetary policy were applied to a set of economies that were very different one from the other. In the lingo of economists, the original group of 12 nations—Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, and Spain—did not constitute an “optimal currency area.” (Greece joined in 2001 between the euro’s establishment and introduction.) The countries were subject to too diverse a set of economic shocks. They were not sufficiently integrated, and they lacked a fiscal union that could smooth out those shocks, compensating hard-hit economies with transfers from better-performing economies. Further, with the euro in place, the monetary policy of the new European Central Bank proved to be too loose for some countries and too tight for others.

The second weakness is that investors interpreted the creation of the union as an implicit guarantee of member countries’ government debt. It seemed clear that if a serious financial crisis erupted in one eurozone member country, the risks of contagion to the rest of the zone and of a negative effect on the euro would force other countries to bail out the member in crisis. Investors believed this interpretation even though no such formal guarantees were made. These implicit guarantees were problematic because they pushed interest rates lower, which, in turn, gave governments, businesses, and households incentive to borrow more than they would have had they properly understood the risks. In other words, risk was underpriced due to the perception of an implicit guarantee. The result was that Europe, particularly Southern Europe, which experienced unnaturally low interest rates, borrowed far more than was sensible, and is now suffering from the resulting debt binge. And in certain countries, this problem of over-borrowing is compounded by a long-term problem of public spending on pensions and health care that has exceeded what the rate of economic growth made possible.
In the next section, we review the origins of the euro project. We then recount the ideas that underpinned the project and explain why some economists were skeptical. The current state of debate over possible solutions is next. We conclude with some views on the likely path forward.

The Origins of the Euro Project

The creation of the euro—formally the completion of Europe’s Economic and Monetary Union (EMU)—is the latest step in a long process of politically motivated economic integration. In the wake of World War II, political leaders of the main European countries sought to bind the economies of the former antagonists. First they established the European Coal and Steel Council, which harmonized trade in these critical commodities. This led to the 1956 creation of the European Economic Community, which, in principle, established a common market wherein goods were free to move across borders. This was quite an accomplishment, given that these countries had been at war a few years earlier.

After the breakdown of the fixed exchange rate system of Bretton Woods in 1971, the Europeans sought to minimize the variability of intra-Europe exchange rates. Central banks committed to intervening—by buying and selling foreign exchange—to achieve that aim. There was some modest success, especially after the 1979 establishment of the European Monetary System, which attempted to link other European Union (EU) member currencies to the Deutsche mark. After 1985, the system included most EU members and some non-members.

In 1992, EU members agreed to a program of economic and monetary union, the culmination of which would be the creation of a common currency called the euro and managed by the European Central Bank. The plan envisioned a multi-stage process toward this single currency. First, there would be a period of tight management by central banks so that currency values did not vary more than 3 percent from target, or “par,” values. Finally, the currency values would converge toward the final conversion rates, established by common agreement. Along the way, authorities would have to bring inflation down to a sufficiently low level so that the rates did not diverge substantially. In addition, the agreement required that, as a share of GDP, national budget deficits not exceed 3 percent, and government debt not exceed 60 percent (most countries failed to abide by these conditions). Despite the European Monetary System crises of 1992 and 1993, during which many member currencies were devalued or deviated from the par values by more than the allowed amounts (and Britain dropped out completely), the euro was put in place on January 1, 1999. The physical currency was rolled out in 2001. The eurozone eventually expanded to its 17 members.

The Economic Calculus of the Euro

To comprehend the eurozone’s difficulties, one must understand the economic logic of a currency union. In what is called the “optimal currency area” literature, Robert Mundell, Ronald McKinnon, and Peter Kenen laid out the conditions under which having a common currency makes sense for countries.

Having many currencies is bothersome and costly. The practice requires keeping track of many prices—after all, an exchange rate is essentially the price of foreign currency. But that price happens to fluctuate a lot minute by minute, day by day. In addition, when one is thinking about long-term projects such as investing across borders, this volatility can be very costly. The associated risk impedes the flow of goods and capital across borders. Currency unification produces substantial benefits, in particular by encouraging trade and financial integration. In the context of the EU’s continuing quest for greater economic integration, a currency union appeared to be a logical next step.

However, a flexible exchange rate allows governments to adjust policy to changes in economic conditions. The exchange rate thus serves as a sort of macroeconomic “shock absorber.” For instance, if demand for American cars decreases, a weakening of the dollar, which makes American cars cheaper for foreigners, can help offset the negative impact on the economy. Fixing one’s exchange rate to a certain value or, at the extreme, giving up one’s currency, eliminates that shock absorber. A transnational currency requires a nation’s government to give up one of the most powerful tools of macroeconomic policy.

When do the benefits of an independent currency outweigh the costs? The answer depends on a lot of variables. However, some insights can be gleaned from an example. Consider Wisconsin and the rest of the United States. One could argue that if Wisconsin had its own currency, when demand for Wisconsin cheese fell, the Wisconsin dollar could lose value so that some of that demand could be made up by selling the cheese at a lower price (in U.S. dollars). But those sales would incur the cost of converting currency for each transaction, and indeed for every cross-border transaction, including those for banking and finance, as well as other goods and services.

Now, if Wisconsin and all the other states in the United States produced cheese (or an identical bundle of goods and services), then each state economy would be subject to the same shocks, and the argument for a monetary union would be stronger.

In the Wisconsin-U.S. case, being part of a monetary union make sense for two additional reasons. The first is that Wisconsin is part of a “fiscal union” that the federal government manages. Members of the U.S. fiscal union share the risks. When Wisconsin experiences a downturn, federally funded net transfers

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(unemployment insurance, reduced tax payments) increase, partially offsetting the negative impact. The second reason that monetary union works well for Wisconsin is that labor mobility is fairly high in the United States. When economic conditions deteriorate in Wisconsin, out-migration to the rest of the country increases, while in-migration decreases. Unemployment is less volatile with this “escape valve.”

A long-established U.S. policy is that the federal government will not “bail out” states that run into financial difficulties. This situation means that states with different fiscal positions are often charged different interest rates by financial markets. In the eurozone, investors’ belief that a bailout would be forthcoming if a member state got into trouble considerably loosened European borrowing constraints.

The argument that the euro area countries did not constitute an optimal currency area was well known prior to economic and monetary union. In a series of 1994 papers, economists Tamim Bayoumi and Barry Eichengreen measured the extent to which the shocks hitting the eurozone economies were different; they established that only a few economies could be construed to fit the requirements of symmetric shocks (the Northern European countries, within the eventual eurozone).

Of course, these conditions are not immutable. Since the late 1990s, the steady flow of edicts from EU headquarters in Brussels and the European economic plan known as the Lisbon agenda issued by the EU’s European Council in 2000, sought to make individual economies more flexible and increase cross-country mobility of labor. Increasing trade integration (which would tend to be one result of reducing exchange rate volatility) would also make the effects of asymmetric shocks less pronounced. In addition, currency union seemed desirable to many as a way of encouraging further integration within Europe; if it had a (perhaps temporary) cost, that price might be worth paying. Finally, groups in the EU strongly favored Economic and Monetary Union because it promised to provide them with powerful benefits—firms and industries with major cross-border economic interests particularly stood to gain. For them, whatever problems Economic and Monetary Union might cause for the EU as a whole were counter-balanced by the positive impact.

While trade integration increased dramatically in the wake of Economic and Monetary Union, labor mobility did not increase sufficiently. While professionals can move without too much difficulty, lower skilled workers faced considerable impediments to relocation. In addition, cultural and linguistic ties seem to exert a substantial pull, keeping cross border labor flows small, by comparison to U.S. levels.

Why did the problems come to a head in the wake of the global financial crisis? First, from 1999 to 2007, following the euro’s introduction, the eurozone faced a fairly benign economic environment. Whatever nationally specific economic developments took place were not so serious as to call into question the integrity of the eurozone as an economic unit. Second, as shown in Figure 1, the implicit guarantees associated with Economic and Monetary Union drove down interest rates toward German levels—even for the countries such as Greece that arguably had poorer fiscal prospects—and encouraged more borrowing, a situation that fed upon

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**Figure 1: European Sovereign Interest Rates, 10-Year Maturity**

Europe’s Economic and Monetary Union, January 1, 1999

- Germany
- Spain
- France
- Greece
- Ireland
- Italy
- Netherlands
- Portugal

Source: European Central Bank (January 2012). Note: Greece entered the Economic and Monetary Union in 2001.
itself in a proverbial “self-reinforcing loop.” The credit boom papered over problems.

In this sense, the apparent “disappearance of risk” in the eurozone paralleled the similar phenomenon in the United States. In the eurozone, the underpricing of risk resulted in excess borrowing by households, firms, and governments and in commensurate capital flows from Northern European countries to Southern European countries. In the United States, the private sector borrowed excessively, pulling in record capital inflows—manifesting in record current account deficits, as we reported in our 2011 book, Lost Decades.

When the global recession of 2008-09 struck, most eurozone governments went further into deficit, as social welfare and unemployment benefit payments increased and tax revenues collapsed. In some cases, the problem, which the recession aggravated, was a structural deficit associated with overgenerous social spending and insufficient tax collection. This scenario applies most profoundly to Greece. To a certain extent, it applies also to Italy, although a slow trend growth is driving the debt dynamics there. However, the characterization of excess public spending does not pertain to all the problem eurozone countries.

For instance, Ireland, in contrast, was a paragon of fiscal rectitude on paper. In the midst of a boom in financial and housing markets, the Irish government ran budget surpluses. With the financial crisis, the government implemented a complete bank deposit guarantee and subsequently bailed out major banks, resulting in massive increases in the government’s debt. Similarly, Spain was running a budget surplus—until the collapse of its housing market.

The phenomenon of hidden government liabilities suddenly showing up at the onset of a crisis is not new. In fact, the East Asian crises of the 1990s brought to the fore the concept of “contingent liabilities.” A government can look like it’s in an enviable fiscal situation, when in fact the government is on the hook for massive debts, because it cannot allow a banking system to become insolvent.

This point highlights the linkage of the banking system debt problem with the sovereign debt problem. Portions of the banking system are insolvent. In the case of the United States, the federal government had the resources to bail out the financial system without seriously endangering its ability to borrow. In the eurozone, because some countries’ governments already had high debt loads, the additional borrowing associated with bank bailouts would only make the sovereign debt problem worse.

Clearly, the problem countries need additional resources from outside—either from multilateral institutions or other eurozone countries, a reduction in their burdens, or both. This condition is unavoidable for a resolution of the crisis.

Possible Solutions

Experts have made innumerable proposals for solving the eurozone debt crisis. But once one understands that solution requires a net transfer of resources, then the set of options is reduced considerably.

A prefatory statement: Greece is not the problem; it is too small to have a regionwide impact. However, Spain and Italy are much more serious situations. In this light, the proposal for stricter fiscal requirements is nothing more than window dressing to assuage popular criticism of bailouts.

The only viable options are the following:

◆ Continued austerity measures.
◆ Northern European transfers to the Southern European countries, directly or in the form of the restructuring of Southern European debts to the detriment of Northern European creditors.
◆ Breakup of the Economic and Monetary Union and a complete or partial dissolution of the eurozone.

The first option is pretty much current policy. Although there is talk of voluntary debt write-downs for Greece, this policy is not on the table for the other problem eurozone countries. But the austerity measures required to hit the targets envisioned by the pact agreed to in 2011 will only exacerbate the incipient eurozone-wide recession (thus making the targets even harder to achieve). At some juncture, at much greater cost in terms of unemployment and lost output, the debts will be eventually written down. The private sector will bear some of the cost, as will the creditor governments. The apportionment of costs is the problem, and the attempts to shift the burden will delay resolution. As a consequence, the total cost will be much larger, so, in this case, the game is negative sum, not zero sum.

The downside risk is great. A prolonged period of economic stagnation is not to be taken lightly; the years between the first and second world wars stand testament to the fact that such conditions lead to social unrest and dangerous political upheavals.

From our perspective, it is important to understand that large net transfers from Germany and other Northern European states to the periphery countries will result in a more rapid resumption of growth. The transfer takes place by way of a bigger bailout fund, financed by the surplus countries, and a bigger reduction in debt loads via write-downs. In certain countries, social welfare spending programs will require larger, more comprehensive, reforms than in others. Clearly, this situation is true in Greece. It is also true in Italy.

Spending cuts will not be enough; spurring long-term growth is equally important—perhaps more important, in the case of Italy. But whether a similar prescription for Ireland would be productive at all is unclear. The likelihood of success would be greater if the European Central Bank was to ease liquidity concerns, as it has started to do, by purchasing large amounts of government bonds—the European equivalent of quantitative easing.

However, European Central Bank actions along these lines is a necessary, but not sufficient, condition. In our view, the bank has to address the key problem associated with the eurozone: the lack of an exchange rate adjustment mechanism. Exchange rate changes facilitate shifts in relative prices. In the absence of exchange rate changes, alterations
of relative prices have to take place via nominal price changes. When wages are what have to fall, the process can be a long, drawn-out affair, associated with persistent and elevated unemployment. A tacit acceptance of a higher target inflation rate (which would allow faster adjustments in real wages) would facilitate adjustment to full employment—and would more rapidly erode the real debt burden faced by the debtor countries.

The idea that the Northern European countries can avoid these net transfers is a chimera. If the transfers do not occur by way of an orderly debt write-down, they will be effected by outright debt defaults. The resulting social and economic costs will likely be much larger than any coordinated approach.

The third option, a complete or partial breakup of the eurozone, might prove to be less costly than either of the previous two choices. However, tremendous uncertainty is associated with this path. Although a breakup would allow for adjustments of exchange rates in a way that would lead to a faster recovery, the resulting chaos associated from litigating all the trillions of euros worth of contracts could far outweigh those benefits. Hence, this option has so much downside risk that it cannot be contemplated. Sad to say, the current political paralysis in Europe’s capitals has increased the possibility of such a catastrophic outcome.

Looking Ahead

What are the prospects for a positive outcome? While we hope for the early recognition of the need for North-South transfers, recapitalization of the banking system, and accelerated inflation, our observation of the political process makes us pessimistic. Thus far, electorates in the creditor countries do not seem to be convinced that transfers are necessary. As long as this characterization holds true, progress toward a true solution will be elusive.

Much more likely will be a process of lurching from one crisis to temporary palliative to the next crisis. In that scenario, recovery will be years off.