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FIDDLING IN EUROLAND AS THE GLOBAL MELTDOWN NEARS

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Preface

Senior Scholar L. Randall Wray and I survey the prospects of a new global financial crisis being triggered by events in Europe or the United States and suggest a number of ways a fresh disaster might be averted.

Beginning with the troubles in Euroland, we argue that the common diagnosis of a "sovereign debt crisis" obscures more than it explains. This diagnosis ignores the crucial role of rising private debt loads and the significance of current account imbalances within the eurozone. The economic crisis itself is largely to blame for the rise in public debt ratios experienced by most eurozone nations—precrisis, only two had public debt ratios that significantly exceeded the Maastricht limit. Profligate spending in the periphery is not at the root of the problem, and austerity, as we demonstrate, will not solve it. If a nation like Greece tries to reduce its public debt load through austerity, it will only be able to blunt the ensuing collapse in economic growth and worsening of the private debt problem if it can reduce its current account deficit. But this requires that surplus countries like Germany change their policies. Pushing austerity in the periphery while ignoring these imbalances is a recipe for deflationary disaster.

The European Monetary Union (EMU), as we and others have long pointed out, was flawed from the start. Members became users of an external currency without setting up central fiscal or monetary policy bodies capable of kick-starting growth or backstopping member-state debt. The EMU is like a United States without a Washington. After surveying some of the potential solutions that have been discussed, we offer our own road map through this crisis, one that involves addressing the flawed setup of the EMU.

Turning to the United States, we find a shaky financial system that is unlikely to withstand the pressures created by a financial collapse in the eurozone. Even without a full-blown financial crisis in Euroland, the health of the US financial system is suspect. We lay out the reasons to believe that many of the biggest US banks are already insolvent. They have not fully recovered from the last crisis and their weaknesses are papered over by a policy of "extend and pretend." Turbulence can be expected from numerous directions, from a struggling real economy, with its sluggish labor market, to the still-weak housing market, the inevitable deflation of the commodities bubble, and the growing number of securities fraud cases faced by banks. Although the spark for the next financial firestorm looks likely to come from Europe, it may instead originate from problems at America's biggest banks. We discuss what we need to do to rebuild the US economy and its financial structure, addressing the jobs situation, household debt relief, and how to shore up the brittle banking system.

We conclude with the situation in Greece, at the center of the eurozone storm. The various rescue packages on offer will not ultimately solve the problem for Greece. A default is a very real possibility. Inspired by neoliberal doctrine, the crisis is being used as a pretext for privatization and a rollback of social legislation, while harsh austerity measures are having devastating consequences in terms of unemployment, poverty, and fraying of the social fabric. If a new approach is not embraced, we are likely seeing the end of the EMU as it currently stands. The consequences of a breakup would ripple through all EMU countries, and may ultimately trigger the next global financial crisis. The future of the eurozone could break in one of two directions, with nations leaving the euro in a coordinated dissolution or, far more desirable, a major restructuring of the EMU, featuring increased consolidation and a mechanism for dealing with the effects of competitive imbalances within the eurozone.

As always, I welcome your comments.

Dimitri B. Papadimitriou, *President*
February 2012

Introduction

The crisis in Europe has spread from Greece to Spain, Italy, and beyond, with the impending fallout threatening to jump the pond and strike the United States' already shaky financial system. Failure to understand the nature of this crisis (willful or otherwise) and a lack of political consensus around real solutions mean we may be witnessing the end of the euro project in its present form. The latest plan for the European Monetary Union (EMU)—the latest in a long line of such inadequate "solutions"—is a new fiscal compact with more automatic penalties for violators of strict budget limits. This is the wrong solution for the wrong crisis. As we will demonstrate, it is a misunderstanding to regard the problems in the eurozone as primarily a "sovereign debt crisis," and a mistake to lay the blame at the feet of government profligacy (Mediterranean or otherwise). The problem, rather, is the very setup of the EMU.

The looming crack-up of the EMU will be just the beginning. If sovereign debt goes bad, all the major European banks will be hit—and so will the $3 trillion held in US money market mutual funds (MMMFs), which have about half their funds invested in European banks. Add in other US bank exposure to Europe and you have a potential $3 trillion hit to US finance. That probably explains why the United States has suddenly taken a keen interest in Euroland, with the Fed ramping up lending to European financial institutions and attempting, in a coordinated effort with five other central banks, to improve liquidity in the market and bring down interest rates. Critics of this latter move point out that, despite the temporary infusion of cash into a system on the brink, the temporary fix will fail to address investors' loss of confidence in the ability of Greece, Portugal, Italy, and Spain to pay back longer-term loans.

Even without a complete collapse in the eurozone, the US financial system remains vulnerable: financial headwinds are poised to hit the United States directly. Commodities prices have finally begun their inevitable downward trajectory, as the biggest speculative bubble in human history loses air. The US real estate sector heads toward spring with no end to its crisis in sight. The big banks are increasingly losing the cases brought against them for securities fraud, paying big in both fines and settlements. They are even beginning to lose in foreclosure cases, and since the vast majority of mortgages made since 2000 involved some kind of fraud (if not lender fraud, then at least property recording fraud perpetrated by the industry's monster, the Mortgage Electronic Registration System), there could be big losses there, too. Since there are reasons to believe that many US banks are already insolvent, it will not take much to spark another financial crisis.

We first summarize the situation in Europe. We then turn to US problems, assessing the probability of a return to financial crisis and recession. We conclude that difficult times lay ahead, with a high probability that another collapse will be triggered by events in Europe or in the United States. Finally, we provide an assessment of possible ways out. Although adequate policy solutions abound, political obstacles on both sides of the pond may mean that real reform will have to wait until after the next global meltdown.

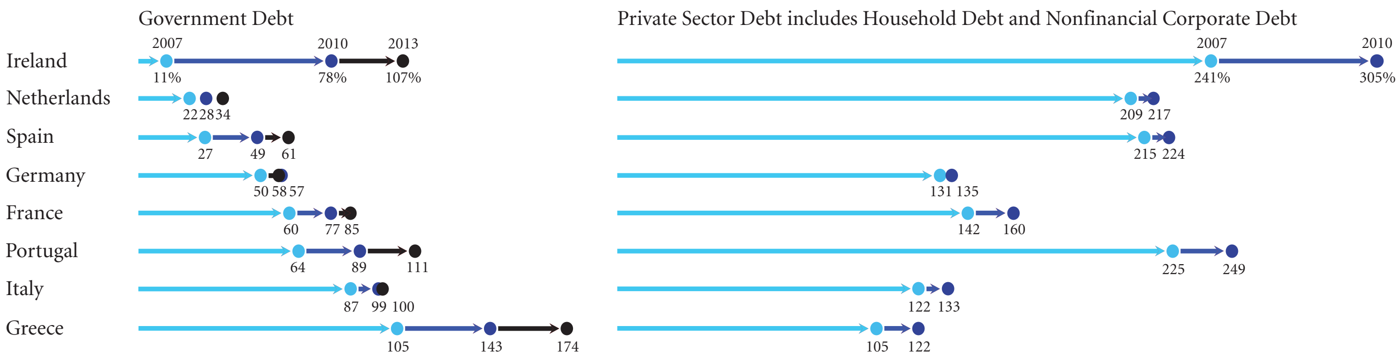
Austerity in Euroland

It is becoming increasingly clear that European authorities are merely trying to buy time to figure out how they can save the financial system against a cascade of likely sovereign defaults. Meanwhile, they demand more blood in the form of periphery austerity, which will only increase the eventual costs of the bailout while stoking North-South hostility. Presumably, leaders like German Chancellor Angela Merkel are throwing red meat to their constituent base for domestic political reasons. If the EMU is eventually saved, the rancor will make it very difficult to mend fences.

There is no alternative to debt relief for Greece and other periphery nations. Even Chancellor Merkel reportedly told her parliamentarians that she could not exclude the possibility of a Greek default (Peel 2011). She has also said that all of her economic advisers recommend debt relief for Greece, but insists that debt relief just encourages other highly indebted nations to demand similar treatment. Thus, she prefers to demand austerity, and if that forces default, so be it.

In other words, Europe's leaders believe debt relief must be tied to painful austerity. Remarkably, even as leaders were putting together yet another rescue package, the European Parliament, the principal law-making body of the European Union (EU), voted to make sanctions more automatic for countries that exceed Maastricht criteria for debts and deficits. Previously, although penalties were threatened, they were never actually imposed. Karel Lannoo, chief executive officer of the Centre for European Policy Studies in Brussels, stressed that the purpose of the new system is "to show Germany that economic governance is being improved and to help overcome German concerns about insufficient accountability in this area at the European level" (Stearns 2011). Amusingly, only four of the 27 EU nations meet

Figure 1 **Net Debt as a Percentage of GDP**



Note: Government figures are IMF calculations of net debt of general governments, after subtracting monetary assets held by governments.

Sources: International Monetary Fund; European Central Bank (via Rebecca Wilder)

the Maastricht deficit criteria: Sweden, Finland, Estonia, and Luxembourg. Even Germany will have to pay the fines! It was Germany that originally got the rules relaxed when its own slow growth period caused it to chronically exceed Maastricht limits on deficits and debts. And it is all the more ironic that loosening the rules allowed Greece to build to the higher debt ratios that Germany now admonishes (Liu 2011).

The picture of the debtors that the Germans, especially, want to paint is one of profligate consumption and runaway government spending by Mediterraneans. From this perspective, the only solution is to tighten the screws. As Finance Minister Wolfgang Schäuble put it, "The main reason for the lack of demand is the lack of confidence; the main reason for the lack of confidence is the deficits and public debts which are seen as unsustainable. . . . We won't come to grips with economies deleveraging by having governments and central banks throwing—literally—even more money at the problem. You simply cannot fight fire with fire" (Giles 2011). In other words, you have to fight the headwinds with more growth-killing glacial ice.

A leaked letter from former European Central Bank (ECB) President Jean-Claude Trichet demanded that Italy move more quickly to a balanced budget (Reuters 2011). It also urged adoption of the neoliberal's favorite package of policies, including "full liberalization of local public services," "a thorough review of the rules regulating the hiring and dismissal of employees," "administrative efficiency," and "structural reforms." Following Rahm Emanuel's advice, the EU's neoliberals are using the crisis not only to impose austerity but also to roll back social legislation, while privatizing as much of the economy as possible. For this purpose, it is extremely important that these neoliberals shift the focus away from problems with the private sector (especially with the excesses perpetrated by financial institutions that created the global financial crisis) and on to government's supposed profligacy and "coddling" of the population (in the form of decent social legislation).

Meanwhile, the doctrine of expansionary austerity continues to fall on its face. Ireland, the poster child of austerity, has been hailed as a success story, an exemplar of the miracle of growth through fiscal contraction. But the reality does not match the accolades. Ireland's GDP fell 1.9 percent in the third quarter of 2011—one of the worst performances in the eurozone (Chu 2011).

The Real Nature of the Eurozone Mess

While the story of fiscal excess is a stretch even in the case of Greece, it certainly cannot apply to Ireland and Iceland, or even to Spain. In the former cases, these nations adopted the neoliberal attitude toward banks that was pushed by policymakers in Europe and America, with disastrous results. The banks blew up in a speculative fever and then expected their governments to absorb all the losses.

Further, as Ambrose Evans-Pritchard (2011) argues, even Greece's total outstanding debt (private plus sovereign) is not high: 250 percent of GDP (versus nearly 500 percent in the US). Spain's government debt ratio is just 65 percent of GDP. And while it is true that Italy's government debt ratio is high, its household debt ratio is very low by Western standards.

Figure 1 presents net debt as a percentage of GDP for a number of EMU nations. It is obvious that for most of them, the economic crisis itself caused significant growth of government debt ratios. Before the crisis, only Greece and Italy significantly exceeded the Maastricht limit of 60 percent of GDP. However, all of them had private sector debt ratios above 100 percent by the time the crisis hit—and half had ratios above 200 percent. To label this a sovereign debt crisis is rather strange. Remarkably, Italy and Greece have the lowest private debt ratios, which is not consistent with the view that consumers in those nations are profligate. As we discuss below, it is not surprising that these two nations have this combination of relatively high government debt ratios and low private debt ratios, since these are related through the "three sectors identity" (see below). But the figure does cast some doubt on the favored story about sovereign excesses in the periphery.

If you take the West as a whole, what you find is that over the past 40 years there has been a long-term upward growth trend of debt relative to GDP, from just under 140 percent of GDP in 1980 to almost 320 percent today. It is true that government has contributed to that, growing from some 40 percent of GDP to about 90 percent—a doubling to be sure. But the private sector's debt ratio grew from a bit over 100 percent to somewhere around 230 percent of GDP.

In sum, to label this a sovereign debt problem is quite misleading. The dynamics are surely complex, but it is clear that there is something that is driving debt growth in the developed world that cannot be reduced to runaway government budget deficits. Nor does it make sense to point fingers at Mediterraneans, since it is (largely) the English-speaking world of the United States, UK, Canada, and Australia that has seen some of the biggest increases in household debt. The total US debt ratio is 500 percent of GDP, of which household debt alone is 100 percent (and financial institution debt another 125 percent).

Briefly, part of this phenomenon involves what Hyman P. Minsky called "money manager capitalism": a large increase in financial assets (the flip side of the debt) under professional management. The long postwar boom helped to build up pension funds and other financial wealth seeking high returns. That led to pressure to open up the globe to financial capital flows, and that in turn generated a series of bubbles and busts across economies, from the developing world, to Asia, to the United States, and, finally, to Europe. At the same time, it generated record inequality and to the extension of what many call "financialization" to every walk of life. Growing financial wealth is the sunny side of money manager capitalism, but the dark side is defined by growing debt and inequality.

The obsessive focus on sovereign debt and austerity also betrays a lack of understanding of the current account imbalances that plague the eurozone. There is a nearly unacknowledged (except around the Levy Institute) Godleyan identity that shows the ex post relations (without necessarily saying anything about the complex endogenous dynamics): the domestic private balance equals the sum of the domestic government balance less the external balance. To put it succinctly, if a nation runs a current account deficit, then its domestic private balance (households plus firms) equals its government balance less that current account deficit. To make this more concrete, when the United States runs a current account deficit of 5 percent of GDP and a budget deficit of 10 percent of GDP, its domestic sector has a surplus of 5 percent; or, if its current account deficit is 8 percent of GDP and its budget deficit is 3 percent, then the private sector must have a deficit of 5 percent, running up its debt.

A big reason why much of the developed world has seen its outstanding private and public sector debts grow relative to GDP is because we have witnessed the rise of current account surpluses in Brazil, Russia, India, and China (and others, especially in Southeast Asia), matched by current account deficits in developed Western nations as a whole. Hence, developed country budget deficits have widened even as their private sector debts have grown. By itself, this is neither good nor bad. But over time, the debt ratios and hence debt service commitments of Western domestic private sectors became too large to service out of income flows. This was a major contributing factor to the global financial crisis (GFC).

Our Austerians see the solution in belt-tightening, especially by Western governments. But that tends to slow growth and boost unemployment, thus increasing the burden of private sector debt. The idea is that this will reduce government debt and deficit ratios, but in practice that may not work due to impacts on the domestic private sector. Tightening the fiscal stance can occur in conjunction with lowering private sector debts and deficits only if this somehow reduces current account deficits. Yet many nations around the world rely on current account surpluses to fuel domestic growth and to keep domestic government and private sector balance sheets strong. They therefore react to fiscal tightening by trading partners either by depreciating their exchange rates or by lowering their costs. In the end, this sets off a sort of modern mercantilist dynamic that leads to race-to-the-bottom policies that few Western nations benefit from.

Germany has specialized in such dynamics and has played its cards well. It has held the line on nominal wages while greatly increasing productivity. As a result, it has become a low-cost producer in Europe despite its reasonably high living standards. Given productivity advantages, it can go toe to toe against non-euro countries in spite of what looks like an overvalued currency. For Germany, however, the euro is significantly undervalued. The result is that Germany operates with a current account surplus that allows its domestic private sector and government to run deficits that are relatively small. Hence, its overall debt ratio is at 200 percent of GDP—approximately 50 percent of GDP lower than the eurozone average.

Not surprisingly, the Godleyan balances identity hit the periphery nations particularly hard, as they suffer from what is for them an overvalued euro and lower productivity than Germany enjoys. With current accounts biased toward deficits, it is not a surprise to find that the Mediterraneans have bigger government and private sector debt loads.

If Europe's center understood balance sheets, it would be obvious that Germany's relatively "better" balances rely to some degree on the periphery's relatively "worse" balances. If each country had a separate currency, the solution would be to adjust exchange rates so that debtor nations would have depreciation and Germany would have an appreciating currency. Since within the eurozone this is not possible, the only price adjustment that could work would be either rising wages and prices in Germany or falling wages and prices on the periphery. But ECB, Bundesbank, and EU policy more generally will not allow significant wage and price inflation in the center. Hence, the only solution is persistent deflationary pressures on the periphery. Those dynamics lead to slow growth and hence compound the debt burden problems.

We have known since the time of Irving Fisher that deflation imposes tremendous costs. The biggest cost is borne by debtors, as the real value of their nominally denominated debts increases. It is for this reason that deflation is a disease to be avoided. It typically results in debt deflation dynamics, with debtors forced to default on commitments. Outside of deep recessions or depressions, price and wage deflation is a rare event—and an outcome that policy purposely tries to avoid. But if Germany refuses to inflate, and if Greece and other periphery nations cannot depreciate their currencies, then debt deflation dynamics are the only way to avoid increasingly noncompetitive wages and prices.

Those noncompetitive wages and prices virtually guarantee current account deficits that, by identity, guarantee rising debt for the government or the private sector. And if debt grows faster than GDP, the debt ratio rises. Note that these are statements informed by identities; they are not meant to be policy statements. But policy cannot avoid identities. Reduction of deficits and debts in periphery nations requires changes to balances outside the periphery. If we want Greece and Ireland to lower debt ratios, they must change their current account balances. That in turn requires that some nations reduce their current account surpluses. For example, if Germany would be willing to run large current account deficits, it would be easier for periphery nations to reduce domestic deficit spending.

But instead, Europe's center insists on a combination of underfunded bailouts and austerity imposed on the periphery. This is supposed to keep indebted nations in the EMU, on the belief that with sufficient fiscal rectitude they might become fit for living within Maastricht guidelines. The problem is that they are left with too much debt, and at the same time they face German intransigence to changing the current account dynamics outlined above. Austerity on the periphery will not improve deficit ratios (of the private and government sectors) unless the external accounts improve. While there might be some wage and price level that would allow a Greece or a Portugal to compete with German productivity, GDP in these nations would be so depressed that government deficits would likely be worse than they are today, and default on both government debt and private debt would be virtually assured.

Given these dynamics, debt relief, which might take the form of default, is the only way that Greece, Ireland, Portugal, and perhaps Spain and Italy can remain within the EMU. But it is not at all clear that the nuclear option of dissolution can be avoided. Even the most mainstream commentators are providing analyses of a Euroland divorce, with resolution ranging from a complete breakup to a split between a Teutonic Union embracing fiscal rectitude with an overvalued currency, and a Latin Union with a greatly devalued currency. In a recent poll, global investors put a 72 percent probability on a country leaving the euro within five years (40 percent think it will occur within a year), and three-quarters expect a recession in Euroland within the next 12 months. Global investment strategist PIMCO thinks the recession has already begun (Kennedy 2011).

A recent report from Credit Suisse dared to ask, What if there is a disorderly breakup of the EMU, with the narrowly defined PIGS (Portugal, Ireland, Greece, and Spain) abandoning the euro and each adopting its own currency (Garthwaite et al. 2011)? The report paints a bleak picture. The currencies on the periphery would depreciate, raising the cost of servicing euro debt and leading to a cascade of sovereign defaults across highly indebted euro nations. With the weaker nations gone, the euro used by the stronger nations would appreciate, hurting their export sectors. That would increase the pressures for trade wars, and for a Great Depression "2.0" (the report puts this probability at an optimistic 10 percent).

Surveying Some Proposed Solutions

Ambrose Evans-Pritchard (2011) comes very close to getting it right, in our view. The problem, he asserts, is not sovereign euro debt but "the euro itself"—a "machine for perpetual destruction," as he puts it. He rightly points to the competitive gap between the North and the South, and argues that the euro is overvalued in the South and undervalued for Germany. He also points to the German delusion that its trade surpluses are "good" but the South's trade deficits are "bad" (obviously, they are linked). Evans-Pritchard discounts scare talk about the catastrophic costs of a breakup and argues that the benefits of a North-South split could be significant. If the "Latin tier" could reboot with a significantly devalued (new) currency, it could become competitive. While our preferred solution is different, we believe Evans-Pritchard is certainly on the right track, and his criticism of Euroland's German center is on target.

One popular but ultimately misguided proposal is to use European Financial Stability Facility (EFSF) funding as capital to create (following the instructive example of US mortgage securitizers!) a sort of structured investment vehicle (SIV) that would buy sovereign debt and issue its own bonds, with the bailout fund serving as equity security. If leveraged, total funding available to buy trashy government debt could be several trillions of euros. But as we found out during the US crisis in mortgage-backed securities, leverage is great on the way up but very painful on the way down. When a crisis hits, the SIV cannot continue to finance its position, so it must sell assets into declining markets. If leverage is eight-to-one, its capital is quickly wiped out by a fairly small reduction (12 percent) in the value of its assets; problems are reinforced by price reductions that lower capital and lessen the willingness of lenders to hold the SIV's debt.

So this proposal only works if: (a) the SIV buys the assets at fire-sale prices now, so that (b) the risks of further large price declines are remote. If the SIV's own debt is long term, it does not need to worry about refinancing its position. But that will make the initial financing more expensive, since the risk is shifted to creditors. One of the reasons that the American SIVs seemed to "work" is that they relied on very short-term, and thus cheap, finance. But of course that permitted a run out of the SIVs as soon as the crisis hit. In the case of this European proposal, it is difficult to see why lenders to the SIVs would prefer to get stuck in bonds that effectively place highly leveraged bets on troubled assets. Anyone who wants to take a chance on Greek debt can just go out and buy it. As we now know, diversifying across trashy subprime mortgages did no good—they were all risky and the risks were highly correlated, because when real estate prices stopped rising, the charade ended.

A different solution offered by Jacques Delpla and Jakob von Weizsäcker (2011) would pool a portion of each member's government debt—equal to the Maastricht criterion of 60 percent of GDP. This would be allocated to a "blue bond" classification, with any debt above that classified as "red bond." The idea is that the blue bonds would be low risk, with holders serviced first. Holders of red bonds would only be paid once the blue bonds were serviced. About half the current EMU members would have quite small issues of red bonds; about a quarter would not even be close to their limit on blue bond issues at current debt ratios.

The proposal draws on the US experiment in tranching mortgages to produce "safe" triple-A mortgage-backed securities protected by "overcollateralization," since the lower-grade securities supposedly took all the risks. Needless to say, that did not turn out very well. Delpla and von Weizsäcker's idea is that markets will discipline debt issues, since blue bonds will enjoy low interest rates and red bonds will pay higher rates. Again, the US experience proves that markets are far too clever for that. If anything, market discipline delivered precisely the opposite results. The risks on the lower tranches were underestimated and vastly underpriced. In a search for yield, financial institutions held on to a lot of the trash. And the triple-A tranches were much too big (85 percent of the total pool), meaning they were not overcollateralized at all. Finally, to increase yield, the lower tranches were pooled into credit default options (CDOs) with triple-A tranches, and then the worst of that was used in CDOs-squared, and so on. And all of this behavior was perfectly aligned with "market discipline."

This blue bond / red bond proposal is not, however, entirely without merit. If the full faith and credit of the entire EMU (including, most critically, that of the ECB) were put behind the blue bonds, and substantial nonmarket discipline (i.e., regulation) were placed upon the red bonds, the scheme would have some potential. More important, it directs us toward a real solution. Our colleagues Yanis Varoufakis and Stuart Holland (2011) have issued a similar proposal. Briefly, the ECB would buy member sovereign debt at a volume of up to 60 percent of a nation's GDP. These would be held as eurobonds and nations would continue to service them, albeit at a lower interest rate to reflect the ECB's lower cost of issuing its own liabilities. By moving so much debt to the ECB, nations would easily meet the Maastricht criteria—which would be applied only to the remaining debt outstanding in markets. The ECB, in turn, could sell eurobonds to provide liquid and safe euro-denominated debt to markets, attracting foreign investors, especially central banks and sovereign wealth funds. That would help to finance the European Economic Recovery Programme, with the ECB issuing eurobonds to provide new funding to the European Investment Bank. Thus, the authors not only address the current insolvency problems but also tackle the problem of recovery. Our preferred solution involves a similar issuance of bonds backed by the ECB.

After the failure to expand the EFSF from the 440 billion euros to the trillions needed to backstop Italy and Spain, the European Commission proposed an alternative to allow every eurozone country to issue eurobonds guaranteed by all 17 member-states, subject to the Commission's control of national budgets.

The International Monetary Fund (IMF) has come out with its own suggestion to create a fund from which troubled eurozone members could borrow. Financing of the fund would be through loans from the ECB. This would circumvent the Maastricht Treaty's rules against bailouts and the purchase of new government bonds. It would, however, entail the IMF's and Commission's control over national budgets and include sanctions for noncompliance. Obviously, the proposals would restrict governments' abilities to institute their own tax and spending policies. The civil disturbances in Athens and other European cities suggest what could happen if Brussels came to dominate national economic policies (Feldstein 2011).

Before we begin to outline the way forward in the eurozone, we look across the pond to the rickety banking system and sputtering economic recovery in the United States.

The View from America

The problem with the setup of the EMU was the separation of nations from their currencies—as we, along with Charles Goodhart, Warren Mosler, and Wynne Godley, have long argued. It is a system that was designed to fail. It would be like a United States with no Washington, with each state fully responsible not only for state spending but also for social security, health care, natural disasters, and bailouts of financial institutions within its borders. In the United States, all of those responsibilities fall under the purview of the issuers of the national currency: the Fed and the Treasury. In truth, the Fed must play a subsidiary role because, like the ECB, it is prohibited from directly buying Treasury debt. It can only lend to financial institutions and purchase government debt in the open market. It can help to stabilize the financial system, but it can only lend, not spend, dollars into existence. The Treasury spends them into existence. When Congress is not preoccupied with kindergarten-level spats over debt ceilings, that arrangement works almost tolerably well—a hurricane in the Gulf leads to Treasury spending to relieve the pain. A national economic disaster generates a federal budget deficit of 5 or 10 percent of GDP to counteract recessionary forces. That cannot happen in Euroland, where the European Parliament's budget is less than 1 percent of GDP (approximately $100 billion). We argued long ago that the first serious Europe-wide financial crisis would expose the flaws. And it has.

Matters are made much worse because Euroland cannot turn to its center for help, nor can it rely any longer on the rest of the world. The economies of the West (at least) are stumbling. In addition to the residual problems in US real estate, the commodities speculative bubble appears to have been pricked. Since fools rush in on the belief that they can take advantage of sale prices, the air will not rush out quickly. But with commodities prices at two, three, and even four standard deviations away from the mean, the general trend will be downward. That leads to a vicious cycle of margin calls, which will have knock-on effects as those with long positions in commodities have to sell out other asset classes. The stock market will likely be next to falter, and there are plenty of reasons to sell bank stocks anyway.

US and European banks are probably already insolvent. If Greece defaults and the crisis spreads to the periphery, this will become more obvious. The smaller US banks are in trouble because of the economic crisis. However, the biggest banks, which caused the crisis, are still reeling from their mistakes during the run-up to the crisis. In our view, they were already insolvent when the GFC hit, and they are still insolvent. Policymakers have pursued an "extend and pretend" approach to hide the insolvencies. However, the sorry state of these banks will be exposed when the next crisis begins to spread. It is looking increasingly likely that the opening salvo will come from Europe, although it is certainly possible that it could come from problems at Bank of America, or Citigroup, or Morgan Stanley.

Let us look at the reasons to doubt that the "big six" banks are solvent, and the reasons why it will not take much to push the United States back into another financial crisis.

(1) The broader economy is struggling. Real estate prices are not recovering. Few jobs are being created. Defaults and delinquencies are not improving. GDP growth is anemic. Household debt as a percentage of GDP has only declined from 100 percent to 90 percent. While declining debt ratios are good, it is still too much debt to service. Total US debt remains about five times GDP, and while household borrowing has gone negative, debt loads remain high. Financial institutions are still heavily indebted, mostly to one another (Wray 2011). Total US debt loads are much higher than the loads across most of Euroland. This is especially true if government debt is removed from the equation (which should be done when talking about the United States, since it has a sovereign government that issues its own currency). In comparison, the Europeans are debt pikers. On the one hand, that is not a fair comparison, because for some of the European nations (especially Italy), government debt is the problem, and these are not currency issuers. Instead, they are more like US states, which are currency users. But the point is that the US private sector—which is the sector that matters—remains heavily indebted, while ability to pay has plummeted. "Recovery" of labor markets remains dismal, by far the worst of the postwar period.

Most of the household debt (almost three-quarters) is linked to real estate. Twenty-two percent of homeowners, or 10.9 million, are underwater on their mortgages, while 1.6 million are delinquent or in the process of foreclosure (Ablan and Goldstein 2011). Banks still have $700 billion in second lien debt (such as home equity loans). As these are "sloppy seconds," much of this debt is worthless. American consumers account for nearly half of the global $9 trillion of securitized loans (e.g., mortgage-backed securities and so on). And there is another $4.1 trillion in mortgage debt held by Fannie Mae and Freddie Mac. The point is that there is still a phenomenal amount of debt linked to a declining US real estate market, and much of that is either directly held by US financial institutions or will come back to bite them because of extensive layering of debt across the global financial system.

(2) Not only are financial institutions engaged in very little traditional commercial banking (lending), they are not doing much investment banking business either: remember that the two investment banks remaining in 2008, Goldman Sachs and Morgan Stanley, were handed commercial bank charters so that they could scoop up insured deposits as a cheap way to finance their business. How many initial public offerings and corporate debt issues have been floated? Not much is happening in those areas. As for trading, in late 2011 Morgan Stanley (today, the sixth-largest US bank), released a poor trading outlook blamed on "high costs, historically low interest rates and market volatility that has pushed clients to the sidelines" (LaCapra 2011).

(3) Commodities are tanking and equities markets are at best horizontal. Other than making profits by cooking their books, these are the main areas open to banks to make profits since 2008. Both commodities and equities had been doing quite well, climbing back up from the depths of the crisis. This should be put in perspective, however, because at best these markets only recouped losses that were incurred in the crisis. Still, those bubbles are now probably over, and losses are going to pile up. It is true that financial institutions hedge their long positions in commodities with some shorts, but with whom do they short? Remember American International Group, the insurer of first and last resort: hedges are only as good as counterparties, and counterparties are no better than you are when markets collapse. In a crisis, correlations reach 100 percent. All asset classes collapse together because of the heavy layering and margin calls that force sales of even good assets in portfolios.

(4) Hedge funds have not done particularly well over the past couple of years, and yet banks have, so that even though their profits come largely from trading (plus cooking books and reducing loan loss reserves), the banks are far more successful than hedge fund managers at picking winners. Does that make a lot of sense?

(5) And, as mentioned above, banks are facing a number of lawsuits, which requires hiring lawyers, paying fees and fines, and employing robo-signers to falsify documents. In other words, it is costly to continue to fight a growing wave of lawsuits, not only by homeowners but also by deep-pocketed securities holders like PIMCO, the New York Fed, and Fannie and Freddie. The threat of such suits also causes bank stocks to fall, increasing the cost of raising capital.

(6) Europe, as we noted above, is on the verge of collapse, and US bank exposure to Euroland is huge. Indeed, in the fall of 2011 Morgan Stanley was fighting off rumors that it could lose $30 billion due to exposure to German and French banks (LaCapra 2011). As Robert Reich (2011) correctly argued, although direct lending by US banks to heavily indebted sovereign European governments is not high, they have exposure of almost $3 trillion through links to European banks. If, say, Greece defaults, US banks get hurt to the extent that European banks default on their debts. US money market mutual funds are also heavily invested in Euroland—about half of their assets are in short-term European bank IOUs.

Note that MMMFs are essentially uninsured deposits that pretend to be as safe as FDIC-insured deposits, and there are $3 trillion worth of them (versus about $6 trillion of insured deposits). When the GFC hit, there was a run out of MMMFs that threatened to "break the buck." They were saved by extension of the US government guarantee, which is now illegal according to the 2010 Dodd-Frank Act. One might say "So what, let them fail." But these funds lend to US banks, which need to roll over short-term paper bought by the MMMFs. Bank finance will dry up in a run. That is the trouble with layering, and the MMMFs are an important link in the finance chain. A problem with the MMMFs is not a two or three standard deviation event. It is a relatively high probability event that ought to be taken into account when "stress testing" banks. This is an accident waiting to happen.

In addition, the Fed has become a lender of last resort for Euroland (and, indeed, around the globe). To be sure, the Fed has the ability to create an infinite supply of US dollar reserves through "keystrokes." Its only limit is self-imposed, unless Congress gets involved and tells it to stop.

Paths to Recovery

Where do we go from here? The US has the fiscal capacity to deal with its problems. Briefly, it needs a three-pronged approach:

(1) *Jobs.* The best policy would be to follow the New Deal example, with direct job creation programs along the lines of the Works Progress Administration and the Civilian Conservation Corps. If a universal program is not politically feasible, then a smaller-scale assault could help (recall that President Carter managed to expand the Comprehensive Employment and Training Act during the late 1970s stagflation). This could entail some combination of federal jobs programs plus something like block grants to states to fund infrastructure and social spending that would create jobs. We must think big, however. We need more than 20 million full-time jobs, and the federal government will have to provide the funding for a significant portion of these.

(2) *Debt relief.* The number of homeowners underwater on their mortgages will continue to grow. Even after falling by 30 percent, house prices in some parts of the country remain too high. Based on the history of US real estate busts since World War II (which had always been regional up to this current bust), it takes many years for prices to rise back to precrisis levels. Because the speculative bubble took prices to unprecedented heights, we should not expect that economic "fundamentals" will justify a return to such prices for a decade or more, and maybe even a generation in some regions. Since we must learn to live with lower prices, we must write down the mortgage debt.

To make this fair, it must be done for everyone, not just for those who default. That will almost of necessity require a big role for Uncle Sam. Individual banks are not going to do it. We need an honest assessment of real estate values, following clear guidelines, to establish a base for an acceptable mortgage. Let us say that, on average, houses will be valued at one-third less than precrisis prices. An acceptable mortgage would then be 80 percent of that. The federal government, working either with government-sponsored enterprises or with private lenders (a choice will need to be made), would then provide a new mortgage on favorable terms (fixed rate, 30 years), used to retire the outstanding mortgage. Policy will have to be developed to determine how the losses (the difference between the new mortgage and outstanding mortgage debt) would be shared among mortgage originator, servicer, mortgage-backed security holder, and the federal government. Some analysts have proposed clever "claw back" schemes in which creditors can share with homeowners any capital gains generated as house prices rise. In any event, it is clear that policy direction must come from Washington, and that the policy will have to be imposed on creditors. Homeowners could choose either to participate or to keep current mortgages. It is important, however, to exclude speculators who bought several houses in the boom. Debt relief should only be for owner-occupied housing.

(3) *Resolution of insolvent institutions.* We know from the savings-and-loan crisis of the 1980s that the costs of eventual resolution explode when insolvent banks are kept open by a policy of "extend and pretend." If you keep an insolvent bank

open and let the same people continue to run it, they have every incentive to pay themselves huge bonuses, slash loan loss reserves, burn documents, and move as much cash to offshore havens as they can, because their institution is already bankrupt. All they have to do is to keep it open and shred evidence until the statute of limitations runs out.

That is why these institutions must be resolved. And note that this is the law: insolvent institutions must be resolved at the least cost to the FDIC. Unfortunately, more than three years after the GFC we still have not done that. And if we do pursue a policy of mortgage relief, with proper accounting of property values and losses, the insolvencies will be exposed. Note that the debt relief is more a matter of recognizing reality than one of creating losses for banks. The existing mortgages do not recognize that reality, and carrying them on the books at face value just hides it. The losses already exist. Closing the insolvent institutions is the only way to end the charade while at the same time reducing incentives to continue the cover-ups and the fraud. It would also lead to a stronger financial system, with smaller institutions and less concentration of economic power. Closing the biggest insolvent institutions would admittedly produce some collateral damage—say, losses among pension funds that hold their equities and uninsured debt—and policymakers would have to deal with that. Among the greater challenges: the Pension Benefit Guaranty Corporation would become insolvent and would need a bailout.

As for Euroland, the solutions are more difficult because, as discussed above (and in several other Levy Institute publications), these nations do not individually have the fiscal capacity to deal with their problems. So one solution for a troubled country is to leave the EMU and return to a sovereign currency issued by the government—the drachma for Greece, the lira for Italy, and so on. The transition would be disruptive, with near-term costs. But the benefit would be to create domestic fiscal and policy space to deal with the crisis. Default on euro-denominated debt would be necessary and retaliation by the EU is possible. However, in our view this is preferable to the "Teutonic vs. Latin" two-currency scheme discussed above by Evans-Pritchard, which would simply tie, say, Greece to another external currency. It would have no more fiscal or monetary policy space than it has now, albeit with a currency that would be devalued relative to the euro.

If dissolution is not chosen, then the only real solution is to reformulate the EMU. Many critics of the EMU have long blamed the ECB for sluggish growth, especially on the periphery. The argument is that the central bank kept interest rates too high for full employment to be achieved. We have always thought that was wrong—not because lower interest rates are undesirable, but because even with the best run central bank, the real problem in the setup was fiscal policy constraints. Indeed, the authors of a 2005 Levy Institute Working Paper demonstrated that the ECB's policy was not significantly tighter than the Federal Reserve's, but US economic performance was consistently better. The difference was fiscal policy, with Washington commanding a budget that was more than 20 percent of GDP, and usually running a budget deficit of several percent of GDP. By contrast, the European Parliament's budget was less than 1 percent of GDP. (See Sardoni and Wray 2005.)

The problem was that, as deficits and debt rose, markets reacted by increasing interest rates, recognizing that, unlike a sovereign country like the United States, Japan, or the UK, EMU members were users of an external currency. As we said above, they were more like a US state. On the one hand, they could run much bigger deficits than US states (all but two of which are constrained by constitutions to balance their budgets), in part due to the expectation that if things went bad, the ECB would probably help their state central banks. But on the other hand, US states had Washington to provide fiscal relief—something EMU members did not have. At best, they could borrow euros from European institutions or from the International Monetary Fund (IMF). But borrowing would just increase interest rates, potentially leading to a vicious debt trap. To some extent, America avoided this trap, as markets force balanced budgets on states and Washington eased the pain with fiscal transfers. As a result, a larger percentage of EMU national deficits went to interest payments, which may not be the best stimulus as much leaks out to foreign holders of the debt.

Once the EMU weakness is understood, it is not hard to see the solutions. They include ramping up the fiscal policy space of the European Parliament—for instance, by increasing its budget to 15 percent of GDP, with a capacity to issue debt. Whether the spending decisions should be centralized is a political matter. Funds could simply be transferred to individual states on a per capita basis.

ECB rules could also be changed to allow it to buy, say, an amount equal to a maximum of 6 percent of Euroland GDP each year in the form of government debt issued by EMU members. As a buyer, it can set the interest rate. It might be best to mandate that rate at the ECB's overnight target or some markup above the target. Again, the allocation would be on a per capita basis across the member-states. Note that this is similar to the blue bond / red bond proposal discussed above. Individual members could continue to issue bonds to markets, so they could exceed the debt issue that is bought by the ECB, much as US states issue bonds.

One can conceive of variations on this theme, such as the creation of some EMU-wide funding authority backed by the ECB that issues debt to buy government debt from individual nations—again, along the lines of the blue bond proposal. What is essential, however, is that the backing comes from the center: the ECB or the EU stands behind the debt. That will keep interest rates low, removing "market discipline" and vicious debt cycles due to exploding interest rates. With lending spread across nations based on some formula (e.g., per capita), every member should get the same interest rate.

All of these are technically simple and economically sound proposals. They are, however, admittedly difficult politically. But the longer the EU waits, the more difficult these solutions become. Crises only increase the forces of disunity and dissolution, increasing the likelihood of eventual divorce and hostility, which in turn forestalls a real solution and makes a new Great Depression—a combination of a downturn plus Fisher debt deflation dynamics—ever more probable.

Conclusion: A Greek Endgame for the Euro?

The grand experiment of a unified Europe with a common currency has entered its endgame. If the current trajectory continues, the disintegration of the euro is inevitable. Athens is, of course, at the center of the vortex. The "rescue" plan accepted by Greece certainly will not save the system, and it will not save Greece from a sovereign default. The bailout conditions demanded by the troika that holds the purse strings—the IMF, the ECB, and the EU—are unworkable. The latest package, recently approved by the Greek Parliament, offers 130 billion euros in return for more of the same crippling austerity measures. It is a neoliberal fantasy, including a 22 percent reduction in the minimum wage, deep pension cuts, and layoffs of 150,000 public workers. The troika can barely expect these latest austerity measures to be adhered to, as they stretch the limits of what will be tolerated by a nation already experiencing severe social tensions. If fully enacted, these growth-killing measures threaten to push Greece out of the eurozone.

Despite a climate of denial, a complete default is a real possibility. As the results cascade across the continent, credit ratings, interest rates, and the political fallout will quickly become unworkable, for both stronger nations and weaker ones. Our view is that even though they know very well that Greece's sovereign debt problem is a solvency issue and not a liquidity problem, Europe's leaders pretend and forcibly argue that it can be solved with these rescue packages, and only if Greece can carry out its promised reforms. But regardless of the success or failure of the harsh austerity measures, the country's debt level is increasing, while the European financial system remains at risk and will, in all likelihood, occasion the unraveling of the euro project. The consequences will undoubtedly be catastrophic for the eurozone member-states that are highly indebted (Italy, Greece, Spain, Ireland, Belgium, and Portugal). But they will also be devastating for the surplus-producing states, especially Germany, France, the Netherlands, and the Nordic states, which are highly dependent on their export-directed economies enjoying the exchange rate stability the euro provides. And then there is the contagion effect once Greece's insolvency is "officially" recognized, spilling over to Italy, Spain, Portugal, and Ireland, and possibly to the global economy.

For a society like Greece with flagrant tax avoidance and evasion, together with a high degree of transaction opacity, the ongoing harsh measures and reforms that are being implemented have proven to be ineffective, exacerbating tax evasion, growing the shadow economy, and slowly but steadily causing the disappearance of the middle class. Vulnerable segments of the population are being pushed deeper into poverty and despair while the privileged benefit disproportionately. All of this has combined to make Greece one of the most unequal countries in Europe.

The demands of the troika have been devastating for the Greek population, and under terms of the latest bailout package, matters will only worsen. In 2011, the decline in GDP was 6.9 percent (EL-STAT 2012). Unemployment has risen to over 20 percent overall, and in some provinces it has hit the 50 percent mark. Youth unemployment is over 52 percent (Antonopoulos, Papadimitriou, and Toay 2011). Negative social and economic trends are already emerging, with homelessness and crime accelerating rapidly. Combined with dangerous anti-immigrant sentiments (immigrants make up about 7 percent of the Greek population) and shifts toward the extreme right, such trends threaten to wreak havoc, dismantle social cohesion, and destabilize the nation.

Given the unprecedented and extraordinarily high levels of Greek bond yields, markets and investors have concluded that Greece will sooner or later default on its debt, whether in an orderly or a disorderly fashion. It is no surprise, then, that they would want a clearly worked-out plan that isolates Greece from the rest of the eurozone. But this is not possible, as demonstrated by the troubles of the Franco-Belgian lender Dexia and the ECB's recent wave of loans to European banks. Greece's sovereign debt problem is not limited to Greek lenders. It affects the entire eurozone, requiring a eurozone-wide solution.

The immediate problem could be resolved if the ECB announced that it was ready and willing to purchase all outstanding Greek bonds at market prices. The result would be a dramatic drop in yields and increases in Greek bond prices. The ECB's message would quickly calm the financial turbulence and solve the eurozone markets' volatility problem until a permanent solution could be crafted.

The absence of this bold approach opens the possibility of an orderly default. Greece would most likely continue to receive structural funding support from the EU for development purposes, but it would be required to continue the implementation of even harsher austerity measures and reforms. The structural deficit would eventually be brought under control, but at the expense of an unemployment rate even higher than the current socially disastrous level of 20 percent. The EU/ECB/IMF-imposed measures would achieve the goal of deficit reduction with unprecedented numbers of unemployed, severely unequal distribution of income and wealth, and a country highly dependent on the European powers.

This is not the only possible endgame. Greece's exit from the euro has been presented as another option for dealing with the country's insolvency, but it would entail significant risks that are difficult to ascertain. An exit would cause market upheaval to reverberate throughout the global economy, at least for some period of time, pushing other eurozone countries to follow suit and with serious consequences for Greece. In this scenario, we should expect an immediate devaluation of the national currency, a default on the country's debt, inflationary pressures, and runs on Greek banks (and their nationalization), together with perilous economic and societal trends characteristic of a dysfunctional economy. It is possible, however, that after a period of dramatic hardship, the country could reestablish itself as a viable economy highly dependent on a spectacular leader showing the way.

In sum, the collapse of the euro project will break in one of two ways. Looking increasingly likely, and least desirable, is that nations will leave the euro in a coordinated dissolution, which might ideally resemble an amicable divorce. As with most divorces, it would leave all the participants financially worse off. Wealthier countries would be back to the kinds of tariffs, transaction costs, and immobile labor and capital that inspired the euro in the first place. Poorer nations could kiss their subsidies, explicit and implicit, good-bye.

Less likely, but more desirable, would be a major economic restructuring leading toward increased European consolidation. Thus far, the real beneficiaries of the EU bailouts have been the banks that hold all the debt. But with some restructuring and alteration of regulations, that would not need to be the case. The doomed rescue plans we are seeing do not address the central problem: countries with very different economies are yoked to the same currency. Nations like Greece are not positioned to compete with countries that are more productive, like Germany, or that have lower production costs, like Latvia. Any workable plan to save the euro has to address those differences.

The best structural changes would even out trade imbalances by "refluxing" the surpluses of countries such as Germany, France, and the Netherlands into deficit countries by, for example, investing euros in them. Germany did this with the former East Germany following reunification. This kind of mechanism could be set up very quickly under the EFSF if it had a deeper well to draw from, probably one trillion euros.

The European Parliament, led by its premier leaders, Angela Merkel and Nicolas Sarkozy, could authorize the EFSF to take over the entire sovereign debt of the expanding periphery, which, in addition to Greece, would include Ireland, Portugal, Spain, and possibly Italy. Ideally, the EFSF would ultimately be responsible to the (elected) Parliament. The arrangement would replicate, in some ways, the US Treasury's relationship with the states, but with more control by Europe's nations. Yes, the European Parliament has long engaged in payments to poorer nations, but its total budget has remained below 1 percent of GDP, which is clearly too small.

It is possible that the EU will eventually take this path, or a similar one, in recognition of the value of the eurozone. The current approach is unsustainable, with French and German taxpayers furious about footing the bill and residents in the peripheral nations angrily resisting cutbacks. It is remarkable that Merkel has not already recognized that Germany, as the EU's largest net exporter, is facing a losing proposition by insisting on fiscal austerity for its many troubled neighbors.

The founding of the EU was a political venture that emerged from the ambitious heads of the two leading continental powers, Germany and France. Their creation grew into a promising economic laboratory. The absence of a true political union—an entity with a unified fiscal policy as well as a unified currency—might be the cause of its death. The fallout from a European crash would be significant. Indeed, we believe that due to the interconnectedness of global finance, a financial crash in any region is likely to set off a second installment of the GFC. The spark could originate in Europe, the United States, or even Asia or the BRICs. While we do believe there are benefits to unification in Europe and to the greater integration of all economies around the globe, there is also the danger that overleveraged global financial capitalism could cause a crisis in one area to quickly degenerate into a global panic.

What we have today is, in Minsky's terms, money manager capitalism. What we need is a different form of what he called the "57 varieties of capitalism." The current one is simply too fragile to be sustained. While the problems in Euroland are somewhat idiosyncratic—a unified currency without unified fiscal policy—Europe also shares with the Anglo economies the typical money manager characteristics: too much debt, too much layering and leveraging, and too much power concentrated in the hands of a few institutions. The greatest barrier to a resolution in Europe is the fear among leaders that reform will harm the biggest banks. Both Europe and the Anglo nations, as well as Iceland, need debt relief and downsizing of the role played by finance. But the very power that finance has managed to assume makes real solutions politically infeasible. It may take the total collapse of money manager capitalism before a real solution can be brought forward.

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