Working Paper

Thomas I. Palley¹

Europe's crisis without end: The consequences of neoliberalism run amok

March 2013

Abstract

This paper argues the euro zone crisis is the product of a toxic neoliberal economic policy cocktail. The mixing of that cocktail traces all the way back to the early 1980s when Europe embraced the neoliberal economic model that undermined the income and demand generation process via wage stagnation and widened income inequality. Stagnation was serially postponed by a number of developments, including the stimulus from German re-unification and the low interest rate convergence produced by creation of the euro. The latter prompted a ten year credit and asset price bubble that created fictitious prosperity.

Postponing stagnation in this fashion has had costs because it worsened the ultimate stagnation by creating large build-ups of debt. Additionally, the creation of the euro ensconced a flawed monetary system that fosters public debt crisis and the political economy of fiscal austerity. Lastly, during this period of postponement, Germany sought to avoid stagnation via export-led growth based on wage repression. That has created an internal balance of payments problem within the euro zone that is a further impediment to resolving the crisis.

There is a way out of the crisis. It requires replacing the neoliberal economic model with a structural Keynesian model; remaking the European Central Bank so that it acts as government banker; having Germany replace its export-led growth wage suppression model with a domestic demandled growth model; and creating a pan-European model of wage and fiscal policy coordination that blocks race to the bottom tendencies within Europe.

Countries, particularly Germany, can implement some of this agenda on their own. However, much of the agenda must be implemented collectively, which makes change enormously difficult. Moreover, the war of ideas in favor of such reforms has yet to be won. Consequently, both politics and the ruling intellectual climate make success unlikely and augur a troubled future.

JEL ref.: E00, E24

Keywords: Financial crisis, euro zone, neoliberalism.

¹ Thomas I. Palley, New America Foundation, Washington DC, E-mail: mail@thomaspalley.com

Europe's crisis without end: The consequences of neoliberalism run amok

Abstract

This paper argues the euro zone crisis is the product of a toxic neoliberal economic policy cocktail. The mixing of that cocktail traces all the way back to the early 1980s when Europe embraced the neoliberal economic model that undermined the income and demand generation process via wage stagnation and widened income inequality. Stagnation was serially postponed by a number of developments, including the stimulus from German re-unification and the low interest rate convergence produced by creation of the euro. The latter prompted a ten year credit and asset price bubble that created fictitious prosperity.

Postponing stagnation in this fashion has had costs because it worsened the ultimate stagnation by creating large build-ups of debt. Additionally, the creation of the euro ensconced a flawed monetary system that fosters public debt crisis and the political economy of fiscal austerity. Lastly, during this period of postponement, Germany sought to avoid stagnation via export-led growth based on wage repression. That has created an internal balance of payments problem within the euro zone that is a further impediment to resolving the crisis.

There is a way out of the crisis. It requires replacing the neoliberal economic model with a structural Keynesian model; remaking the European Central Bank so that it acts as government banker; having Germany replace its export-led growth wage suppression model with a domestic demand-led growth model; and creating a pan-European model of wage and fiscal policy coordination that blocks race to the bottom tendencies within Europe.

Countries, particularly Germany, can implement some of this agenda on their own. However, much of the agenda must be implemented collectively, which makes change enormously difficult. Moreover, the war of ideas in favor of such reforms has yet to be won. Consequently, both politics and the ruling intellectual climate make success unlikely and augur a troubled future.

JEL ref.: E00, E24

Keywords: Financial crisis, euro zone, neoliberalism.

Thomas I. Palley
Senior Economic Policy Adviser, AFL-CIO
Washington, D.C.

Mail@thomaspalley.com

February 2013

1. Europe's toxic policy cocktail

This paper examines the causes of the euro zone crisis and the outlook for euro zone prosperity. Its conclusion is not optimistic and the euro zone likely faces a prolonged future of economic stagnation. The paper argues that the euro zone crisis is the product of a toxic neoliberal economic policy cocktail. The mixing of that cocktail traces all the way back to the early 1980s, the defining moment being March 1983 when French President Francois Mitterrand initiated a turn away from Keynesian policies of reflation to neoliberal policies of austerity. That fateful turn symbolized the end of the Keynesian era in Europe and the beginning of the neoliberal era. The crisis is the culminating logic of thirty years of neoliberal policy.

The roots of the euro zone crisis therefore lie deep. That makes explaining the crisis a difficult task as it is easy to focus on more recent developments and mistake symptoms for causes. The crisis is best understood as the outcome of a process of "policy sedimentation". Measures put in place long ago set the course for economic stagnation. That stagnation was postponed by subsequent developments, but only at the cost of deepening the ultimate crisis and tendency to stagnation.

There are close analytic parallels with the U.S. crisis (Palley, 2009 [2011a], 2012). This reflects the fact that the global economic crisis is a crisis of neoliberalism which has been the guiding global economic ideology for the past thirty years. In the U.S., as in Europe, there was also a change of economic policy paradigm, symbolized by the election of President Reagan in November 1980. That change saw the abandonment of the post-World war II Keynesian policy paradigm and its replacement with a neoliberal growth paradigm. A thirty year credit bubble papered over the demand

shortage caused by worsening income distribution. That, in turn, created an unstable financial system which crashed when the credit bubble burst. Now, after the crisis, the U.S. economy is also stuck in stagnation because of deteriorated income distribution and a structural trade deficit that together undermine aggregate demand (AD).

Though the specific details are different, Europe exhibits an analytically similar narrative. However, the European story is complicated by the introduction of the euro. That added an additional dimension of institutional change that has proved catastrophic because it was shaped by neoliberal economic theory.

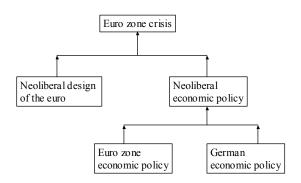
The sedimentation approach to understanding the euro zone crisis means there is no silver bullet to resolving it. Instead, there is need to reform or replace the series of policy and institutional changes put in place over the past thirty years. That is far easier said than done because of the problem of "lock-in". Once in place, it is extremely difficult and costly to make changes. For instance, with regard to the euro the intellectual issues are fairly simple (Palley, 2011b [2011c]). However, successful change will require political near-unanimity, which is an unlikely outcome. For that reason, as discussed in the conclusion, the most likely scenario is continued stagnation. Moreover, there is also a fair likelihood of a damaging "black swan" political or economic shock that causes the euro to shrink or disintegrate at great economic cost.

2. Overview

The euro zone crisis is the product a neoliberal policy cocktail. Figure 1 illustrates the recipe behind this cocktail, the principal ingredients of which are flawed neoliberal institutional design combined with flawed neoliberal economic policies. The flawed institutional design concerns the architecture of the euro and the European Central Bank

(ECB). The flawed economic policy can be decomposed into flawed European-wide policy and flawed German policy.

Figure 1. The toxicneoliberal cocktail: causes of the euro zone crisis.



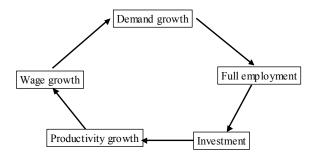
The flawed European wide policy concerns the neoliberal labor and macroeconomic policy strategy that has been persistently promoted since the early 1980s. The flawed German policy concerns Germany's reliance on export-led growth based on domestic wage suppression. The combination of flawed policy plus flawed design explains how the crisis came about; why existing policy has been incapable of addressing the crisis; and why the future promises on-going economic crisis absent reform of the euro zone's economic policy configuration and monetary architecture.

2.1 The shift from Keynesianism to neoliberalism

The workings of the post World War II Keynesian growth model are illustrated in Figure 2 and it can be described as a "virtuous circle" model built on full employment and wage growth tied to productivity growth. Its logic was as follows. Productivity growth drove wage growth, which in turn fuelled demand growth and created full employment. That

provided an incentive for investment, which drove further productivity growth and supported higher wages.

Figure 2. The Keynesian "virtuous circle" growth model.

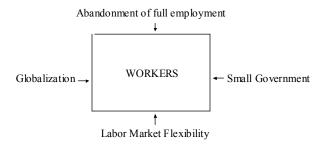


After 1980 the Keynesian model was replaced by a neoliberal growth model. The key changes wrought by the new model were: 1) abandonment of the commitment to full employment and the adoption of commitment to very low inflation; and 2) severing of the link between wages and productivity growth. Together, these changes created a new economic dynamic. Before 1980, wages were the engine of demand growth. After 1980, finance and idiosyncratic factors became the engine.

The new economic model was rooted in neoliberal economic thought. Its principal effects were to weaken the position of workers; strengthen the position of business; and unleash financial markets to serve the interests of financial and business elites. The new model is illustrated in Figure 3 and it can be described as a policy box that fences workers in and pressures them from all sides. On the left hand side, the corporate model of globalization put workers in international competition via global production networks that are supported by free trade agreements and capital mobility. On the right hand side, the "small" government agenda attacked the legitimacy of government and pushed

persistently for deregulation regardless of dangers. From below, the labor market flexibility agenda attacked unions and labor market supports such as the minimum wage, unemployment benefits, employment protections, and employee rights. From above, policymakers abandoned the commitment of full employment, a development that was reflected in the rise of inflation targeting and the move toward independent central banks controlled by financial interests.

Figure 3. The neoliberal policy box.



This shift to neoliberal policy created a new economic model that gradually cannibalized the income and demand generation process in the euro zone. However, the effects of this cannibalization process were obscured by positive temporary developments including the launch of the euro in 1999 and the credit and property bubble it unleashed. Now that the credit bubble has burst, the combined effects of the turn to neoliberalism and the flawed design of the euro have created a deep structural crisis that will persist absent change of policy direction and profound reform.

2.2 Germany's role

These underlying structural conditions regarding European macroeconomic policy and design of the euro are further aggravated by Germany's economic policy of export-led

growth based on domestic wage suppression. However, as will be shown later,
Germany's export-led growth strategy is not the principal cause of the crisis. Indeed,
ironically, Germany stands to suffer significantly from the crisis which will undermine its
export sales in Europe.

On the other hand, Germany is significantly to blame for blocking reform of the euro's architecture and for its demands for fiscal austerity from stricken euro-zone economies as the price of financial support. This stance has kept in place the underlying structural problems. It has also amplified deflationary forces by compelling fiscal austerity in crisis countries, and by forcing them to pursue deflation (so-called internal price devaluation) in an attempt to sustain demand via reducing imports and increasing exports.

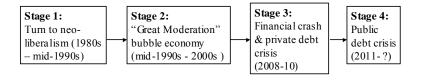
2.3 The role of the euro's neoliberal design:

One of the great difficulties in discussing the euro zone crisis is that it has taken the form of a public debt crisis. For both politicians and the general public appearance and correlation are taken as causation. As a result, government profligacy has become the "fall guy" for the crisis, and that has driven a push for fiscal austerity that has made the crisis worse.

The reality is the public debt crisis is just the latest phase of the crisis, rather than cause. Moreover, the reason there is a public debt crisis is the flawed institutional design of the euro. Figure 4 shows the sequence of the crisis beginning with the deep originating causes, moving to the "Great Moderation" period that generated financial exuberance and real estate bubbles in the euro zone, followed by the financial crash and the private debt crisis, and leading to the current situation of a public debt crisis. This is a complicated

sequence with a complicated transmission mechanism. That explains why it has been so hard to counter neoliberal populist rhetoric that government and welfare state profligacy is the cause of the crisis.

Figure 4. The causal sequence of the euro zone crisis.



In fact, as is shown later, the statistics are very clear on the non-role of fiscal excess. Except for Greece, the crisis countries (Greece, Ireland, Portugal, Spain, and Italy or GIPSI) exhibited a high degree of fiscal responsibility in the six years prior to the crisis. Indeed, they can even claim to have been more responsible than Germany. However, with the onset of the crisis in 2008 they all plummeted into large budget deficits. The message is not that they were fiscally irresponsible. Instead, it is that the economic model ruptured catastrophically and plunged them into budget deficit.

3. The complex mechanics of the euro zone's crisis

Rather than being the result of fiscal irresponsibility, the crisis is the product of the systems and policies put in place within the euro zone over the past thirty years. In the wake of an airplane crash the task is to find out what went wrong. That yields a parallel with the euro zone crisis where the task is to find out how and why the system failed.

3.1 Stage 1: the turn to neoliberalism as originating cause

The euro zone's crisis and current predicament is rooted in the past, and understanding the crisis therefore requires going back in the past. A critical feature is that important factors explaining today's predicament were established long ago. However, those factors were obscured by later developments.

The starting point for the story is the turn away from social democratic Keynesianism to neoliberalism, symbolized by the election victories of Margaret Thatcher in 1979 and Ronald Reagan in 1980. In continental Europe this turn was symbolized by French President Mitterand's 1983 policy U-turn.

The turn to neoliberalism changed the economic policy configuration by adopting a labor market flexibility agenda aimed at weakening worker bargaining power; having monetary policy focus on inflation instead of full employment; and imposing fiscal austerity central bank independence that aimed to shrink the social democratic state by financially constraining it.

In one form or another, this policy configuration was pushed throughout Europe. Though not explicitly expressed in such terms, the goal was to cow labor unions and redistribute income to capital. Analytically, the macroeconomic significance was it ruptured the link between productivity and real wage growth and worsened income distribution. That undermined the demand generation process, which in turn undermined employment growth. The neoliberal model therefore created a growing "structural demand gap" because the demand generation process weakened relative to the growth of potential output.¹

¹ The most vocal official proponent of the new economic policy strategy was the OECD. Its "Jobs Strategy" (OECD, 1994) exemplifies the labor market flexibility agenda. That agenda was supported by

Table 1 provides data on the wage share. From 1960 – 1981 the wage share was roughly constant, but after 1981 it began a precipitous decline that continued through to end of the last business cycle expansion in 2007. The far right column of Table 2 shows that between 1981 and 2010 the wage share declined 7.5 points of GDP in the EU-15; 9.4 points in France; 7.5 points in Germany; 10.2 points in Italy; and 11.9 points in Spain. Ironically, despite being viewed as the source of neoliberalism, the wage share in the U.K. and the U.S. has declined by less than in continental Europe and the U.K. has a far higher wage share.²

Table 1. Wage share as a percent of GDP.

	1960- 1970	1971- 1980	1981- 1990	1991- 2000	2001- 2010	1981	2010	Δ1981 -2010
EU-15	71.5	72.9	70.1	67.6	66.1	73.6	66.1	-7.5
France	74.1	74.3	72.3	67.3	66.6	76.7	67.3	-9.4
Germany	67.8	70.4	67.4	66.6	64.1	70.6	63.6	-7.0
Italy	72.5	72.2	68.7	64.6	62.1	71.3	63.1	-10.2
Spain	70.5	72.4	68.3	66.9	62.6	73.0	61.1	-11.9
U.K.	72.9	74.3	72.8	71.9	71.4	75.2	73.0	-2.2
U.S.	70.0	69.9	68.3	67.1	63.7	69.1	63.7	-6.3

Based on compensation per employee

Source: European Commission, ECFIN, Statistical Annex, Table 32, Autumn 2011.

Table 2 provides data on the evolution of the unemployment rate. The shift to neoliberalism in the early 1980s is accompanied by a large jump in the unemployment

almost the entirety of the economics profession and still is. It was contested by a handful of Keynesian economists.

² There are two caveats to this. First, there have been significant changes in the distribution of the wage share between workers and managers that has contributed to income inequality, and this managerial pay effect may have been worse in the US and UK. Second, the wage share is calculated using total compensation data, which includes fringe benefits such as health care. In the U.S. health care costs have risen astronomically so that workers have been forced to take compensation in the form of health insurance premiums. Moreover, on the basis of health and longevity data, those premiums appear to buy little in terms of additional health and longevity. These two factors tend to overstate the worker wage share in the US and the UK.

rate. In continental Europe the jump is permanent. In the US and the UK the unemployment rate backs down a little in the 1990s and 2000s, but as of 2010 it is back up and approximately the same as in continental Europe.

Table 2. Unemployment rate (%).

	1960- 1970	1971- 1980	1981- 1990	1991- 2000	2001- 2010	2010
EU-15	2.2	4.0	8.5	9.2	8.0	9.6
France	1.8	4.1	8.7	10.6	8.9	9.8
Germany	0.6	2.2	6.0	7.8	8.8	7.1
Italy	4.9	6.1	8.6	10.4	7.8	8.4
Spain	2.4	5.4	15.6	15.7	11.9	20.1
U.K.	1.7	3.8	9.6	7.9	5.6	7.8
U.S.	4.8	6.4	7.1	5.6	6.1	9.6

Based on compensation per employee

Source: European Commission, ECFIN, Statistical Annex, Autumn 2011.

Tables 1 and 2 provide an unambiguous and clear picture of the effects of the shift to neoliberalism. That picture rejects the claims of mainstream economists and confirms the analysis of Keynesian economists (Palley, 1998, 1999, 2004 [2006]; Baker et al. 2007) who have argued the neoliberal model worsens income distribution, undermines the aggregate demand generation process, and increases the unemployment rate.

3.2 Stage 2: Europe's "Great Moderation" and bubble economy

Europe's turn to neoliberalism in the early 1980s undermined the European economy so that it never fully recovered from the dislocations of the 1970s. The critical significance of the turn was that it set in train developments that persistently eroded the wage share and raised unemployment. That created (1) a growing structural demand shortage, and (2) a growing pool of unemployed. However, these two features were obscured in the 1990s and 2000s by developments associated with the introduction of the euro (see below)

which created a bubble economy, but they were not permanently solved. In effect, the bubble economy filled the demand gap but did not solve it. Consequently, with the implosion of the bubble economy the gap has come back to haunt Europe, which explains the baseline condition of stagnation.

In the 1990s and 2000s the contradictions of the neoliberal model were kept at bay and the unemployment rate actually came down in the 2000s. The reason is Europe, like the US, had a temporary "Great moderation" and bubble economy of its own that obscured the underlying trend to stagnation. The first temporary economic adrenaline shot came from German unification in 1990, which triggered a massive fiscal expansion to integrate the former East Germany. Table 3 shows the evolution of the German federal government's budget deficit. In 1989 the budget was in small surplus, but in 1990 it turned to deficit and the deficit then trended up for the next seven years, peaking at 3.4 percent of GDP in 1996. This generated large German fiscal stimulus that benefitted all of Europe since Germany is the largest economy in Europe.

Table 3. The German federal government budget outcome as a percent of GDP, 1989 – 1996.

	1989	1990	1991	1992	1993	1994	1995	1996
Budget	0.1	-1.9	-2.9	-2.5	-3.0	-2.3	-3.0	-3.4

Source: European Commission, ECFIN, Statistical Annex, Table 76, Autumn 2011.

The second temporary adrenaline shot came from the general lowering of interest rates that occurred during the 1990s, something that also happened in the US. This is illustrated in Table 4 which shows how the German long-term nominal interest rate, which proxies for the European safe rate, trended down strongly. In 1990 the long-term rate was 8.7 percent. In 1999 it was 4.5 percent. Moreover, after rising slightly at the end of the 1990s business cycle expansion, German long-term interest rates resumed their downward slide and bottomed at 3.4 percent in 2005. This decline benefitted all euro zone countries as their interest rates are effectively priced off the German rate, with premiums reflecting differences in credit risk relative to Germany.

Table 4. The German long-term nominal interest rate (%), 1990 – 2007.

		1990	1992	1994	1996	1999	2000	2001	2003	2005	2007
R	ate	8.7	7.8	6.9	6.2	4.5	5.3	4.8	4.1	3.4	4.2

Source: European Commission, ECFIN, Statistical Annex, Table 49, Autumn 2011.

The third temporary adrenaline shot came from the introduction of the euro and the resulting convergence of European long-term interest rates across countries. This convergence between European periphery (Greece, Ireland, Portugal, Spain, and Italy) and center (Germany) interest rates is shown in Table 5. The critical implication is that the periphery enjoyed a double interest rate boon, which delivered a double dose of economic adrenaline that spurred a massive long running real estate and construction boom in the GIPSI countries. First, it benefitted from the decline in the general level of

interest rates caused by the decline in German rates. Second, it benefitted from convergence between GIPSI country and German interest rates. This convergence is shown in the bottom row of Table 5 which reports the ratio of the average GIPSI long-term interest rate to Germany's long-term interest rate.

Table 5. Long-term nominal interest rates (%), 1996 - 2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Germany	6.2	5.7	4.6	4.5	5.3	4.8	4.8	4.1	4.0	3.4
Greece		9.9	8.5	6.3	6.1	5.3	5.1	4.3	4.3	3.6
Ireland	7.2	6.3	4.7	4.8	5.5	5.0	5.0	4.1	4.1	3.3
Portugal	8.6	6.4	4.9	4.8	5.6	5.2	5.0	4.2	4.1	3.4
Spain	8.7	6.4	4.8	4.7	5.5	5.1	5.0	4.1	4.1	3.4
Italy	9.4	6.9	4.9	4.7	5.6	5.2	5.0	4.3	4.3	3.6
GIPS I average	8.5	7.2	5.6	5.1	5.7	5.2	5.0	4.2	4.2	3.5
Ratio GIPS I/ Germany	1.37	1.26	1.21	1.12	1.07	1.08	1.05	1.02	1.05	1.02

Source: European Commission, ECFIN, Statistical Annex, Table 49, Autumn 2011.

However, even as these interest rate developments were spurring growth, there continued to be background developments that were undermining the euro zone's economic integrity. In particular, Germany was focused on increasing its competitive advantage via policies of wage repression and domestic demand suppression. The objective was to spur the economy by increasing German exports. This relative wage repression is shown in Table 6 which shows nominal compensation growth per employee. In Germany, especially after 2000, nominal compensation growth slowed dramatically relative to its euro country partners. This is shown in the bottom row which reports the ratio of German nominal compensation growth to average euro area twelve country compensation growth.

Table 6. Annualized growth of nominal compensation per employee (%).

	1991-2000	2001-2010
Germany	3.2%	1.1%
France	2.5	2.7
Greece	10.1	4.3
Italy	4.1	2.8
Ireland	4.9	4.1
Portugal	8.6	3.2
Spain	4.9	3.6
Euro area 12	3.5	2.4
Germany/EA-12	0.91	0.46

Source: European Commission, ECFIN, Statistical Annex, Table 29, Autumn 2011.

Table 7 shows country trade deficits and surpluses as a share of GDP, and it shows Germany was successful with its strategy of increasing its trade surplus. The German surplus jumps after 2000 and jumps again in 2004. Coinciding with this improvement in the German current account, the GIPSI countries experience a deterioration of their current account positions after 2004. The result of these developments was to drain demand from the periphery countries to the benefit of Germany. This did not matter as long as the financial and real estate boom continued so that credit was plentiful in the GIPSI economies. However, when the real estate bubble burst in 2008, it came home to haunt the euro zone as discussed below.

Table 7. Current account balances as percent of GDP, 2000 - 07.

	2000	2001	2002	2003	2004	2005	2006	2007
Germany	-1.8	-0.2	2.0	1.9	4.7	5.1	6.5	7.5
Greece	-12.0	-11.4	-12.7	-12.3	-10.5	-10.8	-13.0	-16.9
Ireland	-0.4	-0.5	-0.4	0.8	-0.1	-3.0	-3.7	-5.5
Portugal	-10.7	-10.6	-8.5	-6.7	-8.3	-10.4	-10.8	-10.2
Spain	-4.0	-4.3	-3.8	-4.0	-5.9	-7.5	-9.0	-10.0
Italy	-0.2	0.3	-0.3	-0.8	-0.4	-0.9	-1.5	-1.3

Source: European Commission, ECFIN, Statistical Annex, Table 44, Autumn 2011.

3.3 Stage 3: The unraveling of Europe's Great Moderation

Europe's Great Moderation economy came to an abrupt end in 2008 with the implosion of the U.S. sub-prime market and the collapse of Fannie Mae, Lehman Brothers and AIG. The unraveling of the bubble era economy has been far easier to understand in US. There, the financial crisis ended the asset price and consumer credit bubble that had filled the U.S. demand gap for two decades (Palley, 2009 [2011a], 2012). *Ex post*, the workings and flaws of the U.S. bubble economy relatively easy to see.

In Europe, the unraveling has been far more complex and difficult to understand. That has fostered misunderstanding and helps explain why the crisis is so widely and mistakenly seen through the lens of a public debt crisis. The first misunderstanding of the crisis came from Germany's Social Democratic Finance Minister, Peer Steinbrück, who immediately declared "The U.S. will lose its status as the superpower of the world financial system (September 25, 2008)." From Steinbrück's point of view the crisis was a purely American phenomenon to do with the American model; the European economy

was fine; and the euro zone stood to gain from the crisis. Such thinking could not have been more wrongheaded.

Moreover, a great irony is that though Germany has weathered the storm better than other European countries, its financial system was one of the first to feel the spreading shock waves of the global financial crisis. Thus, some of the earliest and largest European losses on U.S. sub-prime loans were felt by German banks. The first German banks to be hit with sub-prime investment losses were Sachsen LB and IKB Deutsche Industriebank which needed bailouts in 2007. By early 2009 massive losses had already been sustained by the major private label names in German banking (e.g. Deutsche Bank, Commerzbank, Dresdner Bank, and Hypo Real Estate) as well as the major landesbanks and co-operative banks (e.g. Bayern LB, West LB, and DZ Bank). The reason for this is simple. Germany was the country running the bulk of Europe's trade surplus so that U.S. and payments for German exports were therefore channeled significantly through German banks. They became large investors in the U.S. sub-prime bubble, thinking it offered easy high returns. That tied the German financial system to the U.S. financial system, made Germany an early victim of the U.S. financial crisis, and provided an initial financial transmission mechanism between the U.S. and Europe.

These financial losses were just a precursor. The reality was Europe's problems were deeper than just exposure to collateral damage from the U.S. financial crash.

Instead, Europe shared a common economic model with the US and the foundations of that model were built on sand. In both regions wage stagnation, worsening income distribution, and growing employment insecurity had contributed to a growing structural demand gap. However, in both regions this reality was obscured by financial

developments that plugged the gap via borrowing fueled by asset price inflation (especially real estate) and a twenty year long persistent decline in nominal interest rates. In the US, the demand gap was filled by an explosion in household borrowing fuelled by financial innovation and the house price bubble (Palley, 2009 [2011a], 2012). In Europe, the demand gap was filled by the cross-country nominal interest rate convergence promoted by the introduction of the euro. The important feature is both economic regions were destined to eventually hit stagnation owing to limits to artificially maintaining aggregate demand by borrowing, asset price inflation, and nominal interest rate reductions.

Though Minister Steinbrück claimed the crisis meant the end of dollar hegemony, the bitter irony is that the euro zone was in far worse structural shape and more vulnerable than the U.S. because of its flawed monetary system that had been implemented in the late 1990s with the creation of the euro. Despite the fact Europe had not enjoyed as robust a boom as the U.S. because it had pursued tighter monetary and fiscal policies, it was more vulnerable to the slump caused by the financial crisis because of its weaker institutional structure. First, unlike the U.S. Federal Reserve, the ECB is prohibited from acting as a government banker that finances euro-member country government deficits. Second, unlike the U.S., the euro zone lacks a federal fiscal policy aimed at macroeconomic stabilization of the entire region, in part via inter-country transfers that smooth differential impacts of business cycle shocks.

The fragility and vulnerability of the euro zone was quickly displayed in early 2009 when the U.S. Federal Reserve had to rescue the euro zone financial system via a series of non-market currency swaps arranged through the ECB. The bail-out was needed

because European banks had financed their massive involvement in the U.S. sub-prime and commercial property markets via short term dollar denominated borrowing, rendering them insolvent when the U.S. commercial paper market froze and banks were unable to roll-over borrowings. Though the Federal Reserve acted out of self-interest with the goal of preventing European banks defaulting on their U.S. counter-parts, it was still Europe that needed the rescue.

Finally, like the U.S., Europe also has its own trade imbalances that signify the need for relative price adjustment to facilitate restoration of full employment. However, here too Europe has found itself worse off. The U.S. has massive trade deficits with Europe and China. Europe has a trade surplus with the U.S., a trade deficit with China, and large internal trade deficits between Northern and Southern Europe. Whereas the U.S. trade deficit is with countries with different currencies (e.g. China, Japan, Mexico, Canada, Europe), the euro zone imbalances are between Germany and the GIPSI economies which are locked together in a currency union. That makes remedying the euro zone's imbalance far more difficult.

For the U.S., exchange rate depreciation can rapidly diminish the trade deficit, and thereby help stem the leakage from imports and investment diversion. For the euro zone, the Germany – GIPSI imbalance cannot be corrected in that way. Instead, either the periphery must undergo deflation relative to Germany, or Germany must undergo more rapid inflation relative to the periphery. Given high levels of domestic indebtedness, the former risks a cycle of destabilizing debt – deflation: the latter is opposed by German policymakers who have visceral resistance to inflation.

In sum, far from signaling the relative decline of the dollar, the crisis has been worse for the euro for three reasons: exposure of euro zone banks to the U.S. financial crisis; structural flaws within the euro's design; and the nature of the euro zone's internal trade imbalance. As a result, the crisis has imposed triple losses on the euro zone's financial system: losses from investments in the U.S.; losses associated with the bursting of Europe's own real estate bubble; and losses caused by the transformation of Europe's private sector debt crisis into a public sector debt crisis.

3.4 Stage 4: Public debt crisis as product of the euro's flawed neoliberal design

The striking feature about the crisis is that it started as a private sector debt crisis in both the U.S. and the euro zone. However, unlike the U.S., the crisis has jumped the line in the euro zone to become a public sector debt crisis. The fundamental reason for this difference is the euro zone's lack of a central bank that can act as government banker (Palley, 2011b [2011c]). This absence is due to the euro's flawed neoliberal design that prohibits the ECB from helping governments finance their deficits and manage their debts.

Tragically, this appearance as a public debt crisis has created a dangerous economic and political situation. That is because it has created space for neoliberal political elements to exploit the "appearance" and push for a doubling-down on the long-standing agenda of fiscal austerity and attack on the social democratic state.

It is easy to show that government debt and fiscal excess are not the cause of the crisis. Table 8 shows central government financial balances as a percent of GDP for the period 2000 – 11. It is striking for several reasons. First, Ireland and Spain both ran budget surpluses for much of the five year period (2002-07) before the crisis. Second, as

shown in the last line of Table 8, the GIPSI countries ran smaller average budget deficits than Germany from 2002 - 2005, and thereafter the deficit positions were quite similar. Third, the large increase in government deficits in the GIPSI countries only comes in 2008, which is when their budget deficits increase enormously relative to Germany as shown in the bottom row.

Table 8. Central government financial balances as a percent of GDP, 2002 - 11.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Germany	-3.6	-4.0	-3.8	-3.3	-1.6	0.3	0.1	-3.0	-3.3	-2.1
Greece	-4.8	-5.7	-7.4	-5.3	-6.0	-6.7	-9.8	-15.6	-10.4	-7.5
Ireland	-0.3	0.4	1.4	1.6	2.9	0.1	-7.3	-14.3	-32.4	-10.1
Portugal	-2.9	-3.1	-3.4	-5.9	-4.1	-3.2	-3.6	-10.1	-9.2	-5.9
Spain	-0.5	-0.2	-0.4	1.0	2.0	1.9	-4.2	-11.1	-9.2	-6.3
Italy	-3.0	-3.5	-3.6	-4.4	-3.3	-1.5	-2.7	-5.3	-4.5	-3.9
GIPS I average	-2.3	-2.4	-2.7	-2.6	-1.7	-1.9	-5.5	-11.3	-13.1	-6.7
GIPS I minus	1.3	1.6	1.1	0.7	-0.1	-1.6	-5.4	-8.3	-9.8	-4.6
Germany										

Source: OECD Economic Outlook 89 database, Annex Table 27.

The message from Table 8 is clear. Except for Greece, the GIPSI countries exhibited a high degree of fiscal responsibility in the six years prior to the crisis, and it is only with the onset of the crisis in 2008 that they plummeted into large budget deficits. The message is not that they were fiscally irresponsible. Rather, the message is that the model broke catastrophically and plunged them into budget deficit. Moreover, when the model broke it broke asymmetrically, plunging the GIPSI economies into massive deficit while Germany suffered much smaller increases in its budget deficit.

Table 8 begins the task of demystifying the euro zone's crisis and why it has taken the shape of a public debt crisis. It definitively rules out fiscal irresponsibility. The

true culprit is the design of the euro. How that design has created a public debt crisis is explained below.

The euro was introduced in 1999 which marked the high water mark of neoliberal economics. The neoliberal political project aimed to diminish the role of the state and enhance the power of the market. This goal is reflected in neoliberal monetary theory that guided the design of the euro. The theory argues the role of the central bank is to control inflation and the exchange rate, but there should be complete separation between the central bank and government finances.

By adopting this theory, the euro's architects intentionally changed the monetary – fiscal balance. Previous national monetary systems ensured "fiscal dominance" whereby central banks served governments. The new euro system instituted "central bank dominance" whereby governments were stripped of access to their own central bank that could help them finance budget deficits and manage interest rates on government debt.

How did the euro do this? It did so by creating a "detached" central bank. The concept of a "detached central bank" is fundamentally from an "independent central bank". A detached central bank is prohibited from buying government debt. An independent central bank distances its decision making from government, but it is allowed to purchase government debt. Both the Federal Reserve and the Bank of England are significantly independent but they are not detached. The ECB is detached by design.

The old national banking systems made European governments masters of the bond market. The euro's architecture makes bond markets master of national governments. Under the old system of national money central banks played a key government banker role by helping manage the government debt and finance spending,

including financial sector rescues. The euro's neoliberal architecture cheats euro zone countries of such assistance.

This can be seen by comparing euro zone country experience with the U.S. and U.K. Tables 9 and 10 show country budget deficits and interest rates for the period 2002 – 2011. Spain was especially fiscally responsible before the crisis, and after the onset of the crisis Spain and Italy have run smaller deficits as a share of GDP than the U.S. and the U.K. This is despite the fact that they have been forced to pursue policies of austerity that have caused deeper recession which has lowered GDP (i.e. the denominator). Yet despite this tighter fiscal policy, Spain and Italy have both had to pay higher long term interest rates – and the differential worsened in 2012. The data clearly show this has nothing to do with so-called "fiscal responsibility" and everything to do with the fact Spain and Italy do not have a national central bank that they can call on to lower rates.

Table 9. Central government financial balances as a percent of GDP, 2002 - 11.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Italy	-3.0	-3.5	-3.6	-4.4	-3.3	-1.5	-2.7	-5.3	-4.5	-3.9
S pain	-0.5	-0.2	-0.4	1.0	2.0	1.9	-4.2	-11.1	-9.2	-6.3
U.K.	-2.0	-3.7	-3.6	-3.3	-2.7	-2.8	-4.8	-10.8	-10.3	-8.7
U.S.	-4.0	-5.0	-4.4	-3.3	-2.2	-2.9	-6.3	-11.3	-10.6	-10.1

Source: OECD Economic Outlook 89 database, Annex Table 27.

Table 10. Long-term nominal interest rates (percent), 2002 - 11.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Italy	5.0	4.3	4.3	3.6	4.0	4.5	4.7	4.3	4.0	4.8
Spain	5.0	4.1	4.1	3.4	3.8	4.3	4.4	4.0	4.2	5.3
U.K.	4.9	4.5	4.9	4.4	4.5	5.0	4.6	3.6	3.6	3.8
U.S.	4.6	4.0	4.3	4.3	4.8	4.6	3.7	3.3	3.2	3.5

Source: OECD Economic Outlook 89 database, Annex Table 35.

Had the U.S. and the U.K. been subject to the same institutional constraints they too would have experienced public debt crises. However, because they have central banks that can act as government banker they have avoided this. Instead, the Federal Reserve and Bank of England have lowered interest rates to near zero; have helped finance private sector financial bailouts; and have helped finance budget deficits at rock bottom interest rates.

GIPSI countries have had none of this assistance. Instead, Spain which had a fiscal position that was not so different from the U.S. and U.K., has found its bonds are under attack. The euro's architecture meant it was without a central bank to defend the government, leaving its bond market open to speculative attack.

The problem of bond market attack is easy to understand if one thinks of a multiple equilibrium model of the bond market. A country can be subject to speculative attack that causes interest rates to jump which can trigger a self-fulfilling cycle. That is because higher interest rates raise the burden of debt, making it more likely the

government will default, which then justifies high interest rates. The flaw in the euro system is the ECB is not supposed to intervene in the bond market on behalf of specific governments under speculative attack.³ Without a central bank, governments are reduced to the same bond market standing as provinces and large corporations – which is exactly what the euro's neoliberal architects intended.

4. What is the role of Germany's euro zone trade surplus?

In the wake of the crisis, one view that has gained increasing prominence is that the euro zone is suffering from a classic balance of payments crisis – albeit one that is taking place within the contours of a currency union. This view has been popularized by Martin Wolf (2011), the prominent economics correspondent of *The Financial Times*:

"The fundamental difficulty throughout has been the failure to understand the nature of the crisis...As Thomas Mayer of Deutsche Bank notes, "below the surface of the euro area's public debt and banking crises lies a balance-of-payments crisis caused by a misalignment of internal real exchange rates." The crisis will be over if and only if weaker countries regain competitiveness."

The balance of payments crisis interpretation has also been embraced by Paul Krugman (2012):

"As a consequence of these inflows, costs and prices rose, manufacturing became uncompetitive, and nations that had roughly balanced trade in 1999 began running large trade deficits instead...If the peripheral nations still had their own currencies, they could and would use devaluation to quickly restore competitiveness. But they don't, which means that they are in for a long period of mass unemployment and slow, grinding deflation."

In effect, this balance of payments crisis interpretation blames Germany and satellite northern euro zone economies (Austria, Belgium, and the Netherlands) for the crisis. The argument is that Germany's export-led growth model predicated on wage repression

³ This was the initial position of the ECB at the onset of the crisis, though that position has softened considerably over the course crisis. The ECB now seems willing to intervene when speculation threatens the integrity of the euro. That is an improvement, but it is a long way away from an optimal position that has the central bank act as government banker.

hollowed out GIPSI economies by creating trade deficits that made those countries vulnerable. It also worsened income distribution within Germany and undermined German domestic demand, thereby undercutting an important support of the European economy.⁴

Whereas the evidence (see Tables 6 and 7) is clear that Germany has engaged in wage repression and export-led growth that has suppressed German domestic demand and prejudiced the wider European economy, that does not mean this is the cause of the crisis. Instead, the structural balance of payments problem that now grips Europe is the dog that barked after the crisis.

Some micro evidence that the balance of payments did not cause the crisis is provided by Table 7. Italy and Ireland are both crisis countries. However, Table 7 shows that Italy's trade deficit on the eve of the crisis was a very manageable 1.3 percent of GDP. Ireland's deficit was larger at 5.5 percent of GDP, but in prior years it had been much smaller and only jumped to unsustainable levels in 2007.

Instead, the current account deficits that built up in the years preceding the crisis reflect how the GIPSI countries benefitted during the period of Europe's "Great Moderation" from low interest rates and easy finance. In effect, the Great Moderation period had the crisis countries trade real estate assets in exchange for goods. When the flow of money chasing real estate dried up, the model blew up and the real estate bubble burst, sending real estate asset prices into reverse. A consequence of that blow-up was

⁴ Bibow (2012) provides a detailed argument in favor of the hypothesis that the euro zone crisis is a balance of payments manufactured by Germany.

⁵ The U.K. can be viewed as having operated on a similar type of model for decades. In the U.K.'s case, it involves gradually selling central London and leading British firms (e.g. Cadbury and ICI) to foreign nationals and foreign corporations.

also a domestic banking crisis, but its effects have been largely contained by government and ECB support for the banking sector.

At this stage, the GIPSI economies are held back by demand shortage. Though bank lending is down, it is not because of lack of supply of finance, but rather because of lack of credit demand combined with bankers' fears about the quality of credit demand. The private sector is burdened by accumulated debt and deteriorated income distribution, while the public sector is burdened by fiscal austerity resulting from the flawed design of the euro.

What then is the role of the euro zone's internal balance of payments disequilibrium? Its significance is not that it caused the crisis, but rather that it now constitutes an additional impediment to escaping the crisis. The impediment is threefold. First, Germany's wage repression continues to undermine demand in Europe's largest economy at a time when demand shortage is Europe's pressing problem. Second, the structural trade deficit drains demand from the euro zone's crisis countries, further undermining their economies. Third, by undermining crisis country economies, the trade deficits worsen their budget deficits at a time when the market, the ECB, the IMF, and the European Commission are pushing for deflationary fiscal consolidation. That worsening of budget positions reinforces demands for fiscal austerity, which only worsens Europe's demand shortage. It is easy to mistake these balance of payments related impediments as causes of the crisis when they are after the fact factors.

5. What should be done?

The above diagnosis of the causes the euro zone crisis paves the way for prescription.

This section identifies a four part program for escaping the crisis and restoring European full employment with shared prosperity.

(1) The first critical component is the reversal of Europe's turn to neoliberalism that occurred thirty years ago. Earlier, the paper described the neoliberal growth model in terms of a policy box that pressures workers from all sides. The way forward is to replace the neoliberal box with a structural Keynesian box (Palley, 2009 [2011a], 2012) that repacks the policy box as illustrated in Figure 5. The critical feature is to take workers out of the box and put corporations and financial markets in so that they are again made to serve a broader public interest. The key elements are to replace corporate globalization with managed globalization; restore a commitment to full employment; replace the neoliberal anti-government agenda with a social democratic government agenda; and replace the neoliberal labor market flexibility with a solidarity based labor market agenda. The critical goals are restoration of full employment and restoration of a solid link between wage and productivity growth.

Figure 5. The structural Keynesian Box.



(2) The second critical element is to reform the euro's design. The euro is a good idea because it provides transaction and pricing efficiencies, and it also solves the problem of exchange rate speculation which was historically a very serious for European economies because they are small and open. The problem is the ECB is prohibited from acting as government banker for individual member countries. That prohibition is appropriate as the ECB should not give special treatment and intervention subsidies to individual countries. Doing so could establish dangerous incentives as countries would have an incentive to engage in populist fiscal policy, knowing the ECB would come to the rescue. And that would result in monetary instability.

The challenge is to design a system in which the ECB helps finance and defend governments, but without incentives for country fiscal irresponsibility. My proposed solution (Palley 2011b [2011c]) is a new public finance architecture that includes the creation of a European Public Finance Authority (EPFA) which would issue European bonds jointly and severally backed by all member countries. The critical feature that distinguishes this proposal is the ECB would have the right to buy and sell EPFA bonds. The EPFA would work as follows. (i) It would have the right to sell new EPFA bonds at its discretion. (ii) All bond proceeds would be paid directly to national governments. (iii) The ECB would have the right to buy and sell EPFA bonds. (iv) EPFA would be governed by finance ministers of euro zone member countries, representing their national governments. (v) Voting rights within the EPFA would be allocated on a per capita basis. (vi) Distribution of bond proceeds would also be on a per capita basis, as would payment of debt interest. In effect EPFA would serve as a trust entity with regard to bond issues,

receiving interest service from countries, and distributing interest payments to bond holders.

The important feature of EPFA is that it would create a European bond without any trace of national identity so the ECB favors none. EPFA bonds can then be legitimately traded by the ECB. That creates the space for open market operations and allows the ECB to take on the role of government banker for Europe, which fills the missing feature in the current institutional set-up. EPFA would be able to help finance annual budget deficits for countries and annual bond issues could vary with the state of the overall Euro zone economy. All member countries would receive payments on a per capita basis. Countries that received payments in excess of their own needs could retire their own sovereign debt or build up a sovereign wealth fund by acquiring the national debt of other countries.

In this fashion, an ECB – EPFA system would give back the euro zone a policy architecture similar to that enjoyed by the U.S. and U.K. The ECB would be responsible for monetary matters including interest rates. It would also retain responsibility for exchange rates. The EPFA would have responsibility for issuing euro zone bonds. All spending decisions would remain entirely in the hands of national governments as proceeds from bond sales would be paid to governments.

(3) The third critical element is to reverse Germany's model of export-led growth based on wage repression. Germany is the largest most prosperous economy in Europe. Instead of seeking to be pulled along by the euro zone and the global economy, it must become a locomotive for growth. Doing so requires Germany shift to a domestic demand-led growth strategy. That requires both real and nominal wage growth. Real wages must

grow with productivity, and there is also room to increase real wages to reverse some of the increase in profit share over past thirty years. Higher nominal wages are needed so that Germany reduces the competitive pressure and drain of demand on Europe's crisis countries. Rather than having the crisis countries gain competitiveness via price deflation, Germany should instead raise its prices. That achieves relative price adjustment without deflation which would trigger destructive debt-deflation dynamics.

(4) The final piece of the program is coordinated European fiscal expansion and real wage determination. In many regards, European economic integration is akin to globalization as it unifies economies with different characteristics and different levels of development. This process of unification can easily unleash "race to the bottom" dynamics whereby countries seek to gain competitive advantage in unified product and service markets via adverse competition.

Such adverse competition can take a host of the forms including tax competition that favors capital income and prejudices labor income; suppression of labor, environmental, and regulatory standards; suppression of government social and educational spending; suppression of public investment; and wage repression. All of these features have been visible in the process of globalization, and they have also been present in the European integration project. This has contributed to Europe's demand problem by fostering wage stagnation and increased income inequality. It has also undermined the political willingness of countries to regulate capital for fear of deterring investment.

Restoring European shared prosperity requires putting in place institutional arrangements that block these adverse competitive dynamics. In particular, there is need

for increased fiscal coordination to prevent an austerity race to the bottom, and increased wage bargaining coordination that harmonizes wage increases in an upward direction. A European minimum wage system (Palley, 2011d) can play an especially critical role with regard to this latter need.

6. Conclusion; where next?

To conclude, Europe was long headed for economic stagnation because of its embrace of the neoliberal economic model that undermined the income and demand generation process. That stagnation was serially postponed by a number of developments including the stimulus from German re-unification and the low interest rate convergence produced by creation of the euro. The latter prompted a ten year credit and asset price bubble that created fictitious prosperity, particularly in the GIPSI countries.

However, postponing stagnation in this fashion has had costs since it worsened the ultimate stagnation by creating a large build-up of debt that now over-hangs the economy. Additionally, the creation of the euro, which also helped postpone stagnation, has left behind a flawed monetary system that fosters public debt crisis and the political economy of fiscal austerity. Lastly, during this period of postponement, Germany sought to avoid stagnation via export-led growth based on wage repression. That has created an internal balance of payments problem within the euro zone that is a further impediment to resolving the crisis.

There is a way out of the crisis. It requires replacing the neoliberal economic model with a structural Keynesian model; remaking the European Central Bank so that it can act as government banker; having Germany replace its export-led growth wage suppression model with a domestic demand-led growth model; and creating a pan-

European model of policy and wage coordination that blocks off race to the bottom tendencies within Europe.

Countries, particularly Germany, can implement some of this agenda on their own. But much of this agenda must be implemented collectively, either because countries are now locked into institutional arrangements (such as the euro) or because markets threaten to punish individual countries that try to go it alone. This makes change enormously difficult because political consensus that borders on near unanimity is needed. Moreover, the war of ideas in favor of such reforms has yet to be won.

Consequently, both politics and the ruling intellectual climate make success unlikely.

Europe confronts three possible future scenarios. By far the most likely is prolonged stagnation with on-going bursts of mini-crisis that compel policymakers to make small reforms which are just enough to preserve the euro. By far the least likely is that policymakers enact the type of reform program described above that can restore full employment with shared prosperity. The third scenario, with an in between likelihood, is that Europe is hit by a political or economic "black swan" event that leads to country exit from the euro, causing it to shrink or disintegrate completely. This last scenario would likely be very economically disruptive and costly.

References

- Baker, D., Glyn, A., Howell, D., and Schmitt, J. (2007), "Are protective labor market institutions at the root of unemployment? A critical review of the evidence," *Capitalism and Society*, 2 (1), 1-71.
- Bibow, J. (2012), "The euro debt crisis and Germany's euro trilemma," Working paper No. 721, Levy Economics Institute of Bard College, Annandale-on-Hudson, New York.
- Krugman, P. (2012), "What ails Europe?" New York Times, February 26.
- Palley, T.I. (1998), "Restoring prosperity: Why the U.S. model is not the right answer for the U.S. or Europe," *Journal of Post Keynesian Economics*, 20 (Spring), 337-54.
- Palley, T.I. (1999), "The myth of labor market flexibility and the costs of bad macroeconomic policy: U.S. and European unemployment explained," in S. Lang, M. Mayer, and C. Scherr (eds.), *Jobswunder U.S.A.*, Munster: Westfalisches Dampfboot.
- Palley, T.I. (2004, [2006]), "The causes of high unemployment: Labor market scelerosis versus macroeconomic policy," in Stanford and Vosko (eds.), *Challenging the Market: The Struggle to Regulate Work and Income*, McGill-Queens University Press, Montreal & Kingston: Canada. Also published as "The causes of high unemployment: Labor market scelerosis versus macroeconomic policy," in Hein, Heise and Truger (eds.), *Wages*, *Employment, Distribution and Growth*, Palgrave/Macmillan: London, 2006, 20 48.
- Palley, T.I. (2009, [2011a]), "America's exhausted paradigm: Macroeconomic causes of the financial crisis and Great Recession," New American Contract Policy Paper, New America Foundation, Washington, D.C., July 22. Shortened version published as "America's flawed paradigm: Macroeconomic causes of the financial crisis and Great Recession," *Empirica*, 38 (1), 3 17.
- Palley, T.I. (2011b, [2011c]), "The European Union needs a government banker," *Challenge*, 54 (July-August), 5-21. Also published as "Monetary union stability: The need for a government banker and the case for a European Public Finance Authority," *WSI Mitteilungen*, 6, 297 303.
- Palley, T.I. (2011d), "A global minimum wage system," *Financial Times Economists'* Forum, July 18.
- Palley, T.I. (2012), From Financial Crisis to Stagnation: The Destruction of Shared Prosperity and the Role of Economics, Cambridge: Cambridge University Press.
- Wolf, M. (2011), "Thinking through the unthinkable: Fundamental difficulty has been failure to understand the crisis," *Financial Times*, November 8.

Publisher: Hans-Böckler-Stiftung, Hans-Böckler-Str. 39, 40476 Düsseldorf, Germany **Phone:** +49-211-7778-331, IMK@boeckler.de, http://www.imk-boeckler.de

IMK Working Paper is an online publication series available at:

http://www.boeckler.de/imk_5016.htm

ISSN: 1861-2199

The views expressed in this paper do not necessarily reflect those of the IMK or the Hans-Böckler-Foundation.

All rights reserved. Reproduction for educational and non-commercial purposes is permitted provided that the source is acknowledged.

