



Levy Economics Institute of Bard College

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# ***Public Policy Brief***

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## **FISCAL TRAPS AND MACRO POLICY AFTER THE EUROZONE CRISIS**

GREG HANNSGEN and DIMITRI B. PAPADIMITRIOU

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## Preface

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This policy brief reflects our unambiguous preference for a Keynesian response to the challenges facing the US economy. This should come as no surprise—we are Keynesians. Specifically, this brief speaks to a troubling question in US economic policy: why does the United States continue to pursue economic policies that have been shown to fail? It is an effort to correct, by recourse to fact and reason, the present misunderstanding of three crucial points; namely, the results of European austerity to date, the differences between economies whose currencies are constrained versus sovereign-currency countries, and the consequences of federal spending cuts in the present economic environment. It is our hope that this policy brief will discourage US policymakers from following the path of European austerity and thus avoid the looming fiscal cliff.

Research Scholar Greg Hannsgen and I find the prospect of budget cuts in the United States both remarkable and troubling given the results of fiscal austerity in the eurozone and the UK. At this writing, the United States is poised to embark on \$500 billion in spending cuts—a choice with such devastating consequences that it has come to be associated with the term “fiscal cliff.” If these cuts are allowed to occur, the Congressional Budget Office predicts a recession for the US economy in 2013. Yet the demand to “live within our means” continues to garner support. We offer the following as a rebuttal, and hopefully an antidote, to those who insist that cutting the deficit is the only path to economic recovery.

First, we examine how the eurozone countries have fared under austerity. In short: not well. Most European economies remain well below their historical growth rates. Austerity has brought pain but no relief to the eurozone. The countries in the eurozone periphery have cut spending by double digits, but these economies lead Europe in unemployment. The results of austerity in the eurozone cannot be the reason the United States intends to follow suit with its planned spending cuts.

Perhaps the demand for a European-inspired round of American austerity policies is the result of misunderstanding

how economies enter into an ever-increasing spiral of revenue shortfalls, spending cuts, rising deficits, and higher borrowing costs. To explain this process, we offer a model of what we have named the “fiscal trap”—a cycle of mutually reinforcing forces that takes an economy from an initial position of weakness to the level of economic distress seen in the eurozone periphery. We take pains to show that there is a way for countries that control their own currency to escape this trap.

We focus our concluding remarks on the misguided, and potentially dangerous, budget sequester that threatens to remove half a trillion dollars from the US economy. The fiscal cliff is not inevitable; rather, it is a choice between two very different economic futures for the United States. Choosing the fiscal cliff, and the fiscal trap that may follow, has drawn widespread condemnation from a diverse group of economists. We add our voices to the call to repeal the budget sequester. American austerity is precisely the wrong policy at precisely the wrong time.

As always, I welcome your comments.

Dimitri B. Papadimitriou, *President*

October 2012

## The Eurozone’s Fiscal Crisis and the Fiscal Trap that May Await the United States in 2013

The United States must make a fundamental choice in its economic policy in the next few months, a choice that will shape the US economy for years to come. Pundits and policymakers are divided over how to address what is widely referred to as the “fiscal cliff,” a combination of tax increases and spending cuts that will further weaken the domestic economy. Will the United States continue its current, misguided, policy of implementing European-style austerity measures, and the economic contraction that is the inevitable consequence of such policies? Or will it turn aside from the fiscal cliff, using a combination of its sovereign currency system and Keynesian fiscal policy to strengthen aggregate demand?

Our analysis presents a model of what we call the “fiscal trap”—a self-imposed spiral of economic contraction resulting from a fundamental misunderstanding of the role and function of fiscal policy in times of economic weakness. Within this framework, we begin our analysis with the disastrous results of austerity policies in the European Union (EU) and the UK. Our account of these policies and their results is meant as a cautionary tale for the United States, not as a model.

Europe followed the United States into an economic and financial crisis several years ago, and, with negative growth in the

**Table 1** Change in the Cyclically-adjusted General Government Fiscal Balance, 2009 to 2014 (in percent of potential GDP)

| Country        | Change in Fiscal Balance (in percent) |
|----------------|---------------------------------------|
| Greece         | 17.1                                  |
| Ireland        | 11.0                                  |
| Portugal       | 9.7                                   |
| Spain          | 8.0                                   |
| United Kingdom | 7.3                                   |
| Italy          | 4.7                                   |
| France         | 3.3                                   |
| Netherlands    | 1.2                                   |
| Germany        | 0.6                                   |

Source: IMF 2012, 64; values sorted from largest to smaller by the authors

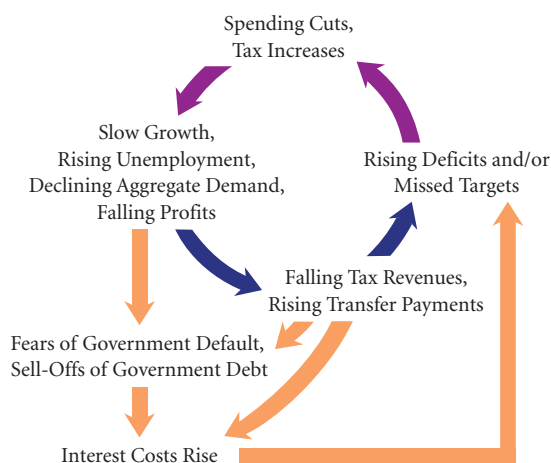
second quarter of 2012, is slipping back into recession. Media accounts frequently point out that fiscal austerity—prescribed as an economic cure—is exacerbating macroeconomic woes. Austerity has been enforced by bailout agreements with three countries—Greece, Ireland, and Portugal—as well as eurozone deficit and debt rules. However, the roots of the European crisis lie in numerous factors not directly related to fiscal policy, especially financial instability. Austerity policies can only make a recession worse, as government layoffs and wage cuts undermine already-weak consumer demand, investment, and tax revenues. The United States continues to face a fundamental choice in how it will restore growth to its economy: austerity or fiscal stimulus.

The “fiscal crisis” began when Greece, Ireland, and Portugal approached default in 2010. The specter of default gave rise to a worrying trend toward fiscal austerity across the eurozone. A report issued by the International Monetary Fund (IMF) in April 2012 projects the following changes in fiscal policy for the five-year period ending in 2014. Table 1 summarizes the change in the cyclically adjusted fiscal balance for each country. In other words, it compares old fiscal policies with new ones, with other things—such as the state of the economy—held constant. Also, the figures in the table refer to the *primary* balance, which does not include net interest payments. The projections are on the low side, at least for the cases of Greece and Portugal, which in fact have already reached the stated amounts of tightening this year—two years earlier than the projections suggest.

Clearly, fiscal policy is tightening drastically throughout Europe, a situation that has been the subject of much controversy (Jones and Cohen 2012). Meanwhile, and not coincidentally, unemployment in the eurozone has reached record levels. In Greece and Spain, overall unemployment rates are currently 25.1 percent and 24.4 percent, respectively, with rates for youth exceeding 50 percent in both countries.

The current situation in Europe involves a self-defeating cycle of tight fiscal policies and low growth rates. Critics of eurozone institutions and policies have highlighted the costs of fiscal tightening for many years (e.g., see Kregel [2012, 3–4] and Papadimitriou and Wray [2012, 2]).<sup>1</sup> We call this cycle of fiscal reduction and economic contraction a “fiscal trap” to emphasize its self-reinforcing dynamics. Though the concept of a fiscal trap is not new,<sup>2</sup> our version of this concept differs greatly from orthodox accounts of recent economic crises around the world.<sup>3</sup> Let us elaborate our most basic model of a fiscal trap, which can apply to many types of monetary systems.

**Figure 1 A Fiscal Trap Can Be Made Worse by the Lack of a Sovereign (“Fiat”) Currency (e.g., Greece in 2009?)**



The basic trap is a cycle that moves from a decline in demand to falling tax revenues, which in turn engender spending cuts and tax increases. Spending cuts and tax increases undercut the economy further, and the cycle continues. The basic trap is illustrated by the four dark arrows at the top and center of Figure 1.

The upper pair of dark arrows in the figure illustrates “fiscal drag,” a related concept. In the context of mainstream US Keynesian policymaking, fiscal drag refers to the perverse tendency (from the perspective of good countercyclical policy) of tax revenues, and therefore government spending, to move in the same direction as economic growth when a government tries to maintain a balanced budget each fiscal year—as, for example, most US state governments are constitutionally required to do. In much of the rest of the world, similarly ill-timed spending cuts and tax increases have often happened because of the imposition of austerity measures. Deep spending cuts and/or tax increases have been required by international institutions—such as the European bailout “troika” comprising the IMF, the European Central Bank (ECB), and the EU—when government finances were spinning out of control.

The downward pressure on fiscal stimulus exerted by a politically motivated aversion to deficits is shown in Figure 1 in the movement from rising deficits to spending cuts and increased taxes. The effects of such reductions include slow growth, rising unemployment, declining aggregate demand, and falling profits.

However, as shown by the lower pair of dark arrows, low or negative growth feeds back into the vicious cycle of the fiscal trap by reducing government tax revenues, raising expenditures on transfer programs, and hence increasing fiscal stress, completing the basic trap.

The point of illustrating the basic fiscal trap is to highlight the strong need for temporary stimulus packages in times of negative or slow growth, as well as the need for permanent “automatic stabilizers.” Stabilizing government policies include means-tested benefits—such as unemployment insurance and food stamps in the United States<sup>4</sup>—and progressivity in the tax code.<sup>5</sup>

The full fiscal trap, on the other hand, also includes the forces illustrated by the light-colored arrows in Figure 1. These arrows describe the part of the trap that owes its existence to the faulty unified currency system, though this part would exist and work the same way in any other “sound money” system, including a gold-backed currency.

The light-colored arrows in Figure 1 show the effects of ongoing fiscal and economic troubles on the costs of financing debt in what is known in the literature as a metallist system. “Fears of Government Default, Sell-Offs of Government Debt” and “Interest Costs Rise” are two consequences of the cycle, and both are the result of “Falling Tax Revenues, Rising Transfer Payments.” Fear of government default is a result of a weak economy and the markets’ view of sovereign creditworthiness. The rise in interest costs is an effect of increases in both interest rates and principal. Finally, Figure 1 depicts the effects of increasing debt-service payments on the deficit itself; that is, higher payments to creditors raise total government outlays (see the arrow from “Interest Costs Rise” to “Rising Deficits and/or Missed Targets”). The question of how to escape the fiscal trap is broadly answered by two competing perspectives: metallism and chartalism.

While well known to macroeconomists, other readers may appreciate a clarification of the terms.<sup>6</sup> The “metallist” approach to solvency views the money supply as constrained by some exogenous condition. Money is based on something that has a limited supply, either because it is based on something physical (such as gold) or because of some constraint on the government’s ability to issue liabilities (e.g., balanced budget laws, the Maastricht regime, or an inflexible exchange rate target). In contrast, chartalists do not see the money supply as intrinsically constrained. This freedom allows fiscal policy to be guided only by an imperative to maintain full employment—without, of course, spurring excessive inflation. Hence, the chartalist perspective regards

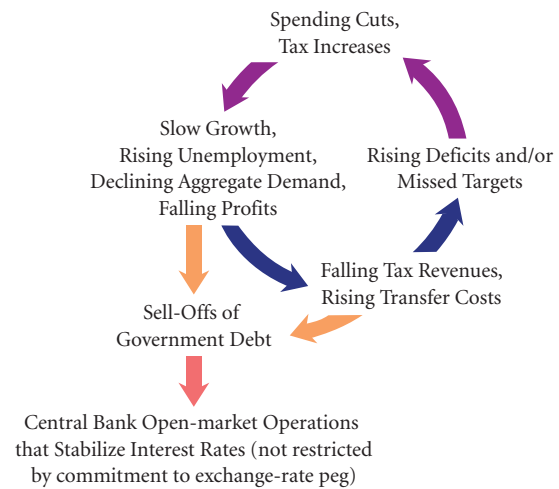
solvency as a nonissue for governments that possess a sovereign currency, with the understanding that they must permit their exchange rates to vary freely. These two perspectives define very different approaches to economic recovery, as is evident in the discussion that follows.

In our interpretation of the European fiscal trap, the eurozone’s metallist monetary institutions play a crucial role, turning a basic trap into a full trap. Some of the more orthodox voices—for example, the Congressional Budget Office (CBO 2010), the IMF (2012) and the *New York Times* (see McClain 2011)—have underestimated or ignored the special handicap faced by national governments that are forced to operate with one hand tied behind their back; namely, their power to create “state money.” In other words, eurozone metallists and like-minded orthodox commentators imagine that the complete analysis shown in Figure 1 is equally applicable to all nations with sovereign debt, including “sovereign currency” countries such as Canada, Japan, the United States, and the UK.

In lumping the United States together with a number of very different cases, the mainstream account of the fiscal trap thesis assumes that fiscal problems common in metallist monetary systems—including default—are equally likely to trouble chartalist ones. It argues that yields on government bonds tend to rise continually once borrowing reaches certain limits. As recent Levy Institute work demonstrates, this is false.<sup>7</sup> Central banks in countries with sovereign currencies and flexible exchange rates use open market operations to keep short-term interest rates stable,<sup>8</sup> and can even, given enough time, consistently hit a target for long-term yields.<sup>9</sup> The United States has effectively managed its debt in the past, and there is no indication that it will fail to do so in the future.

The US Federal Reserve effectively set rates on longer-term Treasury debt during the late 1940s and early 1950s. The Fed has exerted a great deal of influence over many longer-term rates since it resumed buying large amounts of notes and bonds, especially in QE1, QE2, the new “Operation Twist” (which involves purchases funded by sales of shorter-maturity securities), and the recently announced QE3. The Fed’s strategy to keep long-term rates low has led to record-low average home mortgage interest rates, albeit under much tighter lending standards than in the recent past. Figure 2 highlights the way that such central bank operations ensure that governments in sovereign-currency nations can “escape” the full-trap mechanism shown in Figure 1. Instead of allowing the fiscal trap to bleed an economy indefi-

**Figure 2** With a “Sovereign” or Fiat Currency and Flexible Exchange Rate, the Debt-service Part of the Trap Is Avoided and the Policy Flaw Is Fiscal (e.g., UK in 2012)



nately, central banks use open market operations to stabilize interest rates and control the cost of servicing debt. The cycle of the full fiscal trap is broken.

Providing solvency in times of economic weakness is a traditional, even ancient, role of central banks. Central banks ensure that central governments can make all of their scheduled payments on debt denominated in their own currencies and at the same time permit their monetary authorities to set interest rates at desired levels.<sup>10</sup> This is both a prudent and a proven system, but its distinctive workings are sometimes forgotten in times of economic turmoil.

### **Fiscal Austerity: Is the United States Next to Fall into a Trap?**

In the United States, the federal government faces a problem of tightening fiscal policies and slowing growth that increasingly resembles the situation in the eurozone. Republican vice presidential candidate Paul Ryan is known for touting a gold-backed national currency. This idea was adopted as part of the official platform of the Republican Party at the party’s national convention in Charlotte. Like unified currency proposals, this is simply a metallist approach that ignores both history and prudent economic policy.

Not a single metallist approach has stood the test of time in any country that has adopted it. Adopting a metallist policy

might well lead the United States to a fate similar to that of Greece, Ireland, Portugal, and other countries in the eurozone periphery; namely, default on sovereign debt, an unthinkable event under the current unbacked sovereign-currency system. In fact, following a statement by ECB President Mario Draghi that the bank would do “whatever it takes” to check rising interest yields on the debt of “peripheral” eurozone nations, the ECB has moved closer to a role as a Fed-like interest-rate stabilizer, albeit with numerous strings attached to its commitment in the form of a fiscal “pact” (Steen, Fontanella-Khan, and Stothard 2012). As of this writing, these policy moves have greatly reduced the cost of borrowing for the Spanish and Italian governments. It seems that even the ECB is unwilling to cleave to a strictly metallist approach in its policies.

Loudly echoing European economic orthodoxy (i.e., metallism), many US observers frequently misconstrue the big issue facing the economy as merely the failure to control spending, which leads to their repeated calls for “reforms” of government finances. In fact, total US government spending has been falling as a percentage of GDP, while the total number of employees on government payrolls has been declining in absolute numbers. This indicates that deficits have a great deal to do with tax revenues. The sharp decline in tax revenues is mostly due to the recession, the financial crisis, and the subsequent weak recovery. As Paul Krugman (2012) has also pointed out, one can gauge the size of the effect of the economy on tax revenues by “updating” CBO tax-revenue projections from 2008 for tax-law changes that occurred after the projections were published, such as extending the Bush tax cuts. The tax shortfall is largely the result of economic events, most notably the recession of 2007–09, not fiscal largesse.

This “updated” version of the 2008 projection estimates a \$2.933 trillion tax take for fiscal year 2011. Actual tax revenues were only \$2.303 trillion. Nearly all of the shortfall can clearly be attributed to the recession that began in late 2007. Moreover, spending on income-security programs, which varies from year to year depending mostly on recipients’ financial situations, was \$164 billion higher than forecast in 2008. Adding together these recession-related costs, we can account for \$794 billion of the \$1.296 trillion, or 61 percent, of the total deficit for the year 2011.

The large federal deficit incurred in 2011 was largely a product of the kind of revenue losses and spending increases shown in our fiscal trap diagram. The increased deficit should not be seen as a sign of a relaxation of fiscal policy, but merely an appro-

priate response to a change in economic circumstances. Clearly, any approach to fiscal policy that reacted to the large deficit by cutting spending or raising taxes would be reading a sign of prudence as a sign of imprudence.

This prudent choice to allow an increase in the deficit in the presence of declining taxes and relatively modest increases in income security programs—one that was indeed only in small part the result of policy changes—probably had a very beneficial effect, as the late Levy Institute Distinguished Scholar Hyman P. Minsky and many other Keynesians would have predicted (e.g., Minsky 2008 [1986], 13–37). In contrast, the spending *cuts* and tax *increases* currently scheduled for 2013 will almost certainly worsen the US economic situation and increase the risk of the States falling into the sovereign-currency fiscal trap (see Figure 2).

Today, the current outlook for the US economy is dire, unless the federal government uses fiscal stimulus policy to increase total demand and employment. As John Maynard Keynes advised, “The boom, not the slump, is the time for austerity.” We outline our case for prudent fiscal stimulus below.

### **Closer to the Cliff**

Krugman’s remark referred to what is known in Washington parlance as the “fiscal cliff.” Earlier this year, the public’s attention was drawn to this imminent event by a CBO study projecting that a recession would occur in the first two quarters of 2013 if the United States reached the fiscal cliff (2012a, 6). Fed Chairman Ben Bernanke, once a student of noted monetarist Milton Friedman, echoed this alarm (2012).<sup>11</sup> We will reach the fiscal cliff if the president and Congress fail to prevent the following events:

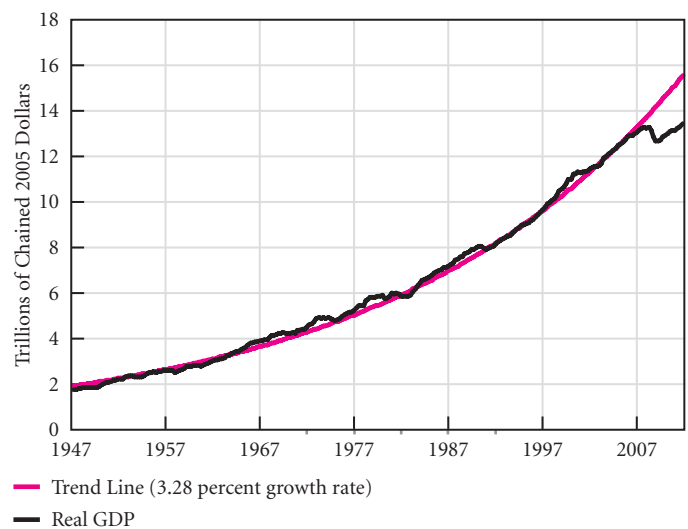
- (1) As required by the Budget Control Act, passed in the summer of 2011, across-the-board cuts are scheduled to take effect on January 2, 2013. These cuts will be divided in a roughly even manner between defense and nondefense discretionary spending and across spending items in those categories. Cuts will be made in every area, from bombers to infantry and the Environmental Protection Administration to the Women, Infants, and Children (WIC) nutritional program. Since these cuts are supposed to be spread across a wide range of programs and departments, one might expect they will be rather small cuts proportionately. In fact, these cuts are

- expected to be in the neighborhood of 12 to 15 percent for all affected items (BPC 2012; CBO 2012a and 2012b).
- (2) The Bush tax cuts and the indexing of the Alternative Minimum Tax are scheduled to expire. These tax changes will raise the tax bill for the majority of Americans, but most of the increased revenues from the end of these policies will come from married couples reporting more than \$250,000 in taxable income, or \$200,000 for other filers.
  - (3) Emergency unemployment insurance benefits for eligible workers who have been unemployed for more than 34 weeks are already being phased out gradually and will expire altogether in 2013 (CBPP 2012a).
  - (4) The 2 percent Obama Social Security payroll tax cut that began last year expires as well.
  - (5) A number of other spending cuts and tax increases will occur, including a 2 percent reduction in Medicare payment rates for physicians.

The CBO estimates that, taken together, these changes will lead to more than \$500 billion in deficit reduction for 2013. Many of these cuts will disproportionately affect low-income people, in spite of continuing high levels of unemployment among low income Americans. The president and most members of Congress do not want to see these cuts go into effect. Politically, the Bush tax cuts may be the easiest part of the cliff to avoid. Both houses of Congress have passed legislation to extend these cuts, though the Senate version leaves out taxpayers filing as couples with incomes greater than \$250,000. President Obama has supported the Senate version on the grounds of distributive fairness. Thus far, neither the president nor Congress has taken any action to extend the payroll tax holiday, even though this is the biggest working-class tax issue and essential to avoiding the fiscal cliff.

On the spending side of the ledger, the fiscal conservatives offer various plans to shift the spending cuts to future years and to replace the across-the-board reductions with cuts to a smaller group of specific items. Their plans call for a large net cut in spending over the next 10 years (see BPC 2012). Judging by the statements of Washington opinion leaders, it is quite possible that Congress will act later this year to repeal the cuts to military spending and allow the nonmilitary spending cuts to go into effect early next year, as called for by current law.

**Figure 3 Real GDP and Exponential Trend Line, 1947Q1–2012Q2**



Notes: Trend estimated using OLS regression on log-transformed data series. “Growth rate” = annual rate with quarterly compounding.

Sources: Federal Reserve Bank of St. Louis FRED database and Levy Institute calculations

For decades, Keynesian and post-Keynesian economists at the Levy Institute and elsewhere have noted a shortfall in US government spending, given levels of aggregate private demand (e.g., Godley 1999; Papadimitriou, Hannsgen, and Zezza 2012); additional cuts will serve only to weaken an already unhealthy economy. Nonetheless, many pundits and members of Congress have been confident that recovery is well under way. They fret that if spending cuts and tax increases were put off even for a year, the government might not act quickly enough to tighten fiscal policy once economic indicators reached acceptable levels. Perhaps they do not know how long GDP has been well below trend (see Figure 3). Based on the present state of the economy, any notion that implementing better policy would be mostly a matter of precise timing is patently absurd. The gap between recent real GDP growth and the historical trend is so large that the danger of overshooting the trend is hard to imagine.<sup>12</sup>

Any recovery that leaves the economy so far below trend is destined to fall short in job creation, as this one indeed has. Excessive caution about the timing of stimulus has led a concerned Robert Reich (2012), the former Labor secretary, to propose a rule that would trigger spending cuts and tax increases only after standard measures of unemployment fell below a



threshold of 5 percent and economic growth reached 3 percent per year! Given the enormous distance we would have to travel to reach those milestones, it is not clear if such a rule would have any practical effect. However, it could help reassure the public that those leaders who are in favor of stimulus measures in principle support moving to a tighter fiscal policy stance once the need for stimulus passed. It seems doubtful that such an agreement could be reached in Washington without a more stagnation-averse and cooperative Congress. The recovery is also complicated by the trends in income and wealth inequality and financial fragility, to which we turn next.

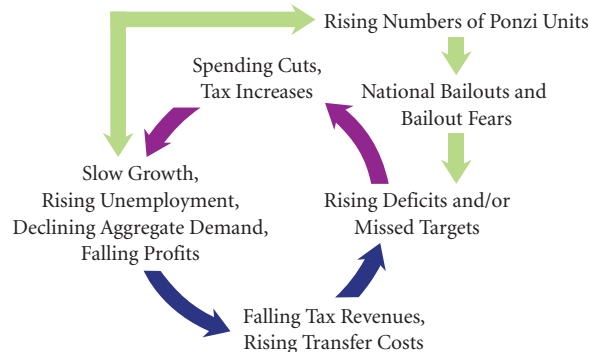
### Beyond the Fiscal Trap: The Roles of Distribution and Financial Fragility

Up to this point, we have focused on the hypothesis that a straightforward fiscal trap story accounts for many of the economic problems seen recently around the world—fiscally conservative economic doctrine encourages budget cuts, leading to slow or negative growth, which in turn undermines tax revenue collections. This situation leads to more demands for spending cuts, and the cycle repeats itself. However, the current US economic predicament involves much more than a vicious cycle of budget cuts, tax increases, and slow-to-nonexistent growth. An ongoing trend of income and wealth is also feeding into the cycle of fiscal restraint and low growth (Galbraith 2012; Krueger 2012; Papadimitriou, Hannsgen, and Zezza 2012; Rajan 2010; Reich 2010; Stiglitz 2012; van Treeck 2012).

According to the differential savings-rate hypothesis, households and groups with high incomes tend to save large proportions of their incomes, while lower income households and classes save very little, spending new income almost as soon as they receive it. One version of this hypothesis—which is a staple of post-Keynesian macro models—states that a high proportion of profit income is saved, while most (or perhaps nearly all) wage and salary income is spent immediately.<sup>13</sup> Since these hypotheses are at least approximately true,<sup>14</sup> today’s less equal distribution of income and assets means it is more difficult to generate enough demand to keep businesses producing and workers employed: people with money are not spending enough, and people with only a little money spend it to meet their basic needs.

Another crucial factor behind the recent fiscal crisis is the inherent fragility of modern financial systems. Financial instability was documented in detail by Minsky (2008 [1975]; 2008

**Figure 4 A Fiscal Trap Occurs When Fiscal Policy Aims to Balance the Budget—And Private-sector Financial Fragility Can Worsen the Problem**



[1986]). Figure 4, a modified version of our fiscal trap diagram, shows the important role of financial instability in the current fiscal trap.<sup>15</sup> Specifically, the “Rising Numbers of Ponzi Units” show the potential effects of such fragility, which tend to arise spontaneously, even in an otherwise stable economy. Minsky used the term “Ponzi unit” to refer to an individual or entity that cannot make required interest payments without borrowing money to do so. Financial crisis arises when too many entities are paying their debts with borrowed money. Any disruptions in the resulting chain of borrowing can bring down the economy, as we have recently seen. Financial fragility often leads to public bailouts, or at least fears of the need for such bailouts, as shown by the arrow pointing from the words “Rising Numbers of Ponzi Units” to “National Bailouts and Bailout Fears.”<sup>16</sup> Figure 4 illustrates the potent two-way effects that exist between intensifying financial fragility and wider economic distress (see the two-way arrow). The ways in which increased Ponzi activity contributes to financial instability are crucial for understanding the cases of, for example, Ireland and Spain, whose fiscal troubles are largely the result of huge cleanups from housing-related financial crises.

While financial fragility constitutes a key part of the fiscal trap mechanism, it can also be linked in turn to the broad inequality issues mentioned above. With incomes stagnant or falling, struggling low- and middle-income households have been under far more pressure than in past years to take on dangerous levels of mortgage and credit-card debt—increasing the economy’s tendency to become financially fragile. Indeed, a number of recent studies link slow or negative wage growth with rising consumer debt.<sup>17</sup> Whatever constitutes the true source of weak demand, recent problems cannot be addressed without

worrying a bit about the household-debt overhang and the anemic growth in real wages, in addition to the need for stronger and steadier fiscal stimulus (i.e., increased deficits). The British government’s recent austerity experiments may provide insights into the results of this approach in a sovereign-currency country, yielding lessons for US policymakers.

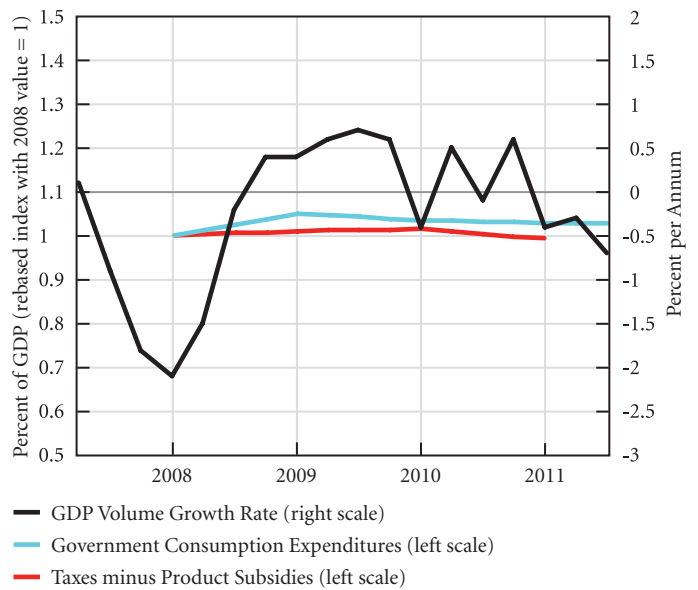
### A Comparison to the British Case: Fiscal Trap without Fiscal Treaty

As a euro holdout, the UK has a monetary system very similar to that of the United States. The UK may be entering into a fiscal trap. Naturally, this situation bears watching by US policymakers. The failure of fiscal austerity in Britain has become apparent to observers in the media, with headlines such as the following appearing in the mainstream financial press: “Osborne Economy Plan Attacked as Critics Question Competence.” This particular article goes on to take the government to task, noting that “Osborne’s 2010 austerity program—which was extended for two years in November—envisaged that the economy would be growing by 2.8 percent this year. Instead, it is 0.9 percent smaller than in the third quarter of 2010” (Vina and O’Donnell 2012).

This is another example of contractionary fiscal policies leading to a slump in total output. This raises the prospect that low or poor growth will prevent a reduction in deficits, setting off another round of budget cuts in the UK.<sup>18</sup> When it comes to the danger of falling into such a fiscal trap, the United Kingdom is particularly relevant to US policymakers. Unlike the countries in the eurozone, with their common currency, the UK is a nation with its own money, having stayed out of the eurozone from the beginning. In two key ways, Britain’s use of the pound rather than the euro makes its current predicament more relevant as an analogue to the US situation than the eurozone crisis.

First, policymakers in the UK control the base interest rate, the so-called “bank rate,” much as the Fed sets the federal funds rate. They have also shown a willingness to undertake quantitative easing to keep medium- and long-term rates low. Second, in principle, the UK government can also make its currency depreciate or allow it to appreciate and depreciate as needed to implement a full-employment policy. Hence, as in the United States (and most other countries with sovereign currencies), the government faces no “solvency constraint” on its spending and tax policies, and it is much less likely that a fiscal trap will develop.

**Figure 5 UK GDP Growth and Fiscal Policy, 2008Q1–2012Q2**



Sources: Eurostat data and Levy Institute calculations

Nonetheless, even in these sovereign-currency countries, the concept of a fiscal trap is relevant, because the fiscal trap mechanism that operates as depicted by the dark arrows in Figure 1 may be enough to constitute a dangerous trap, one that goes beyond the ill-timed policy changes emphasized by many critics in the financial press.<sup>19</sup> Yet despite the freedom in policymaking afforded by Britain’s use of the pound, the Cameron government has deliberately tightened its fiscal policy in step with Spain and many of its other European counterparts (Table 1). This policy of fiscal tightening seems incongruous for two main reasons: (1) interest rates remain low, compared to those in Italy, Spain, and other “peripheral” eurozone countries; and (2) the UK government is subject to few binding debt or deficit restrictions.<sup>20</sup>

Figure 5 shows Eurostat data on revenues and expenditures by the entire UK government sector. Indeed, spending fell in 2011 as a percentage of the country’s GDP, following what was in fact only a moderate increase during the recession in the UK. Figures on GDP, which can be measured along the right axis of the figure, show a series of low or negative growth rates dating back to the first quarter of 2010. Four of the past six years have seen negative GDP growth rates.

With austerity measures already unpopular among electorates in the eurozone, it is astonishing that fiscal policy remains

tight in the UK, with the government reluctant to acknowledge that its policies have helped to bring about a new recession. Moreover, to say the least, it is galling to realize that the United States may be about to jump off the same austere “cliff.”

### **Some Proposals to Help Avoid the Trap in the United States**

Several policy measures to counter the perverse effects of fiscal austerity follow from our analysis:

- (1) The budget sequester should be repealed and not replaced, and action should be taken to raise the debt limit as needed. It would be counterproductive to adopt the “repeal and replace” approach of the fiscal conservatives. Budget cuts may lead the economy into a trap no matter when cuts take place or how judiciously they are made. Therefore, the sequester that goes into effect next January should be repealed outright. This will eliminate the congressional imperative to make specific amounts of cuts over a 10-year period. If necessary, the repeal could be replaced by a target rate, meaning a specific unemployment rate and/or growth rate rather than a new target date, to ensure that policy is not tightened prematurely (Reich 2012).
- (2) The rest of the “fiscal cliff” must be further moderated, or eliminated. This includes keeping the payroll tax holiday, which began at the start of last year, and cutting payroll tax deductions for Social Security from 6.2 to 4.2 percent. At this point, neither house of Congress nor the president has called for an extension of this effective stimulus measure, first passed in 2010. The tax holiday should be extended for the foreseeable future, especially given that the payroll tax currently applies only to the first \$110,000 of each worker’s earned income.<sup>21</sup> Payroll taxes are crucial, as they account for more than half of the federal tax payments of workers with modest incomes.<sup>22</sup>
- (3) As a longer-run fiscal solution, the government should seek to use a more comprehensive and rational combination of policy rules and/or automatic stabilizers to help ensure that spending is increased when needed and used in positive ways. This is an approach that Minsky (2008 [1986]) and other Keynesians have supported for

many years. These measures would work on the principle of increasing the deficit when capacity utilization, employment growth, economic growth, or some similar economic indicator was below par, and vice versa. There are a number of proposed institutions that could be used to achieve this effect. These include: an employer-of-last-resort policy (as described in Papadimitriou 2008, Gross 2011, and elsewhere), especially for the low-skilled; an infrastructure-project banking agency (e.g., Shubik 2009); an enhanced system of countercyclical assistance to the states and localities (e.g., Zaleski and Whalen 2011); and/or some other improved system of social benefits for the unemployed, the ill, the blind, and the disabled. The latter might include a new investment in social care provision (Antonopoulos et al. 2011; Antonopoulos 2007). These ambitious reforms are not the focus of this brief, but they are essential over the long run.<sup>23</sup>

Our general approach contrasts sharply with the Romney-Ryan campaign’s calls for tax cuts, mostly for the wealthy, which would help to loosen fiscal policy to little social purpose other than a macroeconomic one. The Republican candidates’ support of deep cuts in spending are worst of all in our view. In fact, we would support increased programmatic spending aimed at solving key problems, as well as tax cuts and transfers to individuals and families with the greatest needs and lowest savings rates. We would hope that a large portion of the new spending would be used in ways that increased employment, not by magic, but by public sector hiring. The administration’s languishing American Jobs Act highlights the lack of Congressional support for this approach. On the other hand, the mantra of fiscal responsibility, represented by proposals such as the “Bowles-Simpson plan,”<sup>24</sup> has borne the brunt of our criticism in this piece. This is no surprise: we are Keynesians. The failure of Pollyannaish orthodox economics, the same perspective that brought us the financial crisis and the Great Recession of 2007–09, to provide an effective strategy for economic growth argues for another approach. The renewed vigor seen in many heterodox economic traditions offers a better hope for effective policies that will steer clear of the fiscal trap and put the economy back on a path to recovery.

## Notes

1. For an early collection of euro critiques and comments in a chartalist vein, see Bell and Nell (2003), in addition to the works referenced in the text. For additional details on the difference between chartalist and metallist monetary theories and the benefits of a system based on the former, see the background articles in Wray (2004) and the more modern account in Wray (1998).
2. For example, Reich (2012) uses the term “austerity trap” rather than “fiscal trap,” and *The New York Times* uses the term “debt spiral” (see McClain 2011).
3. Similar mechanisms are important in many models that have been developed by various scholars to describe situations in which deficits seem to be growing out of control (for a discussion, see Câmara and Vernengo 2001). During crises, these models make deficits and the money stock a function not mostly of policy, but rather of economic variables that are beyond the control of policymakers.
4. The federal food-stamp program, which provides needy individuals and families with money to purchase food, is now officially known as SNAP (Supplemental Nutrition Assistance Program).
5. Zalewski and Whalen (2011) discuss the role of automatic stabilizers in the context of post-Keynesian and Institutionalist thought. Picketty and Saez (2007) describe evidence that the US federal tax system has been somewhat progressive, though state and local taxes are generally rather regressive.
6. See also the sources in note 1.
7. This includes a working paper (Hannsgen and Papadimitriou 2010) and a critique written by Nersisyan and Wray (2010).
8. In fact, chartalists point out that, all things being equal, increases in government spending tend to *reduce* interest rates, as they add to the stock of money. Securities sales occur after the fact and are a means of stabilizing interest rates, rather than “financing” government spending (Wray 1998). In practice, this view is a bit less convincing with regard to *long-term* interest rates, without some form of open market purchases near that end of the maturity spectrum—a type of operation that is often seen as “unconventional.”
9. Robinson (1951, 163–64) emphatically makes this point about sovereign currencies. In an open-economy framework, Godley and Lavoie (2007) suggest a way that an enlightened ECB-like central bank might be able to maintain stable interest rates and Keynesian policies in its member countries, along with a single currency, using simulations of a stock-flow-consistent model. They use a three-country model with two countries tied in a currency union and a third with a floating exchange rate.
10. The mechanism shown in Figure 2 does not purport to be a perpetual-motion machine. Rather, it simply avoids most of the problems associated with a metallist monetary system, including fiscal traps of the type shown in Figure 1.
11. The CBO has repeated its warning about the fiscal cliff in a recent update of its report (2012b).
12. Caveat: the trend line is not derived from a theoretical model; rather, it was constructed by mechanically fitting a constant-growth-rate curve to the data. (The methods used to compute the trend are described in the caption.) Hence, the trend is useful only as a rough benchmark based on past growth rates. Some economists argue that for various reasons the country is in for an era of diminished growth potential; in that case, the trend line would perhaps be an inappropriate guide to countercyclical policy. Yet it is difficult to explain away such a sharp departure from historical trends.
13. For examples of classic contributions to the post-Keynesian literature that use the assumption of differing saving propensities, see Kalecki (1991 [1943]), Kaldor (1955–56, 1957), and Robinson (1986 [1969], Book 5).
14. Bowles and Boyer (1995), Stockhammer, Hein, and Grafl (2011), and Stockhammer, Onaran, and Ederer (2009) find some support for the differential saving propensity hypothesis. Each of these articles lists some additional references. Even neoclassical journals, with their traditional aversion to thinking in terms of the distribution of income, have published work in support of this empirical hypothesis, with a key example being Dynan, Skinner, and Zeldes (2004). For recent evidence that most Americans substantial amounts of nonhome or liquid wealth, a fact that suggests they may have savings propensities close to zero, see the household-survey evidence in Bricker et al. (2011) and Wolff (2010). The realism of the differential-savings rate hypothesis and models based upon it contrasts, for example, with models based on a representative hyper-rational consumer possessing rational expectations of all future income and tax flows, et cetera (Davidson 1982–83). In an interesting development, sophisticated criticism of models of this type has flourished recently in the popular and financial presses. Some examples

- of this new genre include Bhidé (2010), Buiter (2009), Krugman (2009), and Smith (2010).
15. Figure 4 omits the arrows depicting the financial impacts and costs of escaping the fiscal trap seen in Figures 1 and 2, to avoid cluttering the picture.
  16. See Tagkalakis (2012) for some empirical documentation of the generally rather sizable effects of financial crises on government finances.
  17. Some examples are: Barba and Pivetti (2009), van Treeck (2012), Guttman and Philon (2010), and Zalewski and Whalen (2010). Hannsgen (2007) and others have noted causal links between the threat of a crisis, rising household indebtedness, financial innovation and deregulation, and orthodox consumer theory itself.
  18. See also, for example, Wolf (2012).
  19. Frankel (2012) documents some of the remarkable timing mistakes made by modern US presidents in their macro policy announcements, though he underestimates the harm generally done by fiscal austerity.
  20. Schaechter, Kinda, and Budina (2012) enumerate the “fiscal rules” currently in force in various places around the world. Of course, some restrictions exist on chartalist governments, such as the UK and the United States, but these are cases in which states have voluntarily agreed in some manner to accept or impose restrictions on their own economic policies by legislation or international agreement. Unfortunately, given the persistently weak economic climate and the anti-Keynesian approach of current rules, these laws will almost invariably prove to be against the interests of the nations affected by them, because they impose inappropriately contractionary policies.
  21. The maximum amount of taxable income for each earner is currently scheduled to rise as high as \$161,000 by 2021 under the intermediate assumptions used in the official Social Security trustees’ report (SSA 2012).
  22. The debt-burden issue is another important one for households with modest incomes, as mentioned above. Perhaps the best remaining option for dealing with weakness in household balance sheets is to enact some form of fair mortgage-loan forgiveness program, or a program to enable more homeowners to refinance at current interest rates (Timiraos 2012; Stiglitz and Zandi 2012).
  23. For ideas on further reforms of the financial system itself, which could greatly reduce financial fragility and its economic consequences, see Levy Economics Institute (2012).
  24. A recent study by the Center on Budget and Policy Priorities (2012b) outlines the current implications of this proposal. The proposal was made by Representative Erskine Bowles and Senator Alan Simpson, leaders of a Congressional “supercommittee” charged with drafting a list of spending cuts and revenue increases in accordance with the terms of the Budget Control Act (BCA) of 2011. Ultimately, the committee was unable to agree on the Bowles-Simpson proposal or any other set of deficit-reduction measures in the required amount before its deadline was reached. As of this writing, the United States faces a situation in which automatic, across-the-board spending cuts are scheduled to take effect in January 2013 under the terms of the BCA. Many observers regard the fiscally conservative Bowles-Simpson proposal as a reasonable basis to substantially reduce the deficit over the next 10 years.

## References

- Antonopoulos, R. 2007. “The *Right* to a Job, The *Right* Types of Projects.” Working Paper No. 516. Annandale-on-Hudson, N.Y.: Levy Economics Institute of Bard College. September.
- Antonopoulos, R., K. Kim, T. Masterson, and A. Zacharias. 2011. *Investing in Social Care Delivery*. One-Pager No. 11. Annandale-on-Hudson, N.Y.: Levy Economics Institute of Bard College. August.
- Barba, A., and M. Pivetti. 2009. “Rising Household Debt: Its Causes and Macroeconomic Implications—a Long-period Analysis.” *Cambridge Journal of Economics* 33(1): 113–37.
- Bell, S. A., and E. J. Nell. 2003. *The State, the Market, and the Euro*. Northampton, Mass.: Edward Elgar.
- Bernanke, B. S. 2012. “Semiannual Monetary Policy Report to the Congress.” Testimony Before the Committee on Banking, Housing, and Urban Affairs, US Senate, Washington, D.C., July 17.
- Bhidé, A. 2010. *A Call for Judgment: Sensible Finance for a Dynamic Economy*. New York: Oxford University Press.
- Bipartisan Policy Center (BPC). 2012. “Indefensible: The Sequester’s Mechanics and Adverse Effects on National and Economic Security.” White Paper. June.

- Bowles, S., and R. Boyer. 1995. "Wages, Aggregate Demand, and Employment in an Open Economy: An Empirical Investigation." In G. A. Epstein and H. M. Gintis, eds. *Macroeconomic Policy after the Conservative Era*, 143–74. New York: Cambridge University Press.
- Bricker, J., et al. 2011. "Surveying the Aftermath of the Storm: Changes in Family Finances from 2007 to 2009." Finance and Economics Discussion Series (FEDS) 2011-17. Washington, D.C.: Board of Governors of the Federal Reserve System.
- Buiter, W. 2009. "The Unfortunate Uselessness of Most 'State of the Art' Academic Monetary Economics." Maverecon Blog, comment posted March 3, <http://blogs.ft.com/maverecon/2009/03/the-unfortunate-uselessness-of-most-state-of-the-art-academic-monetary-economics/#axzz29UA2bd9R>.
- Câmara, A., and M. Vernengo. 2001. "The German Balance of Payment School and the Latin American Neo-Structuralists." In L.-P. Rochon and M. Vernengo, eds. *Credit, Interest Rates and the Open Economy: Essays on Horizontalism*, 143–59. Northampton, Mass.: Edward Elgar.
- Center on Budget and Policy Priorities (CBPP). 2012a. "Policy Basics: How Many Weeks of Unemployment Compensation Are Available?" Washington, D.C.: CBPP. October 9 (updated October 15).
- . 2012b. "What Was Actually in Bowles-Simpson—and How Can We Compare It with Other Plans?" Washington, D.C.: CBPP. October 2.
- Congressional Budget Office (CBO). 2010. "Federal Debt and the Risk of a Fiscal Crisis." Economic and Budget Issue Brief. Washington, D.C.: CBO. July 27.
- . 2012a. *Economic Effects of Reducing the Fiscal Restraint that Is Scheduled to Occur in 2013*. Washington, D.C.: CBO. May 22.
- . 2012b. *An Update to the Budget and Economic Outlook: Fiscal Years 2012 to 2022*. Washington, D.C.: CBO. August 22.
- Davidson, P. 1982–83. "Rational Expectations: A Fallacious Foundation for Studying Crucial Decision-Making Processes." *Journal of Post Keynesian Economics* 5(2): 182–98.
- Dynan, K. E., J. Skinner, and S. P. Zeldes. 2004. "Do the Rich Save More?" *Journal of Political Economy* 112(2): 397–444.
- Frankel, J. 2012. "The Procyclicalists: Fiscal Austerity vs. Stimulus." VoxEU.org, August 27.
- Galbraith, J. K. 2012. *Inequality and Instability: A Study of the World Economy Just before the Great Crisis*. Oxford: Oxford University Press.
- Godley, W. 1999. *Seven Unsustainable Processes: Medium-term Prospects and Policies for the United States and the World*. Strategic Analysis. Annandale-on-Hudson, N.Y.: Levy Economics Institute of Bard College. January.
- Godley, W., and M. Lavoie. 2007. "A Simple Model of Three Economies with Two Currencies: The Eurozone and the USA." *Cambridge Journal of Economics* 31(1): 1–23. Reprinted in M. Lavoie and G. Zezza, eds., *The Stock-flow Consistent Approach: Selected Writings of Wynne Godley* (New York: Palgrave Macmillan), 159–88.
- Gross, W. H. 2011. "Investment Outlook: School Daze, School Daze, Good Old Golden Rule Days." Newport Beach, Calif.: PIMCO. July.
- Guttmann, R., and D. Philon. 2010. "Consumer Debt and Financial Fragility." *International Review of Applied Economics* 24(3): 269–83.
- Hannsgen, G. 2007. "A Random Walk down Maple Lane? A Critique of Neoclassical Consumption Theory with Reference to Housing Wealth." *Review of Political Economy* 19(1): 1–20.
- Hannsgen, G., and D. B. Papadimitriou. 2010. "The Central Bank 'Printing Press': Boon or Bane?" Working Paper No. 640. Annandale-on-Hudson, N.Y.: Levy Economics Institute of Bard College. December.
- International Monetary Fund (IMF). 2012. *Fiscal Monitor: Balancing Fiscal Policy Risks*. World Economic and Financial Surveys. Washington, D.C.: IMF. April.
- Jones, C., and N. Cohen. 2012. "Debate Rages over Benefits of Fiscal Austerity." *Financial Times*, July 12.
- Kaldor, N. 1955–56. "Alternative Theories of Distribution." *Review of Economic Studies* 23(2): 83–100.
- . 1957. "A Model of Economic Growth." *Economic Journal* 67(268): 591–624.
- Kalecki, M. 1991 (1943). "Studies in Economic Dynamics." In Jerzy Osiaty ski, ed. *Collected Works of Michal Kalecki, Vol. II*. Trans. C. A. Kisiel. New York: Clarendon Press.
- Kregel, J. 2012. "Six Lessons from the Euro Crisis." Policy Note 2012/10. Annandale-on-Hudson N.Y.: Levy Economics Institute of Bard College. August.

- Krueger, A. B. 2012. "The Rise and Consequences of Inequality in the United States." Remarks prepared for delivery at the Center for American Progress, Washington, D.C., January 12.
- Krugman, P. 2009. "How Did Economists Get It So Wrong?" *The New York Times Magazine*, September 2.
- . 2012. "Sources of the Budget Deficit." The Conscience of a Liberal Blog, comment posted July 27, <http://krugman.blogs.nytimes.com/2012/07/27/sources-of-the-budget-deficit/>.
- Levy Economics Institute. 2012. *Beyond the Minsky Moment: Where We've Been, Why We Can't Go Back, and the Road Ahead for Financial Reform*. eBook. Annandale-on-Hudson, N.Y.: Levy Economics Institute of Bard College. April.
- McClain, D. L. 2011. "The Making of a Debt Spiral," *The New York Times*, August 14. Graphic.
- Minsky, H. P. 2008 (1975). *John Maynard Keynes*. New York: McGraw-Hill.
- . 2008 (1986). *Stabilizing an Unstable Economy*. New York: McGraw-Hill.
- Nersisyan, Y., and L. R. Wray. 2010. "Does Excessive Sovereign Debt Really Hurt Growth? A Critique of *This Time Is Different*." Working Paper No. 603. Annandale-on-Hudson, N.Y.: Levy Economics Institute of Bard College. June.
- Papadimitriou, D. B. 2008. "Promoting Equality Through an Employment of Last Resort Policy." Working Paper No. 545. Annandale-on-Hudson, N.Y.: The Levy Economics Institute of Bard College. October.
- Papadimitriou, D. B., G. Hannsgen, and G. Zezza. 2012. *Back to Business as Usual? Or a Fiscal Boost? Strategic Analysis*. Annandale-on-Hudson, N.Y.: Levy Economics Institute of Bard College. April.
- Papadimitriou, D. B., and L. R. Wray. 2012. "Euroland's Original Sin." Policy Note 2012/8. Annandale-on-Hudson, N.Y.: Levy Economics Institute of Bard College. July.
- Picketty, T., and E. Saez. 2007. "How Progressive Is the U.S. Federal Tax System? A Historical and International Perspective." *Journal of Economic Perspectives* 21(1): 3–21.
- Rajan, R. 2010. *Fault Lines: How Hidden Fractures Still Threaten the World Economy*. Princeton, N.J.: Princeton University Press.
- Reich, R. 2010. *Aftershock: The Next Economy and America's Future*. New York: Alfred A. Knopf.
- . 2012. "How to Avoid the Austerity Trap but Still Deal with the Budget Deficit." *Economonitor Blog*, comment posted May 29, [www.economonitor.com/blog/2012/05/how-to-avoid-the-austerity-trap-but-still-deal-with-the-budget-deficit/](http://www.economonitor.com/blog/2012/05/how-to-avoid-the-austerity-trap-but-still-deal-with-the-budget-deficit/).
- Robinson, J. 1951. "The Rate of Interest." In Robinson, *The Generalization of the General Theory and Other Essays*. New York: St. Martin's Press.
- . 1986 (1969). *The Accumulation of Capital*. 3rd ed. Philadelphia: Porcupine Press.
- Schaechter, A., T. Kinda, and N. Budina. 2012. "Fiscal Rules in Response to the Crisis—Toward the "Next-Generation" Rules. A New Dataset." International Monetary Fund (IMF) Working Paper 12/187. Washington, D.C.: IMF.
- Shubik, M. 2009. "A Proposal for a Federal Employment Reserve Authority." Levy Institute Policy Note 2009/5. Annandale-on-Hudson, N.Y.: Levy Economics Institute of Bard College. April.
- Smith, Y.. 2010. *Econned: How Unenlightened Self Interest Undermined Democracy and Corrupted Capitalism*. New York: Palgrave Macmillan.
- Social Security Administration (SSA). 2012. "The 2012 Annual Report of the Board of Trustees of the Federal Old-age and Survivors Insurance and Federal Disability Insurance Trust Funds." Washington, D.C.: SSA. April.
- Steen, M., J. Fontanella-Khan, and M. Stothard. 2012. "ECB Signals Resolve to Save Euro." *Financial Times*, September 7.
- Stiglitz, J. E. 2012. "The Price of Inequality." *Project Syndicate*, June 5.
- Stiglitz, J. E., and M. Zandi. 2012. "The One Housing Solution Left: Mass Mortgage Refinancing." *The New York Times*, August 12.
- Stockhammer, E., E. Hein, and L. Grafl. 2011. "Globalization and the Effects of Changes in Functional Income Distribution on Aggregate Demand in Germany." *International Review of Applied Economics* 25(1): 1–23.
- Stockhammer, E., Ö. Onaran, and S. Ederer. 2009. "Functional Income Distribution and Aggregate Demand in the Euro Area." *Cambridge Journal of Economics* 33(1): 139–59.
- Tagkalakis, A. 2012. "The Effects of Financial Crisis on Fiscal Positions." Working Paper No. 145. Athens: Bank of Greece.
- Timiraos, N. 2012. "How Forgiveness Fits in Housing-fix Toolkit." *The Wall Street Journal*, July 30.
- van Treeck, T. 2012. "Did Inequality Cause the US Financial Crisis?" Working Paper No. 91. Dusseldorf: Macroeconomic Policy Institute (IMK).

- Vina, G., and S. O'Donnell. 2012. "Osborne Economy Plan Attacked as Critics Question Competence." *Bloomberg News*, July 26.
- Wolf, M. 2012. "The IMF on UK Macroeconomic Policy: Part 2." Martin Wolf's Exchange, May 28.
- Wolff, E. N. 2010. "Recent Trends in Household Wealth in the United States: Rising Debt and the Middle-Class Squeeze—an Update to 2007." Working Paper No. 589. Annandale-on-Hudson, N.Y.: Levy Economics Institute of Bard College. March.
- Wray, L. R. 1998. *Understanding Modern Money: The Key to Full Employment and Price Stability*. Northampton, Mass.: Edward Elgar.
- . 2004. *Credit and State Theories of Money: The Contributions of A. Mitchell Innes*. Northampton, Mass.: Edward Elgar.
- Zalewski, D. A., and C. J. Whalen. 2010. "Financialization and Income Inequality: A Post Keynesian Institutional Analysis." *Journal of Economic Issues* 44(3): 757–77.
- . 2011. "Towards a More Rapid Recovery: Incorporating Subsidiarity into Macroeconomic Policy." In C. J. Whalen, ed. *Financial Instability and Economic Security after the Great Recession*. Northampton, Mass.: Edward Elgar.



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