Levy Economics Institute of Bard College

Summary

Fall 2012 Vol. 21, No. 3

Contents

INSTITUTE RESEARCH

Program: The State of the US and World Economies

Strategic Analysis

6 DIMITRI B. PAPADIMITRIOU, GREG HANNSGEN, and GENNARO ZEZZA, Back to Business as Usual? Or a Fiscal Boost?

7 C. J. POLYCHRONIOU, The Mediterranean Conundrum: The Link between the State and the Macroeconomy, and the Disastrous Effects of the European Policy of Austerity

8 C. J. POLYCHRONIOU, Reconceiving Change in the Age of Parasitic Capitalism: Writing Down Debt, Returning to Democratic Governance, and Setting Up Alternative Financial Systems—Now

9 PHILIP PILKINGTON and WARREN MOSLER, Tax-backed Bonds—A National Solution to the European Debt Crisis

10 RAINER KATTEL and RINGA RAUDLA, Austerity that Never Was? The Baltic States and the Crisis

10 C. J. POLYCHRONIOU, The Greek Crisis: Possible Costs and Likely Outcomes of a Grexit

11 DIMITRI B. PAPADIMITRIOU and L. RANDALL WRAY, Euroland's Original Sin

12 JAN KREGEL, Six Lessons from the Euro Crisis

13 SUNANDA SEN, Managing Global Financial Flows at the Cost of National Autonomy: China and India

14 PAVLINA R. TCHERNEVA, Reorienting Fiscal Policy after the Great Recession

15 JÖRG BIBOW, The Euro Debt Crisis and Germany's Euro Trilemma

16 GREG HANNSGEN, Fiscal Policy, Unemployment Insurance, and Financial Crises in a Model of Growth and Distribution

17 ESTEBAN PÉREZ CALDENTEY and MATÍAS VERNENGO, Toward an Understanding of Crises Episodes in Latin America: A Post-Keynesian Approach

Program: Monetary Policy and Financial Structure

18 JAN KREGEL, Minsky and the Narrow Banking Proposal: No Solution for Financial Reform

19 JAN KREGEL, The Wrong Risks: What a Hedge Gone Awry at JPMorgan Chase Tells Us about What's Wrong with Dodd-Frank

20 JAN KREGEL, The LIBOR Scandal: The Fix Is In—the Bank of England Did It!

21 L. RANDALL WRAY, Global Financial Crisis: A Minskyan Interpretation of the Causes, the Fed's Bailout, and the Future

Continued on page 3 ▸

Scholars by Program

The State of the US and World Economies

DIMITRI B. PAPADIMITRIOU, President and Program Director
JAMES K. GALBRAITH, Senior Scholar
JAN KREGEL, Senior Scholar
L. RANDALL WRAY, Senior Scholar
GREG HANNSGEN, Research Scholar
MICHAIL NIKIFOROS, Research Scholar
GENNARO ZEZZA, Research Scholar
MARSHALL AUERBACK, Research Associate
CLAUDIO H. DOS SANTOS, Research Associate
JESUS FELIPE, Research Associate
MICHAEL HUDSON, Research Associate
ROBERT W. PARENTEAU, Research Associate
C. J. POLYCHRONIOU, Research Associate and Policy Fellow

Monetary Policy and Financial Structure

JAN KREGEL, Senior Scholar and Program Director
DIMITRI B. PAPADIMITRIOU, President
JAMES K. GALBRAITH, Senior Scholar
L. RANDALL WRAY, Senior Scholar
MARSHALL AUERBACK, Research Associate
JÖRG BIBOW, Research Associate
STEVEN M. FAZZARI, Research Associate
JESUS FELIPE, Research Associate
MICHAEL HUDSON, Research Associate
ROBERT W. PARENTEAU, Research Associate
SUNANDA SEN, Research Associate
WILLEM THORBECKE, Research Associate
ÉRIC TYMOIGNE, Research Associate

The Distribution of Income and Wealth

JAMES K. GALBRAITH, Senior Scholar
EDWARD N. WOLFF, Senior Scholar
DIMITRI B. PAPADIMITRIOU, President
AJIT ZACHARIAS, Senior Scholar and Program Director
SELÇUK EREN, Research Scholar
THOMAS MASTERSON, Research Scholar and Director of Applied Micromodeling
ROBERT HAVEMAN, Research Associate
CHRISTOPHER JENCKS, Research Associate
SUSAN E. MAYER, Research Associate
BRANKO MILANOVIC, Research Associate
JACQUES SILBER, Research Associate
BARBARA WOLFE, Research Associate

Gender Equality and the Economy

RANIA ANTONOPOULOS, Senior Scholar and Program Director
DIMITRI B. PAPADIMITRIOU, President
KIJONG KIM, Research Scholar
NILÜFER ÇAĞATAY, Research Associate
LEKHA S. CHAKRABORTY, Research Associate
PINAKI CHAKRABORTY, Research Associate
VALERIA ESQUIVEL, Research Associate
INDIRA HIRWAY, Research Associate
TAMAR KHITARISHVILI, Research Associate
EBRU KONGAR, Research Associate
EMEL MEMIS, Research Associate
IMRAAN VALODIA, Research Associate
TAUN TOAY, Research Analyst

Employment Policy and Labor Markets

DIMITRI B. PAPADIMITRIOU, President
JAMES K. GALBRAITH, Senior Scholar
JAN KREGEL, Senior Scholar
L. RANDALL WRAY, Senior Scholar
RANIA ANTONOPOULOS, Senior Scholar
MARSHALL AUERBACK, Research Associate
VALERIA ESQUIVEL, Research Associate
MATHEW FORSTATER, Research Associate
FADHEL KABOUB, Research Associate
PAVLINA R. TCHERNEVA, Research Associate

Immigration, Ethnicity, and Social Structure

JOEL PERLMANN, Senior Scholar and Program Director
YUVAL ELMELECH, Research Associate
YINON COHEN, Research Associate
SERGIO DELLAPERGOLA, Research Associate
SANJAYA DESILVA, Research Associate
BARBARA S. OKUN, Research Associate
SEYMOUR SPILERMAN, Research Associate

Economic Policy for the 21st Century

JAMES K. GALBRAITH, Senior Scholar
DIMITRI B. PAPADIMITRIOU, President
RANIA ANTONOPOULOS, Senior Scholar
PHILIP ARESTIS, Senior Scholar
MARSHALL AUERBACK, Research Associate
WILLIAM J. BAUMOL, Research Associate
JÖRG BIBOW, Research Associate
LEKHA S. CHAKRABORTY, Research Associate
PINAKI CHAKRABORTY, Research Associate
SANJAYA DESILVA, Research Associate
STEVEN M. FAZZARI, Research Associate
JESUS FELIPE, Research Associate
MATHEW FORSTATER, Research Associate
GREG HANNSGEN, Research Scholar
MICHAEL HUDSON, Research Associate
THOMAS KARIER, Research Associate
STEPHANIE A. KELTON, Research Associate
TAMAR KHITARISHVILI, Research Associate
WILLIAM H. LAZONICK, Research Associate
MARY O'SULLIVAN, Research Associate
ROBERT W. PARENTEAU, Research Associate
C. J. POLYCHRONIOU, Research Associate and Policy Fellow
JAMES B. REBITZER, Research Associate
MALCOLM SAWYER, Research Associate
ANWAR M. SHAIKH, Research Associate
MARTIN SHUBIK, Research Associate
MICHAEL STEPHENS, Senior Editor and Policy Fellow
WILLEM THORBECKE, Research Associate
W. RAY TOWLE, Research Associate and Editor
ÉRIC TYMOIGNE, Research Associate
FATMA GÜL ÜNAL, Research Associate
L. RANDALL WRAY, Senior Scholar
AJIT ZACHARIAS, Senior Scholar

Equality of Educational Opportunity in the 21st Century

ELLEN CONDLIFFE LAGEMANN, Senior Scholar and Program Director
DANIEL KARPOWITZ, Research Associate

The Levy Economics Institute of Bard College, founded in 1986, is a nonprofit, nonpartisan research organization devoted to public service. It depends on the financial support from individuals, corporations, and private foundations to carry out its scholarship and economic research generating viable, effective public policy responses to important economic issues.

The *Summary* is published three times a year (Winter, Spring, and Fall) and is intended to keep the academic community informed about the Institute's research. To accomplish this goal, it contains summaries of recent research publications and reports on other activities.

Editors: Jonathan Hubschman and Michael Stephens   Text Editor: Barbara Ross

The *Summary* and other Levy Institute publications are available on the Institute's website.
To comment on or inquire about publications, research, and events, contact the Institute online at www.levyinstitute.org.

Inquiries regarding contributions could be sent to Dimitri B. Papadimitriou, President, Levy Economics Institute of Bard College, Blithewood, Annandale-on-Hudson, NY 12504-5000
Phone: 845-758-7700, 202-887-8464 (in Washington, D.C.) Fax: 845-758-1149 E-mail: info@levy.org Website: www.levyinstitute.org

Contents (continued)

22 THORVALD GRUNG MOE, Shadow Banking and the Limits of Central Bank Liquidity Support: How to Achieve a Better Balance between Global and Official Liquidity

22 THORVALD GRUNG MOE, Control of Finance as a Prerequisite for Successful Monetary Policy: A Reinterpretation of Henry Simons's "Rules versus Authorities in Monetary Policy"

23 ÉRIC TYMOIGNE, Measuring Macroprudential Risk through Financial Fragility: A Minskyan Approach

24 L. RANDALL WRAY, Introduction to an Alternative History of Money

25 NICHOLAS APERGIS and EMMANUEL MAMATZAKIS, What Are the Driving Factors behind the Rise of Spreads and CDSs of Euro-area Sovereign Bonds? A FAVAR Model for Greece and Ireland

26 CHARLES J. WHALEN, Post-Keynesian Institutionalism after the Great Recession

27 JAN KREGEL, Diversity and Uniformity in Economic Theory as an Explanation of the Recent Economic Crisis

Program: The Distribution of Income and Wealth

Levy Institute Measure of Time and Income Poverty

28 THOMAS MASTERSON, Simulations of Full-Time Employment and Household Work in the Levy Institute Measure of Time and Income Poverty (LIMTIP) for Argentina, Chile, and Mexico

Program: Gender Equality and the Economy

29 GÜNSELI BERIK and EBRU KONGAR, Time Use of Mothers and Fathers in Hard Times: The US Recession of 2007–09

Program: Employment Policy and Labor Markets

30 ANTOINE GODIN, Guaranteed Green Jobs: Sustainable Full Employment

Program: Economic Policy for the 21st Century

Explorations in Theory and Empirical Analysis

31 JESUS FELIPE, ARNELYN ABDON, and UTSAV KUMAR, Tracking the Middle-income Trap: What Is It, Who Is in It, and Why?

32 JESUS FELIPE and JOHN MCCOMBIE, Aggregate Production Functions and the Accounting Identity Critique: Further Reflections on Temple's Criticisms and Misunderstandings

33 JESUS FELIPE and JOHN MCCOMBIE, Problems with Regional Production Functions and Estimates of Agglomeration Economies: A Caveat Emptor for Regional Scientists

34 MICHAEL HUDSON, Veblen's Institutionalist Elaboration of Rent Theory

INSTITUTE NEWS

35 New Master's Degree Program in Economic Theory and Policy

35 21st Annual Hyman P. Minsky Conference: Debt, Deficits, and Financial Instability

Upcoming Event

35 Hyman P. Minsky Conference on Financial Instability, Berlin, Germany

PUBLICATIONS AND PRESENTATIONS

36 Publications and Presentations by Levy Institute Scholars

LETTER FROM THE PRESIDENT

To our readers:

Under the State of the US and World Economies program, Research Scholars Greg Hannsgen and Gennaro Zezza and I present a strategic analysis of the US economy and its prospects through 2016, based on three simulations of US fiscal policy. Based on our simulations, we argue that the Congressional Budget Office's economic growth projections for the "current law" baseline could only become a reality if an improbable increase in private sector consumption and debt-fueled investment were to occur. We recommend policies to increase employment and spur growth, such as continuing the payroll tax cut, federal stimulus aid to state and local governments, incentives for private sector job creation, extension of unemployment benefits, and infrastructure investment. We also call for more federal investment in research and development to promote employment and economic growth over the long term. Finally, we conclude that financial regulatory reform remains a pressing concern in terms of promoting a stable economic environment.

In a public policy brief, Research Associate and Policy Fellow C. J. Polychroniou explores the disastrous effects of European austerity policies. The narrative of out-of-control, overly generous progressive agendas as the cause of the crisis is a facile and incorrect explanation. He points out that the countries at the core of the crisis in southern Europe—Greece, Spain, and Portugal—have seen their macroeconomic environments shaped by the dominance of regressive political regimes and an embrace of neoliberal policies. In a policy note, Polychroniou takes up the question of how to chart a way out of the most recent crisis brought on by parasitic capitalism and offers policy recommendations that include writing down debt, reforming governance systems, and creating alternative financial institutions. In a separate policy note, Polychroniou offers his analysis of a likely Greek exit, or "Grexit," from the eurozone. He concludes that a Grexit, if properly managed, need not endanger the eurozone as a whole. The more difficult issues rest with Greece and how it would make a transition to a national currency and reform its government.

Three additional policy notes are included under this program. Philip Pilkington and Warren Mosler argue for the creation of tax-backed bonds as a solution to the eurozone debt crisis. Rainer Kattel and Ringa Raudla discuss whether the Baltic austerity plan worked, how it was designed to work, and, most important, whether it can be replicated anywhere else. They conclude that the experience of the Baltics is unique and, therefore, not replicable. Senior Scholar L. Randall Wray and I discuss the central flaw of the euro system: the separation of monetary sovereignty and fiscal policy. We argue that the "solution" that emerged from the June 2012 summit—using funds from the European Financial Stability Facility and the European Stability Mechanism to directly bail out banks—will not solve the problem. In a separate note, Senior Scholar and Program Director Jan Kregel identifies six lessons that can be drawn from the euro crisis and will help to shape policy going forward.

Five working papers are included under this program. Research Associate Sunanda Sen examines the problem of rate stability, capital account opening, and monetary autonomy in India and China, and how these goals can conflict with the real economy. Research Associate Pavlina R. Tcherneva proposes policies to reorient US fiscal policy in the wake of the Great Recession. Research Associate Jörg Bibow analyzes the European debt crisis and Germany's euro trilemma. Hannsgen employs heterodox models to add to our understanding of fiscal policy and financial crises. Esteban Pérez Caldentey and Matías Vernengo offer a post-Keynesian explanation of why Central and South America fared differently during and after the global financial crisis of 2007–09.

Kregel contributes four publications under the Monetary Policy and Financial Structure program. In a public policy brief, he presents a Minskyan analysis of narrow banking proposals, and concludes that narrow banking will not ensure adequate financial reform. In separate policy notes, he examines Dodd-Frank in light of the JPMorgan Chase hedging debacle, and exposes a basic misunderstanding of how the LIBOR scandal has been presented by policymakers and the press. Finally, in a working paper, Kregel examines the ideas of diversity and uniformity in economic theory as contributing factors in the recent economic crisis.

Seven additional working papers are included under this program. Wray provides a Minskyan analysis of the causes of the global financial crisis, the Fed's bailout, and our prospects for the future. In a second paper, he offers an alternative history of money. Research Associate Thorvald Grung Moe also contributes two papers—one on shadow banking and the limits of central bank liquidity, and the other offering a reinterpretation of Henry Simon's work as it applies to the challenges facing today's financial sector. Research Associate Éric Tymoigne presents an index to measure financial fragility within and across countries, focusing on housing in the United States, the UK, and France. Nicholas Apergis and Emmanuel Mamatzakis present a FAVAR model for Greece and Ireland with which they examine spreads and credit default swaps related to euro-area sovereign bonds. Charles J. Whalen draws on the work of Hyman P. Minsky in his discussion of post-Keynesian institutionalism (PKI) following the Great Recession, and identifies several core elements for a coherent PKI.

Under the Distribution of Income and Wealth program, Research Scholar and Director of Applied Micromodeling Thomas Masterson contributes a working paper that reviews simulations of full-time employment and household work as part of the Levy Institute Measure of Time and Income Poverty for Argentina, Chile, and Mexico.

The Gender Equality and the Economy program includes a working paper by Günseli Berik and Ebru Kongar on the time use of mothers and fathers during the US recession in 2007–09.

Under the Employment Policy and Labor Markets program, a working paper by Antoine Godin argues for a green jobs program to boost employment and bring about some of the structural changes needed for a sustainable economy.

Four working papers are included under the Economic Policy for the 21st Century program. Jesus Felipe, Arnelyn Abdon, and Utsav Kumar take up the question of why some countries avoid the middle-income trap and others fail to grow into higher-income countries. In two related papers, Felipe and John McCombie present additional arguments in the ongoing debate on aggregate production functions, and offer several cautions regarding the use of regional production functions and estimates of agglomeration economies. Finally, Research Associate Michael Hudson revisits Thorstein Veblen's institutionalist elaboration of economic rents, a timely reminder of the relevancy of Veblen's work to current economic theory and policy.

As always, I welcome your comments and suggestions.

Dimitri B. Papadimitriou, *President*

Program: The State of the US and World Economies

Strategic Analysis

Back to Business as Usual? Or a Fiscal Boost?

DIMITRI B. PAPADIMITRIOU, GREG HANNSGEN, and GENNARO ZEZZA

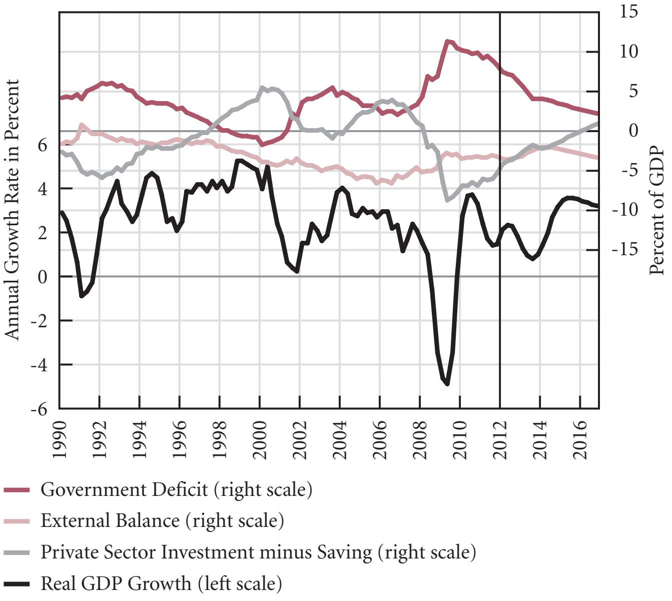
Strategic Analysis, April 2012

Levy Institute president Dimitri B. Papadimitriou and Research Scholars Greg Hannsgen and Gennaro Zezza assess the state of the US economy and lay out its prospects through 2016 based on three different simulated pathways for fiscal policy. They report that although the labor market has shown modest improvement, hiring has not reached a rate sufficient for a return to full employment even within the next decade. Moreover, the authors note, the recent modest but insufficient gains in the labor market appear to be something of a fortunate outcome, given the weak GDP numbers. Securing a more substantial improvement in the labor market would require much higher growth rates than those seen in the past couple of years. From where, however, would this growth come? Papadimitriou, Hannsgen, and Zezza point out that we cannot expect this expansion to be driven by an increase in exports over the next four years. The only remaining option is an increase in private sector or public sector demand, or both.

Based on data from the Federal Reserve, Bureau of Economic Analysis, and other public sources, the authors lay out three scenarios featuring different potential combinations of private and public sector demand. The first scenario starts from the Congressional Budget Office's (CBO) "current law" baseline for the federal government's expenditures and revenues, which shows a large drop in the budget deficit: from 8.7 percent of GDP in 2011 to 3.7 percent and 2.1 percent in 2013 and 2014, respectively. Given these budget numbers, the CBO projected real GDP to grow by 1 percent in 2013 and eventually accelerate to 3.6 percent in 2014 and 4.9 percent in 2015. The authors use the Levy Institute macro model to determine what would have to happen in the private sector for the CBO's growth forecast to be realized, given the baseline assumption of federal budget austerity and the International Monetary Fund's GDP projections for US trading partners. As they demonstrate (see Figure 1), in order to replicate the CBO's growth numbers under these conditions, the private sector would have to engage in a dramatic debt-fueled increase in investment and consumption. Household and nonfinancial business debt would have to reach levels similar to those that preceded the 2007–09 recession and financial crisis. Given this explosion in private sector indebtedness (depicted in Figure 2), a new crisis would not be far away. And without this massive increase in private debt, the Levy Institute model projects much more pessimistic growth numbers than the CBO in the context of the budget austerity represented by the "current law" pathway.

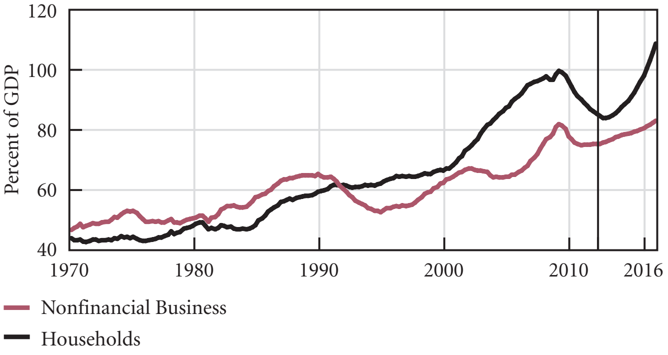
In the second scenario, the authors assume a more plausible pathway for fiscal policy in which most tax cuts are extended and moderate deficit reduction is achieved through spending cuts alone (Figure 3). Compared to the first simulation, this scenario assumes a more modest increase in house-

Figure 1 **Scenario 1: US Main Sector Balances and Real GDP Growth**



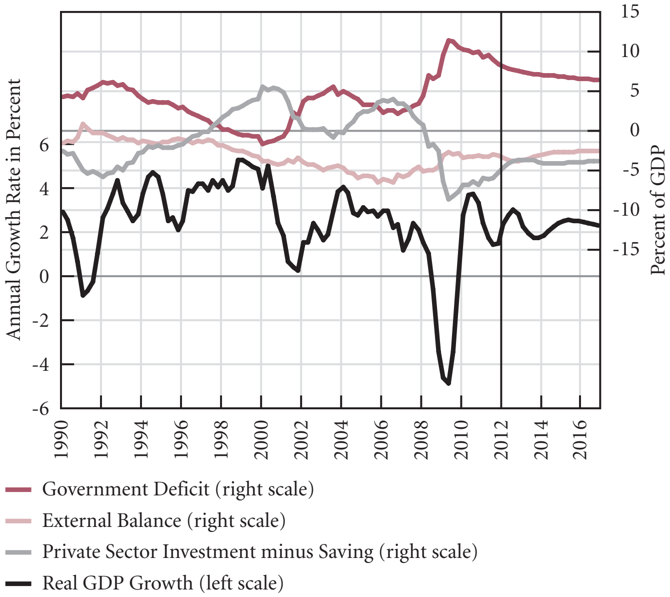
Sources: BEA; authors' calculations

Figure 2 **Scenario 1: US Private Sector Debt**



Sources: BEA; Federal Reserve; authors' calculations

Figure 3 **Scenario 2: US Main Sector Balances and Real GDP Growth**



Sources: BEA; authors' calculations

hold borrowing that stabilizes after 2012. Under these conditions, GDP grows by 2.7 percent in 2012 and then levels off at roughly 2 percent for the rest of the simulation period. As a result, the unemployment rate is not significantly reduced.

Papadimitriou, Hannsgen, and Zezza point out that their analysis of the first two scenarios underscores problems in the CBO's macroeconomic model, which contains overly optimistic forecasts for GDP growth in the absence of fiscal stimulus. This misplaced optimism, say the authors, can be attributed to some flawed theoretical assumptions, including the idea that government deficits only crowd out private investment when the economy is running at its so-called "potential" output level—a level, they note, that falls well short of full employment. Policies aimed at increasing growth that are based on a model like the CBO's will chronically undershoot the mark.

In the third scenario, the authors simulate a modest fiscal stimulus: an increase of 1 percent of GDP in public investment from the second quarter of 2012 through the first quarter of 2013, matched by an increase in tax rates that would compensate for the increased expenditure. This policy intervention would be sufficient to bring down the unemployment rate by almost 0.5 percent, though they note that a deficit-financed stimulus would reduce the unemployment rate even further.

The authors conclude by outlining a policy approach that would spur growth and employment creation. Included in such an agenda would be a federal stimulus package with aid to state and local governments, a renewal of the 2011 payroll tax cut, incentives for private sector job creation, the extension of unemployment benefits, and infrastructure investment. The authors dispute supply-side arguments for spurring business investment through cuts in corporate tax rates, noting that corporate balance sheets are awash with cash. Part of the answer to encouraging further investment, they argue, lies in the public sector. They advocate an expansion of federal funds for basic research that would help spur further work in more applied research and development, and aid in job creation in both the short and long terms. Finally, they point to the need to shore up the financial system with more thoroughgoing regulatory reform.

www.levyinstitute.org/pubs/sa_apr_12.pdf

The Mediterranean Conundrum: The Link between the State and the Macroeconomy, and the Disastrous Effects of the European Policy of Austerity

C. J. POLYCHRONIOU

Public Policy Brief No. 124, 2012

Research Associate and Policy Fellow C. J. Polychroniou asks why the eurozone crisis erupted in the periphery. Alongside the euro's flawed design and the economic imbalances this produced, Polychroniou points to the role of domestic political developments in southern Europe. In this policy brief, he traces some of the political roots of an economic crisis. By contrast with the conventional wisdom, which tells a story of southern European profligacy and overly generous welfare states, Polychroniou argues that Greece, Spain, and Portugal share a history of regressive, rather than progressive, political regimes, and that the policies pursued by these regimes helped create a macroeconomic environment that exacerbated the eurozone's problems.

Polychroniou observes that social democracy of the northern European variety never really took root in southern Europe. Instead, he argues that the political regimes of Greece, Spain, and Portugal ushered in comparatively regressive policies since emerging as parliamentary democracies in the mid-1970s. Polychroniou notes that distinctions between socialist and conservative parties began to break down in southern Europe in the late 1980s, and that even the left-leaning parties came to tacitly accept a neoliberal agenda.

This neoliberal agenda included the privatization of public assets and a chronic underinvestment in education and social services. Southern Europe has greater economic inequalities than the north, Polychroniou observes, and in spite of higher unemployment rates, the southern regimes failed to put in place well-funded job retraining programs like those in the north. According to Polychroniou, the fact that southern Europe also lags behind in terms of revenue collection, with rampant tax evasion, is at least partly a function of clientelism and political ties between the state, the rich, and big business. He notes that on the whole—and contrary to much of the conventional wisdom—public expenditures in Greece, Spain, and Portugal are less generous than the European Union (EU) average. A dearth of public investment, combined with political cultures that rely heavily on clientelism and patronage, is part of the reason why southern Europe is in such a troubled spot, according to the author. Consistently regressive policies have failed to lay the foundations for sustainable growth, and have made a bad structural situation even worse.

Polychroniou concludes by outlining a set of measures for addressing the eurozone periphery's economic woes. He reframes the periphery's central economic challenge as a growth problem rather than a debt problem. Reliance on outdated economic dogmas, including the idea that austerity can stimulate growth, is destroying any chance of addressing this growth problem. Moreover, the results of these austerity policies are contributing to the rise of authoritarian political movements. Polychroniou calls for the issuing of eurobonds but cautions that eurobonds will not provide growth and stability on their own; not without changes to the EU's governing structure. The crisis in the periphery can only be dealt with through the development of a more powerful federal state for the EU, he says, including a parliament with the authority to transfer surplus revenue for budget stabilization and a central bank able to operate as a lender of last resort.

www.levyinstitute.org/pubs/ppb_124.pdf

Reconceiving Change in the Age of Parasitic Capitalism: Writing Down Debt, Returning to Democratic Governance, and Setting Up Alternative Financial Systems—Now

C. J. POLYCHRONIOU

Policy Note 2012/3

In this policy note, Research Associate and Policy Fellow C. J. Polychroniou writes at the intersection of economics and political economy, focusing on the role of finance. He argues that advanced liberal societies are being pushed to a breaking point by a five-year-long crisis of finance capitalism. The main problem identified by Polychroniou is the power exerted by the financial industry and the consequences of the abuses it has inflicted since being unchained in the 1970s. Since that time, many governments, particularly that of the United States, have created an environment favorable to the interests of high finance but detrimental to other, "healthier" economic sectors, and to the living standards of working populations.

Finance capitalism, according to Polychroniou, does not create true wealth, lives off the revenues produced by other sectors, and exacerbates wealth inequalities. Governments and households are being subjected to a form of "debt bondage," such that revenues are being diverted toward interest payments and fees for loans that were taken out on exploitative and fraudulent terms. After building up a Ponzi financial regime, Western capitalism must now find the strength to turn in a new direction—as it did in the United States during the Great Depression. Otherwise, it risks collapsing into a condition of long-term economic instability, opening the possibility of a rise in authoritarian regimes, much like in the 1920s and '30s.

Polychroniou identifies debt restructuring as the first step toward loosening the grip of finance capitalism and repairing the damage it has wrought. Given that nearly all Western capitalist countries are burdened by unsustainable debt levels, he says, and given the interconnectedness of their economies, a large restructuring of public and private debt is a policy option worth serious consideration. Wiping out debt may be the only way to restore growth and avoid another financial meltdown. Polychroniou notes that pursuing this sort of debt restructuring in Europe and the United States would require coordination among central banks (particularly if it involves reducing debt levels through government stock repurchases) and the nationalization of some financial institutions.

Finally, Polychroniou looks to the development of alternative financial systems as a means of reorienting Western economies. The goal would not be to eliminate financial institutions driven by profit but to restrict their more destructive activities. First, says Polychroniou, banks are public institutions and should be returned to serving their original purposes: a secure place for people's savings and a source of capital for businesses. If banks wish to profit by betting with their own capital, they should not be permitted to practice traditional banking. Nationalizing large insolvent banks is also a necessary part of the conversation. Polychroniou points to social banks and social businesses, which would attract small investors focused on longer-term goals like sustainability, and not just short-term profit taking, as part of the solution in moving toward alternative financial architectures. International organizations might play a key role here in providing know-how and initial funding to these new social enterprises.
www.levyinstitute.org/pubs/pn_3_12.pdf

Tax-backed Bonds—A National Solution to the European Debt Crisis

PHILIP PILKINGTON and WARREN MOSLER
Policy Note 2012/4

Philip Pilkington and Warren Mosler present a financial innovation that they believe could settle the eurozone's sovereign debt crisis: tax-backed bonds. This special type of debt instrument would contain a clause stating that if (and only if) the country issuing the bond defaulted, the bond could be used to make tax payments in that country, and would continue to earn interest.

Countries in the troubled eurozone periphery are seeing the interest rates on their public debts rise due to investors' concerns about default. These higher rates entail larger and larger interest payments, thus perversely making it more likely that a peripheral eurozone government will in fact default. Pilkington and Mosler call attention to the fact that countries like Japan that issue their own currency are not facing unbearably heavy interest costs on their debt, with the reason being that such countries, as sovereign currency issuers, can always make payments when due. Investors know that Japan can always create enough yen to meet its obligations. Eurozone member-states, however, are users, not issuers of the euro. As a result, the authors observe, while many countries in the periphery have debt-to-GDP ratios that are *smaller* than Japan's, they nevertheless face higher debt servicing costs.

The idea behind the tax-backed bond, which draws inspiration from Modern Monetary Theory, is to provide a way of securing investor confidence in peripheral debt—the bonds are guaranteed to be "money good," since they are acceptable for the payment of taxes in the event of default—and thereby keep interest payments under control, without requiring a eurozone exit. The bonds provide a way of endowing peripheral debt with an aura of safety comparable to that of the debt of a currency-issuing nation, but without requiring a country like Greece to actually revert to the drachma. To ensure that a defaulting government does not simply refuse to accept the tax-backed bond as payment of taxes, the authors suggest that the bonds be written under UK (international) law. However, if the plan worked, the bonds would never actually be used for tax payments, since they could only be used in this manner in the eventuality of default.

According to the authors, these bonds would help to address concerns raised by both sides in this debate. Wealthier countries in the core are demanding that the countries in the periphery take responsibility for their debts and stop relying on bailouts, while the population in the periphery is concerned about the loss of sovereignty, in the form of the enforced austerity programs that accompany those bailouts. The tax-backed bonds solution is intended to address both concerns—responsibility and sovereignty—by allowing distressed peripheral countries to fund themselves with manageable interest costs rather than turning to bailouts.

www.levyinstitute.org/pubs/pn_4_12.pdf

Austerity that Never Was? The Baltic States and the Crisis

RAINER KATTEL and RINGA RAUDLA

Policy Note 2012/5

Rainer Kattel and Ringa Raudla of Tallinn University of Technology enter the debate over whether the Baltic economies (Estonia, Latvia, and Lithuania) should serve as models for the rest of the eurozone periphery. They conclude that the Baltic experience is not replicable. If the rest of the eurozone periphery cannot reproduce the conditions that led to Baltic growth, then this is not a useful model.

The authors note that the Baltic states had long stood out as pro-market reformers, having adopted, as early as the 1990s, policies advocated by the "Washington Consensus": currency boards with fixed pegs, fiscal discipline, trade liberalization, and privatization. After running overheated economies in the mid-to-late 2000s, in 2008 the Baltic economies began to collapse as they were hit by the global financial crisis. In 2009 alone, GDP fell by 14.3 percent in Estonia, 14.8 percent in Lithuania, and 17.7 percent in Latvia; unemployment rates rose to 19.8 percent, 18.3 percent, and 20.5 percent, respectively. In response, as part of a strategy of internal devaluation, the Baltic states enacted austerity policies that amounted to 8–9 percent of GDP in 2009 and 3-4 percent of GDP in 2010. By 2011, growth had returned, with GDP growth rates of 7.6 percent in Estonia, 5.9 percent in Lithuania, and 5.5 percent in Latvia. Is this the model of a successful "expansionary contraction"?

The argument is supposed to be that austerity and internal devaluation (reducing real wages in order to regain competitiveness) should be credited for the recoveries in the Baltics. The problem with this argument, as Kattel and Raudla point out, is that the downward adjustment of prices in Estonia, Latvia, and Lithuania was relatively modest. The peak-to-trough reduction in real wages was around 15 percent in all three countries, and by the end of 2009, real effective exchange rates had fallen by three to five percentage points from their peaks during the boom years. None of the Baltic countries experienced significant deflation, and in 2010 and 2011, inflation resumed its upward trajectory.

The authors argue that these Baltic recoveries are largely attributable, not to internal devaluation, but to economic factors that have little to do with domestic austerity policies. The recoveries were largely "outsourced," as Kattel and Raudla put it. First, the Baltics have been relying on advanced use of European Union (EU) structural support funding—as the authors note, 20 percent of Estonia's 2012 budget is made up of EU funds. Second, Baltic exporters are deeply integrated with the Scandinavian and Polish economies, both of which weathered the crisis quite well. Finally, all of the Baltic economies have very flexible labor markets, accompanied by unusually high emigration—which is in part, say the authors, why their (very high) unemployment rates have started to tick down. In other words, this is not a model that could be replicated periphery-wide.

Moreover, Kattel and Raudla provide reasons to believe that these outsourced Baltic recoveries are unsustainable. First, structural support funding from the EU is set to expire in 2015 and there is some uncertainty around whether or in what amounts it will continue. Second, they argue that the problem with the Baltic export sector is that foreign-owned export firms have few linkages to domestic Baltic suppliers and partners. In addition to this problem of "enclave industries," while Baltic exports have recovered to precrisis levels, these levels are not high enough to make up for the loss in the foreign financing that was used to spur growth in the mid-2000s.

www.levyinstitute.org/pubs/pn_5_12.pdf

The Greek Crisis: Possible Costs and Likely Outcomes of a Grexit

C. J. POLYCHRONIOU

Policy Note 2012/7

Research Associate and Policy Fellow C. J. Polychroniou argues that it is only a matter of time until Greece leaves the eurozone. In this policy note, he looks at why the bailout policies failed to rescue Greece, and examines the effects that a "Grexit" might have on the beleaguered country and the rest of the eurozone. Polychroniou concludes that a Greek exit would not be as dire a scenario as its critics imply.

Not allowing Greece to proceed with an orderly default two years ago was a mistake, says Polychroniou. The bailouts, the first of which was agreed to in 2010, failed to appease markets; largely because of the economic fallout—the most severe depression in Greek postwar history—from the austerity measures and other "neoliberal dictats" imposed on Greece as part of the loan agreements (cutting deficits, firing public employees, privatizing public assets, and creating more flexible labor markets). The second bailout was even more severe than the first in terms of its demands for austerity and a restructuring of the Greek economy, to be met in an even shorter time frame. The intention behind these bailouts, says Polychroniou, was not primarily to rescue the Greek economy, but to avoid contagion throughout the eurozone and protect the banking system.

In the author's view, economic pain is unavoidable for Greece, whether it stays in the eurozone or returns to the drachma. The question is whether staying in the eurozone and dying a "slow death" is preferable to reverting to a national currency. Exiting the eurozone would allow Greece to devalue its currency and slowly return to growth. But this would not be a pain-free process, and some segments of the population would suffer more than others; particularly individuals whose incomes could not keep up with inflation.

Most economic assessments of a Grexit, says Polychroniou, offer "gloom and doom" scenarios. Writing ahead of the June 17 elections, he argues that many of these assessments had clear political aims and were intended to influence the election. Moreover, most of these scenarios assume a disorderly default, but Polychroniou argues that an orderly default, with involvement from the European Union (EU) and International Monetary Fund, is more likely. The possibility of contagion spreading to the rest of the periphery is overblown, he says, and could be contained if the EU were to build a large enough firewall around Spain and Italy, which Polychroniou estimates would have to be more than two trillion euros. In order to guarantee their survival, banks would have to be brought under state control. The real concern, notes Polychroniou, is that Greek political forces would be unable to manage the transition back to a national currency. The political system is unprepared for a Grexit. In a post-euro era, various administrative reforms, including breaking political parties' grip on the bureaucracy, would be necessary.

www.levyinstitute.org/pubs/pn_7_12.pdf

Euroland's Original Sin

DIMITRI B. PAPADIMITRIOU and L. RANDALL WRAY
Policy Note 2012/8

President Dimitri B. Papadimitriou and Senior Scholar L. Randall Wray point to the central flaw in the design of the euro system: a divorce of fiscal policy from monetary sovereignty. When the European Monetary Union (EMU) was set up, member-states adopted what was essentially a foreign currency (the euro) but were left in charge of their own fiscal policy. Papadimitriou and Wray explain why this fundamental structural defect is at the heart of the solvency crises in the periphery. These crises, along with the bank runs hitting the periphery, were all entirely foreseeable (and, as they document, foreseen), given the setup of the EMU. Unless the separation of fiscal policy from currency sovereignty is addressed, these problems will continue to push the eurozone to a breaking point.

Since they are users rather than issuers of a currency, EMU nations are in the same position as US states, but the crucial difference is that US states can rely on the currency-issuing firepower of the federal government in the event of a cyclical downturn or banking crisis. European integration enabled banks to buy assets and issue liabilities all across the eurozone. Deregulation and desupervision resulted in banks being allowed to run up huge debts. Because individual EMU nations were responsible for their own banking systems but had abandoned their sovereign currencies, there was no hope, say the authors, that national governments would be able to bear the burden. The problem was not just the size of the private debts, but that member-states had to take responsibility for them without the benefit of currency sovereignty.

The authors turn to Modern Money Theory to help explain why governments whose fiscal policy has not been divorced from currency sovereignty are not experiencing the vicious cycle of rising borrowing costs that the eurozone member-governments are facing. The United States and Japan, as currency issuers, can run high debt-to-GDP ratios with interest rates on short-term government debt that are near zero (and historically low rates on long-term debt) because there is no risk of involuntary default. While there are numerous institutional arrangements, such as the debt ceiling in the United States, that raise the possibility of a voluntary default, there is no *economic* reason that countries with sovereign currencies need default on their debts. Interest rates in Japan and the United States will remain low as long as their central banks want them to; this is, the authors stress, a policy decision. Borrowing costs for governments in the periphery are spiraling out of control, not because of the size of the debts but because these governments do not issue their own currencies.

On top of this cycle of escalating borrowing costs, the periphery is also facing a series of bank runs that are, once again, occurring because of the very setup of the EMU. The "TARGET2" facility (the Trans-European Automated Real-time Gross Settlement Express Transfer System) allows bank depositors to shift euro deposits all around the EMU without cost. This is enabling huge runs on periphery deposits, given the relative risk of a peripheral nation exiting the eurozone, defaulting on deposits denominated in euros, and redenominating them in a new, depreciating national currency. As deposits flow out of the periphery, the central banks of those nations go deeper in hock to the European Central Bank (ECB) in order to obtain reserves—reserves that accumulate in the account of the Bundesbank.

As a partial solution, the authors advocate unlimited, EMU-wide deposit insurance backed by the creation of a strong treasury at the European Union (EU) level. However, because this arrangement would place an unlimited liability on the ECB, which in turn would presumably mean that Germany would be left with the bill if a country like Spain or Italy were to leave the EMU, Papadimitriou and Wray suggest that this policy change is unlikely to happen.

They conclude by arguing that the "solution" that emerged from the June 2012 summit—using funds from the European Financial Stability Facility and the European Stability Mechanism to directly bail out banks—will not solve the problem. Those bodies, they observe, do not have the unlimited firepower of a sovereign currency issuer.
www.levyinstitute.org/pubs/pn_8_12.pdf

Six Lessons from the Euro Crisis

JAN KREGEL
Policy Note 2012/10

In this policy note, Senior Scholar Jan Kregel elaborates on the six lessons we should learn from the crisis in the eurozone. First, he says, currency zones do not solve the problem of payments imbalances. Many economists argued that creating independent, unified currency zones would help solve the problem of the exchange rate instability created by global payments imbalances, but the introduction of the euro has not yielded the predicted stability. If anything, Kregel notes, the imbalances that had afflicted the European Economic Community were worsened by the euro's introduction.

Second, the "structuralists," who argued that the best way to create a unified single market was to create common structures, and that member economies would eventually conform to them, got it wrong. Despite this fact, some structuralists continue to argue that the implementation of stronger European Union (EU) institutions, such as a common bond or fiscal authority at the EU level, would eventually prove the theory correct (his objections to this position can be found in the sixth "lesson"). Kregel contrasts the structuralists with the "economists," who argued that common structures would only come out of an extended process of economic convergence.

Third, there is no French-German compromise on policy convergence. The exchange rate mechanism was supposed to resolve a conflict between two objectives: (1) French desires to reduce the constraining impact on French domestic economic activity of low inflation in Germany and real appreciation of the deutsche mark; (2) German desires to use the mechanism as a means of bringing about convergence to German preferences for low inflation over high growth and employment. In the end, says Kregel, the German position prevailed. France is not an equal partner in discussions of common policies.

Fourth, competition may reduce inflation but it does not produce growth and convergence. Although the single market coincided with declining inflation (from over 10 percent in the 1970s and '80s to below 2 percent in the 1990s), Kregel observes that it did not coincide with an increase in average EU growth rates, which declined from 3.2 percent in the 1970s to 2.25 percent in the '80s and below 2 percent in the '90s.

Fifth, a common currency does not eliminate the need for internal adjustments. In response to what Kregel calls Germany's beggar-thy-neighbor wage policy, other member-states were faced with the prospect of either reducing the level of their domestic wages or using fiscal policy to maintain growth and employment despite losses in relative productivity and competitiveness, since they no longer had the option of making exchange rate adjustments. Furthermore, the common interest rate was set too low for many countries and it exacerbated the problem of divergences between member-states in government debt and growth levels.

The sixth and final lesson, says Kregel, is that increasing political integration through the creation of more sovereign EU institutions, such as a supranational treasury or common debt instrument, will not solve the eurozone's problems. Political integration, in his view, is not the central issue. Since eurozone governments do not issue the currency in which their debts are denominated and cannot borrow euros directly from the European Central Bank (ECB), member-states essentially have to run budget surpluses—generating euros by taxing the private sector—if they are going to reliably meet their debt servicing costs. And member-states need to run even bigger surpluses if they are going to reach the debt limits set by the Stability and Growth Pact. However, in order to maintain such budget surpluses, Kregel points out, the eurozone needs higher economic growth, and this sets up what he terms a fundamental "paradox of euro surivival": national governments cannot produce this growth through deficit spending, and attempting to reduce the deficit through spending cuts and tax increases lowers domestic demand. This leaves external demand. But the only way to spur external demand is to engage in internal depreciation—which, says Kregel, merely offsets whatever gain there might be in external demand by reducing domestic demand. The problem could ultimately be solved, he says, if the ECB were able to act as lender of last resort. The ECB, he concludes, should ask the European Commission to run a fiscal deficit that would be financed by a global European security. This would generate the necessary surpluses in countries that are struggling to service and retire debt.
www.levyinstitute.org/pubs/pn_10_12.pdf

Managing Global Financial Flows at the Cost of National Autonomy: China and India

SUNANDA SEN

Working Paper No. 714, April 2012

In this working paper, Research Associate Sunanda Sen explores the question, "Can emerging economies, such as India and China, achieve integration with the global financial system without paying a high price in terms of their domestic priorities or surrendering control of their monetary policy?" Both countries—and especially China—occupy center stage in the context of the prevailing global imbalances and are thus relevant to policymakers and scholars alike. The pace of growth in both countries and the rapid increase in their official reserves, even in the face of the global recession, make these two economies rather special among developing countries. However, an analysis of the structural changes occurring within both economies is often neglected.

Sen examines changes in the financial sectors of China and India, which, as in many developing economies, have been exposed to the vagaries of global finance. The analysis examines the constraints these two countries confront and argues that both countries have lost a degree of autonomy in their monetary policy as a result of financial integration. This outcome has been described in the literature as resulting from an "impossible trinity" (i.e., rate stability, capital account opening, and monetary autonomy).

Sen argues that achieving this holy trinity is not only impossible, but also contrary to the interests of the real economy (e.g., further depressing the level of activity in a bid to contain inflation). In addition, attempts to achieve these three goals may have the unintended consequence of reducing import demand and thus cause spillover effects in other countries. Financial integration can also introduce increased volatility in, for example, markets for financial assets, commodities, and real estate. Sen observes that both China and India have faced added degrees of volatility in all three of those markets since their deregulation.

The paper surveys current global imbalances, with an emphasis on countries with large current or capital account imbalances. Countries with current and/or capital account surpluses understandably have seen increased reserves. Sen reviews these developments in China and India, and critically assesses the relevant literature. Consistent with the monetarist frame of analysis (as in the Mundell-Fleming model and its sequel, the "impossible trinity" theorem), monetary authorities put "inflation targeting" as the main focus of their agenda. Little attention, however, is paid to the need to harness monetary policy in the interest of domestic growth. Moreover, there is hardly any attention paid to the related effects in terms of curbs on social sector spending and public investments, which come as a consequence.

Sen then moves to an examination of the theoretical premises of the "impossible trilemma" of free capital flows and exchange rate management with continued monetary autonomy. She questions the assumptions upon which the trilemma rests—assumptions that she identifies as an offshoot of the Mundell-Fleming IS-LM framework for open economies. Sen extends her analysis by introducing the dimensions of uncertainty and expectations.

The trilemma (or even the quadrilemma) essentially postulates a static framework in terms of the intersecting IS-LM-BP framework. With exchange rates, monetary policy (including interest rates), and both the magnitude and the composition of capital flows all being subject to volatility that is hardly predictable, policy options remain even more constrained—an aspect of their policies that offers one possible explanation of why those countries maintain such high reserves. Thus, the prevailing pattern of international financial transactions and the global current account imbalances, while generating the "excess" reserves held by the emerging market countries, need to be viewed in the context of the uncertainties and related compulsions as are perforce faced by these countries in the deregulated financial market.

The paper then takes up the experience of India and China in an effort to examine real-world examples of the trilemma. The adjustments by national governments to financial integration are shown to affect their options in formulating domestic monetary policy, which includes responses to the changing money supply, changes in interest rates abroad, and other related matters. Specifically, Sen analyzes the limits India and China face in crafting a monetary regime that will support growth in the presence of instability. She argues that, contrary to the notion of a "savings glut" suggested by Federal Reserve Chairman Ben Bernanke and others, India and China have been on a path of passive adjustment to the inflow of speculative (and other) capital that originates overseas and is thus external to their economies.

Sen examines empirical data to advance her investigation of whether or not the "trilemma" is evident in the monetary policies of China and India. The evidence lends itself to a conclusion that both free flows and the volatility of overseas capital have had a significant impact on China's monetary and related policies—curbing, in the process, monetary autonomy in the Chinese economy. Monetary policy in India is found to have been subject to the exigencies arising out of the open capital account and the need to both manage the real exchange rate of the rupee at a competitive level and control inflation. The trilemma (or quadrilemma) that India has been facing with the closer integration with global financial markets has thus not only constrained its monetary policies (which have been consistently sidetracking the interests of real growth), but also changed the composition of public expenditure—away from distributional justice toward the rentier interests.

Sen concludes that financial integration and free capital mobility have not only failed to achieve their promises, but have also pushed the high-growth developing economies of China and India to a state of compliance—in which domestic goals of stability and development are sacrificed to attain the globally sanctioned norms of free capital flows.
www.levyinstitute.org/pubs/wp_714.pdf

Reorienting Fiscal Policy after the Great Recession

PAVLINA R. TCHERNEVA
Working Paper No. 719, May 2012

Research Associate Pavlina R. Tcherneva evaluates US fiscal policy prior to and following the Great Recession in the United States. She argues that, although the unconventional fiscal policies targeted at the financial sector dwarfed the conventional countercyclical stabilization efforts directed toward the real sector, the relatively disappointing impact on employment was a result of misdirected funding priorities, combined with an exclusive and ill-advised focus on the output gap rather than on the employment gap. Tcherneva argues further that conventional pump-priming policies are incapable of closing this employment gap. In order to tackle the formidable labor market challenges observed in the United States over the last few decades, policies should be fundamentally reoriented away from trickle-down Keynesianism and toward what she terms a "bottom-up approach" to fiscal policy.

While the stimulus programs were very effective in stopping the collapse in aggregate demand, they failed to create robust employment because they did not target the unemployed directly. The "Job Training and Unemployment" component of the 2009 American Recovery and Reinvestment Act (ARRA), which aimed to deal explicitly with the unemployment problem of the most vulnerable members of society—the elderly, and low-skill and unemployable workers—allocated a paltry $4.5 billion, or about half a percent of total stimulus spending. Most of the fiscal effort was devoted to "pump priming." Tcherneva argues that the United States should put aside "trickle-down" Keynesian policies (i.e., policies that attempt to increase employment by stimulating output) and pursue policies of direct employment through public, nonprofit, and community-based programs.

Stabilizing aggregate demand is not enough—different methods will have different impacts on employment, and also on income distribution. While direct job creation is more effective in turning unemployment around, it also helps ensure that income gains from growth are more evenly distributed. Tcherneva compares the recovery efforts during the latest crisis to the ones during the Great Depression, where direct job creation was a principal stabilization tool. Income distribution in the latter case improved dramatically, whereas during the Great Recession, it eroded further. The most rapid increase in income inequality in the recent period was observed during the euphoric first decade of the 21st century, right before the financial crisis. The only other time in history when the United States has seen such dramatic erosion in the income distribution was during the Roaring Twenties. In both periods, the top 10 percent of the income distribution captured *all* income growth, whereas income for the bottom 90 percent *declined*. By contrast, Tcherneva points out that in the two decades following the Great Crash the bottom 90 percent of the population received 100 percent of the increases in income, whereas the exact opposite occurred in the current "recovery," when all of the income gains have gone to the top 10 percent. A change in policy orientation is clearly needed.

Direct job creation has a number of advantages over the pump-priming methods of stabilization: it delivers greater primary and secondary employment effects, it can be designed to deal with structural and regional unemployment problems directly, and it provides a more stable floor to demand than income-support programs. If designed in a bottom-up fashion by providing an employment safety net to those who experience the most precarious labor market conditions, direct job creation can also help improve the overall income distribution. The challenge is designing a public employment safety net that offers a genuine countercyclical employment mechanism. Several proposals, such as the employer-of-last-resort and job guarantee schemes, already exist. Tcherneva offers a third proposal that focuses on job opportunities for the unemployed through the social entrepreneurial and nonprofit sectors.

A direct employment program can be organized and executed in a number of ways—through the communities, nonprofits, social enterprises, and conventional public services and infrastructure investment initiatives. What is required is for the federal budget to include a permanent countercyclical employment stabilization fund, which would expand in recessions as unemployed private sector workers entered transitional public service jobs, and shrink in expansions as the economy recovered and those workers were rehired by the private sector.

Tcherneva concludes that we must rethink how fiscal policy is conducted and refocus our efforts on closing the labor demand gap by designing novel countercyclical stabilization mechanisms that offset fluctuations in private labor markets. If we do not, we will be left with a "new normal" in which reducing the high unemployment rate seems beyond the reach of public policy.

www.levyinstitute.org/pubs/wp_719.pdf

The Euro Debt Crisis and Germany's Euro Trilemma

JÖRG BIBOW

Working Paper No. 721, May 2012

Research Associate Jörg Bibow argues that the Euroland crisis is not primarily a "sovereign debt crisis" but rather a banking and balance-of-payments crisis. Intra-area competitiveness and current account imbalances, and the corresponding debt flows that such imbalances give rise to, are at the heart of the matter. These imbalances have their origins in Germany's competitive wage deflation starting in the late 1990s. Bibow argues that Germany's departure from the annual unit labor cost growth target, or the "2 percent rule," gave it a competitive advantage over other European Union (EU) member-states. However, Germany's current position is not sustainable in the long run.

Germany faces a trilemma of its own making and must make a critical choice, since it cannot have it all—perpetual export surpluses, a no transfer / no bailout monetary union, *and* a "clean," independent central bank. Thus far, misdiagnosis of what ails Europe has led to a prescription of austerity that has made the situation worse by adding a growth crisis to a host of internal stresses that threaten the euro's survival. The crisis in Euroland poses a global "too big to fail" threat, and presents a moral hazard of perhaps unprecedented scale for the global community.

Bibow begins his analysis by tracing the historical development of the euro crisis from the late 1990s to the present. At the start of the euro, Euroland had fully converged to the historical German norm of 2 percent and, by and large, has stayed close to that norm ever since—except for Germany itself. Starting in 1996, Germany established a new, lower norm for itself of zero nominal unit labor cost inflation. There can be no serious doubt that Germany's departure from its own historical stability norm provided the main cause behind the buildup of intra-area current account imbalances.

Current account imbalances can arise for a number of reasons. The following two were the most relevant in the Euroland context: first, out-of-kilter competitiveness positions; and, second, divergent domestic demand growth rates. Closely intertwined, these two influences reinforced each other owing to the working of the Maastricht regime. The ensuing current account balances set the process in motion.

While trade imbalances may persist for quite some time, at some point the prospect of bankrupting debtor countries will no longer escape the attention of markets—at which time private financing will suddenly stop (or reverse). Trade imbalances may then be sustained by official lending, but such emergency loans (liquidity "bailouts") do not solve the underlying solvency problem—calling for debt forgiveness (proper fiscal bailouts). Therefore, as a rule, perpetual export surpluses can only be sustained if offset by fiscal transfers. In fact, by replacing lending by transfers, a fiscal union proper could save and make the euro overnight.

Bibow observes that Germany eagerly designed the Maastricht regime so as to exclude both transfers and bailouts of partners, but ignored the fact that running perpetual trade surpluses would bankrupt its trade partners and thus make application of the forbidden medicine inevitable. The true choice facing Germany is to bail out either its bankrupt Economic and Monetary Union (EMU) partners or its own banks (after the latter were hit by EMU partners' defaulting on their debts).

Containing the threat posed by the self-inflicted Euroland crisis to the global recovery, therefore, has to focus on stemming euro weakening. Mindless austerity imposed continent-wide under German leadership—following the example of Germany's constitutional "debt brake," which inspired the latest "strengthening" of the Stability and Growth Pact as well as the new "fiscal compact"—is suffocating domestic demand. As ever, the EU's "growth strategy" is just doing "more of the same"; that is, more—allegedly confidence-boosting—austerity and structural reform, amounting to nothing but an *anti*-growth strategy. Adding a growth crisis to Euroland's twin banking-and-balance-of-payments crises is bound to make solvency problems worse, not better, and turn Europe into an even bigger drag on global growth and a bigger risk to global stability. A euro breakup is a non-negligible risk at this point, since timely political agreement may not be forthcoming and European Central Bank liquidity may prove unconvincing.

The required resolution calls for bank recapitalization and symmetric internal rebalancing, both of which can only be achieved if growth is sustained alongside. In a large economy such as Euroland's, that means sustaining domestic demand growth. By erroneously treating the situation as a "sovereign debt crisis" and calling for nothing but austerity and wage deflation in debtor countries, Bibow concludes, Euroland is adding a self-inflicted growth crisis on top of its predicament, which will backfire by further aggravating the underlying twin crisis.

www.levyinstitute.org/pubs/wp_721.pdf

Fiscal Policy, Unemployment Insurance, and Financial Crises in a Model of Growth and Distribution

GREG HANNSGEN

Working Paper No. 723, May 2012

Recently, some have wondered whether a fiscal stimulus plan or a set of carefully designed tax cuts could actually reduce the US government's budget deficit. Similarly, many worry that the fiscal austerity plans that have been implemented in much of the eurozone will only bring spiraling deficits. Issues of this kind involve endogenous changes in tax revenues that occur when output, real wages, and other variables are affected by changes in fiscal policy. These issues, says Research Scholar Greg Hannsgen, can be clarified with the help of a complete heterodox model with endogenous fiscal policy.

Hannsgen's paper seeks to improve our understanding of the dynamics of fiscal policy and financial crises within the context of two-dimensional (2D) and five-dimensional (5D) heterodox models. The nonlinear version of the 2D model incorporates curvilinear functions for business investment and consumption out of unearned income. To bring in fiscal policy, Hannsgen makes use of a rule with either (1) dual targets of capacity utilization and public production, or (2) a balanced-budget target. Next, he adds discrete jumps and policy-regime switches to the model in order to tell a story of a financial crisis followed by a disastrous move toward fiscal austerity. He then returns to the earlier model and adds three more variables and equations: he models the size of the private and public sector labor forces using a constant growth rate and begins to account for their social reproduction by introducing an unemployment-insurance scheme; and he makes the pricing markup endogenous, allowing its rate of change to depend, in possibly a nonlinear way, on capacity utilization, the value of the real wage relative to a fixed norm, the employment rate, profitability, and/or the business sector's desired capital-stock growth rate.

The output from this exercise includes 3D figures that illustrate sample pathways generated through time by model simulations. The latter assume somewhat arbitrary but economically reasonable initial conditions and parameter values. The pathways at least provide a sense of the types of trajectories possible with a fairly small heterodox model and various kinds of fiscal policy rules. Some of the illustrations of the 5D model reveal complex dynamic behavior. Among the inspirations for finding and displaying these "histories" are Joan Robinson's critiques of equilibrium economics.

G. L. S. Shackle's *Keynesian Kaleidics* informs the author's use of discrete jumps. In keeping with Shackle's approach, Hannsgen says that the jumps can be thought of as changes in expectations about an uncertain future that restart the simulation from new initial conditions, disrupting a continuous path through state space. On the other hand, more generally, they can be used as a "black box" model of sudden, irreversible changes in capacity utilization, in order to model numerous kinds of economic crises. The paper's story of financial crises and austerity includes a probabilistic model, in which the probability of a financial crisis is a function of the intensity of financial regulation, the elapsed time since the last financial crisis, capacity utilization, private sector liquidity, and the rate of change of retained earnings.

The fiscal policy and markup-adjustment functions can be used in a flexible way to examine the impact of combining different assumptions about how government spending and the functional distribution of income are determined. For example, in the section on 5D-model simulation results, one of Hannsgen's examples uses Alfred Eichner's "post-Keynesian" theory that more rapidly growing business sectors tend to use high markups in order to fund investment in new capacity, while another is based on the idea that higher unemployment rates bring lower real wages, all things being equal. Two more of the simulations assume "Kaleckian" markup dynamics: the markup on variable costs is increased when capacity utilization is low because (1) higher revenues per unit sold are needed in order to cover fixed costs, and (2) many businesses have gone bankrupt, raising the "degree of monopoly."

The policy rule that combines capacity utilization and public production targets—along with unemployment insurance benefits—does well in many of the simulations in generating a modicum of stability, though in some cases the economy's motion is very irregular, or catastrophic behavior emerges at some point in the simulation. Capacity utilization rates remain rather low in most cases and sometimes, like markups, move cyclically. On the other hand, markups and/or stocks of government liabilities exhibit a tendency to rise over long periods of time in some of the simulations. These results may shed light on recent trends common in developed countries.
www.levyinstitute.org/pubs/wp_723.pdf

Toward an Understanding of Crises Episodes in Latin America: A Post-Keynesian Approach

ESTEBAN PÉREZ CALDENTEY and MATÍAS VERNENGO
Working Paper No. 728, July 2012

Esteban Pérez Caldentey, Economic Commission for Latin America and the Caribbean, and Matías Vernengo, Central Bank of Argentina and University of Utah, present an alternative to the boom-bust approach often applied to the analysis of crises episodes in Latin American economies. The traditional framework owes much of its origin to Austrian business cycle theory and, more recently, New Classical economics. Many analyses of Latin American business cycles assume that monetary shocks cause economies to deviate from the optimal path and that the triggering factors in the cycle are excess credit and liquidity. In this view, the origin of the contraction is ultimately related to the excesses during the expansion. Therefore, the argument runs, avoiding the worst conditions during the bust entails applying restrictive economic policies during the expansion in the business cycle.

Building on the structuralist and post-Keynesian tradition, the authors argue that the boom-bust view is inherently contradictory because its policy recommendations tend to produce exactly the type of drastic and unwarranted fluctuations that policy seeks to avoid. Once the binding character of the external sector is understood and introduced into the analysis, a restrictive fiscal policy aimed at avoiding a "bust" may simply cause a process of debt accumulation in the private sector. The key to understanding business cycles, crises, and their impacts lies in an analysis of the composition and structure of aggregate demand. The authors illustrate these points by focusing on the global financial crisis of 2007–09, one of the largest crises to have affected Latin American economies in the past half century. Their analysis compares the impacts of the crisis on Central and South America.

Caldentey and Vernengo find that the brunt of the effects of the crisis was felt in Central America where the rising current account deficit was mirrored by the accumulation of private debt after the fiscal accounts were put in (or near) balance. The impact of the crisis forced a private sector deleveraging process that had devastating consequences for investment, output, and the financial sector. In contrast to the boom-bust view, the chain of causation in their analysis runs from deleveraging to the real economy and then to liquidity and finance, while also suggesting that the external constraint imposed by the current account does not, in general, allow for rates of growth compatible with catching up with advanced economies.

The key to understanding the impacts of the global financial crisis in these two regions is found in the growth strategies pursued by South America and Central America prior to the crisis. South American growth relied on commodity export growth, while Central America's growth was based on private debt accumulation. The type of growth strategy followed by the Central American countries was much more vulnerable to crisis than that of the South American countries. South America was not, for the most part, as affected, mainly due to the favorable performance of its external sector, which allowed the private sector balance to register a surplus.

This is not to say that growth has resulted exclusively from the external conditions in South America, but that, over the last boom, the external constraint was not binding. In the case of South America, the commodity boom created conditions for growth without hitting the external constraint. This is a situation that has had no recent parallel, and that has, for the most part, permitted relatively high levels of growth associated not only with higher exports but also with the expansion of domestic markets, partly as a result of higher wages and higher levels of social transfers.

Fiscal restraint in the South American context has resulted, in some cases, in lower rates of growth than what otherwise would have been possible as a result of the absence of an external constraint. South America's lesser reliance on external funds made the region less vulnerable and more resilient to the external shocks of the Great Recession than Central American economies. The contrast between the strategies of the Central and South American regions and how these economies fared during and after the global crisis of 2007–09 suggests that the traditional prescription of fiscal conservatism does little to reduce risk and may exacerbate economic crises.

www.levyinstitute.org/pubs/wp_728.pdf

Program: Monetary Policy and Financial Structure

Minsky and the Narrow Banking Proposal: No Solution for Financial Reform

JAN KREGEL

Public Policy Brief No. 125, 2012

Against the backdrop of renewed interest in the Depression-era "Chicago Plan," featuring 100 percent reserve backing for deposits, Senior Scholar Jan Kregel turns to Hyman Minsky's consideration of a similar "narrow banking" proposal in the mid-1990s. Minsky himself eventually abandoned this proposal, and in this policy brief, Kregel concludes that narrow banking is not a solution to the problems embedded in the financial system.

Kregel argues that breaking up large, multifunction financial institutions is an incomplete approach to financial reform. Even if breaking up the big banks did not simply lead to a fresh round of conglomeration through merger and acquisition—a distinct possibility, says Kregel, in the absence of effective antitrust legislation—this proposal is silent on the question of what the structure of the smaller institutions would be after such a breakup. If we were simply left with a greater number of smaller institutions that were allowed to continue engaging in the same complex financing activities involving structured lending instruments, then little progress would have been made toward stabilizing the financial system.

The fundamental problem, says Kregel, is that these financial institutions are too big to regulate and too complex to supervise effectively. He notes Minsky's observation that one of the underrated benefits of the 1933 Glass-Steagall Act was that institutions were limited to activities that could be easily understood and monitored by regulators, supervisors, and examiners. This sort of simplification of the financial system is what we need, says Kregel, but it is not what the 2010 Dodd-Frank Act provides. However, some proposals for simplified alternatives to Dodd-Frank do not pass muster.

Kregel looks at Minsky's consideration in the mid-1990s of a proposal for a reformed, post-Glass-Steagall financial structure. In this proposal, deposit-taking and investment banking functions would be split into separate subsidiaries of a bank holding company, with 100 percent reserves required for the deposit-taking subsidiary and a 100 percent ratio of capital to assets for the investment subsidiary.

Kregel argues that this narrow banking proposal would create a system in which voluntary savings decisions would completely determine investment decisions—effectively creating a financial system that would respect Friedrich Hayek's idea of "neutral" money. This system would be marked by a chronic tendency toward deflation or recession. Total private saving would exceed investment by the private sector's holdings of narrow bank deposits and government currency. Under these circumstances, the "macroprudential" stability of the financial system would be even more reliant on demand injections from the government. In other words, "Big Government" would be even more essential under a narrow banking system. In this system, there would be no leverage, no liquidity creation, and no deposit-credit multiplier, says Kregel. Banks would not be able to play the crucial role of supporting innovation by financing the process of "creative destruction." Finally, Kregel points out that 100 percent reserve banking would still not ensure the stability of the real economy or of capital financing institutions because financial bubbles and sectoral overinvestment could still arise.
www.levyinstitute.org/pubs/ppb_125.pdf

The Wrong Risks: What a Hedge Gone Awry at JPMorgan Chase Tells Us about What's Wrong with Dodd-Frank

JAN KREGEL
Policy Note 2012/6

In spring 2012, JPMorgan Chase announced that it had incurred large trading losses as a result of the bank's attempts to hedge its global risk position. Senior Scholar Jan Kregel asks what lessons we can learn from this episode. Kregel argues that a lot of the discussion surrounding the announcement gave the impression that this was merely a matter of personal folly or bad judgment; an impression designed to stave off arguments for tighter regulation of large financial institutions. However, as Kregel explains in this policy note, there is far more to this story than "bad judgment." An understanding of the episode can help us to discern the flaws in the regulatory approach taken by the 2010 Dodd-Frank Act.

The fact that top managers appeared not to have recognized what was going on in terms of risk and exposure in a unit that reported directly to them suggests that JPMorgan Chase is "too big to manage," says Kregel. And if it is too big to manage, it is too big for regulators to supervise effectively. However, Kregel argues that simply making banks smaller will not solve the problem; not if banks are allowed to continue to engage in the same kinds of trades on the same kinds of assets. In the aftermath of the financial crisis, JPMorgan Chase elected to use its excess deposits and the bank's own funds to increase its exposure to risky corporate debt and even riskier collateralized debt obligations.

There is another way to generate returns for shareholders, says Kregel, but it is likely to be less profitable for the banks' traders: lending to finance business investment. This is where the regulatory system comes into the picture. As pointed out by Hyman Minsky, in addition to limiting banks' activities so that they were neither too big to manage nor too big for regulators to supervise, the 1933 Glass-Steagall Act was also designed to direct bank lending toward investment in productive activities. However, Kregel observes that since passage of the 1999 Gramm-Leach-Bliley Act, the central activity of banks is to profit from changes in the prices of the assets held in their trading portfolios. Banks make capital gains for their shareholders if the guess is right, and if enough banks make the wrong guess in the same direction, then the government and the public bear the losses.

In this context, the problem with the Dodd-Frank Act is that it tries to make banks' trading activities less risky, rather than reorienting the banking system from speculating on price changes in exotic assets toward speculating on the real economy in ways that benefit not just shareholders but also entrepreneurs and workers. The problem is not risk per se, but that banks are taking what Kregel calls the "wrong risks." Instead of speculating on the ability of entrepreneurs to identify and pursue business opportunities that generate employment and real output, banks are generating returns through activities such as, in the case of JPMorgan Chase, hedging global portfolios. The latter, says Kregel, generates little in the way of new investment or employment. Regulation needs to be reoriented so that, as Minsky advocated, finance serves not only traders and banks' shareholders, but also the capital development of the economy.

www.levyinstitute.org/pubs/pn_6_12.pdf

The LIBOR Scandal: The Fix Is In—the Bank of England Did It!

JAN KREGEL
Policy Note 2012/9

In this policy note, Senior Scholar Jan Kregel elaborates on a distinction that is crucial to understanding the LIBOR scandal. The scandal centers on revelations that financial institutions had been manipulating their LIBOR rate submissions to the British Bankers' Association (BBA). Questions have subsequently been raised as to whether regulators were aware of and condoned, or even actively encouraged, these manipulations. But, as Kregel explains, there were two very different types of manipulation that were going on, and the distinction between the two is essential to evaluating attempts to pin a major share of the blame for this scandal on regulators and central bank officials.

LIBOR is a proprietary index put out by the BBA that is supposed to represent an average of the rate at which banks are able to borrow from each other short term. It is composed of rate submissions from banks selected for a panel who are asked to give the rate at which they have borrowed or could hypothetically borrow. The highest and lowest 25 percent of the submissions are thrown out.

Prior to the most recent financial crisis, LIBOR was rigged by banks in an attempt to benefit their trading positions (the banks had made bets whose payoffs depended in part on what was happening to LIBOR). The investigative reports from the UK Financial Services Authority and the US Commodity Futures Trading Commission and Department of Justice point to evidence of such manipulation as far back as 2005.

During the heart of the financial crisis there was a different type of misreporting going on, this time driven by the collapse of interbank lending. While regulators appeared to have been aware of the latter misreporting, the evidence does not suggest they were aware of the former, more venal, precrisis manipulation. A lot of the controversy on this question stems from what Kregel calls a confused reading of the 2012 testimonies of Paul Tucker, currently deputy governor of the Bank of England, and Robert Diamond, the former head of Barclays Capital, before a House of Commons committee. The testimonies are being read as providing the smoking-gun evidence that the Bank of England was aware of the scandal from the beginning and failed to stop it—but, as Kregel demonstrates, this interpretation only works if you confuse or fuse together the two varieties of LIBOR manipulation. And there are good reasons, he says, to keep them separate in our analyses.

The precrisis LIBOR manipulation was both up and down (sometimes by just a single basis point) and was rigged to boost trading profits, while during the crisis the misreporting was in one direction, and largely motivated by an attempt to avoid sending signals of funding difficulty. The context in the

latter case was a complete breakdown of markets due to the fact that short-term interbank lending had essentially seized up in October 2008. This is quite different, says Kregel, from rigging rates to increase trading profits. But more important, he adds, these disputes over where to pin the blame are also serving to distract from much deeper systemic issues deriving from the existence of financial institutions that are too big to manage and too big to regulate effectively—of which the LIBOR scandal is yet one more piece of evidence.
www.levyinstitute.org/pubs/pn_9_12.pdf

Global Financial Crisis: A Minskyan Interpretation of the Causes, the Fed's Bailout, and the Future

L. RANDALL WRAY
Working Paper No. 711, March 2012

Senior Scholar L. Randall Wray provides a quick review of the causes of the global financial crisis (GFC) that began in 2007. There were many contributing factors. Among the most important were rising inequality and stagnant incomes for most American workers, growing private sector debt in the United States and many other countries, financialization of the global economy (itself a very complex process), deregulation and desupervision of financial institutions, and overly tight fiscal policy in many nations.

For his analysis, Wray adopts the "stages" approach developed by Hyman P. Minsky, according to which a gradual transformation of the economy over the postwar period has in many ways reproduced the conditions that led to the Great Depression. Wray then uses this approach to examine the US government's bailout of the global financial system. While other governments played a role, the US Treasury and the Federal Reserve assumed much of the responsibility for the bailout. Wray argues that the manner in which the rescue was formulated ensured that virtually none of the fundamental problems exposed by the GFC would be addressed. Indeed, it can be plausibly argued that the bailout has made the global financial system much more fragile and has exacerbated the other problems with the US economy that brought on the financial collapse. Further, the GFC and the policies adopted in its aftermath have exposed the fundamental weaknesses of the arrangements of the European Monetary Union (EMU). Wray predicts that another GFC is highly likely, and this time it could well begin in the EMU and then spread quickly to the United States—the reverse of the transmission seen in 2007. Wray's detailed examination of the Fed's response shows how unprecedented, and possibly illegal, was its extension of the government's "safety net" to the biggest financial institutions.

Wray points out that the GFC was not simply a liquidity crisis, but rather a solvency crisis brought on by all the risky and fraudulent practices. Firms were holding assets of questionable value, margins were called, stocks fell, and debts could not be paid. The system froze and larger banks began to fail.

The federal government favored a "deal-making" approach over a "resolution-by-authority" approach. This is troubling from the perspectives of transparency and accountability as well for the creation of "moral hazard." In addition, the Fed's policy of quantitative easing is difficult to assess. It can be seen as a means to create liquidity but, if the Fed paid more than market price for its purchases of risky assets from banks, it could also be seen as a bailout. In either case, the actions of the Fed far exceed anything it has undertaken historically, both in terms of total spending and the duration of its efforts to aid troubled firms. Further, the Fed's use of special-purpose vehicles (SPVs) raises questions.

The Fed has used its authority under section 13(3) of the 1913 Federal Reserve Act to create SPVs and then lend to these same SPVs, which then purchase troubled assets. The SPVs have no collateral until the Fed lends to them, so their purchases of troubled assets look more like a bailout than providing liquidity. If this is the case, it is outside the Fed's authority, which is to lend directly to troubled institutions. There is also the question of what effect the Fed's actions will have on the financial structure—have the consequences of these actions been sufficiently punitive to discourage future mismanagement? Has the Fed instead created new incentives and competitive advantages by effectively shifting the risk to other players?

Finally, Wray offers some ideas about how to restructure the financial sector going forward. These include segregating activities within or among banks to protect the payments system from being compromised by high-risk activities and requiring longer-term maturities on liabilities issued to take high-risk positions.
www.levyinstitute.org/pubs/wp_711.pdf

Shadow Banking and the Limits of Central Bank Liquidity Support: How to Achieve a Better Balance between Global and Official Liquidity

THORVALD GRUNG MOE

Working Paper No. 712, April 2012

In this working paper, Research Associate Thorvald Grung Moe takes up the question, "Are there any limits to this balance sheet expansion by central banks, and if so, what should the guiding principles be for central bank liquidity support in the future?" Moe examines the collateral policies followed by central banks during this crisis, and how they are constantly "tweaked" to fit the expanding financing needs of dysfunctional financial markets. This tension between the potential liquidity needs of the rapidly growing shadow banking sector and the capacity of central banks to provide elastic currency in a crisis is at the heart of this paper.

Even when central banks have the ability to create abundant official liquidity, there should be some limits to its support for the financial sector. Traditionally, the misuse of the fiat money privilege has been limited by self-imposed rules that central bank loans must be fully backed by gold or collateralized in some other way. But since the onset of the crisis, we have seen how this constraint has been relaxed to accommodate the demand for market support. Moe suggests there must be some upper limit, and that we should work hard to find guidelines and policies that can limit the need for central bank liquidity support in future crises.

Moe reviews the recent expansion of central bank liquidity support during the crisis and then discusses the collateral polices related to central banks' lender-of-last-resort and market-maker-of-last-resort (MMLR) policies and their rationale. He then examines the relationship between the central bank and the treasury, and the potential threat to central bank independence if they venture into too much risky balance sheet expansion. A discussion of the exceptional growth of the shadow banking system is included. Moe introduces the concept of "liquidity illusion" to describe the fragility upon which much of the sector is based, and notes that market growth has been based largely on a "fair-weather" view that central banks will support the market on rainy days. Moe argues for a stronger theoretical framework with which to understand the growth of the shadow banking system and the role of central banks in providing liquidity in a crisis.

Recently, the concept of "endogenous finance" has been used to explain the strong procyclical tendencies of the global financial system. Moe shows that this concept was central to Hyman P. Minsky's theory of financial instability, and suggests that Minsky's insights should be integrated into the ongoing search for a better theoretical framework for understanding the growth of the shadow banking system and how we can limit official liquidity support for this system. Moe ends the paper with a summary and a discussion of some of the policy issues. He notes that Basel III may reduce the need for central bank liquidity support in the future, but suggests that further structural reforms of the financial sector are needed to ease the tension between freewheeling private credit expansion and the limited ability or willingness of central banks to provide unlimited official liquidity support in a crisis.

Toward this end, Moe offers five policy proposals to reduce risk and strengthen the financial system: (1) impose a global leverage ratio; (2) divorce the payments system from the risky lending system; (3) limit the MMLR role of central banks (i.e., impose a new Bagehot Rule); (4) enforce tougher collateral rules in central banks; and (5) stop the "too big to fail" policy.

The global financial crisis continues to raise pressing questions about the independence of central banks and how to structure policy in the future. As quantitative easing continues, the distinction between monetary and fiscal policy becomes less clear, and the need for substantive reform becomes more urgent.
www.levyinstitute.org/pubs/wp_712.pdf

Control of Finance as a Prerequisite for Successful Monetary Policy: A Reinterpretation of Henry Simons's "Rules versus Authorities in Monetary Policy"

THORVALD GRUNG MOE

Working Paper No. 713, April 2012

Research Associate Thorvald Grung Moe revisits the work of Henry Simons and draws from Simons's work observations and policy recommendations for the monetary system that are as relevant today as when they were first published in 1936. Simons's work was highly influential in the formation of the monetary theory of his students and successors; most notably, Hyman P. Minsky and Milton Friedman. This working paper provides a brief tour of the contribution of Simons, with emphasis on those aspects of his work that speak to the causes and possible remedies for the current global financial crisis.

In his 1936 article "Rules versus Authorities in Monetary Policy," Simons presented a passionate plea for a liberal political system based on clear policy rules. Such a rule-based system was particularly important within the area of monetary policy, according to Simons. The economy cannot function effectively if entrepreneurs have to second-guess the policy actions of the central banks all the time, and Simons noted that "we must avoid a situation where every business venture becomes largely a speculation on the future of monetary policy."

Moe's close reading of Simons's article reveals a more nuanced view of the role of central banks. Simon's rather interventionist views on the need to control short-term borrowing and speculative behavior as a precondition for the central bank's ability to achieve monetary stability are particularly striking. Irving Fisher's proposal for 100 percent money—or narrow banks—was, according to Simons, one important part of a policy package needed for government to gain control of the money supply.

Simons and his colleagues at the University of Chicago viewed volatile bank credit as an important driver of the business cycle and believed that any attempt to stabilize the economy would fail unless there were more control of the growth of private credit. This same theme appears in Minsky's theory of financial imbalances and their role in financial crises—the "financial instability hypothesis." This is not surprising, since Simons was Minsky's teacher at the University of Chicago in the 1930s. Moe's critical review of Simons's classic article provides us with a better basis for understanding the prerequisites for successful monetary policy, and a better understanding of Minsky's theory of financial crises and its relevance today.

Moe summarizes the main features of Simons's "Rules versus Authorities," including three central themes in the article: (1) the proper objective of monetary policy; (2) the need to regulate private credit; and (3) how to organize the central bank. Moe analyzes the similarities between Simons's and Minsky's theories and follows with a brief discussion of how Simons's theories provided the basis for Friedman's monetary theory ("monetarism"). Moe finds that Simons's article covers a wide set of issues related to unstable finance and does not provide unqualified support for the idea of an independent central bank with an inflation target. Simons points in particular to the problem of stabilizing the price level without also controlling private credit. This theme is the subject of renewed interest after the recent financial crisis and in the context of the Basel III proposal for a countercyclical buffer.

Moe concludes that there is much to learn from a reinterpretation of Simons's classic article "Rules versus Authorities in Monetary Policy." There is also much to be learned in the works of Minsky, who took the key insights from Simons and developed them further in his financial instability theory. They both viewed the capitalist economy as inherently unstable and the banking sector as a source of this instability. But while Minsky believed that the economy could be stabilized by an active lender-of-last-resort policy by the central bank in combination with an active fiscal policy, Simons suggested that only radical changes in the financial sector's structure could prevent crises. A mixture of their policy proposals might serve to prevent another global financial crisis.
www.levyinstitute.org/pubs/wp_713.pdf

Measuring Macroprudential Risk through Financial Fragility: A Minskyan Approach

ÉRIC TYMOIGNE

Working Paper No. 716, April 2012

Over the past decade, economists have progressively recognized that macroprudential analysis is an important tool for financial regulation and supervision. In the United States, the Financial Stability Oversight Council (FSOC) established by the Dodd-Frank Act is in charge of "identifying threats to the financial stability of the United States," and must develop a comprehensive framework to understand and measure financial fragility. In this working paper, Research Associate Éric Tymoigne presents an index to measure financial fragility within a country and across countries. Tymoigne focuses on housing finance in the United States, the United Kingdom, and France. However, the method could be applied more widely to identify the fragility that precedes a crisis and should be of interest to policymakers and regulatory authorities globally.

The main idea behind Tymoigne's index is that the risk of debt deflation grows as a result of a combination of factors; specifically, a rising debt burden, rising refinancing needs, and rising asset-based lending. Tymoigne's method/measures build on the theoretical framework developed by Hyman P. Minsky; specifically, the risk of amplification of shock via a debt deflation instead of the risk of a shock per se. Financial fragility is defined in relation to the means used to service debts, given credit risk and all other sources of shocks. The greater the expected reliance on capital gains and debt refinancing to meet debt commitments rather than income, the greater the financial fragility, and thus the higher the risk of debt deflation induced by a shock if no government intervention occurs. In the context of housing finance, this implies that the growth of subprime lending was not by itself a source of financial fragility; instead, it was the change in the underwriting methods in all sectors of the mortgage market that created a financial situation favorable to the emergence of a debt deflation. Put more simply, when nonprime and prime mortgage lending moved to asset-based rather than income-based lending, the financial fragility of the economy grew rapidly.

Tymoigne constructs his index for the household sector in three countries. He analyzes how the financial practices used to fund homeownership changed over time in a way that was conducive to a debt deflation. Thus, his approach has practical applications for regulators and supervisors to help them better understand the financial sustainability, or lack thereof, over a period of economic growth. The regulatory and supervisory focus has been mainly on credit risk and, more recently (via Basel III), liquidity risk to assess financial instability. Tymoigne's index complements this approach by focusing on the amplification risk induced by default, the closing of refinancing sources, or financial disturbance. In addition, Tymoigne uses multiple measures to identify fragility trends in housing finance. He is careful to draw a distinction between measures that are closely correlated with crisis (such as default rates) and measures, such as the ones he uses, used to identify the changes in financial fragility that precede a crisis.

Tymoigne concludes that financial fragility in housing finance started to grow from the late 1990s in the United Kingdom and the United States, and rapidly grew after the US recession in 2001. France's housing finance practices were less permissive and did not record an increase in financial fragility until the second part of the 2000s. Notably, the decline in fragility has been the most dramatic in the United States, and household fragility is almost back to its level of 2003, when most of the Ponzi financing in housing had not occurred. Tymoigne explores these and other findings in the paper. The paper also provides a road map for future research on the construction of indexes of financial fragility. Better datasets should be developed to measure the refinancing needs of different sectors of the economy and the prevailing underwriting practices in the financial sector.

www.levyinstitute.org/pubs/wp_716.pdf

Introduction to an Alternative History of Money

L. RANDALL WRAY

Working Paper No. 717, May 2012

Money: how we understand its origins, uses, and form shapes how we manage it. Senior Scholar L. Randall Wray debunks the orthodox view of money (i.e., what you were probably taught in grade school) and offers a heterodox, or substantivist, view of money (i.e., money as a social artifact). The reader might ask, "Why during these times of financial upheaval should we care about what came first, the pelt or the coin?" Wray presents a perspective on the *nature* of money, banks, and the monetary *system*. He argues that the orthodox approach to money and to policy is historically and logically flawed.

Wray develops a heterodox view of the origins of money and the development of the modern financial system, drawing on the work of historians and anthropologists. While it is unlikely that we will ever know for certain the origins of money, he observes, we can avoid some of the more pat fictions of the mainstream history of money. Money did not simply spring forth fully formed from the brow of some protomarket participant as a rational response to reduce transactions costs. The origin of money is complex, varied, and grounded in its social and historical contexts.

Wray argues that by distinguishing money from the various functions it performs, we may conclude that primitive, pre–private property economies did not use money in the way we commonly understand it. Thus, it is inappropriate to try to find objects that fulfill "money-like" functions (pelts, tobacco, and so on) in tribal societies and then label these "money." Rather, our understanding of the role money plays in capitalist economies enables us to use a comparative methodology to identify the contrasts between monetized economies and those based on communal, reciprocal relations—the latter do not use money, although we may find in them objects that superficially appear to fulfill some of the functions we now associate with assets denominated in a money of account.

As Wray explains, money first existed as a unit of account (i.e., so much wheat or barley). The development of private, alienable property allowed private loans. As loans came to be written in a standard money of account, the means-of-payment function of money developed. This gradually permitted production for market to earn the means of settling debts, which generated a medium-of-exchange function for money. Money acting as a medium of exchange or means of payment would take a physical form (wheat or barley, and, later, clay tablets, wooden tally sticks, metal coins, and paper IOUs), denominated in terms of the idealized money of account. The physical form of money is secondary to money's primary role as a social unit of value—it is a record of the money measure of debits and credits.

Because production in a market system is always *monetary* production, its purpose is to realize production in money form, whatever that form may be. Accumulation of money-denominated assets becomes the universally recognized path to wealth; the money of account becomes the social unit of value. Thus, the unit of social value is defined endogenously.

Contrary to what is often taught, money was not injected into a well-functioning barter economy; instead, money and the market developed together. This helps to explain why production in a market economy is always monetary production—money now for more money later. It also means that the money supply in a monetary economy is necessarily endogenously determined. Monetary economies have not, and cannot, operate with exogenous money supplies. Finally, while a monetary economy with an endogenous money supply can operate with a commodity reserve system, such a system is subject to periodic debt deflations. Thus, in all developed capitalist economies, this has been replaced by an accommodative central bank reserve system. The current system, based on central bank reserves, did not evolve out of a commodity money system. Rather, the commodity money system evolved out of an endogenous money system.

Monetarist policy prescriptions (i.e., close control over the quantity of reserves) represent a giant step backward to an unstable system in which accumulation suffers occasional reversals during debt deflations. Furthermore, monetarist policy would not lead to greater control of the money supply—the supply of reserves (whether of wheat, gold, or central bank liabilities) has never determined the quantity of credit money. Rigid control over reserves would eliminate the primary advantage bank liabilities have over other types of liabilities and lead to greater use of alternative money–denominated liabilities. This, however, would come at a cost: the revival of debt deflations.

www.levyinstitute.org/pubs/wp_717.pdf

What Are the Driving Factors behind the Rise of Spreads and CDSs of Euro-area Sovereign Bonds? A FAVAR Model for Greece and Ireland

NICHOLAS APERGIS and EMMANUEL MAMATZAKIS

Working Paper No. 720, May 2012

Between the introduction of the euro in January 1999 and the beginning of the global financial crisis in mid-July 2007, spreads on bonds of eurozone members moved within a narrow range, with only modest differentiation across countries. The stability and convergence of spreads was considered a hallmark of successful financial integration within the eurozone. The ongoing instability and divergence have raised far-reaching questions. This paper addresses a critical issue in how we understand and model the spreads and credit default swaps (CDSs) of eurozone sovereign bonds. Nicolas Apergis and Emmanuel Mamatzakis, University of Piraeus, observe that our ability to understand and accurately describe the behavior of the factors that drive markets is essential to developing policies to prevent or mitigate financial instability.

The authors' approach is to describe the underlying structural relationships among sovereign debt spreads and CDSs, which are assumed to drive the underlying dynamics of the sovereign debt. The authors employ a factor-augmenting vector autoregressive (FAVAR) model to investigate these relationships, based on an assumption that there is additional information within a vector of unobserved factors. These unobserved factors could be market specific, such as migration risk (i.e., credit downgrade risk) and counterparty risk; or they could reflect a number of economic factors, such as growth rates.

A FAVAR model has never before been used in the literature. Departing from the classical structural vector autoregressive (VAR) models, the authors are able to relax certain limitations regarding the choice of variables that could drive spreads and CDSs of eurozone sovereign debts. The authors employ the following factors to examine their impact on sovereign CDS spreads as well as on sovereign bond spreads. First, they assign proxies for credit risk: (1) the risk-free rate (as a eurozone-wide homogeneous proxy, they use the Euribor three-month short rate) and (2) the corporate CDS premium (iTraxx); as credit spreads compensate investors for more than pure expected loss, this premium is a measure of aggregate credit-market developments; namely, the iTraxx Main Investment Grade index. Second, they use a proxy for each country's public debt; namely, a country's total outstanding bonds relative to its GDP. The authors then analyze weekly data for the period January 5, 2007, to October 29, 2010.

The results show that liquidity, credit risk, and the flight to quality drive both spreads and CDSs of five years' maturity over swaps for Greece and Ireland in recent years. Greece, in particular, is facing elastic demand for its sovereign bonds that further stretches liquidity. Moreover, in current illiquid market conditions, spreads will continue to follow a steep upward trend, with certain adverse financial stability implications. In addition, the authors observe a negative feedback effect from counterparty credit risk.

Both Greece and Ireland appear to be caught in a maelstrom, since in the present debt crisis markets are short of capital, while banks are undercapitalized. The depletion of capital poses a challenge for eurozone sovereigns with large fiscal imbalances that, in turn, result in high costs to hold such sovereign bonds, due to costly haircuts in the repo markets.

For policymakers, there may be some comfort in the recognition that the wider spreads are due, in the first instance, to external factors. Global financial stress, having infected a widening range of financial asset classes, has also fed through to eurozone sovereign debt bonds. If the potency of these common external factors is mitigated over time, spreads should come down. But while common factors have played their role, they do not explain the increased dispersion of spreads. Thus, the wider and more diverse spreads could also reflect domestic vulnerabilities. The implication is that higher spreads could persist, since the financial vulnerabilities uncovered by the global crisis and weaker growth prospects have the potential to reinforce each other.

The authors conclude that deteriorating market liquidity appears to be the driving force behind high sovereign debt spreads and CDSs. In terms of economic policy, given the current degree of pessimism in the markets regarding the prospects of public finances in the eurozone and worldwide, enhancing the scope and the scale of monetary policy remains an important policy option.
www.levyinstitute.org/pubs/wp_720.pdf

Post-Keynesian Institutionalism after the Great Recession

CHARLES J. WHALEN
Working Paper No. 724, May 2012

In this working paper, Charles J. Whalen, US Congressional Budget Office, surveys the context and contours of contemporary Post-Keynesian Institutionalism (PKI). He begins by reviewing recent criticism of conventional economics by prominent economists and surveys the research that paved the way for PKI. He then sketches essential elements of PKI—drawing heavily on the contributions of Hyman P. Minsky—and identifies directions for future research. Although there is much room for further development, Whalen concludes that PKI offers a promising starting point for economics, especially in the wake of the Great Recession.

The global financial crisis underscored some of the weaknesses of mainstream economic theory—its failure to anticipate the crisis or simply understand the tensions that were developing within the economy is a damning indictment of current macroeconomics. Most economists had become so convinced of the idea of market efficiency they could not imagine a global market crisis. As Willem Buiter remarked, mainstream economists' theories "not only did not allow questions about insolvency and illiquidity to be answered; they did not allow such questions to be asked." Now those questions are being asked, and PKI is experiencing a level of interest not seen in decades.

Efforts to develop PKI before the Great Recession were limited. However, there were a number of prominent economists attracted to institutionalist and Keynesian economics. Institutionalism had a number of innovative thinkers and included some illustrious economists (such as John Kenneth

Galbraith and Robert Heilbroner). Meanwhile, Post-Keynesianism was shaped by a small group of economists in the United States and the United Kingdom—including Joan Robinson, Paul Davidson, and Alfred S. Eichner—and rooted in aspects of Keynes's scholarship. The 1970s and early 1980s were a productive period of exploration for scholars interested in the possibility of a PKI. Economists such as Wallace C. Peterson, Charles Wilber, and Kenneth P. Jameson were active in formulating a PKI. However, it was the work of Minsky that would provide the focus after the mid-1980s. Today, the work of constructing a coherent PKI continues.

Whalen describes contemporary PKI as an intellectual tradition that fuses adherence to an institutionalist viewpoint with the use of some powerful Post-Keynesian tools of analysis. He offers the following summary of the core ideas of PKI:

(1) Economics is about real-world social provisioning. Economic life is embedded in a social context involving institutions, power relations, and the like.

(2) Constant change is an inherent feature of capitalism. The evolution of capitalism, especially markets and prices, is often uneven.

(3) The Wall Street (or Financial) Paradigm: financial gain motivates economic activity, production precedes production, and financing precedes production.

(4) PKI uses a business-cycle approach to macroeconomics, arguing that business cycles are endogenous to capitalism.

(5) PKI integrates a financial instability hypothesis (FIH); PKI does not assume efficient markets. An efficient-markets perspective assumes rational behavior; FIH does not.

(6) PKI builds on the Schumpeter-Minsky theory of capitalist development, which is institutionally grounded and finance driven.

(7) PKI appreciates the inevitable and creative role of government in economic life. Government is integral to economic life; it is not merely a means to correct for market failures. PKI also recognizes that government action can be directed toward at least three types of efficiency—Smithian, Keynesian, and Schumpeterian.

Although PKI offers economists a promising starting point post Great Recession, Whalen concludes, there is much room for further development. Among his suggestions: PKI would benefit from greater attention to methodology (or philosophical grounding) and to methods. The FIH and the Schumpeter-Minsky theory of capitalist development need to be more fully integrated, especially since business cycles are both a cause and a consequence of structural economic change. The study of money manager capitalism needs to be more closely connected to the literature on financialization and globalization. The relationship between money manager capitalism and economic insecurity (and income inequality) deserves more attention. And PKI needs to give particular additional consideration to the challenges of global economic development and sustainability.

www.levyinstitute.org/pubs/wp_724.pdf

Diversity and Uniformity in Economic Theory as an Explanation of the Recent Economic Crisis

JAN KREGEL

Working Paper No. 730, August 2012

This working paper summarizes remarks made by Senior Scholar and Program Director Jan Kregel in a speech honoring J. Fagg Foster. Kregel explores two assumptions that are central to mainstream economic theory. These are the assumptions of "diversity" and "uniformity." Kregel argues that these two assumptions, while often necessary, can lead to errors in our thinking and to misguided policy. The subprime debacle and the current debate on recovery measures are two examples of uniformity and diversity gone awry.

Economic theory assumes a natural diversity in individual preferences for commodities. Markets rely on the premise that these diverse preferences can be resolved into uniform commodities with market-clearing prices. Of course, the idea of a uniform commodity is somewhat of a fiction—what we make and what we want are as diverse as we are. However, markets and prices would be impossible without some degree of uniformity, so we create uniformity. It is something of a paradox: markets create commodities and commodities create markets. Economists live with this paradox. However, the tension between uniformity and diversity is laid bare when commodities that are assumed to be uniform (e.g., securitized mortgages) reveal their inherent diversity and become difficult, if not impossible, to price.

Markets and commodities exist as concepts that are useful—indeed, indispensable—to an understanding of the functioning of a mercantile and then capitalistic economic system, precisely because it is possible to abstract from the myriad of individual exchanges a given set of relationships that can be considered representative of actual experience and provide a guide to behavior. The ideas of diversity and uniformity play equally important, and sometimes perilous, roles in the operation of markets.

Historically, things like consumer loans, auto loans, credit card loans, and especially home mortgages were considered too diverse to be seen as a commodity. An auto loan, for example, was seen as too idiosyncratic to trade. Therefore, such loans could not be turned into commodities in the same way as bonds or shares. Securitization was a financial innovation that created homogeneity out of diversity (mortgages). Unbundling bonds was likewise a method to create diverse income streams, or commodities, from a single, uniform instrument.

One could say that the fundamental theoretical error behind the subprime crisis was the failure to correctly distinguish diversity from uniformity and the failure to realize that without a logical foundation for a uniform homogenous commodity, there can be no market—and with no market, there can be no market prices to provide perfect information to inform decisions. The securitized subprime mortgage market was an imaginary construct, based on imaginary commodities, and decisions were based on imaginary prices. Confusing uniformity with diversity carries a high penalty. Many of the proposed recovery policies misunderstand the balance that is needed between uniformity and diversity in order for markets to operate. Kregel warns that too much diversity or uniformity leads to market dysfunction.

Financial institutions uniformly believe that they have assets that can be converted at market prices into liquidity as required. But this implies the existence of diversity of opinion. For there to be sellers, there must be buyers. When all market actors hold the same view and that diversity disappears, there is no liquidity and the market freezes or collapses. Too much uniformity and markets will not function. Thus, we see the importance of the central bank acting as lender of last resort, taking a diverse view, and acting as a buyer of last resort when everyone is a seller—of becoming the market maker and price maker. The role of the central bank is to rebalance uniformity and diversity so that markets can function.

Finally, many of the current policy prescriptions are an attempt to introduce a dangerous degree of homogeneity into the behavior of all sectors of the economy: financial institutions are to reduce leverage to save and build up more capital, households are to reduce expenditures to increase savings to meet their losses from the housing collapse, the nonfinancial business sector is to reduce costs to improve profitability, and the government is to reduce leverage by spending less to pay down debt. The diversity necessary for a viable economy will no longer exist. But, Kregel warns, a lack of diversity is the characteristic of the command economy, and diversity is the heart of economic survival.

www.levyinstitute.org/pubs/wp_730.pdf

Program: The Distribution of Income and Wealth

Levy Institute Measure of Time and Income Poverty

Simulations of Full-Time Employment and Household Work in the Levy Institute Measure of Time and Income Poverty (LIMTIP) for Argentina, Chile, and Mexico

THOMAS MASTERSON

Working Paper No. 727, July 2012

In this working paper, Research Scholar and Director of Applied Micromodeling Thomas Masterson presents the results of simulations of the impacts of full-time employment using the Levy Institute Measure of Time and Income Poverty (LIMTIP). The paper presents part of the ongoing work undertaken for “Why Time Deficits Matter: Implications for Poverty Measurement and Poverty Reduction Strategies,” a LIMTIP project supported by the United Nations Development Programme and the International Labour Organization that offers a more accurate description of poverty by using a measure that incorporates both time and income poverty. The paper describes the application of the LIMTIP methodology to the populations of Argentina, Chile, and Mexico. Masterson concludes that the results of the study provide qualified support for the methodology going forward.

Policy proposals to address income poverty frequently amount to attempts to find employment for those who are in income-poor households. The rationale is straightforward: more income leads to less poverty. Employment-based approaches to poverty reduction assume that households have the time for employment without diminishing the household production necessary to maintain the household. Policies focused on increasing income can be successful insofar as they reduce income poverty. However, they neglect important aspects of household well-being. Standard measures of poverty ignore the impact of the reduced amount of time available to household members for household production, which, by its nature, affects household well-being.

To assess the impact of income poverty–reduction strategies, it is necessary to estimate the impact of those strategies on the income and time allocation of households. Masterson draws on and extends earlier work in which the same microsimulation model used in the LIMTIP study was used to simulate the results of the 2009 American Recovery and Reinvestment Act (see Working Paper No. 568, which is summarized in the Fall 2009 issue, pp. 18–19). The nature of the LIMTIP study is quite different from the prior one, which estimated the impact of a specific fiscal stimulus plan that aimed to increase employment generally. The LIMTIP study does not examine a specific policy proposal; rather, it simulates the time and income consequences of a higher level of employment among the currently unemployed in Argentina, Chile, and Mexico. These simulations serve as inputs to the LIMTIP model.

The paper begins with a description of the methodology used for the imputation of occupation and industry, hours of employment and earnings, household income, and household production hours for the unemployed. A simplified job-assignment scenario is envisioned in the LIMTIP project: all eligible adults not working full-time receive full-time employment (referred to as "job recipients"). Masterson presents a method for assigning the job recipients to employment categories in order to estimate the income and time consequences of their change in employment status in Argentina, Chile, and Mexico. The data used in the simulations were created for each country using statistical matching of time-use surveys and income surveys. The purpose of the LIMTIP simulations is to assess the first-order impacts of policies aimed at alleviating poverty using jobs policies; for example, an employer-of-last-resort (ELR) policy.

After the job recipients are assigned jobs, hours, and earnings, household income is recalculated to reflect the change in employment status. Masterson then compares the distribution of the imputed earnings, hours of employment, and hours of household production within subgroups of the employed (i.e., the baseline population in each country) and the job recipient population (i.e., simulated employment).

The primary obstacle to assessing the quality of the simulations presented in the working paper is the lack of a real-world situation with which to compare the results. For each country, the job recipients' earnings and typical weekly hours of market work and household work are similar to the distribution in the employed population. Intuition suggests that these groups should look similar, but the composition of the employed and job recipient populations is quite different (e.g., in age, gender, and education) in some subgroups. If it is assumed that the results of the simulation should match the baseline employed populations, then these simulations can be used to benchmark the quality of other LIMTIP project simulations. Masterson concludes that the methodology presented in this paper will serve as a working model, but that it will be assessed on a continuing basis as the project progresses.
www.levyinstitute.org/pubs/wp_727.pdf

Program: Gender Equality and the Economy

Time Use of Mothers and Fathers in Hard Times: The US Recession of 2007–09

GÜNSELI BERIK and EBRU KONGAR
Working Paper No. 726, June 2012

In this working paper, Günseli Berik of the University of Utah and Research Associate Ebru Kongar analyze the combined effects of the recent recession and jobless recovery over the

2007–10 period on the time-use patterns of mothers and fathers in the United States. Using American Time Use Survey (ATUS) data for 2003–10 and controlling for prerecession trends, the paper examines whether, in addition to accelerating the convergence of mothers' and fathers' employment rates, the recession and jobless recovery also occasioned a decline in the disparity in unpaid work hours, leisure time, and personal care between mothers and fathers.

Berik and Kongar note that the availability of ATUS data over a business cycle has facilitated empirical testing of the effects of macroeconomic conditions on individuals' allocations of time between unpaid work and leisure. The authors use individual-level monthly data for women and men aged 18–65 who live in the same household with their spouse and have at least one child under age 18. They look at four categories of time use—paid work, unpaid work, leisure time, and personal care—and distinguish between long-term trends and business cycle effects by comparing actual changes in time use from December 2007 to December 2010 to a linear extrapolation from 2003–07 data. They find that the recession contributed to the convergence of both paid and unpaid work only up to June 2009, with the convergence in unpaid work hours in particular disappearing after that point.

Job losses from the recession affected men disproportionately. At the same time, married women, particularly women with children, increased their labor force participation to supplement family incomes. In 2009, the authors observe, women's share of paid employment reached 50 percent for the first time in US history. After June 2009, the official end of the recession as dated by the National Bureau of Economic Research, the proportion of employed mothers declined slightly. However, the convergence in paid work hours continued because fathers' labor force participation dropped and their unemployment increased even more dramatically during the July 2009 – December 2010 "jobless recovery" period than during the official recession.

As for unpaid child care and housework, the authors point to a long-term move toward gender convergence that lasted from the 1960s until the early 2000s, with men spending more time on unpaid work and women spending less. They find that the 2007–09 recession occasioned a return to this convergence in unpaid work hours. The narrowing of the gap in unpaid hours was driven by an increase in the number of hours fathers devoted to child care and a small decline in the number of hours mothers spent on shopping, housework, and child care. This convergence in unpaid work hours stalled after June 2009, and, in fact, the gap in unpaid work widened slightly after this point, driven mainly by changes in unpaid child-care hours.

Controlling for prerecession trends, over the extended period December 2007 – December 2010—which is to say, over the period that includes the recession (December 2007 – June 2009) and the jobless recovery (July 2009 – December 2010)—there was a considerable move toward parity in the paid work hours of mothers and fathers, and a slight, statistically weaker narrowing of the gap in unpaid work hours. All told, this resulted in a relative increase in mothers' *total* workload (paid and unpaid work combined)—a relative increase of three hours per week, on average—and a relative decline in mothers' personal care and leisure time. Without the recession, fathers' paid work hours would have increased slightly, relative to mothers', which would have resulted in a small relative increase in fathers' total workloads. The recession and jobless recovery did not, the authors conclude, generate significant pressures for more equitable sharing of total workloads between mothers and fathers in the United States.
www.levyinstitute.org/pubs/wp_726.pdf

Program: Employment Policy and Labor Markets

Guaranteed Green Jobs: Sustainable Full Employment

ANTOINE GODIN
Working Paper No. 722, May 2012

Antoine Godin, University of Pavia, proposes creating a publicly funded green jobs program as part of an employer-of-last-resort (ELR) strategy. Godin asserts that this approach will increase employment while improving the ability of national governments to reach the goals outlined in the Kyoto Protocol. He investigates the synergistic effects using a stock-flow consistent model of a multisectoral economy with an ELR scheme where workers are engaged in transforming the current economy to a greener economy. The paper includes a review of the economic and fiscal impacts of the green-jobs ELR policy and compares these results with a standard Keynesian demand spur (KDS) model.

Full employment was the objective of employment policies in the post–World War II period until the mid-1970s. Subsequently, there was a dramatic change in the goals of employment policies. Many governments moved from a "full employment" to a "full *employability*" framework. Employment is now widely seen as a microeconomic problem. Creating jobs is no longer seen by many as the role of government.

Godin argues for a return to full employment policies rather than full employability policies. He further argues that markets will not address social needs, such as reducing climate change, in the absence of adequate market signals. Therefore, government must play an active role in promoting economic activity that will bring about needed structural changes.

The literature on green building practices is large and diverse. Godin examines only energy-efficiency impacts for the sake of analytical simplicity. First, he constructs a baseline model of the economy. He then introduces a 10 percent increase in public spending to create green jobs under an ELR program. Unemployed workers are hired by the state and receive green jobs. The first impact of this policy is an increase in household income. The reduction in unemployment continues, as public green jobs create additional employment in the private sector. The second result of the green-jobs ELR policy is greater energy savings. As the green-jobs ELR program has an impact on the economy, energy consumption falls. However, Godin finds that the cost of the ELR program does not reach the expected 10 percent because of the increased revenues from employment and related economic activity. Household income also increases because of reduced spending on energy, which leads to yet more structural changes in Godin's stylized economy.

Godin draws three main conclusions from his analysis. First, a green-jobs ELR strategy is a direct means to remove involuntary unemployment from the economy and thus address poverty. Second, a green-jobs ELR program will reduce energy consumption and lead to needed structural changes in the economy. Finally, the cost of the ELR, originally set at 10 percent, is approximately 4 percent net increase due to the increases in demand created by energy savings in households.

Godin further tests his green-jobs ELR model by comparing its performance to a traditional KDS model. The simulation compares the impacts of a 6 percent increase in government spending to increase consumption (in the KDS case) or an equal amount to fund the green-jobs ELR program.

The results of Godin's simulation show superior results for the KDS model in terms of GDP growth and unemployment. However, the ELR scenario yields greater increases in income and wealth for households. Furthermore, it eliminates involuntary unemployment. By increasing incomes in the lowest income groups, the ELR scenario also benefits businesses because of increased demand. Finally, it produces structural changes in the economy that lead to energy-efficiency gains that are necessary to meet the Kyoto Protocol. Overall, Godin concludes that a green-jobs ELR strategy would reduce unemployment, create needed structural changes in the economy, and provide greater benefits than traditional approaches to stimulate demand.

www.levyinstitute.org/pubs/wp_722.pdf

Program: Economic Policy for the 21st Century

Explorations in Theory and Empirical Analysis

Tracking the Middle-income Trap: What Is It, Who Is in It, and Why?

JESUS FELIPE, ARNELYN ABDON, and UTSAV KUMAR

Working Paper No. 715, April 2012

There is no clear and accepted definition of what the "middle-income trap" is, despite the wide attention that the phenomenon receives. In this paper, Research Associate Jesus Felipe, Arnelyn Abdon, and Utsav Kumar, all of the Asian Development Bank, provide a working definition of the term. First, the authors define four income groups of GDP per capita in 1990 PPP (purchasing power parity) dollars: low-income, lower-middle-income, upper-middle-income, and high-income. They then classify 124 countries for which there are consistent data for 1950–2010. In 2010, there were 40 low-income countries in the world, 52 middle-income countries, and 32 high-income countries.

The authors calculate the threshold number of years for a country to be in the middle-income trap by analyzing historical income transitions. This cutoff is the median number of years that countries spent in the lower-middle-income and upper-middle-income groups before graduating to the next income group (for the countries that made the jump to the next group after 1950). These thresholds are 28 and 14 years, respectively, and they imply that a country that becomes lower-middle-income must attain an average growth rate of per capita income of at least 4.7 percent per annum to avoid falling into the lower-middle-income trap, and that a country that becomes upper-middle-income must attain an average growth rate of per capita income of at least 3.5 percent per annum to avoid falling into the upper-middle-income trap.

The analysis indicates that, in 2010, 35 out of the 52 middle-income countries were in the middle-income trap, 30 in the lower-middle-income trap, and five in the upper-middle-income trap. Eight of the remaining 17 middle-income countries are at risk of falling into the trap. Of the 35 countries in the middle-income trap in 2010, 13 were Latin American, 11 were in the Middle East and North Africa, six were in Sub-Saharan Africa, three were in Asia, and two were in Europe.

Asia is different from the other developing regions, for some economies are already high-income and five have been low-income since 1950. There are eight Asian middle-income countries not in the lower- or upper-middle-income trap. China has avoided the lower-middle-income trap; in all likelihood, China will continue to grow and avoid the upper-middle-income trap. India recently became a lower-middle-income country and it will probably avoid the lower-middle-income trap.

Using highly disaggregated trade data, the authors compare the exports of countries in the middle-income trap with those of countries that graduated, across eight dimensions that capture different aspects of a country's capabilities to undergo structural transformation, and test whether they are different. The results indicate that countries that made it into the upper-middle-income group had a more diversified, sophisticated, and nonstandard export basket at the time they were about to jump to the next income level than those in the lower-middle-income trap today. Likewise, countries that have attained upper-middle-income status had more opportunities for structural transformation at the time of the transition than countries that are today in the lower-middle-income trap. The authors also find that the sophistication of the export basket of countries in the upper-middle-income trap is not statistically different from that of the countries that made it to the high-income level at the time they were about to make the transition. However, countries in the upper-middle-income trap are less diversified, export more standard products, and had fewer opportunities for further structural transformation than the countries that made it into the high-income group.

Avoiding the middle-income trap is a question of how to grow fast enough so as to cross the lower-middle-income segment in at most 28 years, which requires a growth rate of at least 4.7 percent per annum. Countries in the upper-middle-income segment must cross their threshold in at most 14 years, which requires a growth rate of at least 3.5 percent per annum, to avoid the upper-middle-income trap. In this context, the authors view today's development problem as one of how to accumulate productive capabilities and to be able to express them in, first, a more diversified export basket; and, second, in products that require more capabilities (i.e., more complex production). The authors conclude that countries in the middle-income trap have to make efforts to acquire revealed comparative advantage in sophisticated and well-connected products. This is the most direct strategy to becoming a high-income country.

www.levyinstitute.org/pubs/wp_715.pdf

Aggregate Production Functions and the Accounting Identity Critique: Further Reflections on Temple's Criticisms and Misunderstandings

JESUS FELIPE and JOHN MCCOMBIE

Working Paper No. 718, May 2012

Research Associate Jesus Felipe and John McCombie, Cambridge Centre for Economic and Public Policy, clarify a number of issues raised by J. R. W. Temple in his article "Aggregate Production Functions, Growth Economics, and the Part-Time Tyranny of the Identity: A reply to Felipe and McCombie" (2010). Felipe and McCombie stand by the full extent of the implication of their argument; namely, that the use of value data (as opposed to physical quantities) in the estimation of any specification of an aggregate production function, whether or not it is a Cobb-Douglas production function, precludes the researcher from interpreting the regression results as the technological parameters (e.g., the factor output elasticities or the elasticity of substitution). However, Temple argues that the critique only relates to the Cobb-Douglas relationship. The authors argue that it is true for any level of aggregation using value data. The aggregate production function is, in fact, unlikely to exist, not least because of serious aggregation problems and variations in *x*-efficiency, et cetera. The only certainty is that the regression results and the values of the estimated parameters are determined by the accounting identity. The tyranny of the identity works "full time."

The authors note that, despite their and Temple's divergence on the nature of the identity, Temple agrees with them on two points. The first point is that the aggregation problem should receive more attention in the literature than it does, although Temple argues that there are other approaches that are not so reliant on aggregation (e.g., the use of multisector models, reduced-form regressions, and methods inferring productivity levels from bilateral trade data). The second area where there is agreement is that an applied researcher may appear to obtain meaningful results from estimating a production relationship, even when the researcher is making assumptions that do not hold in the data. One important instance arises when factors are not paid their marginal products. In that case, although researchers often interpret their results as if the estimated parameters could be used to derive output elasticities, the identity *suggests* that the estimates may be more closely related to the factor shares.

This would seem to go a long way toward conceding the authors' position and poses difficulties for understanding the rationale behind Temple's criticisms. Felipe and McCombie certainly agree with Temple's statement, except that the identity *shows*, not *suggests*, that the estimated coefficients will take values that are equal to the factor shares, even when no well-defined aggregate production function exists.

The balance of the paper is devoted to the problems with Temple's (2010) arguments. The authors take up two main issues. First, Temple erroneously continues to imply that the critique only holds if certain ad hoc, or what he terms "auxiliary," assumptions are made. Second, the authors demonstrate that his argument at times reduces to a circular one. Temple sometimes *assumes* that the aggregate production function exists, and uses this assumption to supposedly counter the argument that the relationship between outputs and inputs in value terms does not necessarily reflect a technological production relationship.

Despite some acknowledged points of agreement, the authors conclude that Temple does not appreciate the full implications of the critique. The fact that very simple functional forms and two highly aggregate variables (with the constant price value of the capital stock, in particular, subject to all kinds of statistical measurement errors) can often explain more than 90 percent of the variation in output is due simply to the fact that the variables are definitionally related. This explanation does not depend upon any specific assumptions, such as constant factor shares, constant level, or growth; or the weighted average of the growth rate of the wage rate and profit rate; or a constant capital-output ratio. Allowing these to vary does not mean that all the aggregation problems and the problems posed by the accounting identity disappear, and that we can be confident of estimating a technological relationship. Aggregate production functions remain problematic and must be approached accordingly.

www.levyinstitute.org/pubs/wp_718.pdf

Problems with Regional Production Functions and Estimates of Agglomeration Economies: A Caveat Emptor for Regional Scientists

JESUS FELIPE and JOHN MCCOMBIE

Working Paper No. 725, May 2012

In this working paper, Research Associate Jesus Felipe and John McCombie, Cambridge Centre for Economic and Public Policy, caution against the uncritical acceptance of a central concept in neoclassical economics that is widely used in spatial economics: the aggregate production function. This method is used for a variety of purposes, ranging from estimating the size of agglomeration economies and spatial economic spillovers to determining the rate of regional productivity convergence. Therefore, understanding the limitations of the aggregate production function is relevant not only to economic theory but also to how development policies are designed and their results evaluated.

There is substantial technical literature on the "aggregation problem" that shows that the aggregate production function cannot be derived from microproduction functions, except under the most implausible assumptions. Paradoxically, statistical estimations of the aggregate production function give remarkably good "fits" with plausible estimates. The answer to this puzzle is that the aggregate production functions have to be estimated using data for output and capital measured in constant-price monetary units. This is not a neutral procedure because of the definitional relationship between output, capital, and labor explained by an underlying accounting identity. It is this relationship, the authors observe, that is responsible for the surprisingly good statistical fit of aggregate production functions. It is therefore not possible to interpret the estimates of putative aggregate production functions as technological parameters, such as the elasticity of substitution, the degree of returns to scale (including agglomeration economies), and the rate of exogenous technical progress.

The authors identify three specific problems. The first arises at the firm (plant) level from the necessity to sum over the individual factors of production to arrive at aggregate measures of output, capital, and labor. The second is the necessity of aggregating firms' (and industries') production functions. Both are extremely difficult, if not impossible, propositions, the authors argue. In addition, nearly all the work on aggregation has been done on aggregating across firms or industries. To the previous two problems, Felipe and McCombie add the problem of spatial aggregation, which results from summing the individual firms' output to give a total for the spatial unit (such as the state or city) under consideration. It may be shown that all the estimations of putative production functions are accomplishing is a regression of a mathematical transformation of an equation with no economic content. The authors demonstrate that the "surprisingly good" statistical results of estimating the Cobb-Douglas production function are not surprising at all, but inevitable.

The aggregate production function has had a checkered history ever since it was first introduced by Cobb and Douglas. In particular, it is now well-established theoretically that micro Cobb-Douglas production functions cannot be summed to give an aggregate production function, except under most implausible assumptions. These reservations (together with those of the capital controversies) were discussed in most textbooks on economic growth prior to around 1975 and then were conveniently forgotten. The standard instrumentalist defense that aggregate production functions "work," in that they empirically give close statistical fits with plausible estimates, is unsound. The only case where this problem does not occur is when physical or engineering data are used, and such studies are few and far between.

The aggregate production function is widely used in spatial economics; it is used to estimate the degree of agglomeration economies, to calculate the rate of regional technical progress, to model regional economic growth and the rate of convergence or divergence, and to estimate the elasticity of substitution. Its use also has important policy consequences. For example, the elasticity of substitution of the regional production function has been used to estimate the effect of regional capital and/or labor subsidies. But such calculations are fatally flawed, as the aggregate elasticity of substitution does not exist. This paper serves as a warning to the continued uncritical use of the aggregate production function in economic geography and, more generally, in macroeconomics.
www.levyinstitute.org/pubs/wp_725.pdf

Veblen's Institutionalist Elaboration of Rent Theory

MICHAEL HUDSON
Working Paper No. 729, August 2012

Research Associate Michael Hudson offers the reader a brief tour of the contributions of Thorstein Veblen and a reminder that mainstream economic theory is not immune to politics. Hudson sets Veblen in the context of the early-20th-century debate on the role of unearned rents in economic theory. The concept of unearned rents was an accepted part of classical economic theory for centuries. Hudson describes the role of universities, and the interests that funded them, in creating a vocabulary of economic thought that excluded any mention of unearned rents (e.g., rentier income). Hudson observes that the very interests driving the financial booms and busts of the last 20 years are, consequently, invisible to mainstream economists because unearned rents are treated as a productive activity. As a result, society cannot craft effective policies because the press, citizens, and political leaders lack the terms to discriminate between mere tollhouse rents and contributions to economic efficiency.

Like Marx and George, Veblen's ideas threatened what he called the "vested interests." What made his analysis so disturbing was what he retained from the past. Classical political economy had used the labor theory of value to isolate the elements of price that had no counterpart in necessary costs of production. Economic rent—the excess of price over this "real cost"—is unearned income. It is an overhead charge for access to land, minerals or other natural resources, bank credit, or other basic needs that are monopolized.

This concept of unearned income as an unnecessary element of price led Veblen to focus on what is now called financial engineering, speculation, and debt leveraging. The perception that a rising proportion of income and wealth is an unearned "free lunch" formed the take-off point for Veblen to put real estate and financial scheming at the center of his analysis at a time when mainstream economists were dropping these ideas.

Veblen's exclusion from today's curriculum is part of the reaction against classical political economy's program of social reform. By the time he began to publish in the 1890s, academic economics was in the throes of a counterrevolution sponsored by large landholders, bankers, and monopolists denying that there was any such thing as unearned income. The new postclassical mainstream accepted existing property rights and privileges as a "given." In contrast to Veblen's argument that the economy was all about organizing predatory schemes, the pro-rentier approach culminated in Milton Friedman's Chicago School defense: "There is no such thing as a free lunch."

Today, the postclassical mainstream treats all income as "earned," including that of rentier*s*. Lacking the classical concepts of unproductive labor, credit, or investment, today's textbooks describe income as a reward for one's contribution to production, and wealth as being "saved up" as a result of someone's productive investment effort, not as an unearned or predatory free lunch. There are no categories for unearned income or speculative asset-price gains.

Veblen described the largest sectors of the economy where quick fortunes were made as being all about organizing rent-seeking opportunities to obtain income without real cost. His insights ultimately helped lead economics into the new discipline of sociology. Hudson's brief tour of Veblen's contribution to economics should stimulate a discussion of contemporary economic theory—what it has left out, and what we might want to revive.

www.levyinstitute.org/pubs/wp_729.pdf

INSTITUTE NEWS

New Master's Degree Program in Economic Theory and Policy

Starting in fall 2013, the Levy Economics Institute will begin offering the Master of Science in Economic Theory and Policy, a two-year degree program designed to meet the preprofessional needs of undergraduates in economics and finance. Headed by Senior Scholar and Program Director Jan Kregel, this innovative program draws on the expertise of Institute scholars and select Bard College faculty, and emphasizes empirical and policy analysis through specialization in one of four key research areas: macroeconomic theory, policy, and modeling; monetary policy and financial structure; distribution of income, wealth, and well-being, including gender equality and time poverty; and employment and labor markets.

The Levy Economics Institute Master of Science in Economic Theory and Policy degree program offers students a marketable set of skills and a strong understanding of economic and policy models at both the macro and micro levels, with direct application to a broad range of career paths. Thanks to the close links between our research agenda and the program's core curriculum, students experience graduate education as a practicum, and all students participate in a graduate research assistantship at the Institute. There is also a 3+2 dual-degree option for undergraduates that leads to both a BA and the MS in five years.

For more information, visit www.bard.edu/levyms.

21st Annual Hyman P. Minsky Conference
Debt, Deficits, and Financial Instability

April 11–12, 2012
Ford Foundation, New York City

A conference organized by the Levy Economics Institute of Bard College with support from the Ford Foundation

In April, leading policymakers, economists, and analysts gathered at the New York headquarters of the Ford Foundation to take part in the Levy Institute's 21st Annual Hyman P. Minsky

Conference on the State of the US and World Economies. This year's conference addressed the challenge to global growth represented by the eurozone debt crisis; the impact of the credit crunch on the economic and financial markets outlook; the sustainability of the US economic recovery in the absence of support from monetary and fiscal policy; reregulation of the financial system and the design of a new financial architecture; and the larger implications of the debt crisis for US economic policy, and for the international financial and monetary system as a whole. In addition to Federal Reserve Bank President Esther L. George and European Banking Authority Chairman Andrea Enria, keynote speakers included Peter Praet, executive board member, European Central Bank; J. Nellie Liang, director, Federal Reserve Board Office of Financial Stability and Research; Martin J. Gruenberg, acting chair, Federal Deposit Insurance Corporation; Claudio Borio, director of research and statistics, Bank for International Settlements; Christine M. Cumming, vice president, Federal Reserve Bank of New York; and Cyrus Amir-Mokri, assistant secretary for financial institutions, US Department of the Treasury.

Full conference proceedings are available on our website.

Upcoming Event

Hyman P. Minsky Conference on Financial Instability

Berlin, Germany
November 26–27, 2012

Organized by the Levy Economics Institute and ECLA of Bard with support from the Ford Foundation, The German Marshall Fund of the United States, and Deutsche Bank AG

This two-day conference in central Berlin will focus on the causes of financial instability and its implications for the global economy. The conference will address some of the main issues now confronting economic policymakers, including the challenge to global growth resulting from the eurozone debt crisis; the impact of the credit crunch on financial markets; the larger implications of government deficits and debt crises for US, European, and Asian economic policy; and central bank independence and financial reform. Featured speakers include Vice President Vítor Constâncio and Chief Economist Peter Praet of the European Central Bank and US Federal Reserve Bank CEOs Richard Fisher and Dennis Lockhart.

For more information, visit www.levyinstitute.org.

PUBLICATIONS AND PRESENTATIONS

Publications and Presentations by Levy Institute Scholars

RANIA ANTONOPOULOS *Senior Scholar and Program Director*
Publication: "Explaining Long-Term Exchange Rate Behavior in the United States and Japan" (with A. Shaikh), in J. K. Moudud, C. Bina, and P. L. Mason, eds., *Alternative Theories of Competition: Challenges to the Orthodoxy*, Routledge, 2012.
Presentations: "Do We Need Yet Another Indicator? Why Time Deficits Matter for the Standard of Living and Poverty Measurements," Social Wealth Indicators Workshop, Urban Institute, Washington, D.C, May 22–23, 2012; "Time Deficits and Poverty: Policy (Re)considerations," 21st Annual Conference of the International Association for Feminist Economics, University of Barcelona, Spain, June 27–29; interview regarding Greece's policy options in the face of the sovereign debt crisis with Stelios Konteas, *Express-Financial*, July 1 (in Greek); interview regarding Greece's policy options in the face of economic depression with C. J. Polychroniou, *Avgi*, July 14 (in Greek); "An Introduction to Gender-aware Economics: Basic Theoretical Concerns of Gender-aware (and Non-mainstream) Economics," "Intersections of Paid and Unpaid Work: Why Time Use and Household Production Matters" (with V. Esquivel), "Income Poverty and Time Poverty: An Integrated Framework," and "Social Protection and Gender in Historical Perspective: The Debate on Conditional Cash Transfers and Employment Guarantee," Gender, Macroeconomics and International Economics International Working Group (GEM-IWG) Summer Institute and International Symposium, organized with the cooperation of the Levy Economics Institute,

Warsaw School of Economics, and Heinrich Böll Foundation, Jagiellonian University, Krakow, Poland, July 17–26; "Structural Adjustment Revisited: The Case of Greece," keynote presentation, symposium on "Economic Crisis in Europe and Beyond," organized with the cooperation of the Levy Economics Institute, Warsaw School of Economics, and Heinrich Böll Foundation, Jagiellonian University, Krakow, Poland, July 28–29; interview regarding the Greek crisis and its social and economic deterioration with Bartłomiej Kozek*, Przekrój,* (in Polish), August 14.

PHILIP ARESTIS *Senior Scholar*

Publications: *The Euro Crisis* (with M. C. Sawyer), Palgrave Macmillan, 2012; "Can the Euro Survive after the European Crisis?" (with M. C. Sawyer), in P. Arestis and M. Sawyer, eds., *The Euro Crisis*, Palgrave Macmillan; "Economic Policy Implications of the 'Great Recession'" (with E. Karakitsos), in H. Herr et al., eds., *From Crisis to Growth? The Challenge of Imbalances and Debt*, Metropolis-Verlag; "The Effectiveness of Fiscal Policy in the Levy Institute's Stock-flow Model" (with M. Sawyer), in D. B. Papadimitriou and G. Zezza, eds., *Contributions in Stock-Flow Modelling: Essays in Honour of Wynne Godley*, Palgrave Macmillan; "A Historical, Theoretical and Empirical Perspective on Inflation Targeting," in H. M. Krämer, H. D. Kurz, and H.-M. Trautwein, eds., *Macroeconomics and the History of Economic Thought*, Taylor and Francis; "Fiscal Policy: Time for the Renaissance of Keynesianism," in G. Chaloupek and M. Marterbauer, eds., *75 Jahre General Theory of Employment, Interest and Money,* Wirtschaftswissenschaftliache Tagungen der AK–Wien, Band 17; "Introduction" and "'New Economics' and Policies for Financial Stability" (with M. Sawyer), Special Issue on "Economic Policies of the New Thinking in Economics," *International Review of Applied Economics,* Vol. 26, No. 2, March**;** "Trade Flows Revisited: Further Evidence on Globalisation" (with G. Chortareas, E. Desli, and T. Pelagidis), *Cambridge Journal of Economics*, Vol. 36, No. 2, March**;** "Private Productive Investment in Spain and the United States" (with A. R. González and Ó. Dejuán), *Análise Econômica,* Vol. 30, No. 54, September.

Presentations: "The Financial Transactions Tax: Its Potential and Feasibility" (with M. Sawyer), conference on "International Economic Policies, Government and the New Economics," The Cambridge Trust for New Thinking in Economics, St. Catharine's College, Cambridge, England, April 12, 2012; "The 'Great Recession' and Economic Policy Implications," Cyprus Chamber of Commerce and Industry, Nicosia, Cyprus, April 30; "Distributional Effects as One of the Main Causes of the 'Great Recession,'" conference on "Increasing Inequality: Causes, Consequences, and the Great Recession," Centre for Employment Research and Department of Economics and Quantitative Methods, University of Westminster, England, June 22; "The Potential of Financial Transactions Taxes" (with M. Sawyer), "Regional Integration in South America" (with F. Ferrari-Filho), and "Investment, Financialo markets and Uncertainty" (with Ó. Dejuán and A.R. González), 9th International Conference on Developments in Economic Theory and Policy, Bilbao, Spain, June 28–29.

JAMES K. GALBRAITH *Senior Scholar*

Publications: *Inequality and Instability: A Study of the World Economy Just Before the Great Crisis*, Oxford University Press, 2012; "Obama Needs More than Symbolism of 'Buffett Rule,'" CNN, April 11; "Europa droht eine Explosion der Ungleichheit," *Financial Times Deutschland*, April 15; "Solidarity Is Europe's Only Hope," Deutsche Welle, June 6.

Presentations: "Inequality and the Economic Crisis," 11th Annual Speakers and Issues Series, Midwestern State University, Wichita Falls, Texas, February 27; "The Short, Strange Keynesian Revival," Heterodox Economic Students Association, Department of Economics, University of Utah, Salt Lake City, Utah, March 2; panelist, "How Is Inequality Holding Us Back?" forum sponsored by the Organisation for Economic Co-operation and Development, Paris, France, May 22; "The Next Economic Top Model," keynote lecture, "Transformation Congress" Berlin, Germany, June 9; "Unemployment, Inequality, and the Crisis in Europe," Wissenschaftszentrum Berlin für Sozialforschung, Berlin, Germany, June 11; panelist, "Work, Unemployment and Migration," Rio+20 United Nations Conference on Sustainable Development, Rio de Janeiro, Brazil, June 16.

GREG HANNSGEN *Research Scholar*

Publication: "Infinite Variance, Alpha-stable Shocks in Monetary SVAR," *International Review of Applied Economics,* Vol. 26, No. 6, November 2012.

JAN KREGEL *Senior Scholar and Program Director*

Publication: "Regulação Financiera dos Estados Unidos: a Lei Dodd-Frank de Reforma de Wall Street e proteção ao Consumador na Perspectiva Atual e Histórica," in M. Cintra and K. Gomes, eds., *As transformações no sistema financeiro internacional*, Vol. 1, Ipea, 2012.

Presentations: "La critica desde el enfoque post keynesiano," Seminario Internacional, Crisis del la Teoris Economics Actual, Universidad Autonoma Metropolitana, Unidad Xochimilco, Mexico City, Mexico, March 7–9; "Regulating the Financial System in a Minskyan Perspective," conference on "Financial Stability and Growth," Structuralist Development Macroeconomics Center, The São Paulo School of Economics at the Getulio Vargas Foundation, São Paulo, Brazil, March 22; "Public Financial Institutions and Development: Summary Remarks," conference on "Financial Institutions for Innovation and Development: The Cases of Brazil and India," organized by the Multidisciplinary Institute for Development and Strategies (MINDS), Rio de Janeiro, Brazil, March 25; "Argentine Policy Lessons for the Global Crisis," conference on "Lessons from the Argentine Crisis, Default, and Recovery," Center for the Study of State and Society (CEDES), Buenos Aires, Argentina, May 2; "Diversity and Uniformity in Economic Theory as an Explanation of the Recent Economic Crisis," keynote lecture, 9th Associazione Italiana per la Storia dell'Economic Politica (STOREP) Conference, Padua, Italy, June 2; "Minsky on Crisis and Regulatory Reform: Implications of the Current Crisis," conference on "Minsky: Global Financial Fragility and the Development of Capitalist Finance," co-sponsored by the Levy Economics Institute of Bard College, The Institute of Economics of Nankai University (NKIE), and The Center for Political Economics Studies of Nankai University, Tianjin, China, June 9–10; "The World Crisis and the Challenges of a New Emerging Economies Standard in Latin America, Particularly the Brazilian Case," conference on "The Crisis, Its Genesis, and the Economic Policy Responses: USA, China, Europe, Latin America, and Brazil," sponsored by the Center for Strategic Studies and Management (CGEE), Foundation of the Center of High Studies for Brazil in the XXI Century, and Institute of Economics, University of Campinas, Brazil, June 27; "The Future of Development Banking after the New Millennium Depression," Special Session: "Bancos de desenvolvimento, estabilidade econômica e sustentabilidade," First Congresso Internacional do Centro Celso Furtado: "A crise e os desafios para un novo ciclo de desenvolvimento," Rio de Janiero, Brazil, August 17; "Global Financial Fragility," V Encontro Internacional of the Associação Keynesiana Brasileira, Fundação Getúlio Vargas, São Paulo, Brazil, August 23.

TOM MASTERSON *Research Scholar and Director of Applied Micromodeling*

Publications: "Growth and Inequality in the United States" (with E. N. Wolff and A. Zacharias), in J. Xue, ed., *Growth with Inequality: An International Comparison on Income Distribution*, World Scientific, 2012; "An Empirical Analysis of Gender Bias in Education Spending in Paraguay," *World Development*, Vol. 40, No. 3, March; "Trends in American Living Standards and Inequality, 1959–2007" (with E. N. Wolff and A. Zacharias), *Research on Income and Wealth*, Vol. 58, No. 2, June.

Presentations: "Joie de Vivre? French Economic Well-Being, 1989 and 2000," Eastern Economic Association Conference, Boston, Mass., March 10, 2012; "Empirical Methodology for the Levy Institute Measure of Time and Income Poverty (LIMTIP) for Argentina, Chile, and Mexico," conference on "Economic Crisis, Poverty, and Time Use," Ankara University, Ankara, Turkey, March 26–27; "Theory and Methodology for the Levy Institute Measure of Time and Income Poverty (LIMTIP) for Argentina, Chile, and Mexico" and "Weaving Alliances from Feminist Economics," 21st Annual Conference of the International Association for Feminist Economics, University of Barcelona, Spain, June 28; "Investing in Care," Summer Institute, Center for Popular Economics, New York, N.Y., July 23–27; "International Comparisons of Economic Well-Being: The Levy Institute Measure of Economic Well-Being (LIMEW)," and "Time Deficits and the Measurement of Income Poverty: Methodology and Evidence from Latin America," 32nd General Conference of The International Association for Research in Income and Wealth, Boston, Mass., August 5–11.

DIMITRI B. PAPADIMITRIOU *President*

Publications: "Managed Money, the 'Great Recession,' and Beyond," in R. Berkowitz and T. N. Toay, eds., *The Intellectual Origins of the Global Financial Crisis*, Oxford University Press, 2012; "Dodd-Frank: Fossil of the Future?" *The Huffington Post*, July 22; "Europe's Highway to Hell," *The Nation*, August 21.

Presentations: interview regarding the role of hedge funds in midsize business lending with Jenny Strasburg, *The Wall Street Journal*, February 22; interview regarding Greek credit default swaps with Ben Rooney, *CNNMoney*, February 29; "Greek Crisis and the Second Bailout," ECLA of Bard, Berlin, Germany, February 23; interview regarding whether the Fed will pursue another stimulus package with Ivan David Ryngelblum, *Agencia Leia,* March 12; interview regarding periphery banks buying their own government's debt with Yalman Onaran, *Bloomberg*, April 10; interview regarding the Greek sovereign debt crisis with Amalia Deligiannis, *Greek Circle Magazine*, April 18; interview regarding the continuing malaise in the eurozone with Ian Masters, *Background Briefing,* Pacifica Radio, April 23; interview regarding the consequences of the French and Greek election results with Daniel Wagner, Associated Press, May 6; interview regarding the Greek elections with Kathleen Hays, *The Hays Advantage*, Bloomberg Radio, May 7; interview regarding the implications of the elections in Greece and France with Paul Wiseman, Associated Press, May 7; interview regarding the odds of Greece's exit from the euro with Ben Rooney, *CNNMoney*, May 8; interview regarding Greece's failure to form a government in Greece and the consequences for the eurozone with Ian Masters, *Background Briefing*, Pacifica Radio, May 13; interview regarding Greece's possible exit from the euro with Chris Isidore, *CNNMoney*, May 14; interview regarding the effect of the falling euro on US trade and potential effects on the euro if Greece were to default with Vladimir Dubinski, Radio Free Europe, May 17; speaker, conference on "Minsky: Global Financial Fragility and the Development of Capitalist Finance," co-sponsored by the Levy Economics Institute of Bard College, The Institute of Economics of Nankai University (NKIE), and The Center for Political Economics Studies of Nankai University, Tianjin, China, June 9–10; interview regarding the upcoming Greek elections with Ben Rooney at *CNNMoney*, June 11; interview regarding the Greek elections with *Avgi*, June 14; interview regarding the Greek elections with Kathleen Hays, *The Hays Advantage*, Bloomberg Radio, June 15; interview regarding the Greek debt crisis and its effect on world finances with *Biz Asia America*, CCTV America, June 15; interview regarding the prospects for the European Monetary Union with Diego Viana, *Valor Econômico*, June 18; "The U.S. Economic Outlook after the Global Financial Crisis," keynote speech, conference on "Asymmetric Economic Consequences of the Global Financial Crisis," Athenian Policy Forum, Chalkidiki, Greece, July 1–3; interview regarding the June unemployment rate and job creation estimates with Ivan David Ryngelblum, *Agencia Leia,* July 5; interview regarding the euro crisis with *Express*, July 22; "The Evolution of Finance and Monetary Policy: Changing Objectives and Gender Implications," Gender, Macroeconomics and International Economics International Working Group (GEM-IWG) Summer Institute and International Symposium, organized with the cooperation of the Levy Economics Institute, Warsaw School of Economics, and Heinrich Böll Foundation, Krakow, Poland, July 17–29; interview regarding the euro crisis and the latest European Central Bank actions with *Ethnos*, August 5; interview regarding Greece and alternatives for the eurozone with Bartolomiej Kozek, *Zielone Wiadomo ci*, August 14; interview regarding the euro crisis with Christos Pagonis, "Charin Oikonomias," National Greek Radio, August 15; interview regarding how Greece will pay its upcoming euro bond redemption with Ben Rooney, *CNNMoney*, August 15.

EDWARD N. WOLFF *Senior Scholar*

Publications: "Growth and Inequality in the United States" (with T. Masterson and A. Zacharias), in J. Xue, ed., *Growth with Inequality: An International Comparison on Income Distribution*, World Scientific, 2012; "Trends in American Living Standards and Inequality, 1959–2007" (with T. Masterson and A. Zacharias), *Research on Income and Wealth*, Vol. 58, No. 2, June.

AJIT ZACHARIAS *Senior Scholar and Program Director*

Publications: "Growth and Inequality in the United States" (with E. N. Wolff and T. Masterson), in J. Xue, ed., *Growth with Inequality: An International Comparison on Income Distribution*, World Scientific, 2012; "Trends in American Living Standards and Inequality, 1959–2007" (with E. N. Wolff and T. Masterson), *Review of Income and Wealth*, Vol. 58, No. 2, June.

Presentations: "Income and Time Poverty in Latin America: Why Time Deficits Matter," conference on "Economic Crisis, Poverty, and Time Use," University of Ankara, Turkey, March 26–27, 2012; "The Measurement of Time and Income Poverty," 21st Annual Conference of the International Association for Feminist Economics, University of Barcelona, Spain, June 27–29.

Levy Economics Institute of Bard College

Blithewood
PO Box 5000
Annandale-on-Hudson, NY 12504-5000

Address Service Requested

Nonprofit Organization
U.S. Postage Paid
Bard College