Levy Economics Institute of Bard College

Summary

Winter 2014 **Vol. 23, No. 1**

Contents

INSTITUTE RESEARCH

Program: The State of the US and World Economies

Strategic Analysis

6 DIMITRI B. PAPADIMITRIOU, GREG HANNSGEN, MICHALIS NIKIFOROS, and GENNARO ZEZZA, Rescuing the Recovery: Prospects and Policies for the United States

Conference Proceedings

8 The Eurozone Crisis, Greece, and the Experience of Austerity

10 MICHALIS NIKIFOROS, A New “Lehman Moment,” or Something Worse? A Scenario of Hitting the Debt Ceiling

11 C. J. POLYCHRONIOU, A Failure by Any Other Name: The International Bailouts of Greece

12 JÖRG BIBOW, Lost at Sea: The Euro Needs a Euro Treasury

13 ECKHARD HEIN and ACHIM TRUGER, Fiscal Policy and Rebalancing in the Euro Area: A Critique of the German Debt Brake from a Post-Keynesian Perspective

14 PAVLINA R. TCHERNEVA, Reorienting Fiscal Policy: A Critical Assessment of Fiscal Fine-Tuning

15 MICHALIS NIKIFOROS, LAURA CARVALHO, and CHRISTIAN SCHODER, Foreign and Public Deficits in Greece: In Search of Causality

Program: Monetary Policy and Financial Structure

Conference Proceedings

16 Financial Governance after the Crisis

17 WILLIAM GREIDER, “Unusual and Exigent”: How the Fed Can Jump-start the Real Economy

18 WILLIAM GREIDER, Debt Relief and the Fed’s Money-creation Power

19 ÉRIC TYMOIGNE and L. RANDALL WRAY, Modern Money Theory 101: A Reply to Critics

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
MICHALIS NIKIFOROS, Research Scholar
GENNARO ZEZZA, Research Scholar
GIORGOS ARGITIS, Research Associate
MARSHALL AUERBACK, Research Associate
CLAUDIO H. DOS SANTOS, Research Associate
JESUS FELIPE, Research Associate
ECKHARD HEIN, Research Associate
MICHAEL HUDSON, Research Associate
ROBERT W. PARENTEAU, Research Associate
C. J. POLYCHRONIOU, Research Associate and Policy Fellow
ANDREA TERZI, Research Associate

Monetary Policy and Financial Structure

JAN KREGEL, Senior Scholar and Program Director
DIMITRI B. PAPADIMITRIOU, President
L. RANDALL WRAY, Senior Scholar
MARSHALL AUERBACK, Research Associate
JÖRG BIBOW, Research Associate
STEVEN M. FAZZARI, Research Associate
JESUS FELIPE, Research Associate
ECKHARD HEIN, Research Associate
MICHAEL HUDSON, Research Associate
THORVALD GRUNG MOE, Research Associate
ROBERT W. PARENTEAU, Research Associate
SUNANDA SEN, Research Associate
ANDREA TERZI, 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
THOMAS MASTERSON, Research Scholar and Director of Applied Micromodeling
FERNANDO RIOS-AVILA, Research Scholar
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
TAMAR KHITARISHVILI, Research Scholar
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
İPEK İLKKARACAN, 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
RANIA ANTONOPOULOS, Senior Scholar
JAMES K. GALBRAITH, Senior Scholar
JAN KREGEL, Senior Scholar
L. RANDALL WRAY, Senior Scholar
GIORGOS ARGITIS, Research Associate
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

DIMITRI B. PAPADIMITRIOU, President
JAMES K. GALBRAITH, Senior Scholar
RANIA ANTONOPOULOS, Senior Scholar
TAMAR KHITARISHVILI, Research Scholar
PHILIP ARESTIS, Research Associate
GIORGOS ARGITIS, Research Associate
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
GIUSEPPE FONTANA, Research Associate
MATHEW FORSTATER, Research Associate
GREG HANNSGEN, Research Scholar
MICHAEL HUDSON, Research Associate
THOMAS KARIER, Research Associate
STEPHANIE A. KELTON, 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
MARTIN SHUBIK, Research Associate
MICHAEL STEPHENS, Senior Editor and Policy Fellow
WILLEM THORBECKE, Research Associate
ÉRIC TYMOIGNE, Research Associate
L. RANDALL WRAY, Senior Scholar
AJIT ZACHARIAS, Senior Scholar

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.

Editor: Jonathan Hubschman 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)

Program: The Distribution of Income and Wealth

20 THOMAS MASTERSON, Quality of Statistical Match and Simulations Used in the Estimation of the Levy Institute Measure of Time and Consumption Poverty (LIMTCP) for Turkey in 2006

Program: Employment Policy and Labor Markets

21 SERKAN DEĞIRMENCI and İPEK İLKKARACAN, Economic Crises and the Added Worker Effect in the Turkish Labor Market

Program: Economic Policy for the 21st Century

Explorations in Theory and Empirical Analysis

22 AURÉLIE CHARLES, Hierarchy of Ideals in Market Interactions: An Application to the Labor Market

23 GIOVANNI BERNARDO and EMANUELE CAMPIGLIO, A Simple Model of Income, Aggregate Demand, and the Process of Credit Creation by Private Banks

24 ESTEBAN PÉREZ CALDENTEY and MATÍAS VERNENGO, Wage and Profit-led Growth: The Limits to Neo-Kaleckian Models and a Kaldorian Proposal

25 EGMONT KAKAROT-HANDTKE, Keynes's Employment Function and the Gratuitous Phillips Curve Disaster

26 MICHALIS NIKIFOROS, Uncertainty and Contradiction: An Essay on the Business Cycle

INSTITUTE NEWS

27 The Levy-Nagoya Joint Workshop on Income Policy

27 New Research Associate

Upcoming Event

28 The Hyman P. Minsky Summer Seminar

Save the Dates

28 23rd Annual Hyman P. Minsky Conference

28 The 12th International Post Keynesian Conference

PUBLICATIONS AND PRESENTATIONS

28 Publications and Presentations by Levy Institute Scholars

31 Recent Levy Institute Publications

LETTER FROM THE PRESIDENT

To our readers:

This issue begins with a strategic analysis under the State of the US and World Economies program. Research Scholars Greg Hannsgen, Michalis Nikiforos, and Gennaro Zezza, and I argue for public investment in export-oriented R & D to support the current US economic recovery. Our simulations show that this approach would increase output and employment, and restore a measure of US competitiveness in high-tech manufacturing in the near term. Our analysis also addresses a troubling trend in household deleveraging, which threatens the current recovery. In a policy note, Research Associate and Policy Fellow C. J. Polychroniou argues that ending austerity is not enough: Greece needs a new economic vision to guide her as she repairs the economic and social damage wrought by the policies of the troika—the International Monetary Fund, European Central Bank, and European Commission.

Four working papers are included under this program. Research Scholar Michalis Nikiforos, Laura Carvalho, and Christian Schoder examine Greece's foreign and public deficits in an effort to better understand the direction of causality. Their findings indicate that, given the institutional failures and economic imbalances within the eurozone, austerity is not the appropriate policy for countries such as Greece. Turning to the United States, Research Associate Pavlina R. Tcherneva presents a detailed critique of fiscal fine-tuning; specifically, pump-priming and New Consensus stabilization policies. She proposes a Keynesian bottom-up approach to economic stabilization, organized around seven policy criteria. Research Associate Eckhard Hein and Achim Truger examine the German debt brake from a Post-Keynesian perspective, and conclude that it is not in the long-term interest of Germany or its eurozone partners. Also advocating reform, Research Associate Jörg Bibow offers a proposal to address some of the inherent flaws in the euro regime. He argues for the creation of a "Euro Treasury," operating under strict rules and designed not to be a transfer union, as the missing element needed to rescue the euro, foster recovery, and rebalance the eurozone.

Two policy notes by William Greider are included under the Monetary Policy and Financial Structure program. In the first, he argues that the Federal Reserve should take a more active role in the US economy. The Fed, Greider observes, has exercised its powers on behalf of financial institutions; why should it not use its money-creation powers to alleviate debt? In the second note, he calls on the Fed to take direct action to jump-start the real economy and fulfill its dual mandate: to strive for maximum employment as well as stable money. In a working paper included under this program, Research Associate Éric Tymoigne and Senior Scholar L. Randall Wray respond to critics of Modern Money Theory, in the process dispelling many of the misperceptions and outright inaccuracies surrounding this framework.

Under the Distribution of Income and Wealth program, Senior Scholar and Director of Applied Micromodeling Thomas Masterson contributes a working paper that discusses the quality of the statistical match and simulations for the Levy Institute Measure of Time and Consumption Poverty for Turkey.

Under the Employment Policy and Labor Markets program, Serkan Değirmenci and Research Associate İpek İlkkaracan investigate the added worker effect in the Turkish labor market following the global financial crisis. Their analysis is distinctive in its exploration of a dynamic relationship between the labor force participation rates of men and women across labor market states.

Five working papers are included under the Economic Policy for the 21st Century program. Research Scholar Michalis Nikiforos focuses on the dynamics of the business cycle in the medium term, and observes that business cycles are produced by the tension between financial instability and the forces that contain it. His paper includes both a formal model and an empirical analysis. Egmont Kakarot-Handtke discusses John Maynard Keynes's employment function and the development of what he calls "the bastard Phillips curve." The author argues that in the absence of a rigorous proof by Keynes the door was left open to the misappropriation and abuse of the latter's ideas, and he provides a revised, structural Phillips curve as an alternative. Esteban Pérez Caldentey and Matías Vernengo observe that the role of investment in economic growth is a subject that divides many Post-Keynesian economists. They contrast the efficacy of Neo-Kaleckian and Kaldorian models, and present empirical results with important implications for the relationship between income distribution and economic growth. Giovanni Bernardo and Emanuele Campiglio present a stock-flow consistent model to analyze income and aggregate demand, and the process of credit creation by private banks. Their findings shed light on a recent debate between Paul Krugman and Steve Keen while providing insights often lacking in mainstream models. Aurélie Charles discusses the role played by ideals and norms in market exchanges, and provides an empirical demonstration of these dynamics using data from the US and German labor markets.

This issue also contains overviews of two conferences organized by the Levy Institute in conjunction with the Ford Foundation Project on Financial Instability: "Financial Governance after the Crisis," held in Rio de Janeiro, Brazil, in September 2013; and "The Eurozone Crisis, Greece, and the Experience of Austerity," which was convened in Athens in November. For full audio and video of the conference proceedings, I direct the reader to the Events section of our website.

As always, I welcome your comments and suggestions.

Dimitri B. Papadimitriou, *President*

Program: The State of the US and World Economies

Strategic Analysis

Rescuing the Recovery: Prospects and Policies for the United States

DIMITRI B. PAPADIMITRIOU, GREG HANNSGEN, MICHALIS NIKIFOROS, and GENNARO ZEZZA

Strategic Analysis, October 2013

US unemployment remains unacceptably high, and economic growth has been steady but weak. Based on recent Congressional Budget Office (CBO) projections of government revenues and spending, the US economy will not grow quickly enough to bring down unemployment by 2016. The federal deficit is expected to decline, but this will only further weaken the recovery. In addition, the recovery is threatened by net savings, which, while currently declining, could return to their historical levels. Policymakers must take action to expand the current recovery.

In this strategic analysis, Levy Institute President Dimitri B. Papadimitriou and Research Scholars Greg Hannsgen, Michalis Nikiforos, and Gennaro Zezza explore policy options to strengthen the recovery using the Institute's macro model for the US economy. Their analysis begins with a baseline scenario using the September 2013 CBO projections, followed by simulations of two public investment initiatives—one in infrastructure and the other in export-oriented research and development—and a simulation of the impact of continued household deleveraging. The authors conclude that the recovery of jobs and output requires additional stimulus, preferably in the form of public investment in export-oriented R & D.

They note several trends in the current recovery: domestic private sector deficit-financed spending is recovering despite high levels of unemployment and anemic growth in output; the federal deficit has fallen from its peak during the recession of more than 12 percent to slightly more than 4 percent in 2013Q2; and the current account deficit remains steady at approximately 3 percent of GDP. However, the rates of employment and job creation remain dangerously low. The authors observe that some of the decline in the unemployment rate is due to reduced labor force participation, and not the result of job creation. Further, the recovery is hampered by the continuing trend of private sector deleveraging and the austerity measures undertaken by the federal government. Finally, consumer credit, a key driver of household spending in the United States, continues to follow a trend of deleveraging, and thus threatens the recovery.

The main challenge facing the recovery is the tension between slow private sector deleveraging against a backdrop of fiscal austerity at the federal level, and the need to accelerate growth in order to boost employment, raise household income, and increase state and local tax revenues. Credit conditions currently act as a damper on the ongoing housing recovery and limit household spending. In addition, the CBO reports that the US federal deficit continues to decline as a result of the March 2013 sequester. Further, the potential repeal of the current sequester in favor of a new budget compromise may raise new long-term fiscal threats (e.g., cuts to transfer-payment programs). The authors observe that US policymakers are likely to continue to focus on revenue-neutral or revenue-generating policies, which amounts to additional fiscal tightening.

Given the positive balances of nonfinancial firms, it is clear that firms see little reason to invest in new productive assets, given weak effective demand in the United States and the rest of the world. Therefore, it falls to US policymakers to increase demand from the government sector or from the external sector. There is, unfortunately, scant support in Washington for aggressive fiscal stimulus. The problem, therefore, is how to strengthen the current recovery in an environment that is hostile to fiscal stimulus. The authors suggest two public investment initiatives that may garner broad-based support; both would increase employment and output in the near term while promoting the long-term productive capacity and competitiveness of the US economy. The first initiative focuses on repairing the nation's infrastructure and the second on export-oriented R & D investment to restore the United States' position as a leader in high-tech manufacturing. The authors present a series of simulations to compare these policy alternatives.

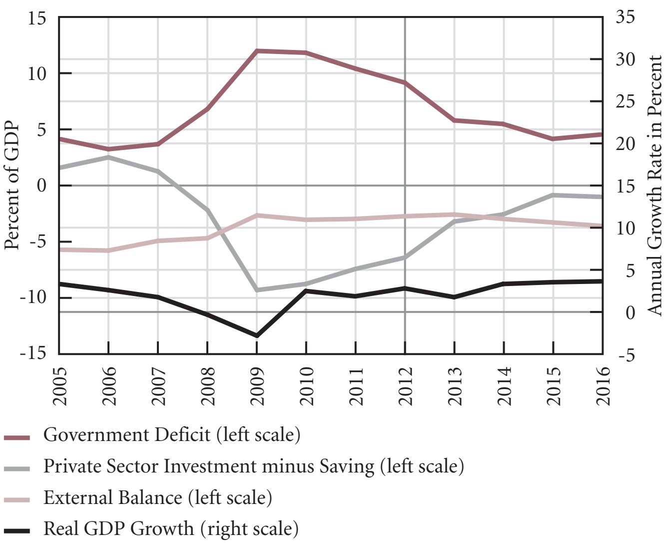
The baseline scenario employs the September 2013 CBO projections for US revenues and expenditures and the global growth forecasts contained in the International Monetary Fund's April 2013 *World Economic Outlook*. The authors report the simulation results for the government deficit, external balance, private sector investment minus saving, unemployment, and real GDP growth from 2013 to 2016. The baseline scenario shows that the federal deficit declines and then stabilizes in 2016, a potentially disastrous result in the context of an output gap and high unemployment. GDP ends the simulation period at approximately 3.5 percent, with the unemployment rate slightly less than 7 percent (Figure 1).

Infrastructure investment is a critical component of the national economy and a ready source of employment, and it enjoys some degree of political support. Increased government spending is expected to boost economic growth and thus drive down unemployment. The first of three alternative scenarios illustrates the impact of a $160 billion, or roughly 1 percent of GDP, annual increase in infrastructure spending over the simulation period. The results show substantial improvement in employment and output. Private sector net borrowing increases somewhat, GDP grows at 5 percent, and unemployment falls to below 6 percent by 2016 (Figure 2).

The next scenario explores the impact of targeted government spending on export-oriented R & D investment. This scenario simulates the effects of the same level of public investment as in the infrastructure scenario. However, in contrast, it includes productivity increases from R & D investment in addition to the stimulus effects of increased spending. The results show significant increases in private sector spending compared to the first scenario, with consumers enjoying higher levels of income due to increased exports and government spending. The government deficit is lower than in the infrastructure scenario but remains higher than the baseline. Real GDP growth increases to 5.5 percent by the end of the projection period, and unemployment falls to less than 5 percent (Figure 3).

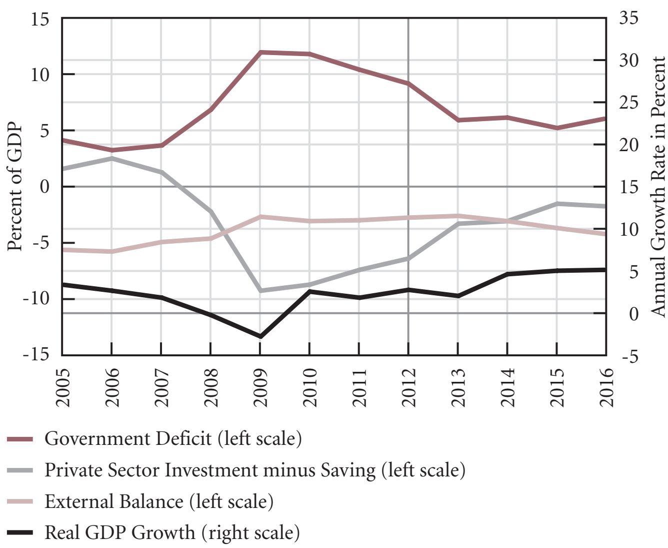
The scenarios developed thus far do not account for an important trend in the US economy: household deleveraging, which is likely to continue. Economic growth appears to be steady, but it requires renewed household and business borrowing if it is to be sustained. The authors note that the assumption of such an increase is not well grounded in historical norms for household indebtedness. They therefore re-run the simulations with lower projected levels of private sector borrowing than was assumed in the previous scenarios. As

Figure 1 **US Main Sector Balances and Real GDP Growth, Actual and Projected, 2005–16**



Sources: BEA; authors' calculations

Figure 2 **An Increase in Government Infrastructure Spending: US Main Sector Balances and Real GDP Growth, Actual and Projected, 2005–16**



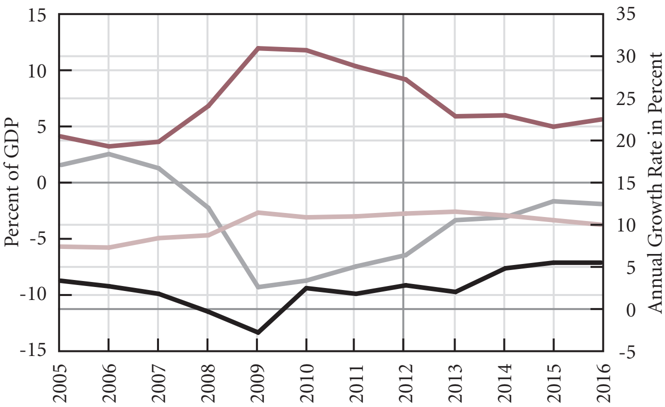
Sources: BEA; authors' calculations

expected, this weakens the results in all of the previous simulations. However, the results for the R & D scenario remain relatively robust and superior to the baseline in terms of growth and employment (Figure 4).

The authors conclude that the United States has limited options in terms of strengthening the current recovery. Promoting higher levels of employment and household income is critical to a sustained recovery. Private expenditure is unlikely to be the driver of economic growth so long as households continue to deleverage. Expansionary fiscal and monetary policies must therefore be implemented and strategies to increase demand from the external sector pursued. Given the limitations both political parties have put on the economic policy debate, the authors recommend a $160 billion public investment initiative targeting export-oriented R & D through 2016. This is a small step toward buttressing the current fragile recovery, but unless additional steps are taken, the United States faces an uncertain road to restoring growth and employment in the near term.

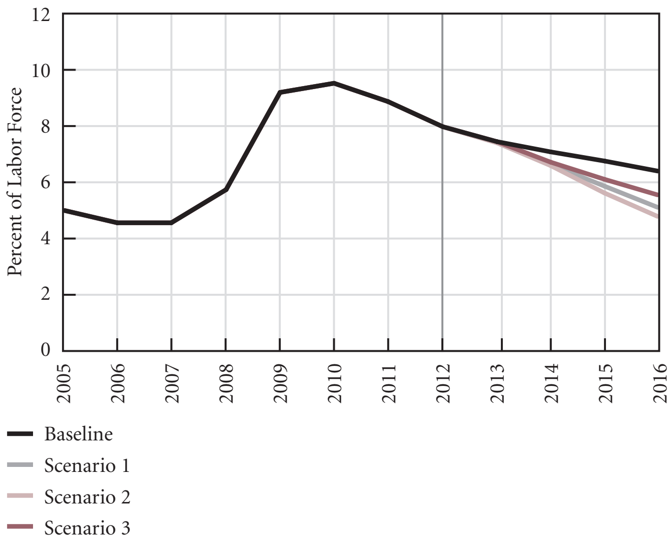
www.levyinstitute.org/pubs/sa_10_13.pdf

Figure 3 **Simulating an Increase in Export-oriented R & D Spending: US Main Sector Balances and Real GDP Growth, Actual and Projected, 2005–16**



Sources: BEA; authors' calculations

Figure 4 **Unemployment Rate, Actual and Projected, 2005–16**



Sources: Bureau of Labor Statistics; authors' calculations

Conference Proceedings

The Eurozone Crisis, Greece, and the Experience of Austerity

Athens, Greece

November 8–9, 2013

This conference was organized as part of the Levy Institute's global research agenda and in conjunction with the Ford Foundation Project on Financial Instability. The conference was well attended, with registrations exceeding capacity and wide coverage by the Greek media. In his opening remarks, Levy Institute President Dimitri B. Papadimitriou expressed the hope that the conference would offer a more accurate understanding of the crises in the eurozone and Greece, and provide alternatives to the austerity policies that have failed to provide an exit from these crises.

Liz Alderman, *The New York Times*, moderated the first session, titled "Europe at the Crossroads." Philippe Gudin de Vallerin, Barclays, opened the session with the observation that the crisis was due to a lack of economic, financial, fiscal, and political union, and that while the central bank has brought some relief, it remains for national governments to address these issues. Ebrahim Rahbari, Citigroup, followed with a presentation on the need for debt reduction in the euro area. Frank Veneroso, Veneroso Associates LLC, reviewed the European crisis from a practitioner's perspective, and then presented an analysis of the most recent economic data for Europe.

Már Guðmundsson, Central Bank of Iceland, discussed Iceland's response to its crisis and the steps it took to promote recovery. Despite the catastrophic collapse of the Icelandic banking system, today there is no talk of a sovereign debt default, access to credit markets has been restored, the economy has been in recovery since early 2010, and the domestic banking system has been rebuilt. Guðmundsson drew a number of lessons from Iceland's experience that suggest approaches in areas such as bank resolution and lender-of-last-resort strategies, bank deposit insurance, flexible exchange rates, and automatic stabilizers.

The second session, moderated by Yannis Aggelis, *Kefalaio* and *Capital.gr*, focused on the experience thus far and prospects of the periphery countries under the euro regime. Rainer Kattel, Tallinn University of Technology, reviewed the results of fiscal austerity in the Baltic states. His analysis illustrated how their recovery had nothing to do with austerity but relied instead on stimulus policy. Thus, the Baltic experience should not be seen as a blueprint for the eurozone. Levy Institute Senior Scholar Jan Kregel offered alternative explanations of the Greek crisis, arguing that it is best seen as a Minskyan crisis, and that the troika's policies resemble those of the structural adjustment policies that led to the collapse of the Argentine economy. Elias Kikilias, National Centre for Social Research, discussed the similarities between the Greek economy and other Mediterranean economies, demonstrating that Greece is not a "unique" case. Levy Institute Senior Scholar L. Randall Wray completed the session with a functional finance analysis of the causes and solutions of the crisis in Greece and, more broadly, in Europe. He observed that the European Monetary Union (EMU) was destined to fail from the outset because nongovernment deficits, both external and internal, create government budget deficits.

A late addition to the speakers list was Alexis Tsipras, a member of the Hellenic Parliament and leader of the opposition party SYRIZA. Tsipras called for an end to austerity and the adoption of SYRIZA's proposal to focus on economic stabilization, address humanitarian needs, and rebuild Greece's productive base. Tsipras was followed by Yves Mersch, European Central Bank, who offered remarks on fiscal sustainability, intergenerational justice, and the sovereign debt crisis. Mersch observed that austerity today will protect Europe's fiscal future, and that a failure to undertake difficult fiscal reform will burden future generations.

Matina Stevis, *The Wall Street Journal*, moderated the first evening session, which opened with remarks by Gerasimos Arsenis, ADGI–INERPOST. Arsenis focused on the role the Greek banking sector played in creating the current economic crisis. Emilios Avgouleas, University of Edinburgh, discussed positive steps the European Central Bank (ECB) could play in resolving the crisis, including an ECB-run "Euro TARP." Dimitri Vayanos, London School of Economics, discussed Greece's credit boom and current credit crunch, and proposed a number of possible reforms. Over the long run, he argued, the ties between politicians and the banks must be severed. The session was brought to a close by George S. Zavvos, European Commission and former member of the European Parliament and European Commission Ambassador. His remarks focused on the European banking union, arguably the most important innovation since the Maastricht treaty, and its implications for Greece.

The second day of the conference opened with the fourth panel, titled "A Union of Austerity or a Union of Growth?" and moderated by Michalis Panagiotakis, *Avgi*. Levy Institute Research Associate Robert W. Parenteau addressed his remarks to the inherent flaws of the design of the eurozone, the misdiagnosis of the crisis, a critique of expansionary fiscal consolidation policies, and a stock-flow consistent analysis of the austerity trap. He closed with proposals to end austerity without exiting the euro, including the creation of a government liability, or "G note." Research Associate Jörg Bibow followed with a proposal to create a "Euro Treasury" to create a minimalistic yet functional fiscal union (but, pointedly, not a transfer union) to resolve the current crisis, and to foster recovery and rebalancing.

The midmorning session focused on unemployment and was moderated by Christina Kopsini, *Kathimerini*. László Andor, European Commission, opened the session with a video address in which he called for greater attention to be paid to the employment and social conditions in eurozone countries such as Greece, through policies such as a youth employment guarantee, and, in the long term, a euro-area budget to counter asymmetric shocks. Duncan Campbell, International Labour

Organization, reviewed Greek unemployment trends, and indicated that high unemployment rates will persist even in the presence of modest economic growth. Massimiliano La Marca, International Labour Organization, presented a sector analysis of the Greek macro economy as well as several policy simulations. Levy Institute Senior Scholar Rania Antonopoulos then followed with a proposal to take the first step toward an employer-of-last-resort program for Greece. She presented simulations of the net cost and impacts of the job proposal that showed the program would partially fund itself. Closing the session, Maria Karamessini, Panteion University, argued that recovery through the destruction of productive capacity and widespread economic misery is not a viable path for Greece and the periphery; an alternative growth strategy must be adopted.

Moderator Nikos Xydakis, *Kathimerini*, opened the afternoon panel on the economic and social conditions in Greece and Europe. Terrence McDonough, National University of Ireland, Galway, began with a survey of the experience of Ireland in the aftermath of the global financial crisis. Louka Katseli, Social Pact Party, Greece, observed that austerity has failed miserably, but that Greece could still exit the crisis through pro-growth reforms, reduction of the debt overhang, protection of domestic purchasing power, and a focus on inclusive policies and institutions. Levy Institute Research Associate and Policy Fellow C. J. Polychroniou delivered a full-throated critique of the neoliberal policies that have been imposed on Greece. These policies have resulted in, not the recovery and prosperity originally promised, but social and economic catastrophe for the Greek nation. Turning to the human cost of economic crisis, David Stuckler, Oxford University, gave an overview of the public health effects of the crisis and austerity policies in Greece and other crisis countries.

Keynote speaker Lord Robert Skidelsky, University of Warwick, discussed the impacts of austerity policies in the United Kingdom. He suggested that UK austerity policy resulted in lost economic growth, and that quantitative easing is unlikely to offset austerity; rather, it will shift wealth from the poor to the rich.

The second afternoon session was opened by Stavros Lygeros, *Real News* and Real FM Radio, and devoted entirely to the effects of austerity on Greece. Levy Institute Research Associate Giorgos Argitis explained how the troika's austerity program was doomed to fail from the outset, and how Hyman Minsky's methodology provides a clearer understanding of the crisis and how to end it. Research Scholar Gennaro Zezza reviewed the results of the Levy Institute Macromodel for Greece, a financial balances approach that builds on the work of Distinguished Scholar Wynne Godley. President Dimitri B. Papadimitriou closed the session with a discussion of several strategies to return Greece to a path of economic growth. These include a public investment initiative modeled after the Marshall Plan, a proposal to suspend interest payments and freeze the public debt, and the creation of a parallel currency, or "Geuro," as a means of financing a job creation program.

The final session of the conference was moderated by Alexis Papahelas, *Kathimerini*. Kerstin Bernoth, DIW Berlin and the Hertie School of Governance, began the session with a proposal for a cyclical transfer mechanism as a means to stabilize the EMU. Her proposal would operate as an international insurance system to counter asymmetrical cyclical income fluctuations. Martin Hellwig, Max Planck Institute for Research on Collective Goods, followed with a discussion of the opportunities and obstacles facing national government, banks, and the ECB. Next, Loukas Tsoukalis, University of Athens and ELIAMEP, characterized the response to the crisis as one of "muddling through" rather than taking decisive action, and observed that we can expect more of the same as long as Europe fears the changes that would come with a European "grand bargain" (i.e., more monetary flexibility for the North and more structural adjustment in the South). Yannis Dragasakis, Hellenic Parliament, closed this session with a call for a development plan to rebuild Greece, an end to the economic and humanitarian crisis, and a new institutional framework for Europe.

A New "Lehman Moment," or Something Worse? A Scenario of Hitting the Debt Ceiling

MICHALIS NIKIFOROS

Policy Note 2013/9, October 2013

The fall of 2013 saw the second "shutdown" of the US federal government in as many decades. Despite the fragility of the economic recovery, Congress struggled to pass a continuing resolution to raise the debt ceiling. Many in favor of the shutdown were sanguine about the prospect of the US government being forced to limit its spending to its current revenues, but there was little discussion of the potential costs. In this timely policy note (quoted in *USA Today* during the final days of the shutdown), Research Scholar Michalis Nikiforos explores the near-term impact of fiscal consolidation on the US economy.

Nikiforos observes that there is no precedent for the US government defaulting on its debt, and therefore no easy answer to the question of what the ramifications of a default might be. However, it seems unavoidable that default would affect the creditworthiness of the US government and have broad repercussions in the financial markets and the real economy. To avoid default, the US Treasury could prioritize interest and principal payments. However, this could lead to a new, perhaps more dangerous, "Lehman moment" if, absent an increase in the debt ceiling, the government rapidly balanced the federal budget. The author explores consequences of this hypothetical "balanced budget" scenario.

The analysis relies on the Levy Institute macroeconomic model of the United States and uses the Congressional Budget Office 2013 estimates of the US growth rate and fiscal condition of the US to construct a baseline scenario. The model integrates the growth and inflation estimates for US trading partners published by the International Monetary Fund (IMF) in its *World Economic Outlook* report of April 2013. Nikiforos finds that the "balanced budget" scenario differs from the baseline only in that it includes a rapid fiscal consolidation in the last quarter of 2013 and the federal government balances its budget for the remainder of 2014.

Nikiforos estimates that the impact of rapid fiscal contraction under a strict balanced budget would be to lower the growth rate from 2.0 percent to 0.5 percent, which translates into an annualized growth rate of -2.5 percent for 2013Q4. The disparity between the baseline and balanced budget scenarios is a loss of 3 percent of GDP growth in 2014. Similarly, the unemployment rate under a regime of fiscal consolidation would rise to 7.8 percent in 2013, reversing a trend of modest improvement. By 2014, fiscal consolidation would yield an unemployment rate of 9.5 percent—a level not seen since 2009. This represents a far bleaker level of employment, as the labor force participation rate has declined during the last four years.

These projections do not account for effects of fiscal consolidation in the United States on the global economy. The IMF projections assume relatively robust growth of the US economy. A US recession would almost certainly depress growth rates globally, and would in turn have feedback effects for the US economy. Thus, Nikiforos's projections are more likely to err on the side of economic optimism.

In addition, the private sector, both in the United States and in the rest of the world, has been engaged in a process of deleveraging in the past few years. This trend has slowed in recent quarters and the recovery has improved. However, a decline in the growth rate would likely trigger a new round of deleveraging and imperil the recovery. Finally, automatic stabilizers and discretionary fiscal spending helped to reduce the duration and severity of the Great Recession; it is unclear how the United States would stabilize the economy following fiscal consolidation. The author concludes that avoiding default through fiscal consolidation could push the US economy back into recession.

A Failure by Any Other Name: The International Bailouts of Greece

C. J. POLYCHRONIOU

Policy Note 2013/6, July 2013

Research Associate and Policy Fellow C. J. Polychroniou provides a brief historical analysis of the international bailouts of Greece. He argues that the troika's bailout is most accurately described as a punitive regime of austerity policies intended to impose an extreme neoliberal socioeconomic experiment on Greece. Despite the horrible failure of its policies, the troika remains committed to austerity. Its priorities are repayment of the loans, regardless of the human cost, and creation of a more favorable environment for business; specifically, Greece's corporate and financial elite. The crisis has been used as an excuse to rewrite the social contract, sell off the nation's assets at bargain prices, and degrade the standard of living to the point that Greece has come to resemble a developing country in many ways.

The justification for austerity has been a false characterization of Greece as a country with a uniquely profligate public sector, and as a nation burdened with overpaid, unproductive workers—which, in combination, poses an obstacle to private sector growth. Polychroniou reminds us that while Greece's public sector was clearly plagued by corruption and inefficiency, it was smaller than that of many other EU countries; Greeks work longer hours on average than many other European workers; and, finally, Greek productivity compared favorably with German productivity in the years leading up to the crisis. The "Greek crisis" actually had its origins in imbalances between the core and peripheral countries of the EU. However, Greece was judged to be uniquely responsible for its fiscal condition in spite of these imbalances: "profligate Greece" became the explanation for Greece's plight and the justification for the brutal policies imposed on it.

Germany played a prominent role in the creation of the crisis and the policy prescriptions that followed. In 2010, many German banks were overexposed to Greek debt and nearly insolvent. The 2010 bailout rejected any notion of debt restructuring and insisted on full debt payments to foreign banks. The eurozone countries could have chosen to backstop Greece's debt. This would have signaled the unity and stability of the EU to international bond investors, and would have likely contained the spread of contagion. But punishment was the policy of choice, and contagion spread within the periphery of the eurozone.

Predictably, contraction in the periphery spread to the core economies. The bailouts appear to have failed in every respect except one: ensuring the flow of payments to foreign banks. The author argues that it was the bailout and the austerity requirements that led to the collapse of the Greek economy. As the economy contracted, tax revenues declined, leading to an even higher debt-to-GDP ratio.

The EU leadership has had years to evaluate and revise its policies, yet its commitment to free market dogma and finance-dominated capitalism remains unshaken. In a very short period of time, we have witnessed the destruction of the Greek economy, the conversion of a financial crisis into a full-blown economic crisis, widening divisions among EU member-states, and increased risk to the recovery of the global economy.

After six years of economic recession, of which the last three have offered little more than an economic free fall, Greece faces an enormous challenge. Ending austerity will halt the decline of the economy and the erosion of Greek society, but it will not create economic and social recovery. Greece needs a massive, sustained development plan. Such an undertaking runs contrary to the neoliberal policy regime of finance-dominated capitalism and the interests of those it benefits. The EU requires fundamental restructuring of its institutions to ensure sustainable and equitable growth. In short, the answer to the current crisis is a new economic vision for Greece and for Europe.

www.levyinstitute.org/pubs/pn_13_6.pdf

Lost at Sea: The Euro Needs a Euro Treasury

JÖRG BIBOW

Working Paper No. 780, November 2013

Research Associate Jörg Bibow proposes a Euro Treasury, operating under strict rules and designed specifically not to be a transfer union, as a strategy to rescue the euro. His investigation is informed by a cartalist critique of traditional optimum currency theory and includes a critique of many of the euro reform proposals offered to date. His analysis also includes a comparison of how public finance functions are allocated within the euro currency union with how these functions are structured in the United States and Germany. The establishment of a Euro Treasury is put forward as the necessary, and heretofore missing, element to rescue the euro, foster recovery, and rebalance the eurozone.

Bibow recalls that the ongoing crisis is not the result of exogenous asymmetric shocks or fiscal profligacy. Rather, the eurozone failed to incorporate sufficient measures to protect against symmetric shocks, did not take steps to prevent endogenous forces from creating imbalances, and failed to address these two forces, which are self-reinforcing and destabilizing. The author contends that the current euro policy regime does not support strong, sustained, and balanced growth; rather, it has produced protracted periods of weak demand and growing intraregional imbalances. History shows that while the Maastricht regime promised net benefits to Europe, it failed to produce them.

The cartalist critique of optimum currency area (OCA) theory emphasizes the eurozone's departure from the "one nation, one currency" rule. When central banks act as the lender of last resort they require the fiscal backing of a treasury; likewise, a treasury needs the liquidity underwriting of a central bank. The eurozone is a conspicuous exception to this approach and explains much of the fundamental weakness of the currency union. Bibow reviews the contributions of OCA theory and then turns to the influence of German ordoliberalism in shaping the euro regime. He explains how the early success of the German model led to its use in the monetary union, where it was mistakenly expected to create price stability and prosperity. The euro regime's designers failed to understand how the German model worked, which explains the currency union's vulnerability to symmetric shocks: active demand management policies and institutions were left out of the design.

Bibow contrasts the rudimentary fiscal union in Europe with the fully functional monetary and economic union in the United States. He argues that the latter provides a prime example of fiscal federalism in a large economy. The US federal government provides a backstop for the financial system, funds public investment, and provides macro stabilization through fiscal policy. The close cooperation between federal fiscal policy and the Federal Reserve reflects this approach, and demonstrated its effectiveness in the most recent economic crisis. In contrast, the German model, with its "debt brake," sets aside public debt levels that were deemed prudent in the past (i.e., the "golden rule"). Germany's obsession with fiscal austerity operates in the context of enabling external imbalances. As Bibow has written previously, this is not a viable policy for the eurozone as a whole.

The proposals put forth to repair the euro regime fall into the broad categories of debt mutualization through the creation of instruments such as "eurobonds," systemic reforms, and progrowth proposals that reject austerity. Bibow recommends a minimalistic but functional Euro Treasury as a means to pool eurozone public investment spending, and funding it with eurozone treasury securities. The Euro Treasury would organize public investment spending from the center on the basis of a strict rule. This is pointedly not a transfer union; rather, it is a vehicle to safeguard Europe's infrastructure and common future, provide stability to the financial system through the establishment of a strong treasury–central bank axis, and stabilize labor markets and consumption spending in the eurozone. The Euro Treasury also has a role to play in rebalancing the currency union. Steady deficit spending at the center will, Bibow argues, allow member-states to reduce their national debt to sustainable levels. This would give the eurozone a fresh start, take the ECB out of the business of dealing in national public debts, and mend an essential defect of the euro.
www.levyinstitute.org/pubs/wp_780.pdf

Fiscal Policy and Rebalancing in the Euro Area: A Critique of the German Debt Brake from a Post-Keynesian Perspective

eckhard hein and achim truger
Working Paper No. 776, September 2013

Research Associate Eckhard Hein and Achim Truger, Berlin School of Economics and Law, Institute for International Political Economy (IPE) Berlin, offer a detailed critique of the German debt brake, a legal limit on Germany's ratio of public deficit to domestic GDP. While it has been hailed by many as a great success and used as a template for the European fiscal compact, Hein and Truger argue that the debt brake contains a number of shortcomings, fails to respect fundamental fiscal policy requirements for countries in a currency union, limits Germany's options to counter deflationary pressures, and complicates any effort to rebalance the euro area. The authors open with a brief introduction to the German debt brake legislation; discuss how the policy fails from both a mainstream and a Post-Keynesian perspective, examine Germany's role in rebalancing the euro area from the standpoint of functional finance, and explore five scenarios to achieve rebalancing within the context of the debt brake.

From a mainstream macroeconomic perspective, the debt brake's caps on structural government borrowing for the Bund (federal government) and ban on borrowing for the Länder (state government) are completely arbitrary. The debt brake contradicts the widely accepted macroeconomic principle wherein structural deficits match net public investment. Further, the eventual results of the debt brake will rely heavily on its technical design, the underlying cyclical adjustment method, and the budget sensitivities applied. Finally, the debt brake will exert a procyclical influence on the economy and thus undermine economic development over the long term.

Hein and Truger next outline a set of Post-Keynesian fiscal policy principles within the context of a currency union, with an emphasis on addressing the current crisis. They argue that central banks should target low real interest rates and act as the lender of last resort to enable member-states to pursue fiscal policies that create stability, full employment, and a more equal distribution of disposable income. Naturally, this requires close coordination of fiscal and monetary policy. Government deficits should be used for public spending on things such as infrastructure and education, with the goal of promoting long-term structural change that leads to environmentally sustainable growth over the long run. Hein and Truger note that some exceptions to these policy principles may be needed for countries with very large current account imbalances. The authors turn next to the development and implications of German surpluses.

Between 1999 and 2007, Germany recorded large financial balance surpluses in the private sector (i.e., excess private saving over private investment). Less than half of these surpluses were absorbed by public sector deficits, which therefore required high external sector deficits (i.e., high current account surpluses). The major counterparts for these surpluses, such as Spain, were located in the euro area. The private household sector is responsible for driving these surpluses between 1999 and 2007, and since 2002, corporate balances have also been positive.

The simplest path to addressing the imbalances would be to follow the principles outlined by the authors; specifically, in terms of the creation of fiscal deficits. However, such policies would violate the debt brake and the fiscal compact. The authors present five policy scenarios that do not violate the debt brake and would rebalance the euro area economies while remaining within the debt and deficit limits of the debt brake and the fiscal compact. They find that the level of the change in the functional distribution of income via the wage share and government redistribution would be immense, unprecedented, and politically impractical. They conclude that Germany is likely to continue its free ride on external demand while exerting deflationary pressure on its neighbors and contributing to imbalances in Europe and globally.
www.levyinstitute.org/pubs/wp_776.pdf

Reorienting Fiscal Policy: A Critical Assessment of Fiscal Fine-Tuning

PAVLINA R. TCHERNEVA

Working Paper No. 772, August 2012

Research Associate Pavlina Tcherneva delivers a critique of pump priming and New Consensus stabilization policies, and argues for a fundamental reorientation of fiscal policy using a bottom-up approach. Her critique reveals that demand-side approaches to stabilization rely on a trickle-down mechanism to achieve growth in income and employment. This approach has consistently contributed to increased income inequality and has failed to create and maintain full employment. Given these failures, Tcherneva discusses the form fiscal policy should take to generate long-run full employment, more equitable income distribution, sustainable growth, and better socioeconomic outcomes. She provides a bottom-up approach that emphasizes direct employment and investment by governments. She begins her analysis with a review of the performance of economic policy in the post–World War II period.

Developed economies have managed to avoid economic depressions in the postwar period but many have experienced frequent and damaging recessions that have contributed to unemployment and rising income inequality. Fiscal policy has not only failed to address these problems but also, she argues, exacerbated them. The recent Great Recession is an excellent example of how mainstream approaches to economic stabilization continue to worsen labor market trends through policies that amount to procyclical austerity rather than countercyclical economic policy.

The flaw in both pump priming and New Consensus stabilization policies lies in the growth and income mechanisms through which fiscal stimulus is expected to create jobs. Pump priming injects money into the economy from the top down, to the benefit of investors and large businesses. Increased investment has been shown to increase income inequality, as it creates jobs for high-skill, high-wage workers rather than the low-wage, low-skill workers who are most likely to lose their jobs in a recession. Public spending on large-scale infrastructure projects tends to have the same effect. Both of these approaches rely on the false premise that jobs result from an increase in investment. The track record of such economic stabilization strategies should be sufficient to put an end to them, but so far, it has not.

Some economists mistakenly consider these policies to be Keynesian in their approach. In fact, John Maynard Keynes and, later, Hyman P. Minsky took pains to describe, unambiguously, the appropriate vehicle for economic stabilization: the direct creation of full employment, not the promotion of an investment or spending environment favorable to increased demand for workers.

Tcherneva next outlines an approach to economic stabilization that works from the bottom up. She argues that unemployment and income inequality should be addressed through direct job creation and targeted public investment, in the tradition of Keynes and Minsky. The author recalls that Keynes argued for full employment in times of crisis *and* during periods of relative prosperity. She observes that Keynes did not envision fine-tuning through deficit spending as the solution to unemployment and economic stability but rather proposed to solve these problems simultaneously.

Tcherneva next outlines seven elements of a Keynesian bottom-up approach. Direct employment schemes are not "depression solutions"; the goal of the program is to provide jobs for all in socially beneficial projects, not aid industry; modern output measures that rely on current or real prices do not account for labor in the loss of aggregate demand; potential output measures are flawed and should be reconfigured in terms of the total number of people who could be employed; the labor demand gap must be closed rather than the demand gap for output; the unemployed must be hired during both expansions and contractions; and, unemployment may not be used to fight inflation.

Tcherneva's policy strategy directly improves income distributions at the bottom. She observes that public handouts do nothing to counter the demoralizing effects of unemployment or to address the loss of efficiency associated with the lost productivity of unemployed labor. For example, welfare reform requires one to work but does nothing to guarantee job opportunities. She concludes that we must reorient policy away from the two demand-side trickle-down approaches and toward a bottom-up approach that is based on labor demand targeting. Direct employment programs can serve as an important vehicle to ensure full employment, economic stability, and shared prosperity.

www.levyinstitute.org/pubs/wp_772.pdf

Foreign and Public Deficits in Greece: In Search of Causality

MICHALIS NIKIFOROS, LAURA CARVALHO, and CHRISTIAN SCHODER

Working Paper No. 771, August 2013

The narratives accepted for the causes of the Greek crisis drive the policy measures adopted to resolve the crisis. Austerity is an acceptable policy "solution" only if one holds that the Greek crisis was caused by profligate public spending. Fiscal integration, institutional reform, and development follow if the crisis is seen as a symptom of institutional failures and economic imbalances within the eurozone. In an effort to clarify the sources of the Greek crisis and to move public debate toward more appropriate policy responses, Research Scholar Michalis Nikiforos, Laura Carvalho, São Paulo School of Economics, and Christian Schoder, Macroeconomic Policy Institute, examine the evolution of the Greek public deficit and sovereign debt over the last three decades and how its development is connected to political and economic conditions. Their analysis supports the argument that Greece's plight is the result of structural deficiencies of the European Monetary Union (EMU), the failure of the eurozone to meet the criteria for an optimum currency area, and divergent labor costs and inflation rates within the currency union. The authors analyze the direction of causality between the foreign and public deficits between 1980 and 2010. Their results suggest that the best way for Europe to fight fiscal deficits is to reduce foreign deficits by addressing structural imbalances.

At first glance, Greece and Italy stand out from their peers in the EMU for their high debt-to-GDP ratios, high rates of tax evasion, and large shadow economies. These trends and the "twin-deficits hypothesis" have been used to explain the Greek crisis, and to justify fiscal austerity measures as the appropriate "remedy" for Greece's fiscal and external imbalances. The authors develop an alternative explanation that relies on the structural characteristics of the EMU and the global recession of the past five years as the main sources of the problem. They recall that Greece was not a unique case. Portugal, Ireland, and Cyprus required bailouts, and both Italian and Spanish bond yields rose to unsustainable levels.

The structural deficiencies of the EMU are central to the authors' explanation; specifically, the EMU does not meet the criteria of optimum currency area theory. Further, disparities in the cost of labor and inflation levels across EMU countries exacerbated these imbalances. High-productivity countries held a competitive advantage over low-productivity countries, which translated into a quasi-structural foreign deficit for low-productivity countries. These foreign deficits were matched by deficits in the domestic sector (i.e., private and/or government). Greek debt is thus the result, rather than the cause, of these imbalances.

The authors provide empirical evidence by examining the relationship and direction of the causality between Greece's foreign and public deficits between 1980 and 2010. They find that causality ran from the foreign to the public deficit between 1980 and 1994. After 1995, the causality reversed in response to the European monetary unification process, the adoption of the hard drachma, and, subsequently, the adoption of a common currency. The authors test and confirm this hypothesis using Granger causality tests and a cointegrated vector autoregression analysis. Their findings show a clear deterioration in the external position of the Greek economy from the mid-1990s to 2009. Increasingly, high foreign deficits led to domestic sector deficits, which were in turn made possible by the liberalization of the capital accounts, massive capital inflows, and very low interest rates.

This finding is reinforced by a comparison of Greece's net lending position and current account balance with the rest of the peripheral countries of the eurozone. Between 1995 and the recent crisis, the external position of all five peripheral countries worsened. While there is variation among these countries, all five saw increased foreign deficits and borrowing. These findings indicate that structural imbalances within the euro area were the main cause of the crisis. Given the direction of causality identified, a current account compact would be a more fruitful way to fight fiscal deficits than the recent European fiscal compact.

www.levyinstitute.org/pubs/wp_771.pdf

Program: Monetary Policy and Financial Structure

Conference Proceedings

Financial Governance after the Crisis

Rio de Janeiro, Brazil

September 26–27, 2013

The conference was organized as part of the Levy Institute's global research agenda and in conjunction with the Ford Foundation Project on Financial Instability, drawing on Hyman Minsky's extensive work on the structure of financial governance and the role of the state. Leonardo Burlamaqui, Ford Foundation, Rogério Sobreira, MINDS, and Levy Institute President Dimitri B. Papadimitriou opened the conference with remarks on the need for a financial system that will promote investment in emerging markets, and on the ongoing challenges austerity poses for global growth, with emphasis on its effects in the United States, the eurozone, and the BRIC countries.

Keynote speaker Paul McCulley, Global Society of Fellows, Global Interdependence Center, organized his discussion around three "first principles": that microeconomics and macroeconomics are fundamentally different fields; that monetary policy and fiscal policy are not inherently different instruments; and that banking is inherently a joint venture between the public and private sectors.

In the first conference session, Albert Keidel, Atlantic Council of the United States, argued that Brazil's long-term economic growth prospects turn on the question of whether that country can learn from and emulate China's domestic investment- and consumption-led growth model. Esther Dweck, Ministry of Planning, Budget and Management, Brazil, contended that the Brazilian economic model is not an export-led model but rather a domestic demand-led one, and placed the country's recent economic slowdown in an international context.

Speaker Paulo Nogueira Batista, International Monetary Fund, dealt with financial governance after the global financial crisis, focusing in particular on legitimacy problems caused by recent delays in governance reforms aimed at giving emerging market economies more of a voice.

In the first of two afternoon sessions, Kevin P. Gallagher, Boston University, discussed possible improvements to a broken system for regulating capital flows that would feature developed economies incorporating the externalities of their monetary policies and emerging economies developing stronger capital flow management strategies. Fernando J. Cardim de Carvalho, Federal University of Rio de Janeiro, articulated some lessons for the Brazilian economy on the topic of the practicality of capital controls. Luiz Fernando de Paula, University of the State of Rio de Janeiro, discussed recent characteristics of cross-border capital flows; the question of whether the implementation of free-floating exchange rates combined with more open capital accounts is allowing greater independence for monetary policy; and the contrast between the International Monetary Fund's new institutional approach and what he called a more integrated approach to capital account regulation.

In the second session, former Brazilian Economic Policy Secretary Nelson H. Barbosa Filho, Federal University of Rio de Janeiro, examined the evolution of Brazil's exchange rate and the implications for growth, distribution, and development strategy more broadly, closing with some alternative approaches to increasing competitiveness. Roberto Frenkel, Center for the Study of the State and Society (CEDES), articulated a policy strategy for preserving a competitive real exchange rate target that would be stable, with respect to agents' future expectations of the real exchange rate; as well as sustainable, in the sense that its implementation would not, for instance, generate inflationary trends. Luiz Carlos Bresser-Pereira, Getulia Vargas Foundation, argued that, for developing countries, financial fragility is not a necessary condition of economic development but is instead the result of major economic policy errors revolving around an overvalued currency and partly explained by a revealed preference for immediate consumption.

On the second day of the conference, in a session devoted to law and finance, José Gabilondo, Florida International University, elaborated on a theoretical framework in which financial innovation is defined in terms of its impact on liability structure, and argued that, while regulators are attempting to focus more on liquidity management, they will have limited success due to opposition from the financial industry. Katharina Pistor, Columbia Law School, presented a legal theory of finance and focused on the problematic tendency, in times of crisis, to suspend the full force of the law for the core of the financial system while fully enforcing it on the periphery.

In a session focusing on Minskyan views of financial instability, Levy Institute Senior Scholar Jan Kregel assessed some recently proposed alternatives to the 2010 Dodd-Frank Act that aim at returning to the regulatory structure provided by the 1933 Glass-Steagall Act. He explained that such proposals cannot work because they are based on a misunderstanding of what banks do, and he closed with some Minskyan ideas for promoting stability. Senior Scholar L. Randall Wray interpreted the global financial crisis as a crisis of Minsky's "money manager capitalism"; analyzed the Federal Reserve's response to the crisis; and ended with a discussion of possible reforms for (1) reconstituting the financial system to promote capital development and (2) altering the way the central bank handles its crisis response. Research Associate Éric Tymoigne presented his index of financial fragility, which uses a Minskyan theoretical framework to measure the risk that a financial disturbance will be amplified and lead to a debt deflation, and demonstrated how it can be applied to the residential housing markets in the United States, the UK, and France.

In the subsequent sessions, Martin Rapetti, CEDES, discussed the differences between developed and developing countries with respect to how their financial crises are generated, their policy responses, and their crisis prevention strategies. Felipe Rezende, Hobart and William Smith Colleges, provided an overview of the recent evolution of the financial system and liquidity creation in Brazil in the context of Minsky's views of the nature of banking and his work on financial regulation.

Levy Institute President Dimitri B. Papadimitriou presented the results of the Institute's latest strategic analysis of the US economy, showing a baseline of high unemployment and slow growth in the context of continued austerity and a weakened link between output and employment creation, and projecting the fiscal stimulus required to reach unemployment-rate targets of 6.5 and 5.5 percent, respectively, by the end of 2014.

The conference concluded with a presentation by Frank Veneroso, Veneroso Associates, LLC, who provided a practitioner's view of Minskyan theories of financial instability and emerging market economies, with a particular focus on China—which he maintained is set up for the biggest potential financial crisis in history.

"Unusual and Exigent": How the Fed Can Jump-start the Real Economy

WILLIAM GREIDER

Policy Note 2013/8, August 2013

William Greider, *The Nation*, calls on American progressives to reassert their voice and take an active role in the policy debates of the Federal Reserve. Americans generally do not understand that the Fed has the ability—indeed, says Greider, the duty—to use its enormous monetary power and influence to fulfill its dual mandate to promote maximum employment and stable money. This power includes taking direct action, as it has in the past, to aid the economy. The Fed has the ability to loan to all kinds of businesses, not just banks. Greider argues that the Fed—specifically, Chairman Ben Bernanke—is hampered by a group of conservative politicians and their patrons from the banking community. The voice of ordinary citizens is absent from the Fed's policy deliberations; most notably, there is no voice from the left to counter the conservative politics that continue to dominate the discussion. Today, if Bernanke were to propose policies that were seen as controversial, he would stand alone.

Greider laments that liberal economists and policymakers seem unwilling to urge the central bank to use its power to stimulate the economy directly. The Fed could, for example, use its power to motivate bankers to start making loans to credit-starved sectors of the economy, such as small business. It could create special facilities for direct lending, similar to what it did for the largest banks during the bailout; if banks refused to participate in such initiatives, the Fed could work with nonbank financial institutions. The Fed could also lead efforts to reduce underwater mortgages and relieve student debt burdens. Similarly, it could organize and finance major infrastructure projects or backstop public-private bonds to overhaul America's common assets. These are only a few examples of innovative ways the central bank might fulfill its dual mandate. No doubt, orthodox monetary economists would argue that it lacks the technical expertise and legal authority to undertake such unprecedented direct action. Orthodox economists would be wrong.

In 1932, under section 13(3) of the Federal Reserve Act, the Federal Reserve was granted open-ended authority to loan to practically anyone, provided the board of governors declared an economic emergency ("unusual and exigent circumstances"). Today, Fed governors must seek the approval of the Treasury secretary, but there is no requirement to seek permission from Congress. The Fed has the legal authority to loan to small businesses, individuals, and other entities. It exercised this authority by making thousands of direct loans to businesses under the New Deal—a practice that continued for 20 years.

While many would have the public believe that section 13(3) is nothing more than a vestige of the New Deal and therefore irrelevant to current economic conditions, it was invoked repeatedly during the most recent financial crisis. Bernanke intervened on a massive scale to rescue the financial system, directing aid to corporations, individual investors, and other nonbank businesses. The central bank declared "unusual and exigent circumstances" in spring 2008, when Bear Stearns—a brokerage house, not a bank—collapsed. The Fed also provided $29 billion to facilitate JPMorgan Chase's acquisition of Bear Stearns. Section 13(3) was invoked again in the bailout of American Insurance Group (AIG)—again, not a bank but an insurance company—to the tune of $180 billion. The AIG bailout resulted in so much public outrage that Congress passed legislation removing the Fed's ability to create a facility to aid a single insolvent company. However, Congress left intact the central bank's ability to loan to individuals, partnerships, and corporations. Greider observes that the Fed protected these companies because of their value to the economic recovery. How is it that homeowners facing foreclosure, recent graduates carrying large student loan debts, or small businesses unable to obtain credit are not equally important to the future of the US economy? Change, Greider concludes, will not come until citizens reclaim their place in the conversation and move policy in a new direction.
www.levyinstitute.org/pubs/pn_13_8.pdf

Debt Relief and the Fed's Money-creation Power

WILLIAM GREIDER
Policy Note 2013/7, August 2013

William Greider calls for the Federal Reserve to abandon failed paradigms and use its powers to serve the broad public interest and fulfill its dual mandate of maximum employment and stable money. The author has been a staunch critic of the Fed in the past, and he does not put aside his past criticisms. The Fed remains, in his estimation, an institution that is in many ways unaccountable, antidemocratic, and far too cozy with the banks and investment houses. However, Greider argues that, today, the United States needs a stronger central bank, one that will exercise its powers on behalf of the real economy. He proposes that the Fed could begin by taking action to clear away the overhang of mortgage and student loan debt that is holding back the economy.

Following the 2008 financial crisis, the Federal Reserve exercised its monetary powers to stabilize markets and rescue ailing banks. It backstopped the housing market by purchasing $1.25 trillion in mortgage-backed securities. While the Fed's massive response to the 2008 crisis created stability for the financial markets, it did little for the real economy, and political leaders have been reluctant to take action. They offer lukewarm praise for the economy but have done little to create jobs or increase output. The Fed, Greider notes, understands the situation better than most of the players in Washington, and it has called for greater activism on the part of the president and Congress.

In January 2012, the Fed launched, with characteristic caution, a media campaign on behalf of homeowners with mortgage troubles. The Fed issued a white paper in which it advocated reducing the principal owed by homeowners whose mortgages are now larger than the value of their homes. The paper calls for bridge loans to aid unemployed homeowners and for Fannie and Freddie to reduce outstanding balances on delinquent loans. The foreclosure crisis, the Fed argued, harms entire communities through reduced property values, lost tax revenue and other deadweight losses created by foreclosures. Mortgage relief, the Fed allows, will redistribute wealth from the creditor to the debtor, but both parties benefit from avoiding foreclosures. Mortgage refinancing through principal and interest rate reduction allows homeowners to keep their home and any equity. Loan modifications will restore loans to profitability for investors. Lenders suffer a loss on paper but in real terms they will earn more. The Fed explains that the same logic applies to the US economy: the initial costs of debt reduction will be felt by lenders but the long term benefits of clearing away bad debt will strengthen the recovery to the benefit of all.

Greider discusses a proposal offered by Senator Elizabeth Warren (D-MA). She has publicly asked why banks pay 1 percent interest on the funds they receive from the Fed while US college students pay 6.8 percent on their loans. Her proposed legislation would lower the interest rate on student loans to 0.75 percent—the same rate that banks pay at the Fed's discount window. Senator Warren further argues that the Fed invests in financial institutions every day, and that we should make an equal commitment to American youth seeking an education. Her proposal would require the Fed to pay for the cost of student loan rate reduction out of the money it creates. If we are willing to harness the "off the books" money-creation power of the Fed on behalf of the big banks, it makes sense to do likewise for students, who are also important to our economic future.

Greider also argues that forgiving debtors is only fair, given the assistance that banks have received. Relieving the debt of homeowners and people with student loans will provide a needed boost to the real economy. The Fed is uniquely empowered under its dual mandate to take action and end the stagnation of recent years. The Fed's leadership does not face the same political headwinds as the president or Congress. Americans too often fail to see that the money created by the government belongs to all of its citizens. Greider calls on Americans to develop a list of national priorities, and for the Fed to deploy its enormous monetary power to shape our common future.

www.levyinstitute.org/pubs/pn_13_7.pdf

Modern Money Theory 101: A Reply to Critics

ÉRIC TYMOIGNE and L. RANDALL WRAY

Working Paper No. 778, November 2013

Research Associate Éric Tymoigne and Senior Scholar L. Randall Wray address some of the main criticisms and misperceptions of Modern Money Theory (MMT). The paper is organized around the authors' responses to five broad critiques of MMT: the origins of money and the role of taxes in the acceptance of government currency; fiscal policy; monetary policy; the relevance of MMT for developing countries; and the validity of MMT's policy recommendations.

Tymoigne and Wray address these critiques using a circuit approach and national accounting identities, and by progressively adding economic sectors. They first address the government sector and demonstrate the role of taxes in promoting the operation of a government-based monetary system. The first section also includes a discussion of the consolidation hypothesis, which is also taken up in detail in subsequent sections. The authors next analyze the private domestic economy and offer conclusions regarding fiscal policy and balances. They then add the central bank to their circuit analysis in order to examine the interactions between it, the treasury, and the domestic economy. The foreign sector is analyzed in terms of its impact on fiscal policy, the role of exchange-rate regimes, and national development levels. The final section reviews the policy framework and conclusions of MMT.

Throughout the paper, the authors note that many critics confuse description with prescription when it comes to the consolidation hypothesis. For example, a number of critics argue that the monetary financing of government expenditures discussed in MMT leads to inflation. Other critics argue that the consolidation hypothesis does not match the institutional framework in developed countries and leads MMT to make needlessly strong claims. Tymoigne and Wray first approach these issues with a discussion of the origins of money, the role of taxes, and issues surrounding the consolidation argument. They take the theory of the circuit as their starting point, and demonstrate how the consolidation hypothesis yields a number of useful insights about how monetarily sovereign governments operate. Contrary to its critics' charges, MMT contains no invitation to profligate government spending. These critics fail to understand that the consolidation hypothesis describes a process and a set of relationships but does not prescribe a particular policy. In point of fact, MMT makes a clear distinction between real and financial constraints.

Further, MMT makes no claim that the hypothesis describes existing institutional frameworks in faithful detail. It is a theoretical simplification that reveals the causalities at work in the current monetary system. The criticism that MMT lacks descriptiveness again misses the point. Theoretical simplifications are common in economic theory; notably, in the work of some of MMT's critics. The authors follow with responses to the critics' complaints with regard to the domestic private sector, the central bank, and the foreign sector before turning to the policy implications of MMT.

MMT contains clear policy conclusions about monetary, fiscal, and financial policy that are squarely in the tradition of economists such as John Maynard Keynes, Hyman Minsky, and many others. The theory holds that government involvement is essential to deal with unemployment, arbitrary income distribution, price stability, and financial instability in market economies. MMT rejects a fine-tuning approach in favor of direct government involvement throughout the business cycle. Specifically, it argues for structural macroeconomic programs to manage the labor force, pricing mechanisms, investment projects, and the monitoring of financial developments. These interventions should be permanent and structural, so as to isolate them as much as possible from the political cycle while ensuring that there is sufficient discretion to ensure their effectiveness. MMT supports a job-guarantee program as well as capital controls for open economies, credit controls, socialization of investment, and involvement in wage rates and interest rate management.

On balance, critics fail to understand the practical and theoretical contributions of MMT. Principally, it aims to reframe the debate, to move away from an inaccurate characterization of financial constraints and toward a discussion about how to create equity, full employment, financial stability, and price stability. MMT, unlike many approaches, rests on accounting identities that describe how spending by a monetarily sovereign government is not inherently constrained in the way that many economists and budget hawks would have us believe. As a nation, we control our currency and can use it responsibly to achieve our goals. MMT pushes aside some of the falsehoods and misperceptions about how monetarily sovereign economies work, and opens the way for political debate based on fact.

www.levyinstitute.org/pubs/wp_778.pdf

Program: The Distribution of Income and Wealth

Quality of Statistical Match and Simulations Used in the Estimation of the Levy Institute Measure of Time and Consumption Poverty (LIMTCP) for Turkey in 2006

THOMAS MASTERSON

Working Paper No. 769, July 2013

Research Scholar and Director of Applied Micromodeling Thomas Masterson describes the creation and quality of the synthetic data sets used in the estimate of the Levy Institute Measure of Time and Consumption Poverty (LIMTCP) for Turkey in 2006. The development of these datasets contributes to an ongoing project supported by the United Nations Development Programme. This working paper includes a description of the primary data sets and the quality of the statistical match and reported diagnostics; and a discussion of the methodology for assignment of industry, occupation, hours of employment, earnings, household income, household production, and consumption expenditures. The paper concludes with an analysis of the results of the simulations.

The purpose of the simulations is to understand the impact of employment gains on household production (the activities that allow a household to function—i.e., cleaning, cooking, caring for children, and so on). Poverty-reduction initiatives typically focus on increasing wage income with the unintended consequence of reducing the time available to households to meet their most basic needs through unpaid, productive activities. If, for example, a household engages in additional wage employment, it will typically purchase goods and services to make up for lost household provisioning. If the additional wages earned are not sufficient to cover the additional services needed as a result of the time allocated to wage employment, the result can be a net increase in household poverty. The results of this simulation provide valuable insights in the development of country-specific employment policies (e.g., employer-of-last-resort programs) that anticipate the impacts of expanded wage employment. The simulations also provide policymakers with insights into the income and time (consumption) impacts across different demographic groups.

This working paper, which focuses primarily on the quality of the statistical match, summarizes an important step in the process of developing LIMTCP results for Turkey. In order to produce LIMTCP estimates (or LIMTIP estimates when "income," rather than "consumption," is the relevant metric), a synthetic data set is created by matching two source data sets. Masterson matches the 2006 national time-use survey (Zaman Kullanim Anketi) with the 2006 household income and expenditure survey (Hanehalki Bütçe Anketi), which contains demographic, income, transfer, and tax information for a representative sample of households in Turkey. (Both data sets were produced by TÜIK, the Turkish statistical institute.)

Masterson finds that the statistical match between the two data sets is of high quality. This is expected given the nature of these data. He notes that there is very close alignment between the two surveys for six of the seven strata variables. Masterson notes that there are some observed limitations—for example, in terms of household income—but that, overall, the distribution is transferred with good precision.

The time and consumption impacts of expanding employment as an income-poverty reduction strategy requires the imputation of the income, time allocation and consumption expenditure effects. Masterson draws upon earlier work assessing the impacts of the 2009 American Recovery and Reinvestment Act and previous LIMTIP employment simulations. The employment simulation does not focus on the precise mechanism by which the unemployed receive work. The goal is to assess the impacts of employment rather than to discuss a specific employment policy mechanism.

Masterson then describes the quality of the simulated employment gains for Turkey in 2006. The simulation begins with the assignment of a job to all persons not (1) employed for wages, (2) employers, or (3) unpaid household workers. For all of the households with a job recipient, the household production of that job recipient is estimated. Household consumption is then assigned to each household that includes a job recipient. The job recipient group and the job donor group are compared demographically, in terms of estimated hours worked, earnings, and household production as generated by the simulation. In both cases, the simulations were found to be of reasonable quality, despite the challenges in assessing such results.
www.levyinstitute.org/pubs/wp_769.pdf

Program: Employment Policy and Labor Markets

Economic Crises and the Added Worker Effect in the Turkish Labor Market

SERKAN DEĞIRMENCI and İPEK İLKKARACAN
Working Paper No. 774, September 2013

The Turkish economy has experienced periodic crises since financial liberalization reforms were enacted in the early 1990s. In addition, Turkey has one of the lowest female labor force participation rates in the world and a limited unemployment insurance scheme. Within this context, Serkan Değirmenci, Istanbul Technical University, and Research Associate İpek İlkkaracan analyze the female added worker effect using micro data from household labor force surveys for the 2004–10 period. They explore whether there is a dynamic relationship between transitions of women and men across labor market states; examine whether and to what extent the primary male earner's move from employed to unemployed status determines the probability of married- or single-female full-time homemakers entering the labor market; and estimate the marginal effect of the unemployment shock on the probability of a labor market transition for the overall sample, as well as for different groups of women. They find that the impact of such shocks varies widely depending on the characteristics of individual women, and that a relatively small share of Turkish households adopted the added worker effect as a coping strategy in the wake of the financial crisis.

Değirmenci and İlkkaracan's contribution differs from other studies in several important ways. They explore the presence of a dynamic relationship between the labor force participation rates of men and women across labor market states. Other studies most often base their analysis on a static association between women's labor force participation status and men's employment status. Değirmenci and İlkkaracan are able to investigate this dynamic relationship using a question introduced in the 2004 Household Labor Force Study, which gathered information on respondents' labor force status in the prior year. The authors use this data to analyze the change in participation status of women in response to a change in the primary male wage earner's labor force status from employed to unemployed between the current and prior years. Thus, they are able to examine the marginal effect of a job loss by the primary male earner on the labor force participation of married- and single-female full-time homemakers.

Their results include estimates for the overall population as well as specific demographic groups. They find marked differences in how the added worker effect varies across different groups of women. Education, age, urban/rural residence, marital, and parental status are all shown to influence the probability of labor force participation.

The analysis shows that a household unemployment shock increases the probability of a female homemaker entering the labor market by 6 to 8 percent. However, there is substantial variation in marginal effects among different groups. For example, a female university graduate who is a full-time homemaker and between the ages of 20 and 45 responds to an unemployment shock with a 34 percent probability of participating in the labor force, while her counterparts with a high school education and those with a secondary education participate at a rate of 17 percent and 7 percent, respectively.

The authors estimate that, based on the total weighted labor force participation of women during the 2007–08 crisis, only 9 percent of households experiencing an unemployment shock entered the labor force. While it is clear that there is an added worked effect as a response to unemployment shocks, this effect corresponds to a relatively small percentage of total households. The authors attribute these low labor force participation rates to profound structural constraints limiting female labor force participation in Turkey.

www.levyinstitute.org/pubs/wp_774.pdf

Program: Economic Policy for the 21st Century

Explorations in Theory and Empirical Analysis

Hierarchy of Ideals in Market Interactions: An Application to the Labor Market

AURÉLIE CHARLES

Working Paper No. 779, November 2013

Aurélie Charles, Centre for Development Studies, discusses the role of ideals and norms in shaping prices and market transactions. Charles argues that norms homogenize the diversity of commodities in the market. This process has the effect of facilitating transactions; or, as the author demonstrates, it can lead to unequal access to employment, compensation, and advancement in the labor market. She argues that when groups do not conform to socially defined norms or ideals they are likely to suffer disproportionately in market interactions relative to groups that do meet these ideals or norms. The author analyzes employment patterns following the Great Recession as an illustration of this dynamic.

Buyers and sellers approach market transactions with different perceptions of the value of a given commodity. Thus, the role of perception in valuing commodities is essential. For example, the material-welfare school emphasizes the visible or observable characteristics of commodities, whereas the feminist school has drawn attention to qualities and activities such as care that are ascribed a low value because they are relatively less visible. Similarly, the ecological school focuses on the embeddedness of the economy in the natural environment, which is often less observable (e.g., the value of air quality). Further, individuals vary in what they perceive as valuable in one commodity versus another. These differences are homogenized through markets, which allow the diversity of individual perceptions and preferences to be transformed into homogenous prices based on an ideal commodity that serves as a reference point.

Market exchanges take place between market participants, who must have a shared standard of how to put a value on a given commodity. Each market participant brings their unique combination of preferences and social identities to the task of valuing commodities and creating a shared standard for the exchange process. Thus, two market participants with the same social or group identity are likely to share a notion of fairness that in turn creates the stability needed for transactions to occur. The dominant norms and institutions provide the standard of fairness against which the optimality of decisions is assessed, until they are challenged. Human identity is a complex combination of gender, race, history, and culture. The concept of identity is closely connected to social categories and groups, which can give rise to insider-outsider dynamics. In the context of market exchanges, identities can give rise to ideals and norms that produce inequality.

Charles next examines how this hierarchy of ideals operates in the US and European labor markets. The author argues that the outcome of this process is occupational and wage discrimination against those groups that do not conform to the dominant ideal. She draws examples of the effects of norms and group identity from the integration of ethnic-minority populations in the labor markets of the United States and Germany. She finds that in Germany ethnic minorities who identify with their country of origin have higher levels of employment than those ethnic-minority immigrants who do not identify with their home country as strongly. She argues that second-generation immigrants who identify with their ethnic identity have access to employment networks that give them an advantage in finding work.

In the United States, Charles finds that unequal access to employment among identity groups is evident in economic downturns. Drawing on research on employment trends and the "glass ceiling" effect, she shows how dominant group identities did not experience the effects of the Great Recession to the same degree as groups that fit the dominant norms. The labor market, she concludes, offers some evidence of how norms and ideals homogenize the labor force in a manner consistent with the perceived hierarchy of ideals.
www.levyinstitute.org/pubs/wp_779.pdf

A Simple Model of Income, Aggregate Demand, and the Process of Credit Creation by Private Banks

giovanni bernardo and emanuele campiglio
Working Paper No. 777, October 2013

Prior to the financial crisis, the roles of money, credit, and banking were glaringly absent from the majority of macroeconomic models. Economists, with a few notable exceptions, were therefore ill equipped to anticipate the crisis, and today lack the tools to advise policymakers as to how to promote economic recovery. The growing recognition of the shortcomings of such mainstream models has led many economists and policymakers to seek out new approaches. The long, if minoritarian, tradition—including such economists as Josef Schumpeter, Hyman Minsky, and Wynne Godley—is now receiving more attention from the broader discipline.

Giovanni Bernardo, University of Pisa and New Economics Foundation, and Emanuele Campiglio, London School of Economics, present a stock-flow consistent model that describes the main mechanisms of the process of credit creation by the private banking system. The model consists of a core unit containing the dynamic mechanisms of income, debt, and aggregate demand. The authors draw a distinction between "planned" and "realized" variables in order to grasp the role of credit in the functioning of the economy. Maintaining an ex-post accounting consistency, they are able to introduce an ex-ante wedge between current income and planned expenditure. Private banks fill this gap through the creation of credit. In addition to the core unit of the model, sectoral accounts are included that represent the agents (nonfinancial firms, banks, central banks, households, and gilt sellers) in the economy. Despite its simplicity, the model captures crucial features of the credit-creation process. In particular, the authors find that a confident banking system, one willing to grant credit to firms for productive investments, is necessary for an economy to prosper.

The authors further argue that the traditional money-multiplier theory is faulty in several respects. Instead of accepting that central banks determine the amount of credit created by altering their reserves, the authors rely on an endogenous theory of money in which private banks decide how much they want to lend and then seek reserves from the central bank. Unless the central bank wants to create a credit crunch, it must acquiesce to the demands of private banks. The authors observe that quantitative easing, which is based on the money-multiplier theory, was expected to have the effect of increasing the supply of broad money, but did not. The money supply relies on the willingness of banks to create credit, not on an increase in central bank reserves. Since the confidence of the banking system is a difficult variable to measure, Bernardo and Campiglio suggest that a comparison of bank loan applications and approval rates might serve as a suitable proxy.

The authors next turn to a recent debate between Paul Krugman and Steve Keen that hinges on many of the issues addressed by their model; specifically, the role of the banking system in stimulating aggregate demand. Keen argues that an increase in the level of debt increases aggregate demand, while Krugman argues that aggregate demand must equal aggregate income. Bernardo and Campiglio find that this debate turns on differences in definitions, and that both economists have internally consistent arguments. The authors' model resolves their seemingly disparate perspectives by disaggregating planned from realized expenditure.

The authors set forth a theoretical specification of the model and follow with numerical simulations. They examine three scenarios to examine the dynamic properties of the model. The simulations show that, at each point in time, income is equal to aggregate expenditure and is, simultaneously, different from expected aggregate expenditure. The difference between income and expected expenditure is equal to the net stock of debt. The authors then expand on their model to make it stock-flow consistent, and investigate a baseline scenario and five alternative scenarios: bank confidence shock; animal spirits; interest rate easing; profit expansion; and faster repayment. These scenarios add to our understanding of the role of private banks in the creation of credit, and how the failure of banks to provide credit to the productive sector is a major obstacle to economic recovery. While programs such as quantitative easing have been designed to foster credit creation by private banks, the results of these measures are mixed. The next logical step, say the authors, is to understand and support the flow of central bank liquidity to firms in a more direct manner.

www.levyinstitute.org/pubs/wp_777.pdf

Wage and Profit-led Growth: The Limits to Neo-Kaleckian Models and a Kaldorian Proposal

esteban pérez caldentey and matías vernengo

Working Paper No. 775, September 2013

Esteban Pérez Caldentey, Economic Commission for Latin America and the Caribbean, and Matías Vernengo, Bucknell University, argue that the treatment of investment is a fundamental difference in how Post-Keynesian economists approach the subject of economic growth. The authors begin with a comparison of Kaldorian and Kaleckian-Robinsonian models. They adopt a Kaldorian model to empirically evaluate the presence of profit- and wage-led growth in 19 developed countries between 1960 and 2012. Their findings show that real wages are positively related to growth, investment, and capacity utilization, and that the limit to wage-led expansion is a binding exogenous constraint. Their findings also highlight the role of finance in sustaining economic expansions, and serve as a caution not to confuse debt-led growth with profit-led growth.

Caldentey and Vernengo divide Post-Keynesian models into two broad groups. One group relies on the work of Nicholas Kaldor, while the other looks to the work of Michal Kalecki and Joan Robinson. Many of the Kaleckian-Robinsonian models employ an investment function that is informed by the profit share and capacity utilization (i.e., a rise in the profit share stimulates investment and growth) and assign a relatively limited role to demand. In contrast, Kaldorian models emphasize the accelerator rather than profitability. They view investment as derived demand (i.e., capacity adjusts to exogenous demand and thus determines the normal level of capacity utilization). The authors develop a Kaldorian open-economy model using investment as derived demand and determined by the adjustment of capacity utilization from its actual to its long-term level in order to investigate how an increase in real wages can produce profit- or wage-led growth.

Their empirical analysis examines the role of wages in growth for a group of 19 advanced economies. They employ spectral analysis and business-cycle indicators to examine a subset of these countries that includes the United States, France, the United Kingdom, Canada, Germany, Italy, Australia, and Japan. The results show that the growth rate of real wages generally kept pace with overall economic conditions during the period analyzed. Caldentey and Vernengo further analyze the relationship between real wages and growth by applying the perspective of cycle behavior. They examine wages, GDP, consumption, investment, exports, and capacity utilization. Their results show that real wages, consumption, and GDP cycles exhibit the most similarity. By contrast, investment, capacity utilization, and exports show the highest frequency cycles. Further, real wages exhibit the greatest degree of synchronicity with real GDP as compared to the other variables analyzed. The authors find that over the business cycle higher real wages imply higher GDP growth, more investment, and greater capacity utilization. Thus, the decline in GDP growth rates between 1960 and 2012 can be partly attributed to wages.

However, real wages have a smaller impact on GDP than consumption. While wages exert a great deal of influence on consumption, the authors observe that in developed economies, where credit plays a large role in consumption, a relative autonomy of consumption from income arises, potentially leading to debt-led growth. The authors observe that, over time, debt has become a crucial factor driving consumption and economic expansions. Examining quarterly data on GDP and liabilities in the US economy, they conclude that the last three economic expansions have been driven more by Wall Street debt-led activity than by profit-led investment. The authors' findings have implications for understanding the relationship between income distribution and growth, and, more broadly, for the direction of economic policy following the global financial crisis of 2008–09.

www.levyinstitute.org/pubs/wp_775.pdf

Keynes's Employment Function and the Gratuitous Phillips Curve Disaster

EGMONT KAKAROT-HANDTKE

Working Paper No. 773, August 2013

Egmont Kakarot-Handtke, University of Stuttgart, presents an alternative to Keynes's employment function and to what he describes as the "bastard" Phillips curve. Kakarot-Handtke observes that while Keynes had a number of interesting things to say about unemployment, he often relied on intuition rather than articulating a rigorous proof. This left the door open for economists to offer their own, sometimes spurious, interpretations of Keynes's work. The Phillips curve is one example of a misappropriation of Keynes's ideas that was eventually used to undermine Keynesian economics. Kakarot-Handtke identifies Keynes's undifferentiated employment function as one such weak spot that has led to misinterpretation.

Kakarot-Handtke laments that so many economists remain wedded to economic theories built on behavioral assumptions of utility maximization and profit maximization by individual agents. His work is informed by the conviction that economics must be nonbehavioral, and must emphasize the interdependence of the real and nominal variables that make up the monetary economy. His first step is to provide the non-Euclidean axioms that Keynes called for but did not himself provide. He then turns to a discussion of Keynes's approach to Say's law.

The author notes that Keynes's acceptance of the most important policy implication of Say's law was that, in the presence of unemployment, workers must accept a lower price for their labor. This recipe for unemployment, the author argues, rests on a fallacy of composition. He restates the proposition of overall market clearing in a structural axiomatic form, showing that Say's regime—the core of general equilibrium theory—can be produced from objective conditions, making behavioral assumptions unnecessary. He addresses the question of how employment affects profit by demonstrating that, no matter what the level of employment or the wage rate, the profit ratio remains constant. Firms are therefore indifferent to the level of employment. Here, the author introduces a single behavioral assumption to move the model in the right direction: firms prefer to be larger rather than smaller if the profit ratio remains the same. Thus, firms will hire workers until the supply of labor is cleared. This condition ensures full employment in Say's regime. Because of the flexibility of product market prices, all levels in output are completely absorbed. Kakarot-Handtke concludes that Say's regime provides an elementary, objective, explicit, and benchmark economy; it is free of marginalistic assumptions and takes the place of the general equilibrium model. He then applies these insights to explore their implications for Keynes's approach.

In Say's world, there is no employment function. Keynes introduced the employment function as an inverse of the aggregate supply function. Employment is thus dependent upon effective demand. This crucial departure from Say's law made price the independent variable, which implies that employment becomes the dependent variable. Thus, by implication, employment depends on consumption expenditure, price, and productivity (with consumption expenditure representing effective demand).

Moving from the structural employment function to the Phillips curve, Kakarot-Handtke argues that Keynes's lack of a robust employment function would prove to be an important deficiency. The original Phillips curve described the relationship between the unemployment rate and the rate of change in the wage rate. The original work by William Phillips made no claims about a link between employment and inflation. It was Paul Samuelson and Robert Solow who made inflation equal to the rate of wage growth, less the rate of productivity growth. The spurious trade-off between inflation and unemployment did not prevent this (bastard) Phillips curve from having wide influence in public policy. It was eventually discredited, much to the injury of the Keynesian policy paradigm.

The final element of Kakarot-Handtke's analysis is to combine the employment function, multiplier, and Phillips curve to account for investment as the second important component of effective demand. He then develops a structural Phillips curve that has the formal status of a theorem, contains 12 observables, and recovers the original Phillips curve—which, he concludes, is a substantial improvement over the bastard Phillips curve.

www.levyinstitute.org/pubs/wp_773.pdf

Uncertainty and Contradiction: An Essay on the Business Cycle

MICHALIS NIKIFOROS

Working Paper No. 770, July 2013

Research Scholar Michalis Nikiforos discusses the forces driving economic fluctuation in the medium term and how these forces relate to short-term macroeconomic equilibrium. The author argues that the business cycle consists of instability (i.e., the difference between expected and realized outcomes) and the inherent contradictions in capitalism that contain instability (i.e., the forces that create the upswing in the economy also create the downswing). He provides a formal argument followed by a discussion of the similarities between the mechanism identified in his analysis and simple harmonic motion in classical physics. The empirical analysis offers a novel contribution to the literature.

Nikiforos begins with a discussion of the behavior of the wage share across the business cycle, building on earlier work co-authored with Duncan Foley. Their research focused on the U-shaped behavior of the wage share across the business cycle using instrumental variables and a two-stage least-squares framework. The business cycle is driven by changes in demand, which interact with a U-shaped distribution schedule that is stable in the medium run. Equilibrium is thus the result of the interaction of distribution and demand. However, this finding leads to a number of questions. What are the forces that cause demand to shift? What determines the direction of the change in demand, and how do these changes manifest within the author's growth model and within the U-shaped behavior of the distribution schedule?

The author adopts a combination of a canonical structuralist analysis of growth and distribution, Roy Harrod's instability principle, and Marxian insights regarding the inherent contradictions of capitalism. Putting aside these myriad contradictions, Nikiforos focuses on the profit squeeze, which has a negative effect on investment and accumulation. He recalls the work of Richard Goodwin, who also observed the contradictory dynamic of higher profits eventually leading to increased wages and a decline in profitability. Similarly, Levy Institute Distinguished Scholar Hyman Minsky is well known for his observation that, in any capitalist system, stability is destabilizing. Demand-led instability and the inherent contradictions of capitalism are two forces that have long been observed in the shaping of economic fluctuations.

Within this framework, expectations provide the linkage and driving force for the short-run equilibria that comprise the medium run. Nikiforos examines this relationship using a stylized model of an economy driven by demand and distribution schedules. He next presents a model that illustrates the linear dynamics of the model and follows with an exploration of the nonlinear aspects of distribution using the overhead of labor. The author completes his analysis with a comparison of his formulation with the relevant literature and empirical data.

Nikiforos observes that the results of his analysis can easily be extended to incorporate other processes, such as Minsky's financial instability hypothesis. Further, at this level of abstraction, his formulation of the movements of the business cycle resembles a simple harmonic oscillator (i.e., periodic motion where the restoring force is directly proportional to the displacement). However, he cautions that models can only approximate complex economic realities, particularly models of growth and the business cycle.

In sum, Nikiforos's contribution provides a clear connection between short- and medium-run dynamics. He addresses the role of expectations as both the linkage between and driver of successive short runs. His analysis sheds light on the discrepancy between expectations and outcomes, which, in combination with the profit-squeeze, create endogenous fluctuations. He demonstrates how these fluctuations can be formalized in a flexible manner to accommodate other sources of economic fluctuation. In doing so, he finds that this formalization of the cycle may be fruitfully, but not literally, compared to a dynamic well known in Newtonian physics. Finally, the author's empirical analysis is a unique contribution to the literature. It reveals valuable insights into counterclockwise cycles, and demonstrates that his analytical framework is both robust and extensible.

www.levyinstitute.org/pubs/wp_770.pdf

INSTITUTE NEWS

The Levy-Nagoya Joint Workshop on Income Policy
Blithewood, Annandale-on-Hudson, N.Y.
October 7–8, 2013

The Levy Institute and Nagoya University co-sponsored a two-day workshop on income policy and sustainable development at Blithewood at Bard College, Annandale-on-Hudson, on October 7–8, 2013. The conference was organized by Research Scholar and Director of Applied Micromodeling Thomas Masterson and Professor Xue Jinjun, project leader at the Economic Research Center at the Nagoya University**.** Scholars from Nagoya University, Chinese Academy of Social Sciences (CASS), the World Bank, The New School for Social Research, University of Hyderabad, and the Levy Institute presented papers on topics including income inequality, growth and development strategies, and income policy changes in China.

New Research Associate

The Levy Institute is pleased to welcome Andrea Terzi as a research associate working in the State of the US and World Economies and Monetary Policy and Financial Structure programs. Terzi is a professor of economics at Franklin College Switzerland and coordinator of the Mecpoc project, which promotes and encourages education and research in new concepts and methods of economic policy analysis. His current research focuses on central banking, monetary operations, macro financial accounts, and the effects of monetary and fiscal policy on private savings and aggregate demand, work that builds on his earlier research on the thought of John Maynard Keynes. Terzi has lectured at Catholic University Milan, the International Studies Institute in Florence, the European College of Parma, and the Venice School of Economics and Finance, and is a past Jean Monnet Fellow at the European University Institute in Florence. He is the author of *La moneta* (2002) and co-editor of *Euroland and the World Economy: Global Player or Global Drag?* (2007), and has contributed to academic journals in both the United States and Europe.

Terzi holds a degree with honors in political economy from Bocconi University and a Ph.D. in economics from Rutgers University, where he was a student of Paul Davidson.

Upcoming Event

The Hyman P. Minsky Summer Seminar
Blithewood, Annandale-on-Hudson, N.Y.
June 13–21, 2014

Registration is now open for the Levy Institute's fifth Hyman P. Minsky Summer Seminar, to be held on the Bard College campus in June 2014. The annual Summer Seminar provides a rigorous discussion of both theoretical and applied aspects of Minsky's economics, and is geared toward recent graduates, graduate students, and those at the beginning of their academic or professional careers. For more information, visit www.levyinstitute.org.

Save the Dates

23rd Annual Hyman P. Minsky Conference
National Press Club, Washington, D.C.
April 9–10, 2014

The 12th International Post Keynesian Conference
Kansas City, Missouri
September 25–28, 2014

PUBLICATIONS AND PRESENTATIONS

Publications and Presentations by Levy Institute Scholars

RANIA ANTONOPOULOS *Senior Scholar and Program Director*
Publication: *Gender Perspectives and Gender Impacts of the Global Economic Crisis* (ed.), Routledge, 2013.
Presentation: "Macroeconomic Employment-targeting Policy," seminar on "The Disparate Impact of Unemployment: Macroeconomic Policy as a Tool for Race, Gender, and Age Discrimination," Columbia University Law School, New York, N.Y., November 25, 2013.

GREG HANNSGEN *Research Scholar*
Presentation: "Heterodox Shocks," Eastern Economic Association 39th Annual Conference, New York, N.Y., May 9, 2013.

JAMES K. GALBRAITH *Senior Scholar*
Publications: "Kritik des finanzmarktgetriebenen Kapitalismus und Perspectiven eines sozial.kologischen Wandels," in B. Huber, ed., *Kurswechsel fur ein Gutes Leben*, Campus Verlag, 2013; "Five Years On: The Lessons of Lehman," *Al Jazeera America*, September 15; "Fixing Inequality Can Save Us from the Next Crisis," *Bloomberg*, September 23; "Government Doesn't Have to Borrow to Spend," *The New York Times*, October 2.
Presentations: Panelist, "Can the European Union Hold?," public forum sponsored by *Harper's Magazine*, Washington, D.C., September 26, 2013; guest speaker, "From the Crisis to the Crazies," sponsored by the Bexar County Democrats, San Antonio, Texas, October 8; "The Reorganization of Financial Capitalism," National Conference on the Relationship between Global Financial Capitalism and Democracy in Europe, sponsored by Fondazione Cercare Ancora, Rome, Italy, October 24; "The End of Normal: The Problem of Growth in a Time of Never-ending Crises," opening lecture, Jean Monnet Chair European Integration Studies, sponsored by Roma Tre University, Rome, Italy, October 28; "The End of Normal: Preconceptions and Institutions in the Debate over Growth," Roselyn & Robert Solo Memorial Lecture, Michigan State University, East Lansing, November 14.

THOMAS MASTERSON *Research Scholar and Director of Applied Micromodeling*
Presentations: "Time Deficits and the Measurement of Income Poverty: Methodology and Evidence from Latin America," 5th ECINEQ Meeting, Bari, Italy, July 23, 2013; "Why Time Deficits Matter: Implications for Understanding and Combating Poverty in Turkey," Department of Economics, METU, Ankara, Turkey, October 23, and EY International Congress on Economics I, Ankara, October 25.

MICHALIS NIKIFOROS *Research Scholar*

Publication: "Export-led Growth: Why the Troika's Greek Strategy Is Failing" (with D. B. Papadimitriou and G. Zezza) *Capital.gr*, September 14, 2013 (in Greek).

Presentations: "Greece: A SAM-based Modeling Analysis" (with M. La Marca), 17th Conference of the Research Network Macroeconomics and Macroeconomic Policies (FMM): "The Jobs Crisis: Causes, Cures, Constraints," Berlin, Germany, October 26, 2013; "Uncertainty and Contradiction: An Essay on the Business Cycle," Economic Theory Workshop, University of Massachusetts Amherst, December 2.

DIMITRI B. PAPADIMITRIOU *President*

Publications: "The Greek Catastrophe and a Possible Way Out," (with C. J. Polychroniou), *openDemocracy*, July 24, 2013; "Exiting the Greek Crisis Requires a Marshall Plan," *Avgi* (Athens), July 29 (in Greek); "Austerity's Failure in Greece: Time to Think the Unthinkable?," *Truthout*, August 7; "Greece Needs a 21st Century Marshall Plan," *Bloomberg*, August 11; "The Great Depression of 1930 Is like a Rainstorm in Relation to the Greek Complete Catastrophe," *Eleftherotypia* (Athens), August 11 (in Greek); "Export-led Growth: Why the Troika's Greek Strategy Is Failing" (with M. Nikiforos and G. Zezza) *Capital.gr*, September 14 (in Greek); "Government Announcements Are Incompatible with Reality," *Avgi*, November 4 (in Greek); "Even if Austerity Is Discontinued the Hope for Growth Is Not until 2016," *Kathimerini* (Athens), November 10 (in Greek); "The U.S. Economy Needs an Exports-led Boost," Reuters, November 26, *Kathimerini*, November 29 (in Greek), and *The Independent*, December 1; "The Ongoing Crisis in Greece and the Eurozone," *Kathimerini*, December 1 (in Greek).

Presentations: Interview regarding the Greek and European crisis and the experience of austerity with George Apostolidis, Radio Athina 984 (Athens), August 11, 2013; interview regarding a Marshall Plan for Greece with Kathleen Hays and Vonnie Quinn, Bloomberg Radio, August 12; interview regarding a new Marshall Plan for Greece with Despina Syriopoulou, *Ependytis* (Athens), August 12; interview regarding Greek Finance Minister Yannis Stournaras with Chanan Tigay, *The New Yorker*, August 27; interview regarding a third rescue package for Greece in 2014–15, "Life," Skai TV (Athens), August 29; interview regarding the sustainability of Greece's public debt and policies to exit the fiscal crisis, Radio Athina 984, September 2; interview regarding Greece's economy with Catherine Bolgar, *The Wall Street Journal Europe*, September 21; interview regarding the economic situation in Greece, Dialogos Radio, September 23; interview regarding the Levy Institute's conference in Rio de Janeiro, Brazil, with Ana Paula Grabois, *Brasil Econômico* (Rio), September 25; interview regarding the rising unemployment in Greece, "Life," Skai TV, September 30; interview regarding present economic conditions and prospects for growth in Greece with Alexandra Voudouri, Radio Athina 984, October 2; interview regarding financial economic stability in Greece with Apostelo Apostolopaelos, Kontra TV (Athens), November 8; interview regarding the Greek budget gap for 2014, "Life," Skai TV, November 14.

JOEL PERLMANN *Senior Scholar and Program Director*

Publication: "Anticipation in Walzer's Just War Theory: The Example of Israel's 1967 First Strike in the Light of Historical Evidence," in J. Neusner, B. D. Chilton, and R. D. Tully, eds., *Just War in Religion and Politics*, University Press of America, 2013.

Presentations: "Ethnic Disparities in Education: Balancing Multiple Explanations," conference on "From Immigration to Ethnic Disparities: The Past and Future of Ethnicity in Israel," Temple University, Philadelphia, Pa., April 30, 2013; "Race, People and Nationality in American Federal Statistics, 1910–16," 38th Annual Meeting of the Social Science History Association, Chicago, Ill., November 22.

L. RANDALL WRAY *Senior Scholar*

Publications: "A Meme for Money," in G. C. Harcourt and P. Kriesler, eds., *The Oxford Handbook of Post-Keynesian Economics,* Vol. 1, Oxford University Press; "A Minskyan Road to Financial Reform," in M. Wolfson and G. Epstein, eds., *The Handbook of The Political Economy of Financial* Crises, Oxford University Press; "Financial Keynesianism and Market Instability," in T. Hirai, M. C. Marcuzzo, and P. Mehrling, eds., *Keynesian Reflections: Effective Demand, Money, Finance and Policies in the Crisis*, Oxford University Press; "Is There Room for Bulls, Bears and States in the Circuit?" in L.-P. Rochon and M. Seccareccia, eds., *Monetary Economies of Production: Banking and Financial Circuits and the Role of the State*, Edward Elgar; "Jan A. Kregel," in T. Cate, ed., *An Encyclopedia of Keynesian Economics,* 2nd ed., Edward Elgar; "Minsky's

Money Manager Capitalism: Assessment and reform," in B. Cynamon, S. Fazzari, and M. Setterfield, eds., *After the Great Recession: The Struggle for Economic Recovery and Growth,* Cambridge University Press; "The Global Financial Crisis: Lessons We Should Have Learned and an Agenda for Reform," in B. Dasgupta, ed., *Non-mainstream Dimensions of Global Political Economy: Essays in Honour of Sunanda Sen*, Routledge; "The Return of Big Government: Policy Advice for President Obama" and "Quantitative Easing and Proposals for Reform of Monetary Policy Operations (with S. Fullwiler), in N. Karagiannis, Z. Madjd-Sadjadi, and S. Sen, eds., *The US Economy and Neoliberalism: Alternative Strategies and Policies*, Routledge; *The Rise and Fall of Money Manager Capitalism: Minsky's Half Century from World War II to the Great Recession* (with É. Tymoigne), Routledge; "Universal Job Guarantee Program: Toward True Full Employment" (with Y. Nersisyan), in R. S. Rycroft, eds., *The Economics of Inequality, Poverty, and Discrimination in the 21st Century, Volume II: Solutions,* Praeger; "What Do Banks Do? What Should Banks Do? A Minskian Perspective," *Accounting, Economics, and Law: A Convivium*, Vol. 3, No. 3, October; interview, "The Countries of the South that Threaten to Leave the Eurozone," *Avgi* (Athens), November 10; interview, "La Teoría Monetaria Moderna, la crisis del capitalismo financiarizado y la catástrofe de las políticas económicas de austeridad" (Modern Monetary Theory, the Crisis of Capitalism and the Catastrophe of Financialized Economic Austerity Policies), *Sin Permiso*, November 17.
Presentations: "The Good, The Bad and Ugly of the Fiscal Cliff," interview with Suzi Weissman, Pacifica Radio, January 4, 2013; "Fiscal Cliffs, Debt Limits, and Unsustainable Deficits: Can the US Really Run Out of Money?," Steinhardt Lecture, Lewis & Clark College, Portland, Ore., February 21; interview regarding the federal budget as a household budget with Danielle Kurtzleben, *U.S. News and World Report*, March 1; interview, "The Love of Money," Radio Litopia, March 31; "The Taper, the Debt Ceiling and the Prospects for Growth," interview with Stephanie Kelton, New Economic Perspectives, September 23; interview regarding postshutdown policy and Modern Money Theory with Stephanie Kelton, October 21; panelist, "Regulating Shadow Banking," sponsored by Americans for Financial Reform and the Economic Policy Institute, Washington, D.C., November 22; presentations as part of the workshop "Financial Governance for Innovation and Social Inclusion," sponsored by SPRU/University of Sussex, Ford Foundation, INET, and MINDS, House of Commons, UK Parliament, London, England, November 25–26; "Time for a New Approach for Unemployment," interview with Marshall Auerback, INET, December 9.

AJIT ZACHARIAS *Senior Scholar and Program Director*
Publications: "Household Wealth and the Measurement of Economic Well-Being in the United States" (with E. N. Wolff), in J. B. Davies, ed., *The Economics of Wealth Distribution*, International Library of Critical Writings in Economics Series, Edward Elgar, 2013; "Class Structure and Economic Inequality" (with E. N. Wolff), *Cambridge Journal of Economics*, Vol. 37, No. 6, November.

GENNARO ZEZZA *Research Scholar*
Publication: "Export-led Growth: Why the Troika's Greek Strategy Is Failing" (with D. B. Papadimitriou and M. Nikiforos), *Capital.gr*, September 14, 2013 (in Greek).
Presentations: "The Effect of Austerity Policies in Greece and Italy," 17th Conference of the Research Network Macroeconomics and Macroeconomic Policies (FMM): "The Jobs Crisis: Causes, Cures, Constraints," Berlin, Germany, October 25, 2013; "L'austerità in Grecia: Possibili vie di uscita" (Austerity in Greece: Possible Ways Out), conference on "Euro, mercati, democrazia—come uscire dall'euro" (Euro, Markets, Democracy—How to Get Out of the Euro), Pescara, Italy, October 27; "Introduction to Post-Keynesian Stock-flow Consistent Models," seminars for the Ph.D. program in economics, University of Macerata, Italy, November 11–12.

EDWARD N. WOLFF *Senior Scholar*
Publications: "Household Wealth and the Measurement of Economic Well-Being in the United States" (with A. Zacharias), in J. B. Davies, ed., *The Economics of Wealth Distribution*, International Library of Critical Writings in Economics Series, Edward Elgar, 2013; "Class Structure and Economic Inequality" (with A. Zacharias), *Cambridge Journal of Economics*, Vol. 37, No. 6, November.

Recent Levy Institute Publications

STRATEGIC ANALYSIS

Rescuing the Recovery: Prospects and Policies for the United States
DIMITRI B. PAPADIMITRIOU, GREG HANNSGEN, MICHALIS NIKIFOROS, and GENNARO ZEZZA
October 2013

POLICY NOTES

A New "Lehman Moment," or Something Worse? A Scenario of Hitting the Debt Ceiling
MICHALIS NIKIFOROS
2013/9

"Unusual and Exigent": How the Fed Can Jump-start the Real Economy
WILLIAM GREIDER
2013/8

Debt Relief and the Fed's Money-creation Power
WILLIAM GREIDER
2013/7

A Failure by Any Other Name: The International Bailouts of Greece
C. J. POLYCHRONIOU
2013/6

WORKING PAPERS

Lost at Sea: The Euro Needs a Euro Treasury
JÖRG BIBOW
No. 780, November 2013

Hierarchy of Ideals in Market Interactions: An Application to the Labor Market
AURÉLIE CHARLES
No. 779, November 2013

Modern Money Theory 101: A Reply to Critics
ÉRIC TYMOIGNE and L. RANDALL WRAY
No. 778, November 2013

A Simple Model of Income, Aggregate Demand, and the Process of Credit Creation by Private Banks
GIOVANNI BERNARDO and EMANUELE CAMPIGLIO
No. 777, October 2013

Fiscal Policy and Rebalancing in the Euro Area: A Critique of the German Debt Brake from a Post-Keynesian Perspective
ECKHARD HEIN and ACHIM TRUGER
No. 776, September 2013

Wage and Profit-led Growth: The Limits to Neo-Kaleckian Models and a Kaldorian Proposal
ESTEBAN PÉREZ CALDENTEY and MATÍAS VERNENGO
No. 775, September 2013

Economic Crises and the Added Worker Effect in the Turkish Labor Market
SERKAN DEĞIRMENCI and İPEK İLKKARACAN
No. 774, September 2013

Keynes's Employment Function and the Gratuitous Phillips Curve Disaster
EGMONT KAKAROT-HANDTKE
No. 773, August 2013

Reorienting Fiscal Policy: A Critical Assessment of Fiscal Fine-Tuning
PAVLINA R. TCHERNEVA
No. 772, August 2013

Foreign and Public Deficits in Greece: In Search of Causality
MICHALIS NIKIFOROS, LAURA CARVALHO, and CHRISTIAN SCHODER
No. 771, August 2013

Uncertainty and Contradiction: An Essay on the Business Cycle
MICHALIS NIKIFOROS
No. 770, July 2013

Quality of Statistical Match and Simulations Used in the Estimation of the Levy Institute Measure of Time and Consumption Poverty (LIMTCP) for Turkey in 2006
THOMAS MASTERSON
No. 769, July 2013

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