



Summary

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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.

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The *Summary* and other Levy Institute publications are available on the Institute's website.

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LETTER FROM THE PRESIDENT

To our readers:

The first publication under the State of the US and World Economies program is a strategic analysis by Research Scholars Michalis Nikiforos and Gennaro Zezza, and myself. We present simulations of the Greek economy in the medium term using a new macro model (LIMG) to simulate the impacts of austerity between 2013 and 2016. The strategic analysis also reviews recent developments in the determinants of aggregate demand. (The reader may recall our *Current Prospects for the Greek Economy*, October 2012.) This analysis offers a direct contrast to recent projections by the International Monetary Fund and European Commission. In short, we find their expectations for growth patently unrealistic. Our simulations show that if current policies are not reversed, the Greek economy will continue its downward spiral. As an alternative to the troika's nonsensical "expansionary austerity," we analyze the effects of a modest stimulus to encourage consumption and investment. This "Marshall Plan" – type simulation yields superior results in terms of increased output, deficit reduction, and higher employment. This strategic analysis adds to the mounting evidence of the failure of austerity policies to return Greece to a path of growth in output and employment.

Also focusing on Greece and the eurozone crisis, Research Associate and Policy Fellow C. J. Polychroniou contributes two policy notes to this issue. The first is a reflection on the history and trajectory of the European Union. He suggests that without a change of course, Europe will find itself living under the heel of a "new Rome." The second note outlines his proposals for a post-Keynesian counterargument to the neoliberal policies that threaten to dominate the 21st century. Turning to the United States, Research Scholar Michalis Nikiforos contributes a policy note that extends the results of our last strategic analysis and adds to our understanding of labor market trends in the United States. His findings are a sobering reminder of the need to do more to increase employment, and not merely watch unemployment "improve" by attrition.

Turning to economic development in Mexico, Gerardo Fujii-Gambero and Rosario Cervantes-Martínez demonstrate how expectations for export-led growth are often weakly anchored in fact. Their working paper compares the economic

impacts of the maquiladora export system with domestically produced exports. The publications under this program conclude with two working papers by Research Associate Jörg Bibow on the eurozone crisis. The first examines how France and Germany's initial motives to create the euro differed and how these differences led to imbalances that may ultimately be the undoing of the euro. In the second working paper, Bibow argues that Germany's position as a "safe haven" is a double-edged sword; exiting the euro will come at a huge cost for Germany.

Senior Scholar L. Randall Wray opens the Monetary Policy and Financial Structure program with a synthesis of research conducted under the Research and Policy Dialogue Project on Improving Governance of the Government Safety Net in Financial Crisis, a two-year project funded by the Ford Foundation. This project has received extensive coverage, as it is the only rigorous analysis of actions taken by institutions such as the Fed following the financial crisis. This is the second report issued as part of this project. It focuses on the extraordinary actions of US monetary authorities in recent years and offers policy options to improve governance of the financial system and promote broad-based recovery.

Senior Scholar and Program Director Jan Kregel contributes a policy brief on the London Whale episode and a policy note analyzing the recent proposal to tax bank deposits in Cyprus. These timely contributions offer lessons for achieving the complementary goals of financial reform and financial stability.

Nicola Matthews offers a working paper that sheds much-needed light on the lending activities of the Fed following the financial crisis. Her findings show that the Fed violated Bagehot's principles by lending at subsidy rates for long duration and often against weak collateral. Nathan Perry and Nathaniel Cline extend the focus on the US economy with their examination of the "great moderation" of inflation. Their analysis includes the first econometric treatment of the Taylor Rule. Turning to China and Keynesian expectations, Sunanda Sen reviews the end of that country's "twin surpluses," and the evolution of aspects of its monetary policy in an environment of changing expectations.

The last publication included under this program continues the themes of central bank performance and monetary policy. Walker F. Todd discusses the implications of the extraordinarily large excess reserves currently held by the Fed.

Todd finds that while this level of reserves is cause for concern, history provides a number of useful lessons as to how the Fed could lower reserves while fostering growth in housing and reducing consumer debt.

Under the Gender Equality and the Economy program, Senior Scholar and Program Director Rania Antonopoulos contributes a policy brief to the growing dialogue on using social protection policies as vehicles for social transformation and gender equality. The brief was developed with the support of the United Nations Development Programme and is intended to contribute to gender-informed policy discussions in country-level social protection debates. In the first of two working papers under this program, Research Scholar Tamar Khitarishvili analyzes the added worker effect in transition countries following the global financial crisis. In her second paper, she presents the first comprehensive analysis of the gender wage gap among wage earners in Georgia in the period following the Rose Revolution of 2003.

This issue concludes with two working papers under the Economic Policy for the 21st Century program. Research Associate Philip Arestis and Ana Rosa González analyze the factors driving the evolution of the housing market in 14 Organisation for Economic Co-operation and Development countries between 1970 and 2011. Finally, a working paper by Research Scholar Greg Hannsgen offers a broad survey of the uses and theoretical debates surrounding shocks, which I am sure our readers will find to be a valuable contribution to the study of shocks in heterodox models.

As always, I welcome your comments and suggestions.

Dimitri B. Papadimitriou, *President*

Program: The State of the US and World Economies

Strategic Analysis

The Greek Economic Crisis and the Experience of Austerity: A Strategic Analysis

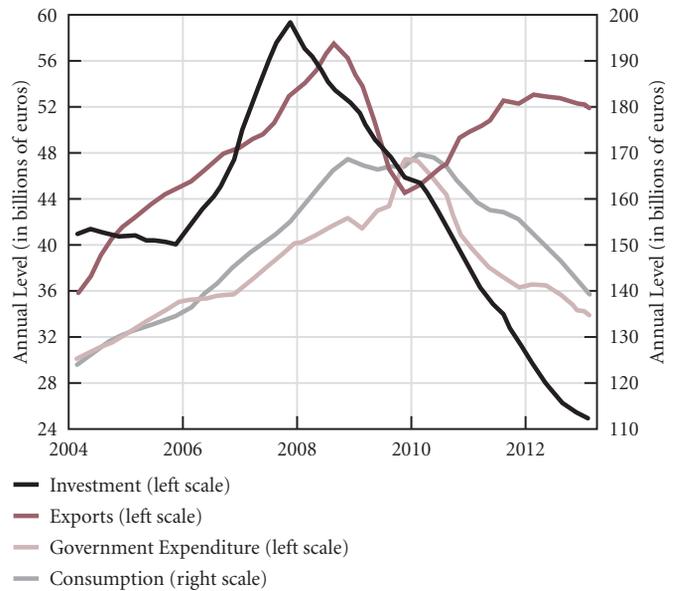
DIMITRI B. PAPADIMITRIOU, MICHALIS NIKIFOROS,
and GENNARO ZEZZA

Strategic Analysis, July 2013

Greece remains in the grips of a crisis that some have described as more severe and damaging than the Great Depression was for the United States. The current condition of the Greek economy is not a result of global economic collapse so much as it is the unwholesome fruit of policy choices informed by a weak theory of “expansionary austerity” and neoliberal labor market reforms. Drawing on simulations from a new macro-economic model developed specifically for the Greek economy (LIMG), Levy Institute President Dimitri B. Papadimitriou and Research Scholars Michalis Nikiforos and Gennaro Zezza review the determinants of aggregate demand, compare the International Monetary Fund (IMF) and European Commission (EC) projections with the LIMG simulations, and present findings and policy recommendations for the medium term. They find that continued austerity will lead to increased unemployment as GDP will not grow sufficiently to arrest or reverse the downward trend in the labor market, and call for an immediate policy reversal. The analysis begins with a review of the development of the determinants of aggregate demand.

The components of aggregate demand (Figure 1) have declined since October 2012, when the Institute published *Current Prospects for the Greek Economy*. The authors note that prior to the downturn, consumption was the largest driver of growth. In the past three years, consumption has fallen faster than any of the other components of aggregate demand and has since become the main component reducing GDP.

Figure 1 Greece: GDP Components

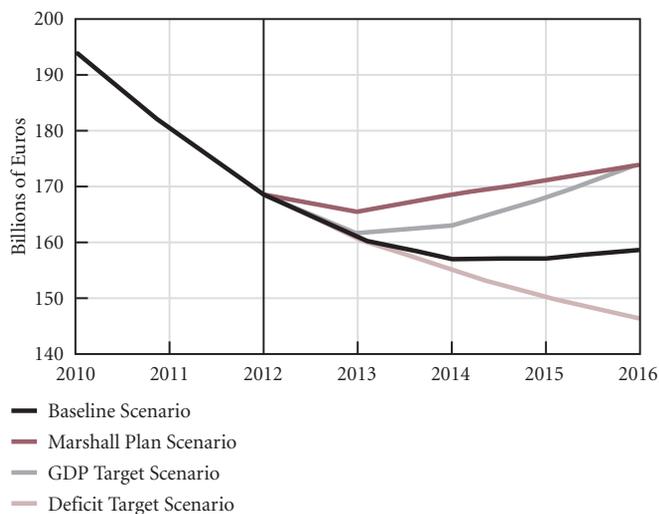


Source: ElStat

Investment boomed briefly in the two years preceding the crisis and has declined steadily since the crisis began in 2007. Real government expenditures played an important role in aggregate demand up to 2009 but have declined procyclically as a result of the policies set by the IMF/EC. This steep decline in public expenditures created a feedback loop that paved the way to a deepening recession. Exports, which were unstable both before and after the crisis, have not offset the fall in domestic demand. The troika’s argument that reduced unit labor costs would lead to export-led growth has not been borne out. However, the damage done to domestic consumption by these policies is indisputable. Lastly, the large drop in imports made a minimal contribution to GDP. The decline in government expenditures and investment yielded a large loss in output. These declines, in combination with the reduction in output and employment, caused consumption to fall by nearly 30 billion euros. The authors next present their analysis of the drivers of GDP growth, including private expenditure, net exports, the current and financial account balances, and fiscal policy, before turning to the LIMG simulations.

The LIMG simulations assume that monetary policy will remain stable, with interest rates remaining low, and that current trends for fiscal variables will continue. The model uses the Organisation for Economic Co-operation and Development’s

Figure 2 Greece: Alternative Scenarios for Real GDP



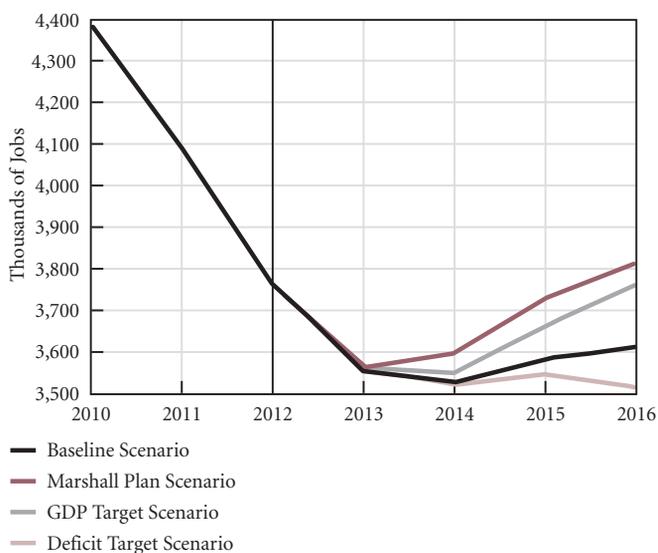
Source: Authors' calculations

projections for foreign output and inflation, and assumes no price increases in Greece and a modest increase in the stock market index. The authors present four scenarios: a baseline scenario based on the troika's projected decrease in government revenue and spending; a troika deficit scenario; a troika GDP target scenario; and a stimulus scenario patterned after the Marshall Plan.

The baseline scenario uses the LIMG to evaluate the troika's projections under current policies for the medium term. The results of the baseline simulation are pointedly less optimistic than the 2013 projections made by the International Monetary Fund (IMF) and European Commission (EC). The IMF and EC project growth returning to Greece in 2014 and beyond. The authors argue that such a rapid return to growth in the absence of a coherent pattern of strong growth in the components of aggregate demand is patently unrealistic. The LIMG results indicate slower GDP growth (Figure 2), larger declines in employment, and that the deficit targets specified in the troika's projections will not be met.

The second scenario examines how much more austerity would be needed to achieve the troika's deficit-to-GDP ratio target. This simulation shows that achieving the deficit target will slow growth in GDP and increase unemployment to a greater degree than in the baseline scenario. The third scenario

Figure 3 Greece: Alternative Scenarios for Employment



Source: Authors' calculations

simulates the level of stimulus needed to achieve the troika's projected level of GDP growth. The stimulus needed will add to Greece's deficit and increase the current account deficit but increase employment by more than 160,000 jobs by the end of the simulation period. The deficit-to-GDP ratio and GDP target simulations reveal the inherent weakness in the assumptions underlying the troika model.

The results of the first three simulations unambiguously show that any form of fiscal austerity will put growth in output and employment into a tailspin. In contrast, the authors' "Marshall Plan" scenario demonstrates that a relatively modest fiscal boost (30 billion euros used at a rate of 2 billion euros per quarter starting in 2013Q3) could reverse the trends in falling GDP and rising unemployment. The simulation shows that GDP reaches its target rate in 2016 and employment increases surpass those of the baseline scenario by 200,000 jobs (Figure 3). The government deficit is also lower than in the baseline and GDP target scenarios. Based on these findings, the authors argue for a policy in the tradition of the Marshall Plan that targets public consumption and investment as a proven and practical alternative to the current destructive policy of "expansionary austerity."

In conclusion, the authors recommend an expanded public benefits work program to combat rising unemployment. They

note that reversing the course of recovery policy will require that the eurozone leadership cast off the discredited economic theories it has embraced thus far and moderate, if not renounce, its faith in unfettered markets to resolve the crisis.

www.levyinstitute.org/pubs/sa_gr_7_13.pdf

Toward a Post-Keynesian Political Economy for the 21st Century: General Reflections and Considerations on an Era Ripe for Change

C. J. POLYCHRONIOU

Policy Note 2013/2, March 2013

Research Associate and Policy Fellow C. J. Polychroniou outlines his argument for a post-Keynesian political economy as an alternative to neoconservative economics. He traces the rise of the neoconservative variant of neoliberalism, and the contours of a progressive, post-Keynesian alternative. Given the persistent failures of neoliberal policies, Polychroniou concludes, a change in our thinking is overdue.

The origins of the neoconservative outlook are found in the version of neoliberalism developed by Milton Friedman and the Chicago School. These ideas were first implemented in the policies of Augusto Pinochet in Chile and later with the free-market policies of Ronald Reagan and Margaret Thatcher. Reagan's adoption of neoliberal policies coincides with the deindustrialization of the US economy. England followed suit under Thatcher in what Polychroniou refers to as "an economic counterrevolution." This neoliberal policy perspective was enshrined in the 1992 Maastricht Treaty.

Critiques of neoliberalism are complicated by neoliberalism's lack of a coherent theory or body of empirical research. Neoliberalism is, the author observes, highly ideological in its arguments, advancing notions of "free markets" and "economic efficiency" that are devoid of any empirical basis. Thus it is best seen as the ideological defense of finance capitalism and the interests of the global economic elite. The United States led the transition to a finance dominated economy and the social transformation that comes with such a change. The postwar (Keynesian) understanding that government played a crucial role in economic and social development was discarded.

This "social peace" came to an end in the mid-1970s when advanced capitalism was confronted with a systemic crisis.

The neoliberal vision of unfettered corporate power, free markets, and abandonment of public services gained ground. Policymakers put aside the remarkable prosperity achieved between 1945 and 1973 under state-managed capitalism (a record that the neoliberal economies have yet to duplicate) and adopted neoliberal policies. The results of "free market" orthodoxy include chronic financial crisis, distorted development of the real economy, rising inequality, and the erosion of civic culture. It is, Polychroniou argues, time for a change.

The author argues that the future of Western liberal societies rests on recapturing the power of the state from the interests of finance capitalism. Finance capitalism must not be allowed to set the rules of the game any longer. A coherent post-Keynesian agenda is crucial to achieving this goal. Polychroniou outlines six principles of a post-Keynesian economic policy.

Capitalism must be seen as an inherently unstable socio-economic system with a natural tendency to create crisis—it must be regulated. Banks play a critical role in the economy but are fundamentally social institutions. They should remain true to their main function; when banks fail, they should be nationalized. Likewise, markets are socially constructed institutions. They do not provide for all of society's needs and easily fall into oligopoly and monopoly. Thus, state interventions in markets are both a social and moral imperative. In this vein, economic policy and social policy are not separate but complementary endeavors. The purpose of economics should be to improve the human condition, not enrich the elite. Guaranteed employment, for example, should be a central pillar of progressive economic policy in the 21st century. The authoritarian workplace of finance capitalism must be replaced with workplace democracy and participatory economics. Finally, the protection and improvement of the natural environment and the critical ecosystems that sustain us must become a strategic goal of progressive economic policy. Polychroniou invites his readers to build upon these principles to create progressive economic policies and discard global neoliberalism.

www.levyinstitute.org/pubs/pn_13_2.pdf

Employment Recovery(?) after the Great Recession

MICHALIS NIKIFOROS

Policy Note 2013/3, April 2013

In this policy note Research Scholar Michalis Nikiforos explores the prospects for job creation in the United States. His analysis draws upon and extends the results of the most recent Levy Economics Institute Strategic Analysis report, *Is the Link between Jobs and Output Broken?* Nikiforos's analysis not only confirms the ongoing weakness of job creation in the US economy, but also provides new insights into unemployment trends. He argues that to understand the continuing weakness in the US labor market, one must look beyond the unemployment rate, which can mask important changes in the labor force. His analysis begins with a discussion of the relationship between growth and job creation.

Job growth during an economic recovery depends on the rate of output growth and the relationship between output growth and job creation. This is also known as the Kaldor-Verdoorn effect wherein a one percent increase in output is associated with some coefficient for the associated increase in employment. As noted in the Strategic Analysis, the recovery of the US economy following the financial crisis of 2007-08 has been slower in terms of output and weaker than the growth in employment. There are many possible explanations for this weakened link.

One explanation is that output recovers more slowly following a financial crisis. The private sector seeks to minimize debt, which in turn weakens demand and therefore output. This has been referred to by some as a "balance sheet recession," a type of recession notable for its resistance to monetary stimulus. In addition, the relationship between job creation and output has become weaker during the economic recoveries in the last three decades. Firms shedding unneeded labor, greater labor flexibility, and technological improvements are some of the explanations offered by economists for lower rates of job creation.

Using the scenarios of the most recent strategic analysis, the author finds that, in scenario 2, the annualized growth rate needed to bring unemployment below 5.5 percent by the end of 2014 is 3.4 percent in 2013 and 6.3 percent in 2014. This underscores the challenge facing the US labor market. He then estimates the number of employed workers under each of the

scenarios of the strategic analysis to determine the level of employment and labor force participation rates under each of the scenarios. The results show that the higher the growth rate, the higher the labor force participation rate. This dynamic shows how lowering unemployment becomes more difficult as the labor force increases in response to high growth.

Nikiforos next examines the same scenarios using the Kaldor-Verdoorn effect. He presents coefficients for the last 5 business cycles calculated from trough to peak and peak to peak. The author notes that at the end of the 1970s a 1 percent increase in output was associated with a 0.714 increase in employment. This ratio has been decreasing since the 1970s and currently stands at 0.288. In addition, the peak-to-peak coefficient for the current recovery remains negative. This indicates that while output exceeds precrisis levels, the number of people employed remains lower.

The author next analyzes data released by the Bureau of Labor Statistics in early 2013 that showed a reduction in the unemployment rate from 7.9 percent in January to 7.6 percent in March. This decrease would seem to indicate an improvement in the labor force. However, using the employment rate the author finds that during the same period the labor force actually decreased by 600,000 workers. The decline in labor force participation, not job growth, explains the "reduction" in unemployment. If the labor force participation rate had remained constant, the unemployment rate for March 2013 would have been 11.5 percent. Stagnant employment levels are also visible in the employment-to-population ratio. Nikiforos reports that the ratio reached 63.3 percent in 2007 and then fell to 58.4 percent in 2009 where it has remained for the last three years.

Nikiforos's analysis demonstrates that the severity of unemployment in the United States is masked by incomplete measures of labor market performance. The author's findings underscore the dire condition of the US jobs market and that more must be done to stimulate growth and to repair the link between output and jobs.

www.levyinstitute.org/pubs/pn_13_3.pdf

The New Rome: The EU and the Pillage of the Indebted Countries

C. J. POLYCHRONIOU

Policy Note 2013/5, May 2013

Research Associate and Policy Fellow C. J. Polychroniou observes that the European Union (EU) is credited by many with providing the longest period of regional integration and peace in the postwar period. Alternatively, the formation of NATO, the threat from the USSR, and the experience of World War II might explain the urge for peace and integration. It is hard to argue that European integration has had a large, positive effect on the social and economic development of periphery states, but it has worked for the core European nations.

Polychroniou traces the evolution of Europe's postwar integration initiatives; for example, the European Economic Community and the Single European Act (SEA) of 1986. He argues that the SEA represented the arrival of neoliberal free market capitalism, or antisocial capitalism, in Europe. The critical shift was not to end the role of the state but to reorient the state away from the interests of the people and toward the interests of capital, and to serve the interests of the core over those of the periphery.

With these goals, the EU was set up using institutions that lack democratic accountability or legitimacy. The principle of "subsidiarity" is, the author argues, little more than a fig leaf covering the assertion of neoliberal institutions over local interests. The Maastricht Treaty of 1992 expanded upon and institutionalized the principles of the SEA, advancing a neoliberal framework in Europe. The formation of the European Central Bank (ECB) and the European Monetary Union (EMU) were central to the neoliberal agenda. The criteria for adopting the euro were arbitrary, as was the design of the ECB and the glaring absence of a lender-of-last-resort function. Some hailed the creation of the euro as the greatest experiment in financial history, but others, including Levy Distinguished Scholar Wynne Godley, publicly questioned how such a scheme would work.

Polychroniou argues that the flaws in the EMU structure were no accident. The Maastricht Treaty should be seen as the political expression of a European elite's bias in favor of the internationalization of capital. The movement to a single currency solidified a single European market and reduced the role

of the state. This choice, the author concludes, does not lead to sustainable development or decent societies. The antigrowth, undemocratic approach embedded in the Maastricht Treaty promotes uneven development and authoritarian decision making, advancing Germany's aspiration of eurozone domination.

The Greek debt problem provides further evidence of these trends. Greece was used as an object lesson to intimidate the other southern European nations and as a laboratory for radical neoliberal transformation. The injury done to Greece was the result of a deliberate EU policy under the direction of an imperial Germany to pillage indebted countries in the southern Mediterranean. Germany revealed its ambitions earlier with East Germany after reunification when it dismantled the East German industrial base and turned the former East Germany into a satellite of Berlin. Germany and the EU have followed a predictable set of bailout steps that are nothing more than neocolonial policies that are turning Europe into an economic wasteland.

Proposals to leave the euro will likely gain ground in the periphery but without the support of the domestic elites and technocrats who support the austerity policy of the new Rome. Change, Polychroniou concludes, will have to come from the bottom, but it remains to be seen whether this will lead to the reestablishment of progressive policies, or to reactionary policies informed by right-wing ideologies and nationalist extremism.

www.levyinstitute.org/pubs/pn_13_5.pdf

Indirect Domestic Value Added in Mexico's Manufacturing Exports, by Origin and Destination Sector

GERARDO FUJII-GAMBERO and

ROSARIO CERVANTES-MARTÍNEZ

Working Paper No. 760, March 2013

In this working paper, Gerardo Fujii-Gambero, National Autonomous University of Mexico, and Rosario Cervantes-Martínez, University of Guadalajara examine the link between exports and the Mexican economy by analyzing the indirect value added in Mexico's manufacturing exports by their sector of origin and destination. Their analysis of the composition of exports in terms of the domestic value added inputs sheds

light on the link between exports and aggregate demand, and thus the link between jobs and income. Their findings provide a comparison of the employment impacts of domestic manufacturing versus the maquiladora export system, and thus development policy in general.

Direct exports consist of goods sold to other countries. Indirect exports are domestically produced inputs that then become part of direct exports. Thus, there are two paths to creating value added in exports: direct and indirect. The authors argue that the size of the indirect value added in exports depends on the density of intersectoral linkages in the domestic economy. This insight is especially relevant to the Mexican economy given its significant role in the international automotive and electronics manufacturing markets. Direct exporting sectors can be a conduit for other sectors to export indirectly (i.e., as domestically produced inputs in another export product). The authors provide estimates of domestic indirect value added in exports by sector of origin and by sector of destination using the input-output table for Mexico. The data are taken from the National Institute of Statistics and Geography for 2008. Domestic value-added exports from maquiladoras are separated from exports produced by the rest of the manufacturing sector to show difference in the economic impact of exports by the origin of their inputs. The authors employ square matrices of indirect value added multipliers to distinguish the indirect value added in exports by the sector and origin of the intermediate inputs.

The authors discuss Mexico's GDP development and the performance of exports. Mexico has pursued a growth strategy that relies on increasing manufacturing exports. While the export manufacturing sector has grown dramatically since the 1980s, the gap between exports and national income has also increased in recent decades. They note that the composition of manufactured exports created by the domestic economy and by the maquiladora export industry contribute different levels of direct and indirect value added to the economy. Using input-output data, the authors find higher value added in exports produced by the domestic economy as compared to the maquiladora export industries. Further, three sectors account for more than half of the domestic value added (electronics, transportation equipment, and electrical). Indirect value added is also found to be lower for maquiladora exports as compared to domestic exports.

The authors conclude that the bulk of manufactured exports contribute relatively little to national income. Direct value added is the largest share of value added in exports, which indicates that the connections between the exporting sector and the rest of the economy are relatively weak; this is particularly true of the maquiladora export economy. Indirect value added in manufactured exports comes mostly from nonmanufacturing sectors indicating that the parts used in manufacturing exports are mostly imported. Manufacturing industry exports are largely direct in nature, which reflects Mexico's specialization in finished goods, and therefore the weak linkages with the rest of the domestic economy. Thus, maquiladoras do relatively less for the growth of the economy, and thus less for income and employment, because maquiladoras are not as closely integrated with the rest of the economy. Growth in total exports does not equate to increases in national income or growth in the larger economy. However, when exports are well integrated with the rest of the economy, growth in supporting sectors is more likely. www.levyinstitute.org/pubs/wp_760.pdf

On the Franco-German Euro Contradiction and Ultimate Euro Battleground

JÖRG BIBOW

Working Paper No. 762, April 2013

Research Associate Jörg Bibow argues the euro project has been laboring under a set of contradictory goals since its creation. France and Germany approached a common European currency with disparate goals. France sought an end to monetary dependence. Germany approached the euro as a means to avoid currency overvaluation that would undermine its export-led growth strategy. These contradictory motives condition the ongoing crisis and limit the strategies to resolve the crisis. He argues that the euro suffers from a number of "birth defects" which may eventually cause the Franco-German alliance to unravel. His analysis begins with a review of German and French economic models in the pre-European Monetary Union era and then moves to a discussion of how these initial differences contributed to the eurozone's subsequent difficulties. Bibow concludes that unless Germany reverses the direction of its policies, France and other countries that share its plight may conclude that breaking up the euro is the best course to end the crisis.

The euro was intended to end the currency dominance of the US dollar and the deutschmark in Europe, and thus promote symmetry and mutual trust among European countries, notably between France and Germany. However, participation in the euro has perversely resulted in more or less the same results for France and Germany, but without the monetary autonomy to combat recession. France remains weakened by the euro, while Germany has used the euro to promote its export-led growth strategy and to dominate eurozone economic policy. France's experience under the German-led ECB is indicative of the experience of what Bibow describes as the "precariousness and futility of the whole endeavor."

While the eurozone crisis weakened Germany's exports to some countries, a weaker euro supported its export-led growth in the rest of the world. By 2012, Germany's GDP, external account balance, and budget were the same as or better than precrisis levels. In contrast, France faces a balanced budget obligation in the face of falling domestic demand. France's financial balance can only be improved by improving its external position through wage disinflation, which amounts to wage deflation for France. The author observes that German policy makers continue to misunderstand that limiting wage increases and labor market liberalization worked for Germany in the past because other eurozone economies did not engage in wage deflation. Nor did German policy makers understand that undercutting their partners would make a transfer union inevitable. Going forward, Germany's policies are a disastrous prescription for Europe as a whole. The disparity of the results of the euro for the German and French economies, Bibow suggests, may drive a wedge between the two partners.

Thus, the euro has not ended France's vulnerability to asymmetric adjustment pressures. Despite her commitment to the golden rule of the currency union (i.e., inflation targets), France faces the prospect of a lost decade and a lost generation if it embraces "competitive austerity." As the main creditor of the eurozone, Germany has in many ways dictated the conduct of the currency union. Instead of sharing the responsibility for the conditions it largely created, Germany continues to demand austerity policies from other countries and demands that the union honor the no-bailout provision. This begs the question of how long France, and other countries, will remain members of the eurozone. Breaking up the euro at its core may, Bibow concludes, be the only way to limit the damage

and foster the cooperation needed to prevent a Europe split into debtor and creditor nations.

www.levyinstitute.org/pubs/wp_762.pdf

Germany and the Eurozone Crisis: The Making of a Vulnerable Haven

JÖRG BIBOW

Working Paper No. 767, June 2013

Research Associate Jörg Bibow extends his discussion of the causes and consequences of the eurozone crisis with an investigation of the German economy's vulnerability to the ongoing crisis. Germany's apparent strengths could, Bibow argues, lead to its undoing. Thus far, Germany has benefited from low interest rates and a depressed euro, which has supported the country's export-led growth. Germany has been seen as a "safe haven." However, what would happen to Germany in the case of a breakup of the euro? The author suggests that the German economy would collapse under the weight of a strong deutschmark, and that Germany's international investment position could lead to huge losses in wealth. The analysis reveals a pattern of mutual dependence within the eurozone that is at odds with the Bundesbank-inspired austerity policies of recent years.

Bibow begins with a survey of current account balances under the euro. He observes that "Germany has had a fairly good crisis," meaning that most of pain has been visited on the periphery while Germany has benefited from low interest rates. He recounts that Germany's current account position has expanded remarkably under the euro, with conspicuous surpluses with other euro members between 2003 and 2007. He then turns to a review of the intra-area imbalances that preceded the eurozone crisis. Germany's departure from the European Central Bank's 2 percent inflation target gave it an advantage over other eurozone economies and created intra-area imbalances. As a result of its current account surpluses, Germany's net international investment position reached 40 percent of GDP in 2012. Further, the country's cross-border holdings have grown dramatically since the introduction of the euro, with gross assets reaching 200 percent of GDP in 2007. By the end of 2012, net foreign assets stood at over 1 trillion euros.

Bibow notes that Germany's international investment position surged initially under the euro, but enormous valuation losses are undermining its position. He analyzes Germany's external vulnerability, using regionally disaggregated data on financial flows and sectoral balance sheets. The financial flow data indicate that while Germany's international financial exposures are mainly in the European Union, data distortions make it difficult to describe with confidence Germany's exposure by country. At the end of 2012, Germany's exposure to euro crisis countries was approximately 20 percent of GDP; in contrast, it appears to have a net debtor position in relation to France of approximately 200 billion euros. An analysis of sectoral balance sheets shows that German banks' involvement in boom-bust cycles was strongest in Spain and Ireland. Today, it appears that Germany has almost entirely withdrawn its net exposure to euro crisis countries and France, which could make some paths to a breakup of the euro easier.

Bibow concludes with a discussion of the consequences of a euro breakup and argues that Germany stands to gain from preventing such a breakup. However, this would require Germany to reconsider what is in its best interest and pursue policies that rebalance the eurozone, share debt legacies, and establish a euro policy regime that addresses the many flaws of the Maastricht regime. The current German policy model is unworkable for Europe, says Bibow—either the German policy model or the euro must go.

www.levyinstitute.org/pubs/wp_767.pdf

Program: Monetary Policy and Financial Structure

The Lender of Last Resort: A Critical Analysis of the Federal Reserve's Unprecedented Intervention after 2007

L. Randall Wray

Research Project Report, April 2013

Senior Scholar L. Randall Wray presents the second report in an ongoing project funded by the Ford Foundation. Last year's report, "Improving Governance of the Government Safety Net in Financial Crisis," examined the size and scope of the Fed's response to the crisis. This report is the most comprehensive review of the Fed's actions during and after the crisis.

The report begins with an overview of the history of the 10 principles developed by Henry Thornton and Walter Bagehot for central banks acting as a lender of last resort (LLR). The author concludes that the Fed violated seven of the 10 principles of the classical LLR model. The Fed shifted its focus from money to credit; accepted questionable, hard-to-value collateral; charged subsidy instead of penalty rates; rescued unsound firms; violated maturity constraints by extending loan repayment schedules; failed to articulate a consistent LLR policy for future financial crises; and, finally, failed to present an exit strategy. The Fed's actions are clearly at odds with the classical LLR model, and lending to insolvent and too-big-to-fail institutions has created enormous moral hazard.

The next chapter examines the massive levels of excess reserves created by the Fed in the wake of the crisis. In 2007, the Fed's excess reserve accounts stood at 5.5 percent of the monetary base. Today, required reserves are 3 percent of the monetary base, while the Fed holds an amount equal to 60 percent of the monetary base in its reserve accounts. The chapter reviews the concerns raised by some economists that this level of excess reserves will lead to inflation. The experience of excess reserves in the 1930s is reviewed in an effort to glean lessons for today's Fed as it seeks to unwind the current excess reserves. The Fed's quantitative easing policy is discussed in detail. The chapter concludes that the Fed will eventually unwind its excess reserve holdings, with little inflationary effect anticipated. The author concludes that it is more likely that weakness and uncertainty

in the US economy, not the payment of interest on excess reserves, have undermined the demand for and supply of credit.

The report then takes up the Fed's lending rates during the global financial crisis to determine if financial institutions, especially larger banks, received a subsidy in the form of lower than market rates as a result of actions by the Fed. The chapter reviews eight of the 13 programs or facilities created by the Fed as well as one open market operation undertaken by the Fed at the height of the crisis. The analysis takes a cumulative (flows) approach in measuring Fed intervention. Overall, it is clear that the Fed did not adhere to Bagehot's principle of lending at penalty rates: the Fed lent at "low" interest rates for extended periods, to credit markets and to troubled institutions.

The report reviews the impact of the Dodd-Frank Act of 2010 on the autonomy and authority of the Fed. The author finds that Dodd-Frank imposed several restrictions on the Fed in terms of its role as the lender of last resort, modified its governance, added Government Accountability Office review to enhance congressional oversight, and added a systemic risk criterion to the Fed's approval of mergers. However, the act also extended the Fed's powers in terms of supervision and direct control of the activities of the institutions it regulates. On balance, the Fed's power has been augmented, with little meaningful restriction of the new monetary powers it has asserted in recent years. Rethinking the Fed's organizational design is overdue.

The manner in which monetary and fiscal policy operations are coordinated is taken up in the next chapter to answer two questions. First, is monetary policy independent from fiscal policy in an operational sense? And, are the instruments used to implement monetary and fiscal policy distinct in any legal sense? The chapter focuses on the institutional and operational elements of the Fed and the Treasury. The author concludes that, given the Fed's role as fiscal agent for the US Treasury and its role in maintaining the clearing and settlement system, it is impossible to see the two institutions as entirely independent of each other's policies. The Federal Reserve Act states clearly that there can be no distinction between the obligations of the Fed and the US government—that is, the obligations of the Fed and the Treasury are equal under the law. Thus, one may say that the Fed is intended to act as if it were independent of fiscal policy, but monetary and fiscal policy are closely tied and there is no significant difference between the money each institution issues.

The final chapter reviews the findings and explores policy recommendations offered in a Fed white paper focused on reviving the housing market. The Fed's proposal to forgive part of homeowners' mortgage debt is a clear break from recent policy prescriptions. There is ample evidence of the efficacy of central banks that have used monetary policy to spur economic growth in specific areas of the economy. The Fed could use its power, Wray argues, to create programs to provide bridge financing for delinquent mortgages that are under water, to underwrite infrastructure development, and to encourage the establishment of community banks, to name only a few. The Fed could also charge penalty rates to banks that refuse to lend or provide more favorable rates for banks that lend for specific purposes.

www.levyinstitute.org/pubs/rpr_4_13.pdf

More Swimming Lessons from the London Whale

JAN KREGEL

Public Policy Brief No. 129, April 2013

Senior Scholar and Program Director Jan Kregel builds on his earlier analysis (Policy Note 2012/6) of the "London Whale" episode and what it reveals about the larger risks inherent in the financial system. It is clear that the Dodd-Frank Act failed to prevent massive losses by one of the world's largest banks and more work remains to be done to reform the financial system. Toward this end, Kregel reviews the findings of a recent report by the Senate Permanent Subcommittee on Investigations and expands on the lessons that we can draw from the evolution of the London Whale episode.

The Subcommittee's report offers a detailed account of the communications between the Synthetic Credit Portfolio (SCP) unit, Chief Investment Office (CIO), and top management but it provides little new information. While the report suggests that the company and management acted in bad faith or worse in their representations of the events, Kregel observes that a more probable explanation for the misinformation is that the bank had grown in size and complexity to such a degree that it had become too big for management to have a clear idea of the real conditions in the SCP. This also suggests that the bank was too large to regulate.

The report further suggests that the CIO operated without a clear mandate. However, Kregel points out that at its creation JPMorgan Chase anticipated that the CIO would undertake overall hedging of the bank's credit risk as well as the connection between credit positions, risk-weighted assets, and bank capital. Kregel notes that until 2009, the CIO had successfully implemented management's priorities. However, in 2010 the CIO's hedging mandates changed in response to market conditions.

As the CIO mandate was expanded it eventually was faced with incompatible goals—to create profits from short credit hedges, adjust to improving credit conditions by reducing short hedges, and reduce the gross positions of the portfolio to reduce risk-weighted capital charges of the CIO. The SCP elected to resolve this conflict by expanding its notional portfolio of long and short credit default swap index positions. By doing so, the SCP had created a Ponzi financing scheme, and because of the large size of the position, counterparties soon took up an opposing Ponzi strategy. The author explains that it was at this point that the strategy produced losses so great that management relented and cut its losses.

The Senate report also criticizes the CIO's remuneration policy as part of what drove the CIO's choices. However, Kregel argues that a much larger concern is that the CIO, a hedging unit, was remunerated on the basis of profitability. A hedging operation should not be profitable; it is expected to run losses most of the time. Mark-to-market accounting also created significant problems for the trading strategy and is arguably the most important failure of JPMorgan Chase's management.

Finally, the report points to "broad systemic problems" in a number of areas. Specifically, it claims the CIO operated without a clear mandate and that hedging activities (and by implication the use of derivatives) were not appropriate for a financial institution. Kregel finds both assertions incorrect. He argues that the problem arose when JPMorgan Chase created the equivalent of a shadow bank to fund SCP's short positions using a Ponzi scheme. Further, Kregel argues that the underlying problem was not proprietary trading per se but a financial system that allows banks to operate across all aspects of finance and creates the necessity for macro hedging. If we are to reduce systemic risk, Kregel concludes that banks must provide regulators with more detailed information on their

balance sheet hedging; or, more simply, Congress could repeal the 1999 Financial Services Modernization Act and reduce, if not eliminate, banks that are too big to fail, manage, or regulate. www.levyinstitute.org/pubs/ppb_129.pdf

Lessons from the Cypriot Deposit Haircut for EU Deposit Insurance Schemes

JAN KREGEL

Policy Note 2013/4, April 2013

In March 2013, the government of Cyprus proposed taxing bank deposits partly in response to a banking crisis and partly to secure financial support from the European Union (EU) and the International Monetary Fund (IMF). In this policy note, Senior Scholar and Program Director Jan Kregel explains the dual operations of banks and the relationship between two types of deposits: currency and coin versus deposit accounts created by bank loans. His analysis identifies some of the problems with the Cypriot deposit tax proposal while more broadly describing the purposes and limitations of deposit insurance. The author observes that the operational impossibility of distinguishing between these two types of deposits implies unavoidable moral hazard in the creation of deposit insurance schemes. Further, deposit insurance requires the backing of a strong central bank. Both of these points are relevant to any effort to create an EU-wide deposit insurance system.

Bank deposits are clearly a form of wealth but governments generally do not tax coin and currency directly. Such action could be construed as default or expropriation by the government. However, private liabilities, including deposits should be subject to taxation. Why then was there such backlash when Cyprus proposed to tax deposits? Kregel explains that unlike taxes with a genuinely fiscal purpose, the Cypriot deposit tax would have done nothing to reduce government liabilities. It was a tax on specific individuals to benefit specific financial institutions and thereby generate an external infusion of funds from the IMF and EU.

A major criticism of the proposed deposit tax was that it violated the intentions of pending EU deposit insurance legislation. Deposit insurance is based on an idea of bank deposits that are not loans but a secure store of wealth, which in turn supports saving and thus demand. Deposits represent purchasing power.

From this perspective, it is the role of banks to receive and lend currency and coin. This understanding of banks is complicated by the fact that banks lend more than they receive in deposits under fractional reserve banking. If banks held 100 percent of the money deposited, there would be no need for deposit insurance. Once banks are allowed to lend more than what they hold bank money, or credit, arises. Thus, banks have a dual function: they provide a secure store of wealth and they create credit by purchasing private liabilities in exchange for the creation of a deposit account which is a liability of the bank. Banks hold liabilities that reflect these two sources of deposits. Deposit insurance is intended to protect depositors of coin and currency from their bank should it fail.

Kregel points out that the problem with the theoretical separation of who should pay for bank failure and how to protect the financial system from the errors of individual institutions is the conflation of the two types of bank deposit origination. Bank runs result from the inability to distinguish between the ability of different institutions to redeem their deposits. Thus, deposit insurance must apply to all deposits. In a perfect world we might reduce moral hazard incentives for bad practice by requiring that insurance not apply to deposits created from loans that default but would apply to deposits created by loans that stay current. Unfortunately this is not possible in practice.

It is the means of payment function that creates the difficulty in distinguishing between what stands behind individual deposits and therefore the need for universal coverage of deposit insurance. Hyman P. Minsky observed that deposit insurance could contribute to financial instability insofar as it makes depositors indifferent to the viability of the banks they deal with. Minsky also noted the necessary link between deposit insurance schemes and central banks. Because member banks fund deposit insurance, it is considered independent of the government. In reality, deposit insurance cannot be provided without the commitment of the central bank.

It is, Kregel observes, hard to see how deposit insurance will lead to greater financial stability in the eurozone without the backing of the ECB or of national governments. Kregel argues that one of the problems with the “fiscal” measure of taxing deposits to support the Cypriot banks is that the banks’ troubles were caused by the banks’ investment in Greek sovereign debt purchased from EU banks. The troika imposed a

private sector bail-in of creditors to the Greek government, which led to the insolvency of Cypriot banks. The tax on deposits is even more inequitable given that many large depositors included many legitimate businesses. The public outcry against the proposal was also fueled by the gains realized by some large investors as a result of the first and second haircuts while the losses were passed on to Cypriot bank depositors. www.levyinstitute.org/pubs/pn_13_4.pdf

How the Fed Reanimated Wall Street: The Low and Extended Lending Rates that Revived the Big Banks

NICOLA MATTHEWS

Working Paper No. 758, March 2013

Nicola Matthews, University of Missouri–Kansas City, evaluates the actions of the Federal Reserve (Fed) following the global financial crisis. This paper is part of an ongoing project, “A Research and Policy Dialogue Project on Improving Governance of the Government Safety Net in Financial Crisis,” under the direction of Levy Institute Senior Scholar L. Randall Wray and funded by the Ford Foundation. Matthews anchors her analysis of the Fed’s actions in terms of Bagehot’s principle that central banks should lend at penalty rates for short duration to solvent banks and against good collateral during crises. The paper examines the lending rates that the Fed set during the global financial crisis and the rates that individual institutions received. In light of Bagehot’s principle, the author asks if banks (particularly large banks) received a subsidy from the Fed in the form of below-market rates (i.e., not at penalty rates).

The author measures the cumulative (i.e., the flow of lending over time) intervention to assess the level of Fed intervention. A cumulative approach emphasizes the volume and duration of the commitment of central bank resources to support the financial system, and provides a more appropriate measure of lending rates associated with specific programs and facilities.

The paper examines the Fed’s short-term liquidity support to depository and investment institutions through the Term Auction Facility, Single-Tranche Open Market Operations (ST OMO), Term Securities Lending Facility (TSLF), and Primary Dealer Credit Facility (PDCF). Bear Stearns and

American International Group (AIG) received direct assistance from the Fed. The Fed created four programs to rescue AIG—the Revolving Credit Facility, Securities Borrowing Facility, and Maiden Lane II and III. Finally, the Fed provided support for the credit markets in the form of the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility, Commercial Paper Funding Facility, and Term Asset-Backed Securities Loan Facility (TALF).

The author finds that three programs account for 84 percent of cumulative borrowing. The PDCF accounts for 51 percent, TALF for 22 percent, and the TSLF for 11 percent. The PDCF and TSLF were only accessible to primary dealers, which limited the participation in these two facilities to no more than 20 banks worldwide. The top eight cumulative individual borrowers availed themselves of \$11.5 trillion dollars and/or securities, with a weighted mean interest rate of 1.49 percent. The sum of the facilities included in this analysis total \$17.7 trillion, with three banks—Citigroup, Merrill Lynch, and Morgan Stanley—borrowing close to 40 percent of this amount. The majority of the funds were disbursed under the PDCF program.

The author concludes that the Fed did not, on average, lend at penalty rates. In addition, the average duration of the facilities (with the exception of ST OMO) was over three years. If the support provided to Bear Stearns and AIG is excluded, the average duration was close to two years. A number of problems arise when the Fed lends without penalty rates for extended periods of time. The first problem is moral hazard. Second, the crisis response becomes one of ensuring solvency, not liquidity. Finally, lending at below-market rates can have the effect of increasing bank profitability.

Matthews concludes that by departing from its traditional role of lender of last resort to depository institutions, the Fed effectively turned from aiding markets to making markets. This action, she argues, put aside both the normal functioning of financial markets and the democratic process. The actions of the Fed validated unsound banking behavior and set the stage for an even greater crisis. Matthews also concludes that Bagehot's principle of lending at penalty rates was violated. In addition, the extraordinary nature of the facilities created by the Fed is not consistent with a liquidity crisis.

www.levyinstitute.org/pubs/wp_758.pdf

Wages, Exchange Rates, and the Great Inflation Moderation: A Post-Keynesian View

NATHAN PERRY and NATHANIEL CLINE

Working Paper No. 759, March 2013

Nathan Perry, Colorado Mesa University, and Nathaniel Cline, University of Redlands, examine the “Great Moderation” between 1982 and 2006, a period in which many mainstream economists argued that inflation had been tamed through a combination of good policy, good luck, and structural changes. Perry and Cline develop a theoretical framework and empirical analysis to test the mainstream explanation of the Great Moderation. The authors first survey the major features of the Great Moderation and the New Consensus Macroeconomics (NCM) that emerged during the same period. The authors draw upon post-Keynesian and structuralist theories of inflation and apply a vector auto regression (VAR) model to examine the decline in the inflation rate and inflation volatility. The authors then provide a discussion of their empirical findings for cost-push inflation and “good policy” factors. The authors conclude with their major findings and offer suggestions for future research.

Mainstream economists attribute inflation moderation to good policy (e.g., effective monetary policy), good luck (e.g., fewer shocks), and structural changes (e.g., efficiency improvements). The common thread in these hypotheses is that inflation is primarily a monetary phenomenon. Of these three hypotheses, the “good policy” hypothesis has garnered the most attention and support. The NCM approach treats inflation primarily as a monetary phenomenon. In contrast, post-Keynesian inflation models do not rely on a Wicksellian natural rate of interest and emphasize cost-push inflation at the macro level and cost-plus pricing at the micro level.

The authors present a post-Keynesian and structuralist model of inflation wherein inflation is affected by wages, commodity prices, the real exchange rate, wage resistance to past inflation and the mark-up. They employ a VAR model to compare the mark-up model to the good policy hypothesis. The authors use a quantified Taylor Rule to represent the “good policy” variable. The authors' use of a Taylor Rule differential to test the “good policy” hypothesis is unique in the literature. The authors calculate the differential as the difference between the predicted Taylor Rule and the Federal Funds rate. This

variable is used to test whether “good policy” has an impact on inflation and its volatility.

Broadly stated, the authors find that monetary policy as measured by the Taylor Rule differential is too weak to explain the moderation of inflation between 1982 and 2006. Thus, the “good policy” hypothesis is rejected. Likewise, contrary to the “good luck” hypothesis, oil prices do not explain the Great Moderation. However, the results show that falling wages and falling import prices are the primary determinants of moderate inflation during this period. Inflation in the US economy moderated due to increased international competition, decreased bargaining by labor, and a decline in exports due to the effects of external competition and exchange rates. Import prices fell as a result of a higher exchange rate for the US dollar and lower international prices pushed down prices.

The authors conclude that the Great Moderation was accomplished not because of effective monetary policy or good luck. Thus, monetary policy based on the Taylor Rule may not be as well founded as previously thought. Perry and Cline find that inflation has been controlled because workers have taken consistent real cuts in wages, thus lowering business costs and reducing prices. Finally, lower inflation was a result of increased international competition and exchange rate effects that lowered import prices. The policies many believed to have tamed inflation appear weak in comparison to the erosion of wages, globalized markets, and a strong dollar.

www.levyinstitute.org/pubs/wp_759.pdf

Currency Concerns under Uncertainty: The Case of China

SUNANDA SEN

Working Paper No. 761, March 2013

China’s “twin surpluses” era ended with the recent decline of its financial account balance. These declines also led to a decline in the stock of official reserves, which reflects a dramatic shift in expectations for China’s currency. The negative financial balances were visible at the end of 2011 and resulted in increased market anxiety. Until 2010, China consistently showed financial account surpluses. In September of 2011, China implemented “two way floating” of the renminbi in the foreign exchange market. This move unsettled financial markets

and precipitated a sharp fall in China’s financial balance. The decline in the financial balance led to a change in expectations for the US dollar – renminbi exchange rate. This was mirrored by the fall in foreign exchange assets which was caused by an increase in short-term credit to pay for imports in dollars, an increase in dollar advances from banks, and the withdrawal of bank deposits denominated in dollars. These changes have been cause for concern, both in terms of China’s economic future and the economic outlook for her trading partners.

In this working paper, Research Associate Sunanda Sen examines China’s external balance and the future of the renminbi. Her analysis focuses on the role expectations have played in the evolution of the exchange rate of the renminbi. She notes that changes in the exchange rate have affected the supply of liquidity in the domestic economy and thus the ability of the Chinese government to create credit. The paper focuses on four important departures in China’s currency management policies. These changes in the renminbi have clear implications for the global economy given the fragile condition of the eurozone economy.

The first change was the end of the fixed dollar-renminbi exchange rate in 2005, in part due to pressure from the United States. The change to managed floating, still supported by direct foreign currency purchases as a result of the continuing twin surpluses, was followed by an appreciation in the renminbi. The change to a floating renminbi did not lead to currency speculation until 2011Q3. The second break in China’s currency management policy came in 2007 with private holding of foreign currency. Sen explains the continued strength of the renminbi did not lead to currency speculation or outflows until expectations of a possible depreciation in the renminbi began to build up in 2011Q3. Partly in response to market concerns, the People’s Bank of China implemented the “two way floating” process in September 2011. This move ended the long-standing consensus of unidirectional movement of the renminbi. While this change allowed the renminbi to depreciate for the first time, the renminbi continued to appreciate, albeit at a slower pace. The fourth change came in April 2012 when China widened the daily trading limit of renminbi and dollar from 0.5 percent to 1.0 percent. Many experts see this as a move to encourage wider use of the renminbi by international markets.

Sen reminds us that we must start from an assumption of uncertainty and not an assumption of perfect information. As she relates, John Maynard Keynes states in the *General Theory*, “About these matters there is no scientific basis on which to form any calculable probability whatever. We simply do not know.” The author concludes that the experience of China, in a changing world and with speculation affecting its external balance in recent years, provides further confirmation of Keynes’s insights.

www.levyinstitute.org/pubs/wp_761.pdf

The Problem of Excess Reserves, Then and Now

WALKER F. TODD

Working Paper No. 763, May 2013

Walker F. Todd, American Institute for Economic Research, sets excess reserves in historical context and analyzes their implications for monetary policy and inflation in the US economy. He finds that the absolute and relative size of current excess reserves is cause for concern for both the Fed and the general public because of the potential for inflation. However, whether or not reserve-driven inflation arises and the extent of any damage such inflation might cause remains uncertain. Some scholars, the author notes, argue that there is no danger associated with excess reserves and that prolonged deflation is more likely. In this paper, Todd reviews the purpose and origin of excess reserves, the recent, dramatic increase in excess reserves, implications for the US economy, and concludes with policy options.

Most of the Fed’s monetary policy operations rely on open market purchases and sales. Historically, Todd notes, the discount window played a relatively small role in these operations. For example, in August 2007, before the Fed’s financial statements were affected by the crisis, total ordinary borrowings at the discount window were \$3 million with a monetary base of \$823 billion and the Fed’s reserve accounts equaled approximately 5.1 percent of the monetary base. Today, the Fed’s reserve accounts are equal to 63 percent of the monetary base and required reserves are only 3.7 percent of the monetary base. Emergency lending was replaced by quantitative easing with the expectation that it would encourage banks to make loans and stimulate economic growth. The author notes

that the results to date have been anemic. Todd suggests the disparity between the level of monetary stimulus and credit expansion is explained by a combination of factors including the failure of bank reform efforts in 2008 and early 2009, abusive banking practices, supervisory emphasis on mathematical models instead of institution-specific oversight, and the payment of interest on bank reserves.

Todd then turns to the experience of the European Central Bank. On balance, the ECB’s experience has been similar to the Fed’s—marked expansion of its balance sheet and large money creation with little increase in credit expansion. Excess reserves in Europe were brought to heel to some degree in the middle of 2012 by raising reserve requirements but are still abnormally large compared to required reserves. Todd observes that the Fed has not achieved the same degree of success restraining its excess reserves.

Following the financial crisis of 2008, some Keynesian economists advocated a massive program of loans and purchases of securities by the Fed on top of the fiscal stimulus enacted by Congress to hasten economic recovery in the United States. Todd questions this argument, suggesting that a properly calibrated fiscal stimulus might have been sufficient and would have avoided adding \$2 trillion to the Fed’s balance sheet. Further, Todd argues that the Fed’s decision to pay interest on required and excess reserves essentially wiped out most or all of the positive effects of its monetary stimulus programs.

Todd notes that the only other period of large and lasting excess reserves in the United States was during the 1930s. These reserves were not reduced to a level that could be considered normal until 1942. He then discusses the causes of the 1937–38 recession and finds that it would be an exaggeration to say that the Board’s decision to increase required reserves was the cause of the recession. The main lesson Todd draws from the experience of excess reserves in the 1930s is that the Fed’s policy decisions were at times led astray by the continuing and growing presence of excess reserves. Todd suggests that another lesson to draw from this experience is that we can ignore excess reserves as a day-to-day guide to the Fed’s monetary policy.

However, Todd argues there is little basis for additional expansion of excess reserves and that removing excess reserves will reduce the temptation to follow an easy path to inflation for Fed policy makers. Further, reducing excess reserves would support Fed monetary policy responses with a positive nominal

interest rate environment and give the Fed more room to respond to external events. Toward this end, the United States could reduce excess reserves by refinancing all student loans and refinancing all qualified home mortgages, with a government guarantee for these refinancing programs. This approach would reduce excess reserves while improving economic conditions for mortgage holders, recent graduates, and younger workers.

www.levyinstitute.org/pubs/wp_763.pdf

Program: Gender Equality and the Economy

From Safety Nets to Economic Empowerment: Is There Space to Promote Gender Equality in the Evolution of Social Protection?

RANIA ANTONOPOULOS

Policy Brief No. 128, April 2013

In this policy brief, Senior Scholar and Program Director Rania Antonopoulos discusses social protection (SP) initiatives in the context of developing countries and explores the opportunities they present for promoting a gender-equality agenda and women's empowerment. Produced with the support of the United Nations Development Programme, this brief calls attention to the need to promote gender-informed policy considerations in country-level social protection debates. The brief provides general background and a taxonomy of SP instruments, discusses social protection in the context of developing countries, and analyzes opportunities to promote women's empowerment through SP policies and programs.

Social protection policy has recently emerged as part of an inclusive-growth framework that ensures that economic participation leads to an equitable distribution of benefits and reduces or removes gender barriers to economic participation. Historically, SP policy, especially in developing countries, has been seen as a "social safety net" to protect households and individuals in or near poverty from shocks. This approach has begun to change, as recognition that the stopgap, short-term focus of past programs often reinforced rather than relieved the underlying issues that have placed people in vulnerable positions.

Antonopoulos analyzes four categories of SP initiatives: conditional cash transfers (CCTs); employment guarantee programs (EGPs); subsidized or free access to such things as food, education, productive inputs, and so on; and unconditional cash transfers and social pensions for the aged, orphaned, or disabled. Social protection systems are redistributive by nature and thus imply the commitment of public funds. However, SP systems have been shown to produce risk mitigation and macroeconomic benefits, particularly in low-income countries, that can reduce their cost. The brief focuses next on gender-differentiated risks that begin early in life and the risks that affect women as paid and unpaid workers. The author first discusses SP instruments that target children, because of the overlap of child care and women's social role as caregivers, and then discusses instruments to address vulnerabilities women face in the world of work.

The brief identifies six SP instruments that warrant increased attention as strategies to realize the universal rights of children. These instruments include infant immunization, free school lunch programs, the removal of health and education fees, cash transfers and social pensions to households with orphaned children, early childhood development programs for preschool children, and conditional cash transfers to promote the use of educational and medical services. The author then examines in greater detail the intersection of early childhood development programs and CCTs. The author calls for a new generation of CCT programs, drawing on lessons from country-specific experiences, to address gender-specific concerns.

Antonopoulos next turns to the systemic risks and inequalities women face in the world of work. EGP initiatives represent an opportunity to address large populations and close income gaps through the expansion of livelihood options via noncontributory employment security. However, issues remain as to whether or not women can gain access to work in an equitable manner, how the gendered nature of work assignments may exclude women from some jobs, and what steps can be taken to ensure wage equality. Further, public works projects typically focus on physical rather than social infrastructure. Antonopoulos suggests that an emphasis on social care projects could narrow gender-based inequalities while providing a valuable economic stimulus to the larger economy.

The author concludes that social protection initiatives often lack clearly articulated objectives to address gender risks.

However, there is broad agreement on the value of such initiatives and powerful examples of effective initiatives. The task is to create the proper combination of instruments to address country-specific conditions in a gender-informed manner. Social protection initiatives have only just begun to tap the transformational potential of gender-informed policies and programs to advance women's empowerment.

www.levyinstitute.org/pubs/ppb_128.pdf

The Economic Crisis of 2008 and the Added Worker Effect in Transition Countries

TAMAR KHITARISHVILI

Working Paper No. 765, May 2013

Research Scholar Tamar Khitarishvili examines the increased women's labor force participation in transition countries of the former Soviet Union and Central and Eastern European states following the financial crisis of 2008. During this same period, men's labor force participation fell. These two developments have led some to conclude that women were spared the full effects of the crisis. This paper critically evaluates this conclusion, using data from 28 countries. The author investigates the increased labor force participation of women to determine if there is evidence of a distress labor supply response to the crisis. The paper reviews the impacts of the financial crisis on the transition region, identifies gender dynamics related to crises, and presents the data, methodology, and empirical results.

The economies of Central and Eastern European as well as those of the former Soviet Union fell into recession as a result of the global financial crisis and their reliance on export-led growth. Weak labor markets and a regional unemployment rate of 14.19 percent are hampering recovery in these economies. The author observes that financial crises often impact male and female workers differently. During the most recent crisis, unemployment rates rose more quickly among men than among women. Similarly, the labor force participation rate of men declined, while it increased for women. This is the opposite pattern of previous crises, which have tended to disproportionately impact the female labor force.

Added worker effects as a distress response to a crisis have been found in other regions. Khitarishvili's analysis of the forces driving the gender differences in labor force movements

in the transition countries is particularly important because of the socialist legacy of gender equality and its postsocialist decline. The author finds strong evidence of a female added worker effect, particularly among married women aged 45 to 54 with a secondary education and no children in the household. She observes that the presence of children in the home limits the labor force participation of women even when a household experiences a sharp drop in income. The author also finds that economic and institutional factors play roles in the strength of the added worker effect among women. It is noteworthy that the added worker effect is only found in non-EU countries and is stronger in labor markets with higher-than-average unemployment rates, but only in countries in the middle of the GDP-per-capita distribution.

Men, on the other hand, show decreased labor force participation when another member of their household loses a job. Unmarried men with a secondary education and one child in the household drive this trend. The correlation is stronger among men who are financially vulnerable and live in countries with high unemployment rates and midrange GDP per capita. Men's withdrawal is mostly a reflection of the high degree of male worker concentration in certain sectors. Both men and women show lower labor force participation rates in the presence of high unemployment rates—a discouraged worker effect that cuts across gender lines. Thus, the decline in labor force participation among men appears to be the result of sectoral contractions, followed by a discouraged worker effect in response to a weaker labor market. For women, the added worker effect was found to be greater than the discouraged worker effect, resulting in an overall increase in the labor force participation of women.

These findings highlight the connection between responses to household-specific microeconomic shocks and the macroeconomic context in which individual and household decisions are made. The author concludes that both the need for and magnitude of an individual's labor supply response depend on macroeconomic conditions.

www.levyinstitute.org/pubs/wp_765.pdf

Evaluating the Gender Wage Gap in Georgia, 2004–2011

TAMAR KHITARISHVILI

Working Paper No. 768, July 2013

Research Scholar Tamar Khitarishvili presents the first study to describe the magnitude and evolution of gender wage gap dynamics among wage earners in Georgia following the Rose Revolution of 2003. The study also investigates the gender wage gap and its development along the wage distribution and analyzes changing patterns of income inequality. The author first presents a survey of the changes in the characteristics of Georgian wage workers during the period analyzed and an initial assessment of the gender wage gap. She then applies a recentered influence function (RIF) decomposition approach and presents her results. The robustness of the RIF analysis is tested using the statistical matching decomposition technique developed by Hugo Ñopo.

The evolution of the gender wage gap in the transition region is a mixed picture, the author reports, with empirical evidence showing a range of outcomes in different countries that is likely a reflection of economic and institutional forces. Using data drawn from the Georgian Household Budget Survey for the period 2004–11, she finds that while the Georgian gender wage gap among wage earners contracted over the period, it remains very large, with women earning 45 percent less than men in 2011. In addition to gender, other factors associated with the wage gap are marriage, ethnicity, vocational education, working in a rural area, and, surprisingly, state sector employment. In terms of industries, the gender wage gap is highest in the sectors of trade, and hotels and restaurants; and lowest in construction, transport, and international organizations.

The author examines the shape of the gender wage gap distribution to identify differences in the movement of real wages across the wage distribution. She finds that 42 percent of the gap can be explained with the explanatory variables (e.g., educational attainment, concentration in high-skill white-collar occupation, and work hours). The components of the unexplained portion of the gender wage gap reveal some of the forces underlying the gap. The author finds that the returns to marriage, living in an urban area, being an ethnic Georgian, and the industry premia for working in the trade, education,

and health sectors are lower for women. However, the returns to higher education and to low-skill white-collar occupations are higher for women. Khitarishvili notes that the gender wage gap is evident across the wage distribution during 2004–11. However, she observes a declining pattern in the wage gap at the top of the distribution. She finds that improved endowments and returns to these endowments contribute to the narrowing of the gender wage gap.

Khitarishvili next examines the forces behind the changes in the gender wage gap in the periods 2004–07 and 2009–11. Women's real wages increased between 2004 and 2007, with the largest increases in the top percentiles, indicating growing wage inequality among female wage earners. Men also saw increases in their wages, but with a reduction in wage inequality. During 2009–11, women's wages were stagnant, but the period also saw reduced wage inequality among women. During this same period, men's wages declined across the entire wage distribution, with virtually no change in the wage inequality.

Finally, Khitarishvili turns to an analysis of the factors underlying the changes in these two periods. Using a statistical matching decomposition technique, she finds that, based on the demographic characteristics and occupation, the wage structure (or unexplained) portion of the gap is higher than the total gap, indicating that women should earn higher wages than men. Only with the introduction of industrial sector variables are the endowments able to explain why women earn less than men (i.e., women tend to work in lower-paid industries). Overall, the results of the Ñopo methodology correspond well with the RIF methodology, though with a slightly different composition, which both supports and enriches the author's findings.

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Program: Economic Policy for the 21st Century

Explorations in Theory and Empirical Analysis

Modeling the Housing Market in OECD Countries

PHILIP ARESTIS and ANA ROSA GONZÁLEZ

Working Paper No. 764, May 2013

Research Associate Philip Arestis and Ana Rosa González, University of the Basque Country, offer a global perspective on the evolution of housing prices in 18 Organisation for Economic Co-operation and Development (OECD) countries to shed light on the factors that drove housing bubbles between 1970 and 2011. The authors develop a theoretical model, and test this model using a vector error correction model to identify long-run relationships and short-run dynamics. The model is a unique contribution to the literature because it includes two new channels—the roles of monetary policy and fiscal policy—in the evolution of housing prices.

The authors find that demand for housing is affected by factors ranging from household income to monetary policy. In the short term, the supply of housing is fixed. If prices change, disequilibrium in the market may occur, leading to an increase or decrease in demand. In the near term, changes in the demand for housing are found to affect the supply of housing, which may reduce the rate of appreciation in housing prices. However, of all the factors affecting the demand for housing, real disposable income is identified as the main determinant. On the supply side, real residential investment plays an important role in the supply of housing. The authors find that, in the short term, increases in real residential investment tend to be accompanied by increases in housing prices. Sustained increased demand for housing boosts supply and tends to suppress price appreciation somewhat. The volume of bank credit also plays an important role in the price of housing. The relaxation of credit standards contributes to the appreciation of housing prices by increasing the number of potential buyers. Monetary policy, in the form of interest rates, and fiscal policy, in the form of tax policies and public expenditures, both contribute to the change in housing prices.

Finally, increased population increases the demand for housing, especially in places that are already densely populated.

The authors test their model specification using data for 18 OECD countries for the period 1970–2011. The estimated relationships point to real disposable income as the most important determinant of housing prices in the long run. The cointegrating equations reveal a positive relationship between income and real housing prices in Belgium, Canada, Germany, Ireland, Italy, Japan, New Zealand, Norway, Spain, Switzerland, and the UK. Real residential investment plays a strong role in explaining housing prices in Germany, Norway, and Spain. Population growth and unemployment are also found to be important explanatory variables.

The short-run results show that real housing prices from earlier periods play a powerful role in explaining housing prices in any given period. Thus, expectations play an important role in the determination of housing prices, particularly in Belgium, France, Italy, Norway, Switzerland, and the United States. The results show a positive effect of real disposable income in Italy, Japan, and the UK. Real residential investment is significant only in the case of Spain. The authors' results confirm the proposition that the relaxation of credit standards increases the number of new homebuyers and thus prices. Fluctuations in mortgage rates are shown to curb increases in housing prices in the case of Sweden, the United States, and the UK. Fiscal policy, in the form of increased property taxes, is also found to reduce housing price appreciation in Belgium, Finland, New Zealand, and Norway. Population growth and unemployment are shown to have the same impact in the short-run analysis as in the long-run analysis.

In conclusion, the authors' model for the determination of housing prices confirms the importance of traditional variables such as income and interest rates. The model demonstrates the explanatory power of two new channels: fiscal and monetary policy. Fiscal policy is found to be the more powerful of the two variables because of its ability to alter income, change taxes, and provide subsidies to individuals and the housing market. In contrast, monetary policy in the form of interest rate manipulation is relatively ineffective. The authors recommend that monetary policy be confined to setting low interest rates and ensuring that appropriate prudential policies are followed. www.levyinstitute.org/pubs/wp_764.pdf

Heterodox Shocks

GREG HANNSGEN

Working Paper No. 766, June 2013

Research Scholar Greg Hannsgen provides an overview of heterodox shocks in macro models, drawing examples from the literature and critically reviewing the use of shocks. He presents two broad classes of shocks as a means of organizing the wide range of shocks found in the literature while recognizing that some shocks may fall somewhere in between these two classes. Hannsgen offers this analysis as an appreciation of the use of shocks and with the hope of fostering a better understanding of their role, how they could be used to improve models, how they have been used historically, and issues in the ongoing theoretical debates attending their evolution. The discussion draws from the work of economists including John Kenneth Galbraith, Distinguished Scholar Wynne Godley, Michal Kalecki, John Maynard Keynes, Distinguished Scholar Hyman Minsky, Wesley Clair Mitchell, G. L. S. Shackle, James Tobin, and others. He begins with some of the most common uses of shocks in heterodox models.

Shocks allow us to set models in motion, bringing into view dynamic pathways not derivable from equilibrium analysis. Applied heterodox economists also use shocks to perform experiments. Yet, while they do appear occasionally in heterodox conference presentations, shocks lack a comprehensive definition and are left with an ad hoc status in the literature. Hannsgen presents a binary typology for shocks: Type 1 and Type 2. He describes Type 1 shocks as “abrupt, sudden changes in independent variables or parameters” (e.g., investor confidence, and wages). Type 2 shocks are defined as “random, erratic, or irregular terms in model equations that usually take on a new value during each period of a simulation in discrete time” and are formally similar to the econometric error term in a time series model. The author notes that some shocks do not fit neatly into either category or are hybrid shocks.

The author turns next to a discussion of the various phenomena that could be defined as shocks. He notes that some view variables tied to expectations and confidence as more likely to be subject to shocks. To arrive at a good theory of shocks, Hannsgen suggests that we should look at the reasons for the phenomena we see in time series (e.g., news and liquidity

preference, or changes in macro policy). For example, John Maynard Keynes saw that market expectations helped to account for the high variability of fixed investment. In Keynes’s view, all exogenous factors were vulnerable to abrupt and substantial change. Further, most heterodox interpreters are skeptical, as was Minsky, of the ability of economists to quantify and endogenize psychological variables in macro models.

The author next examines the question of the exogeneity of shocks. Heterodox models tend to see shocks as behavior that is not accounted for by the model. Type 1 shocks generally change parameters, affecting variables only indirectly. Thus, they are exogenous by nature. Exogeneity leads us to the question, Are shocks economic phenomena? Hannsgen outlines arguments for situations in which shocks are economic phenomena, and notes that some neoclassical economists emphasize shocks as noneconomic events. The author then reviews the contributions of Minsky, Godley, and others to the discussion of ways to endogenize shocks.

For theoretical models of sudden movements, Hannsgen explores the use of catastrophe theory and complex systems theory as ways of seeing shocks as endogenous. On the question of the randomness of shocks, he observes that arguments can be made that many forces in economics are stochastic. For example, Minsky used elements of randomness in an attempt to mimic the effects of changing financial conditions, while Godley included random expectational (Type 2) shocks in simulations of a simple sectoral model.

The balance of the paper investigates the characteristics of shocks to better understand if they are: stable, one-time occurrences; bits of new information; historical, expositional, or pragmatic additions to models; or discrete jumps. Hannsgen’s contribution offers a survey of the ample terrain that heterodox economists continue to explore.

www.levyinstitute.org/pubs/wp_766.pdf

New Research Associates

The Levy Institute is pleased to welcome ECKHARD HEIN as a research associate working in the State of the US and World Economies and Monetary Policy and Financial Structure programs. Hein is a professor of economics at the Berlin School of Economics and Law and an adjunct professor of economics at Carl von Ossietzky University Oldenburg. He is a member of the Institute for International Political Economy (IPE) Berlin, the coordination committee of the Research Network Macroeconomics and Macroeconomic Policies (FMM), and managing co-editor of the *European Journal of Economics and Economic Policies: Intervention*. His research focuses on money, financial systems, distribution and growth, European economic policies, and Post-Keynesian macroeconomics.

Hein is the author or co-editor of 25 books, and he has contributed numerous chapters to edited volumes; he has also published widely in academic journals, including the *Cambridge Journal of Economics*, *European Journal of the History of Economic Thought*, *International Review of Applied Economics*, *Journal of Post Keynesian Economics*, *Metroeconomica*, *Review of Political Economy*, and *Structural Change and Economic Dynamics*. His latest books are *The Macroeconomics of Finance-dominated Capitalism—and Its Crisis* (2012) and *Money, Distribution Conflict and Capital Accumulation. Contributions to “Monetary Analysis”* (2008).

Hein received a diploma in economics from the University of Bremen, a doctorate in economics from the Free University of Berlin, and a postdoctoral degree (Dr. rer. pol. habil.) from Carl von Ossietzky University Oldenburg.

The Levy Institute welcomes İPEK İLKKARACAN as a research associate working in the Gender Equality and the Economy program. İlkkaracan is an associate professor of economics at Istanbul Technical University and a former assistant professor at Yeditepe University. Her areas of specialization include labor economics, development economics, macroeconomics, political economy, and gender economics. She has written extensively on unemployment, wage determination, labor market transformations, development, technological innovation

and indigenous knowledge, rural development, and women and the economy, and is a member of the editorial board of *Feminist Economics*.

İlkkaracan is a founding member of GEM-Turkey and a member of the board of the Middle Eastern Economics Association. She is a past director of the board of the nonprofit Women for Women’s Human Rights – New Ways, Istanbul, and a former member of the National Committee of Turkey on Human Rights Education. She has also served as a program consultant to the United Nations Development Fund for Women (UNIFEM) and the United Nations Development Programme.

İlkkaracan holds a BA in political science from Swarthmore College and an MA and a Ph.D. in economics from the New School for Social Research.

Upcoming Events

Financial Governance after the Crisis

Rio de Janeiro, Brazil
September 26–27, 2013

A conference cosponsored by the Levy Economics Institute of Bard College and MINDS – Multidisciplinary Institute for Development and Strategies, with support from the Ford Foundation

This conference is organized as part of the Levy Institute’s global research agenda and in conjunction with the Ford Foundation Project on Financial Instability, which draws on Hyman Minsky’s extensive work on the structure of financial governance and the role of the state. Among the key topics the conference will address are: designing a financial structure to promote investment in emerging markets; the challenges to global growth posed by continuing austerity measures; the impact of the credit crunch on economic and financial markets; and the larger effects of tight fiscal policy as it relates to the United States, the eurozone, and the BRIC countries.

Invited speakers include Nelson H. Barbosa Filho, former Secretary of Economic Policy for Brazil; Luciano Coutinho, president, Brazilian Development Bank (BNDES); Esther Dweck, chief economic adviser, Ministry of Planning, Budget, and Management, Brazil; Albert Keidel, senior fellow, Atlantic Council of the United States; Paul McCulley, chairman, Global

Society of Fellows, Global Interdependence Center, and former managing director of PIMCO; Paulo Nogueira Batista, executive director for Brazil, International Monetary Fund; Rogerio Sobreira, executive director, MINDS; and Frank Veneroso, president, Veneroso Associates, LLC.

Additional information is available on our website, www.levyinstitute.org.

The Eurozone Crisis, Greece, and the Experience of Austerity

Athens, Greece

November 8–9, 2013

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

Organized in conjunction with the Ford Foundation Project on Financial Instability, this conference will address the challenges to global growth and employment posed by the eurozone debt crisis, the impact of austerity on output and employment, the ramifications of the credit crunch for economic and financial markets, the larger implications of government deficits and debt crises for US and European economic policies, and central bank independence and financial reform. Invited speakers include László Andor, commissioner for employment, social affairs, and inclusion, European Commission; Andrew Balls, head of European portfolio management, PIMCO (London); Lael Brainard, US Treasury Under Secretary for International Affairs; Duncan Campbell, director of policy planning in employment, International Labour Organization; Vítor Constâncio, vice president, European Central Bank; Sir Howard Davies, former head of the UK Financial Services Authority; Philippe Gudin de Vallerin, managing director and chief European economist, Barclays; Mar Guðmundsson, governor, Central Bank of Iceland; Louka Katseli, president, Social Pact party, Greece; Ebrahim Rahbari, director of European and global economics, Citigroup; and Lord Robert Skidelsky, emeritus professor of political economy, University of Warwick.

For more information, visit www.levyinstitute.org.

PUBLICATIONS AND PRESENTATIONS

Publications and Presentations by Levy Institute Scholars

LANIA ANTONOPOULOS *Senior Scholar and Program Director*

Presentation: “Time Deficits and the Measurement of Income Poverty: Methodology and Evidence from Latin America” (with A. Zacharias and T. Masterson), 5th ECINEQ Meeting, Bari, Italy, July 22–24.

JAMES K. GALBRAITH *Senior Scholar*

Publications: “Does Debt Matter,” *The International Economy*, Spring 2013; “Only Syriza Can Save Greece” (with Y. Varoufakis), *The New York Times*, June 23.

Presentations: “Is Economic Inequality a Source of Financial Crisis?,” Social Science and Policy Forum, University of Pennsylvania, Philadelphia, April 5, 2013; panelist, “Capitalism, Government, and the Good Society,” sponsored by the Butler College of Business and Liberty Fund, Butler University, Indianapolis, Ind., April 10; keynote, “The End of Normal, and What Lies Beyond,” sponsored by the Coalition of Kaiser Permanente Unions, AFL-CIO, for the Union Delegate Conference, Anaheim, Calif., May 4; keynote, “The End of Normal: Why It Should Have Dawned on Us by Now that Ending the Crisis Is Not Going to Be Easy,” “The 6th International Conference: The Economics in Crisis,” University of Pula, Croatia, May 30; “Inequality and Instability: New Evidence on the Origins of Crisis,” Università Cattolica, Milan, Italy, June 10; “Technology and the Crisis: What Is the Role of Innovation and Diffusion in the New Unemployment?,” European Commission for Joint Research Centre, Seville, Spain, June 20; panelist, “How to Get Out of a Depression?,” sponsored by members of the European Parliament for the Ulysses Project Conference, Lisbon, Portugal, June 21; lecture workshop, “Inequality, Instability, and the End of Normal,” University of Leeds, England, June 25; keynote, “Solidarity and Stabilization: The Keys to a Progressive Strategy in the Face of a Crisis that Will Not End,” sponsored by MEP Josef Weidenholzer for the “Achieving Europe” Conference, Brussels, Belgium, June 26; “How Come Europeans Understood

the Political Economy of America So Much Better in 1861 than Today, and What Did Karl Marx Have to Do with That?,” symposium on “The 50th Anniversary of the John F. Kennedy Institute for North American Studies,” Berlin, Germany, June 28.

THOMAS MASTERSON *Research Scholar and Director of Applied Micromodeling*

Presentations: “Why Time Deficits Matter: Implications for Understanding Poverty,” Eastern Economics Association Conference, New York, May 9–11, 2013; “Women’s Unpaid and Informal Labor and Its Impact on Time and Income Poverty,” 11th International Meeting of Experts on Time Use and Unpaid Work, Mexico City, Mexico, June 17–18; “Time Deficits and the Measurement of Income Poverty: Methodology and Evidence from Latin America” (with A. Zacharias and R. Antonopoulos), 5th ECINEQ Meeting, Bari, Italy, July 22–24.

DIMITRI B. PAPADIMITRIOU *President*

Publications: “To Create Jobs, the US Must Spend,” *Los Angeles Times*, April 5, 2013; “It’s a Fantasy for Greece to Quickly Return to the Financial Markets,” *Enthemata–AVGI* (Athens), April 5; “Parallel Currency for Greece and Cyprus as Means of Exiting the Crisis,” *Ethnos* (Athens), April 7; “Coming Soon: Another London Whale Shocker?,” *The Huffington Post*, June 18.

Presentations: Interview regarding the Cyprus crisis with Ben Rooney, *CNNMoney.com*, March 21, 2013; interview regarding the effect on markets if the debt crisis in Cyprus is not resolved with Tom Krisher, Associated Press, March 24; interview regarding the crisis in Greece and the introduction of a parallel currency as plan B, “Life,” Skai TV (Athens), April 15; interview regarding rising unemployment and missed troika targets in Greece, “Life,” Skai TV, April 23; interview regarding the Federal Reserve with Gregory Robb, *MarketWatch*, April 23; interview regarding the situation in Cyprus with Yalman Onaran, *Bloomberg Businessweek*, April 30; interview regarding the shortcomings of the Greek program with Katerina Sokou, *The Washington Post*, June 5; interview regarding the IMF “mea culpa” for the Greek structural adjustment program, “Life,” Skai TV, June 7; interview regarding the Greek economy and how it will be affected by the Fed’s policy proposals with Zeynep Duyar, *Anadolu Ajansi* (Istanbul), June 16; interview regarding new austerity measures in Greece, “Life,” Skai TV, July 16.

AJIT ZACHARIAS *Senior Scholar and Program Director*

Presentation: “Time Deficits and the Measurement of Income Poverty: Methodology and Evidence from Latin America” (with T. Masterson and R. Antonopoulos), 5th ECINEQ Meeting, Bari, Italy, July 22–24.

GENNARO ZEZZA *Research Scholar*

Presentations: “Fiscal and Debt Policies for Sustainable US Growth,” conference on “Fiscal and Debt Policies for the Future,” Cambridge, UK, April 11, 2013; “Fiscal and Debt Policies for Sustainable US Growth” and “Reforming the International Monetary System: A Stock-Flow-Consistent Approach,” 10th International Conference: Developments in Economic Theory and Policy, Bilbao, Spain, June 27.



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