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LETTER FROM THE PRESIDENT

To our readers:

This issue begins with a Strategic Analysis by Research Scholars Greg Hannsgen and Gennaro Zezza and me under the State of the US and World Economies program. We determine that fears of prolonged stagnation and flat employment are well justified, as our baseline forecast suggests that growth in the United States will remain very weak through 2016 and unemployment will hover around 9 percent. Moreover, our scenario of the effect of new austerity measures shows that growth will weaken and unemployment will rise even further than in our base case. Our fiscal stimulus scenario, however, shows a very quick increase in real GDP growth and a reduction in unemployment to approximately 7 percent. And despite a serious dose of fiscal stimulus, the US current account deficit improves to 1.9 percent of GDP by the end of 2016 and the ratio of government debt to GDP is only slightly higher than in our baseline scenario. Thus, further stimulus is clearly in order, but an ill-timed round of fiscal austerity could result in a perilous situation for Washington similar to that faced by President Roosevelt in 1937–38, when a rise in the government balance led to a new recession within the Great Depression.

In a public policy brief, Thomas I. Palley concludes that we should abandon strategies aimed at attracting export-oriented foreign direct investment and institute a new paradigm based on a domestic demand–led growth model. In another brief, Senior Scholar Jan Kregel finds that creditors are just as important as debtors in cases of debt resolution. The key to resolving the eurozone problem lies as much in German domestic policy as it does in Greek policy, he says. In a policy note, Stuart Holland proposes that the European Investment Fund issue eurobonds, thus securing the euro as a reserve currency and contributing to balanced global growth. In another policy note, Research Associate Marshall Auerback proposes that the European Central Bank address the eurozone's solvency issues by distributing trillions of euros annually to the national governments on a per capita basis.

Three working papers are included under this program. Research Associate and Policy Fellow C. J. Polychroniou points out that Greece was unfit to join the eurozone and the bailout plan has been a social and economic catastrophe. Current

policies ensure that Greece will default and be forced to exit the euro, he says. Senior Scholar L. Randall Wray and I warn that the grand experiment of a unified Europe with a shared currency has entered its endgame. Gregor Semieniuk, Till Van Treeck, and Achim Truger analyze the national stability programs in the euro area and find that a lack of coordination will likely entrench existing instability, which portends long-lasting economic stagnation.

The Monetary Policy and Financial Structure program begins with a public policy brief and working paper by Wray. He concludes that a new global financial crisis is imminent unless we acknowledge Hyman P. Minsky's financial fragility hypothesis (and the role played by fraud), restrict banks' operational field, and adopt Minsky's employer-of-last-resort policy.

Five additional working papers are included under this program. Hannsgen expands the range of empirical evidence presented in support of his infinite-variance critique of structural vector autoregression analysis. Research Associate Jörg Bibow outlines the advantages of capital account management as an alternative to self-insurance in emerging-market economies. Andrew Sheng outlines central banking mistakes during the global financial crisis and he calls for more regulation of the financial sector. Alfonso Palacio-Vera concludes that there should be a high degree of coordination between the fiscal and monetary authorities in terms of the fiscal policy stance, the inflation target, and the mix of debt monetization by the central bank. Jesús Muñoz finds that Minsky's heterodox model links all elements of economic systems and produces a more coherent theoretical and policy analysis of recent crises.

The Distribution of Income and Wealth program includes two working papers. Senior Scholar Ajit Zacharias proposes a time-income poverty measure that accounts for intrahousehold disparities in the division of labor. Research Scholar Thomas Masterson describes the construction of synthetic datasets to estimate the Levy Institute Measure of Time and Income Poverty for Argentina, Chile, and Mexico.

Under the Gender Equality and the Economy program, a working paper by Research Associate Emel Memis and S. A. Kaya Bahçe finds that preexisting gender inequalities in work time in Turkey were deepened by the economic crisis. In a second working paper, Research Scholar Kijong Kim and Senior Scholar Rania Antonopoulos propose more public provisioning, since women, especially minorities and immigrants

from poor households, are most likely to benefit from newly created jobs in the care sector. In a third working paper, Gunseli Berik and Research Associate Ebru Kongar find that the gender gap in unpaid work narrowed during the recession but widened thereafter.

In a working paper under the Immigration, Ethnicity, and Social Structure program, Research Scholar Selçuk Eren, Hugo Benítez-Silva, and Eva Cárceles-Poveda conclude that the legalization of undocumented immigrants in the United States has a positive effect on economic aggregates and welfare.

Two working papers are included under the Economic Policy for the 21st Century program. Research Associate Sanjaya DeSilva determines that the relationship between village-level institutional conditions and rice farm efficiency in the Philippines has weakened. F. Patriarca and C. Sardoni extend the work of Michal Kalecki and find that the effects of a distributional shock in favor of wages on aggregate profits can give rise to a process of capital accumulation and growth.

As always, I welcome your comments and suggestions.

Dimitri B. Papadimitriou, *President*

Program: The State of the US and World Economies

Strategic Analysis
Is the Recovery Sustainable?

DIMITRI B. PAPADIMITRIOU, GREG HANNSGEN, and
GENNARO ZEZZA

Strategic Analysis, December 2011

Fiscal austerity is now a worldwide phenomenon, and the global growth slowdown is very unfavorable for policymakers at the national level. According to the baseline forecast by President Dimitri B. Papadimitriou and Research Scholars Greg Hannsgen and Gennaro Zezza (Figure 1), recent fears of prolonged stagnation and flat employment are well justified. Assuming no change in the value of the dollar or interest rates, and deficit levels consistent with the bipartisan Congressional Budget Office's most recent "no-change" scenario, growth will remain very weak through 2016, and unemployment will exceed 9 percent (Figure 2).

In Scenario 1 (Figure 3) the authors simulate the effect of new austerity measures ($1.5 trillion) through the end of 2016 that are somewhat comparable with the implementation of large federal budget cuts ($1.2 trillion) over 10 years. Although growth remains stable (2.3 to 2.8 percent) in 2012, it falls to 0.06 percent in the second quarter of 2014 before leveling off at approximately 1 percent. Given the sharp expenditure cuts combined with no dollar devaluation, unemployment rises to 10.7 percent by the end of 2016.

In Scenario 2 (Figure 4), the authors conduct a fiscal stimulus experiment with two components: extending the 2 percent reduction in federal payroll taxes that went into effect earlier this year, and increasing outlays enough to reduce unemployment to approximately 7 percent by 2016. This experiment increases real GDP growth very quickly—it peaks at 4 percent by the first quarter of 2013 before gradually falling to 3 percent. And despite a serious dose of fiscal stimulus, the US government

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

- Government Deficit (right scale)
- External Balance (right scale)
- Private Sector Investment minus Saving (right scale)
- Real GDP Growth (left scale)
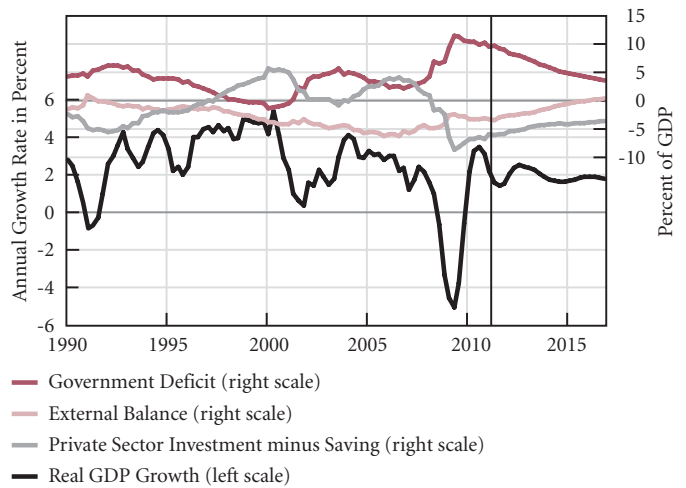
Sources: BEA; authors' calculations

Figure 2 Unemployment Rate in Three Scenarios

- Baseline (CBO Projections)
- Scenario 1 (Deficit Reduction)
- Scenario 2 (Fiscal Stimulus)
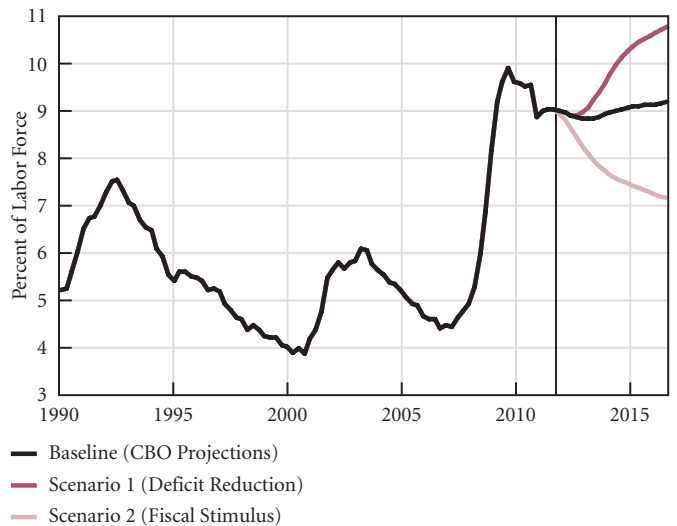
Sources: BLS; authors' calculations

deficit declines fairly sharply, to 6.5 percent of GDP; the current account deficit narrows to 1.9 percent by the end of 2016; and the debt-to-GDP ratio (97.4 percent) is only slightly higher than in the baseline scenario.

Figure 3 Scenario 1: US Main Sector Balances and Real GDP Growth

- — Government Deficit (right scale)
- — External Balance (right scale)
- — Private Sector Investment minus Saving (right scale)
- — Real GDP Growth (left scale)
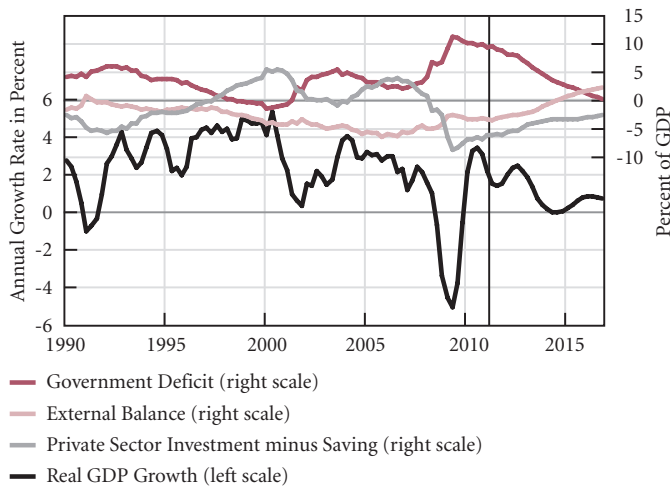
Sources: BEA; authors' calculations

Figure 4 Scenario 2: US Main Sector Balances and Real GDP Growth

- — Government Deficit (right scale)
- — External Balance (right scale)
- — Private Sector Investment minus Saving (right scale)
- — Real GDP Growth (left scale)
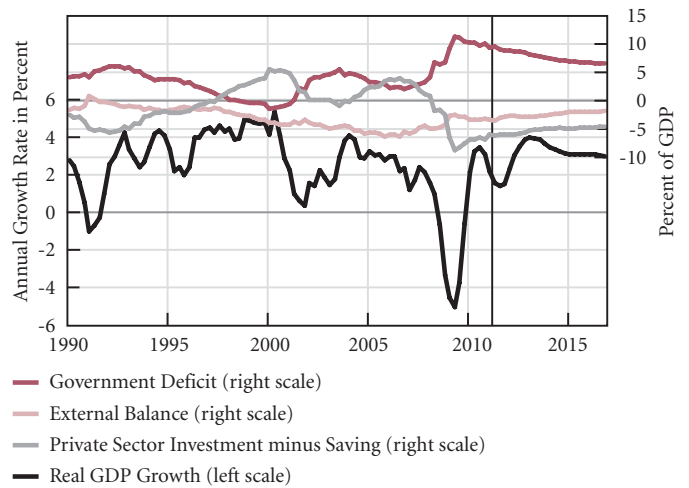
Sources: BEA; authors' calculations

The authors point out that an export-led growth strategy may accomplish little more than drawing a small number of scarce customers away from other exporting nations. According to the US Bureau of Economic Analysis, the current shortfall in aggregate demand from the private, public, and foreign sectors means that GDP is 6.3 percent below its potential level. And according to International Monetary Fund (IMF) predictions, the drain on product demand will reduce the US current account deficit by approximately 1.3 percent of GDP through 2014. Moreover, overall global import demand may be insufficient to enable the world's economies to achieve the (low) growth rates projected by the IMF.

In Figure 5, the authors simulate the impact of an export-led growth policy that is intended to reduce the US current account deficit. They assume a one-time (in the first quarter of 2012) 10 percent devaluation of the dollar relative to a basket of world currencies. The response to depreciation amounts to plus 1 percent of GDP in 2012 but remains less than plus 1.5 percent of GDP through 2016. The authors expect no net contribution to aggregate demand growth from the financial sector even if the major US banks manage to emerge from the eurozone sovereign debt crisis in relatively good shape. Thus, further fiscal stimulus is in order, but an ill-timed round of fiscal austerity may result in a perilous situation for Washington similar to that faced by President Roosevelt in 1937–38, when

Figure 5 US Main Sector Balances: Effects of a Devaluation*

- — External Balance
- — Private Sector Investment minus Saving
- — Government Deficit
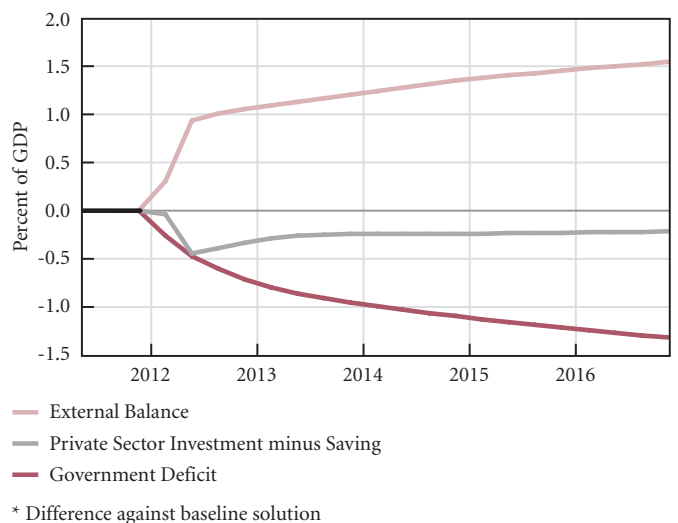
* Difference against baseline solution

Source: Authors' calculations

a rise in the government balance (due to federal spending cuts combined with higher tax revenues) led to a new recession within the Great Depression.

The authors note the merits of a Keynesian stimulus in terms of infrastructure spending and (labor-intensive) care work, as well as the fact that government spending has an additional "multiplier" effect (contrary to the notion of right-wing

economists). When the government hires people or buys goods from the private sector, such economic activity counts as part of the officially measured GDP. This approach would be more effective than relying on monetary policy measures—for example, lowering interest rates and waiting for the business sector to respond with increased investment. In the absence of increased fiscal stimulus, there is a high likelihood that demand will remain weak.

www.levy.org/pubs/sa_dec_11.pdf

The Contradictions of Export-led Growth

THOMAS I. PALLEY
Public Policy Brief No. 119, 2011

This brief by Thomas I. Palley is derived from Working Paper no. 675, which is summarized on p. 14 of the Fall 2011 *Summary*. He concludes that we should abandon strategies aimed at attracting export-oriented foreign direct investment and institute a new paradigm based on a domestic demand–led growth model.

Palley outlines the stages of the export-led growth paradigm, which is a development strategy aimed at growing productive capacity by focusing on foreign markets. Unless we institute a domestic demand–led growth model, he says, the global economy is likely to experience asymmetric stagnation and increased economic tensions between emerging-market and industrialized economies.

www.levy.org/pubs/ppb_119.pdf

Debtors' Crisis or Creditors' Crisis? Who Pays for the European Sovereign and Subprime Mortgage Losses?

JAN KREGEL
Public Policy Brief No. 121, 2011

In the context of the eurozone's sovereign debt crisis and the US subprime mortgage crisis, Senior Scholar Jan Kregel looks at the question of how we ought to distribute losses between borrowers and lenders in cases of debt resolution. Kregel tackles a prominent approach to this question that is grounded in an analysis of individual action and behavioral characteristics;

an approach that tends toward the conclusion that the borrower ought to bear the entire burden of making creditors whole. The presumption behind this style of analysis is that, since the borrower (the purportedly deceitful subprime mortgage borrower or supposedly profligate Greek) is the cause of the loss, the borrower should bear the burden.

Kregel points out the fundamental weakness of this approach and suggests an alternative that takes into account the linkages between balance sheets and cash inflows and outflows. Instead of focusing exclusively on the individual actions of debtors, his analysis takes into consideration the interactions between such actions and the cash flows and balance sheets of other sectors and external economic partners.

The upshot of this alternative analytical approach is to cast doubt on the proposition that debtors can fully bear the losses in a debt resolution. Moreover, it reveals that the behavior and policy of creditors is just as important a factor to consider in assessing the situation. For instance, domestic adjustment on the part of a debtor country as part of its effort to repay creditors can only succeed with the cooperation of that country's external counterparts.

If borrowers are going to be made responsible for losses, says Kregel, they need to be able to rely on rising external demand. The net increase in foreign demand has to be sufficiently large to offset the cost of servicing existing debt and to stimulate rising incomes and the resulting higher government revenues that are necessary for debt repayment. If both Greek households and the Greek government are going to be spending less and saving more, then in order to prevent incomes from falling (which would make it more difficult to redeem outstanding debts), demand will have to come from somewhere; if not from Germany, the increase in demand would have to come from the rest of the periphery.

But as Kregel points out, Greece cannot adjust its exchange rate and remain in the eurozone. Given the unlikelihood that Greece will be able to improve its external competitiveness in the short run, it will not be possible for both Greek households and the Greek government to be in surplus. Greece, in other words, cannot meet its debt obligations on the basis of internal policy alone. Kregel demonstrates that the key to resolving the eurozone problem actually lies just as much in German domestic policy as it does in Greek policy. Asking Greece to shoulder the entire burden is tantamount to asking a debtor to

behave more like a creditor. But this will be possible only if creditors, in turn, begin to behave more like debtors—if Germany, as Kregel puts it, becomes more like Greece.

Kregel performs a similar analysis of the US situation. Without any government relief, homeowners who are underwater on their mortgages will have to reduce consumption and increase savings in order to pay down their debt. If households and private businesses are cutting back, government can run a budget surplus only if there is an offsetting external surplus. Given current global economic conditions, this is unlikely, observes Kregel: the United States will not have an external surplus. This means that either the public sector or the private sector must fail to achieve their goal of running a surplus.
www.levy.org/pubs/ppb_121.pdf

Resolving the Eurozone Crisis—without Debt Buyouts, National Guarantees, Mutual Insurance, or Fiscal Transfers
STUART HOLLAND
Policy Note 2011/5

Resistance to debt buyouts, national guarantees, mutual insurance, and fiscal transfers between member-states has contributed toward the failure of the Economic and Financial Affairs Council and the European Council to resolve the eurozone crisis. According to Stuart Holland, University of Coimbra, Portugal, current assumptions and proposals for debt stabilization are invalid, as none of the above measures are needed either to convert a share of national bonds to European Union (EU) bonds, or for the net issues of eurobonds.

Holland notes that the incorporation of the European Investment Fund within the European Investment Bank (EIB) Group should strengthen its role as net issuer of bonds to finance growth. Such bond-funded investment finance would be the equivalent of Marshall Aid, and could make a reality of the European Economic Recovery Programme (EERP). Moreover, the net issues of eurobonds would secure the euro as a reserve currency and contribute to the more plural global reserve system and balanced global growth.

The author draws on an earlier report recommending Union bonds to European Commission President Jacques Delors (1993). He also points outs that (German) opposition to the

European finance ministers' consideration of the Brussels-based Bruegal Institute's proposal for EU bonds is based on conditions for debt stabilization that are not needed. Net issues of eurobonds could be traded and would attract surpluses from the central banks of emerging economies and sovereign wealth funds. The traded eurobonds could cofund EIB project finance and be serviced by revenues from EIB projects, rather than fiscal transfers between member-states. Moreover, the EIB could also finance a European Venture Capital Fund for small and medium enterprises in the European periphery, including new high-tech startups.

The implications for the United States of the euro attaining global reserve currency status are two-sided: the dollar would no longer have the advantage of being the sole reserve currency; and inversely, it would not be subject to the risk that it could not sustain this role. Net gains for the United States would depend on net issues of eurobonds to finance the EERP rather than debt stabilization alone.
www.levyinstitute.org/pubs/pn_11_05.pdf

Toward a Workable Solution for the Eurozone
MARSHALL AUERBACK
Policy Note 2011/6

The "solutions" on offer concerning the eurozone's problem fail to acknowledge that the problem is fundamentally one of flawed financial architecture. According to Research Associate Marshall Auerback, the European Central Bank (ECB) could rescue the European economy but refuses to use its fiscal capacity—that is, its monopoly rights to issue the eurozone's common currency—to do so. He proposes that the ECB should first address the solvency issues by distributing trillions of euros annually to the national governments on a per capita basis.

Auerback's revenue-sharing proposal would immediately adjust national government debt ratios downward, which would ease credit fears without triggering additional government spending. This would serve to dramatically ease credit tensions and thereby foster normal functioning of the credit markets for the national government debt issues. And this would require no Treaty changes or additional surrender of national sovereignty. It would make the Stability and Growth Pact more credible and enforceable because there would be a

mechanism to ensure compliance (by withholding funds) and limit contagion, and it would not be inflationary.

The author notes that there is no supranational treasury standing behind the ECB but it is in no way operationally constrained in its ability to create unlimited euros. By continuing to buy the distressed debt of the eurozone countries (bond purchases from the ECB's Secondary Market Programme), the ECB can ensure solvency, while continuing to increase its accrual of profits that flow to capital.
www.levyinstitute.org/pubs/pn_11_06.pdf

An Unblinking Glance at a National Catastrophe and the Potential Dissolution of the Eurozone: Greece's Debt Crisis in Context

C. J. POLYCHRONIOU
Working Paper No. 688, September 2011

Greece gained entry into the eurozone on January 1, 2001. According to Research Associate and Policy Fellow C. J. Polychroniou, Greece had serious structural weaknesses combined with an oligarchical structure that made it unfit to join the euro. Its economy was not in a position to engage in intense competition in a single unified market with a single currency. And its entry was orchestrated by fabricating the true state of the country's fiscal condition. Moreover, its subsequent "growth performance" rested upon the twin pillars of heavy state borrowing and European Union (EU) transfers. As a result, economic growth was based on overconsumption, ever-increasing debt levels, and a capital accumulation process that was largely divorced from the real economy.

The Greek crisis is not merely an economic crisis but also a political and moral crisis, says Polychroniou. Financial scandals and corruption have been major sources of wealth creation. State resources have been exploited by successive governments, where wealth has been transferred from public to private enterprises and from the poor to the rich. Examples include the politico-financial scandal regarding the collapse of the Athens stock exchange, the Siemens bribery case (bribes made to political figures in order to gain state contracts), and the 2004 Summer Olympic Games (the actual cost has yet to be made public by corrupt state authorities). The hallmarks of the Greek state are public sector investments of dubious value

(with hefty political kickbacks), a total absence of accountability, administrative incompetence, and massive tax evasions. (The underground economy generates more than 40 percent of official GDP.) Greece's debt level will soon exceed an unmanageable level of 170 percent of GDP, but EU officials continue to treat the problem as one of liquidity rather than insolvency.

The EU and the International Monetary Fund (IMF) orchestrated a massive bailout plan of 110 billion euros in May 2010 that included a structural adjustment program with harsh austerity measures. This plan has been a social and economic catastrophe, says Polychroniou. It has accelerated the economy's downward spiral, subjected people who were the least responsible for the crisis to extreme measures that reduce purchasing power and increase employment insecurity, and contributed to a devastating collapse of the country's productive base and skyrocketing unemployment, with a concomitant increase in poverty, social malaise, political discontent, and crime. The dismal failure of the bailout plan is reflected in a substantial increase in the debt and a deepening recession.

Such EU/IMF policies ensure that Greece will default and be forced to exit the euro, says Polychroniou. The question is whether the default will be soft or hard. A soft default would keep Greece in the eurozone but subject it to an economic recession for a decade. A hard default would force Greece to exit the eurozone and Greek citizens to take charge of their own economic problems and national faults (but the large-scale havoc would be of short duration). For a country in dire need of change, a hard default may be the best scenario. Moreover, the extreme neoliberal policies of the EU increase the risk of the eurozone's dissolution and an unraveling of the European integration project.
www.levyinstitute.org/pubs/wp_688.pdf

Euroland in Crisis as the Global Meltdown Picks Up Speed

DIMITRI B. PAPADIMITRIOU and L. RANDALL WRAY
Working Paper No. 693, October 2011

The grand experiment of a unified Europe with a shared common currency has entered its endgame, says President Dimitri B. Papadimitriou and Senior Scholar L. Randall Wray. The

latest "rescue" plan will not save Greece from a sovereign default, the euro's disintegration is all but inevitable (under the current trajectory), the absence of a true political union could lead to the disintegration of the European Monetary Union (EMU), and the probability of another global financial crisis is high. A real solution may have to await a total collapse of money manager capitalism, say the authors.

A bold approach would resolve Greece's immediate problem along the lines of the US Troubled Asset Relief Program, where the European Central Bank (ECB) is ready and willing to purchase all outstanding Greek bonds at market prices. But this approach is unlikely due to uninspired leadership within the ECB, Germany, and France. Another possibility is an orderly default with a substantial bond "haircut" of no less than 60 percent, together with special bank recapitalization funds for all eurozone banks. But this means harsher austerity measures and reforms in Greece, leading to a high unemployment rate (20–25 percent) and greater disparities of income and wealth. An alternative strategy is a Greek exit from the euro. However, this entails significant risks, including global market upheavals and contagion, as well as perilous economic and societal ramifications of a dysfunctional economy—debt defaults, inflation, and bank runs.

The collapse of the euro project will lead to either an amicable divorce, where all participants are financially worse off, or to a major economic restructuring and greater European consolidation. A workable plan has to address the fact that very different economies are yoked to the same currency. Nations such as Greece cannot compete with more productive countries (e.g., Germany) or with countries that have lower production costs (e.g., Latvia). The best structural change would even out trade imbalances in the eurozone, with surplus countries investing in deficit countries, as Germany did with East Germany following reunification. But the ECB rescue fund—the European Financial Stability Facility—would have to have access to, say, one trillion euros (from its current 440 billion euros) and (ideally) should be responsible to the elected European Union (EU) parliament, thus replicating the US Treasury's relationship with the states (but with more control in the case of European nations).

Papadimitriou and Wray note that the bailout of the US financial system amounted to $29 trillion, and that the exposure of US finance in Europe is as high as $3 trillion (e.g., half of all money market mutual fund assets is in short-term European bank IOUs). They also note that the fiscal policy space of the EU parliament is less than 1 percent of GDP ($100 billion). Furthermore, there is no alternative to debt relief for Greece and other periphery nations, and debt relief is tied to austerity measures that will inflict more pain.

The authors observe that Greece's total outstanding debt (private plus sovereign) is not high and that both Greece and Italy have relatively low private sector–debt ratios. These observations are inconsistent with the view of consumer excesses in the periphery. Moreover, it is misleading to label this a sovereign debt problem when the increase in the overall private sector–debt ratio has outpaced the increase of government debt. According to Wynne Godley's sector-balance identity, the periphery nations suffer from an overvalued euro and lower productivity, while Germany gains from an undervalued euro and a current account surplus. Thus, it is not surprising that some Mediterranean countries have larger governments and higher private sector–debt loads.

Germany's "better" balance sheet relies to some degree on the periphery's "worse" balance sheets. When EMU policy disallows any significant wage and price inflation in the center, the only solution is persistent deflationary pressures in the periphery, leading to slow growth and compounding the debt-burden problems. It would be easier for periphery nations to reduce domestic deficit spending if Germany were willing to run large current account deficits.

US and European banks are probably already insolvent, say the authors, so it will not take much to precipitate another financial crisis in the United States. The US economy is still a massive Ponzi scheme, the economy and commodity prices are tanking, and debt loads remain high for financial institutions and the private sector. It is unreasonable to believe that the US banks will remain profitable when they are not making loans, the equity markets are flat, lawsuits are pending, and there is a huge exposure in Euroland.

The path to recovery requires a three-pronged approach: (1) direct job creation in line with New Deal programs or Hyman P. Minsky's employer-of-last-resort, or job-guarantee, approach; (2) debt relief for owner-occupied housing with policy imposed on creditors by Washington and proper accounting of property values and losses; and (3) resolution of insolvent institutions at the least cost to the Federal Deposit Insurance

Corporation. Closing the biggest insolvent institutions will produce collateral damage, so policymakers will have to deal with the losses. For example, the Pension Benefit Guaranty Corporation will become insolvent and need a bailout.

The options for dealing with financial crisis are narrower in Euroland because individual nations do not have the fiscal capacity to deal with their problems internally. One way for a member-state to confront a crisis of this kind is to exit the EMU and return to a sovereign currency in order to create sufficient fiscal and policy space.

www.levyinstitute.org/pubs/wp_693.pdf

Reducing Economic Imbalances in the Euro Area: Some Remarks on the Current Stability Programs, 2011–14

GREGOR SEMIENIUK, TILL VAN TREECK, and
ACHIM TRUGER
Working Paper No. 694, October 2011

Nearly all euro-area governments are currently in breach of the public deficit and debt criteria enshrined in the Stability and Growth Pact (SGP). Gregor Semieniuk, Till van Treeck, and Achim Truger, Macroeconomic Policy Institute, Hans Böckler Foundation, Germany, analyze the national stability programs (SPs) to determine whether the euro area is on track to resolve its economic crisis. They find that the failure to consider external imbalances will likely entrench existing instability that portends long-lasting economic stagnation. What is needed, they say, is a symmetric effort at rebalancing current accounts that would slow fiscal consolidation in the surplus countries while addressing the macroeconomic challenges—medium-term consolidation and stability.

The SPs are annual member submissions to the European Commission that play an important role in the European Union's supranational budgetary surveillance. They project macroeconomic developments and government plans for achieving stability over the next four years. Members explain how they intend to balance their budgets (or generate a surplus) in the medium term, as required by the SGP. The SGP, however, focuses on the public sector deficit and does not address the issue of linked financial balances between the public, private, and current account sectors.

This paper focuses on the April 2011 version of the SPs, and the analysis is based on the European Commission's Annual Macroeconomic database for May 2011. According to the authors, the April 2011 version continues to ignore the importance of reducing current account (external) imbalances in a coordinated manner, focusing instead on reducing public deficits in spite of the Commission's intent to correct excessive macroeconomic imbalances. Although the euro area has sustained relatively small current account balances with the rest of the world, individual countries display large surpluses and deficits, and are unable to address imbalances (e.g., exchange rates cannot be adjusted).

Former Levy Institute Distinguished Scholar Wynne Godley recognized early on that euro-area governments could become "insolvent." Using his financial balances approach and the connection between financial balances and GDP, the authors review the macroeconomic developments in the euro area before and during the crisis (1999–2007). They note that countries with relatively strong private demand growth on average displayed lower (even negative) private financial balances in 2007 (i.e., low savings and high investment). And while government deficits were less than 3 percent of GDP in 2007, the private sector ran large deficits, especially in Portugal, Ireland, Greece, and Spain (PIGS). Thereafter, the public sector balance fell because government spending soared and revenues plummeted. In order to balance the sectors, economic growth slowed to the point that the combined balances of the private and public sectors matched the foreign sector.

The authors also note that the current account and trade balances were closely linked, and that there was a reversal in the trend of net export balances (except for France and Italy, which experienced a steady decline in their current and trade accounts). They further note that the intra-euro exports of eight countries constituted more than 40 percent of total exports. Thus, reducing current account deficits depended on reducing the current account surpluses of other countries in the euro area.

Since 2010, countries have revised their growth prospects downward (except Germany) and the PIGS (except Greece), along with Germany and the Netherlands, have improved their current accounts. The PIGS (again, except Greece) reduced their foreign financial imbalances at the cost of slower GDP growth, thus shedding their role as counterparts to the surpluses of

Germany and the Netherlands. The PIGS' role has also been adopted by France and Italy.

The authors' analyses of the combined SPs for 2011 reveal that: (1) the projected GDP growth rates appear optimistic, given the degree of fiscal consolidation; (2) the euro area must improve its current account by 1.3 percentage points of GDP by 2014, requiring exporters to benefit from strong global demand and imports to grow at a relatively lower rate than exports (contrary to global rebalancing); and (3) current accounts continue to diverge significantly in 2014, despite an improvement in the overall current account. Growth projections and fiscal consolidation may be jeopardized by unrealized (optimistic) assumptions about the private sector's ability to drive GDP growth, as well as the euro area's current account. The implicit assumption about negative private financial balances in 2014 is a particular concern for France, Greece, and Italy.

Germany's SP shows larger current account surpluses (combined with strong domestic demand and higher imports) and it does not entertain the notion that (symmetric) rebalancing may be in order. Rather, the German authorities want to maintain the monetary union's stability through a combination of stricter rules for fiscal consolidation and "structural reforms" to enhance competitiveness (i.e., asymmetric rebalancing). Germany's growth strategy continues to rest on sustained deficits (public and private) in other European countries and hence, its competitiveness in the euro area. Thus, its rejection of rebalancing responsibility may result in a return to current account imbalances at precrisis levels.

The authors simulate what would have to happen to the financial balances of countries in 2014 if the euro area as a whole failed to improve its current account vis-à-vis the rest of the world and the individual countries realized their projected reductions in the public deficit and growth rates. They compare their symmetric rebalancing cases (where countries reduce their deficits to 2–3 percent of GDP) with their business-as-before case (where the surplus countries achieve their growth projections). The scenarios show that a rebalancing of foreign balances is very important in stabilizing the monetary union. The surplus countries could achieve their desired growth rates if they willingly accepted higher public deficits (more than 3 percent of GDP) over an extended time period, slightly reduced their export growth rates, and allowed the

deficit countries to reduce their imbalances. Rebalancing under these favorable conditions would stabilize the euro project at little immediate cost.

Euro-area governments should not be surprised to see real macroeconomic developments diverge substantially from their SP projections, say the authors, and they should expect a continued breach of the SGP rules. Accepting higher public deficits (or increasing government spending while taxing away excessively high private net savings) in the surplus countries may be the only way to stabilize the European Monetary Union without depressing the SP growth projections.
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Program: Monetary Policy and Financial Structure

Waiting for the Next Crash: The Minskyan Lessons We Failed to Learn

L. RANDALL WRAY
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In this brief, Senior Scholar L. Randall Wray lays out the numerous and critical ways in which we have failed to learn from the latest global financial crisis (GFC), and identifies the underlying trends and structural vulnerabilities that make it likely a new crisis is right around the corner. Borrowing from the work of Hyman P. Minsky, Wray investigates the instabilities in the financial system that rendered it susceptible to a shock like the subprime crisis, arguing that, as in 1929, the system was so unstable that the "trigger" really could have been anything. He also suggests some policy changes that would shore up the financial system while reinvigorating the real economy.

If we are looking for answers, Wray argues, we ultimately need to look beyond the surface, beyond subprime mortgages, to Minsky's account of the long-run transformation of any economy toward instability. A key part of this transformation involves the "financialization" of the economy, in which the financial sector captures a larger and larger share of GDP and financial layering proliferates. Leverage increases as financial institutions borrow from one another in order to lend, creating

more and more complex linkages between firms—linkages and layers that render the whole system vulnerable.

Alongside the hypertrophy of the financial sector, Wray traces the route of stagnation in the real economy, pointing to the recent decoupling of economic growth from employment and wage gains. He draws out the connections between stalled wage growth and the GFC. Households could not count on rising incomes to finance increased consumption, so they eventually turned to indebtedness, particularly through home equity loans, to help prop up living standards and keep up with the Joneses. The combination of debt-fueled consumption and a fraud-riddled real estate boom was crucial to the economy's ultimate collapse.

Wray explains that it is a mistake to attribute the global financial crisis to the Federal Reserve decision to keep interest rates too low. It is also a misconception to regard the GFC as merely a liquidity crisis. Instead, it was a matter of mass insolvency among major financial institutions—a problem that may still be lurking.

Among the lessons we ought to have learned from the GFC is that we cannot rely upon markets alone to ensure solid underwriting. In the face of a euphoric boom, underwriting standards deteriorated or were eliminated entirely, and although it may seem like stricter lending standards have returned, says Wray, this is just a temporary reaction to the crisis. Unless we take steps to create the proper incentives, we can expect standards to deteriorate at the next sign of ebullience. The reality is that the GFC dealt yet another blow to the "efficient markets hypothesis," as markets failed to discover the proper prices of securitized loans. Finally, Wray argues that we cannot understand the GFC without appreciating the deep-seated and widespread role of fraud, up and down the financial food chain of securitized mortgage lending.

Moving forward, Wray recommends that we restructure our financial institutions with an eye toward placing limits around both size and function. Economies of scale are reached at a fairly small size in banking, and, among other problems, oversize banks create opportunities for control fraud. Financial institutions must be forced to choose whether they will hold a bank charter or participate in speculative trading. Banks holding a charter ought to be regarded as public utilities and prohibited from securitizing. For investment banks, incentives for better underwriting can be created by reforming

compensation practices. Finally, Minsky's employer-of-last-resort (ELR) policy, offering a guaranteed job to all those who are willing and able to work, would help revitalize the real economy. By encouraging full employment at all stages of the business cycle, an ELR program would help reduce inequality and fuel consumption on the basis of growing incomes, rather than debt. These measures would go a long way in moving the economy toward stability and higher living standards, and away from financialization and fragility.
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Lessons We Should Have Learned from the Global Financial Crisis but Didn't

L. RANDALL WRAY
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According to Senior Scholar L. Randall Wray, the economy was so vulnerable that almost anything would have triggered the global financial crisis (GFC). His conclusion stems from Hyman P. Minsky's financial fragility hypothesis about the long-term transformation of an economy under money manager capitalism; that is, the impact of factors such as financialization, stagnant real wages, and rising inequality.

There are a number of lessons we should have learned: the GFC was not a liquidity crisis, sound underwriting matters, deregulation evolves into control fraud, and the worst part of the crisis was the cover-up. True financial reform is dead until after the next Wall Street–induced crash, says Wray. He suggests a Minskyan approach to reform that focuses on the "real" economy, includes a government-provided "employer of last resort" program, and confronts the fraud.

Financialization refers to the rising role of finance in the economy, along with greater leverage and increasing layers of debt. A telling measure is the ratio of financial institution liabilities to GDP, or financial layering, whereby institutions borrow from one another in order to lend. Money manager capitalism is an inherently unstable form of capitalism, with huge pools of funds under the management of professionals who seek the highest returns. In 2007, the primary weakness was the US housing market; specifically, subprime mortgages. Most people, including policymakers such as the Federal Reserve, were

caught by surprise when the high rate of defaults on subprime mortgages triggered the GFC.

Although the conventional wisdom suggests that we are on the road to recovery, Wall Street has maintained a 40 percent share of all corporate profits, which represent 88 percent of the growth in national income. In contrast, workers have captured merely 1 percent of that growth. For the first time ever, real wages and salaries have fallen in what has become a jobless "recovery." Meanwhile, Wall Street has escaped reregulation (the flaccid Dodd-Frank Act has avoided any fundamental reform) and the "banksters" are still running their criminal organizations (or "chartered banks"), advising the White House, and funding the next presidential campaign.

When the megabanks discovered that they were holding trashy mortgage products, as well as the liabilities of other mega financial institutions, they stopped lending to one another and the Ponzi scheme collapsed. A massive insolvency led to the "run on liquidity." The banks had an insufficient supply of good assets to offer as collateral against loans. Uncle Sam, acting as "sucker of last resort," spent trillions of dollars to stop the carnage. Nevertheless, all big banks are probably still insolvent, says Wray.

Wray points out that there have been no significant regulatory and supervisory reforms put in place to deal with the next euphoric boom. He expects underwriting standards to decline again because the banks have not been forced to learn any lessons from the GFC. He also points out that 80 percent of all mortgage fraud was committed by lenders who continue to commit foreclosure fraud, and that the Mortgage Electronic Registry System has irretrievably damaged the nation's property records. Moreover, when a bank issues a "liar's loan" (little or no documentation of the borrower's income), every other link in the home-finance chain is tainted—including the US government bank regulators who signed off on the fraud.

The bailout has increased the concentration of banks and the linkages between them, making the system more fragile and the prospect of a greater crisis next time. Most of the debt in 2007 still exists, so a wave of defaults on commercial real estate or a downgrade of student loans or credit card debt could bring on the next crisis. Another path to crisis could be the discovery that a major bank is massively insolvent, or the overall fragility of European banks.

Minsky and others have argued that economies of scale in banking are reached at a very small size, while the "synergy" associated with large institutions allows banks to bet against their own customers. Thus, the large chartered banks should have narrowly focused activities, and they should be prohibited from diversifying across the range of financial services. Companies such as Goldman Sachs and Morgan Stanley should be forced to either give up their bank charters or abandon investment banking.

According to Wray, the most important reform is to prohibit banks from securitizing, which undermines good underwriting. Since banks are public utilities that serve the public purpose, they should be required to hold loans to maturity. And good underwriting should be rewarded by linking compensation with longer-term results. Another important reform is to counter the problem of cyclical and long-term unemployment with Minsky's employer-of-last-resort program. This government program would guarantee a job to anyone willing to work at the federal minimum wage, plus legislated benefits. It would also promote consumption out of income and reduce inequality. The goal is to promote "industry" over "finance" and stability-enhancing institutions over "free market" policies in order to reduce the likelihood of another GFC.
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Infinite-variance, Alpha-stable Shocks in Monetary SVAR: Final Working Paper Version

GREG HANNSGEN
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Structural vector autoregressions (SVARs) are used by macroeconomists to answer questions such as: Do central banks cause recessions? Could contractionary monetary-policy shocks increase inflation? Is the business cycle driven mostly by technology shocks? What are the effects of fiscal-policy shocks? Research Scholar Greg Hannsgen updates Working Paper nos. 546 and 596, and answers skeptics by expanding the range of empirical evidence presented in support of his infinite-variance critique of SVAR analysis. The bulk of the evidence in the paper's numerous tables and figures suggests that many VARs estimated by macroeconomists possess at least one error term with an infinite-variance distribution. Given that a

reduced-form VAR estimate suffers from this problem, it cannot be used to identify any commonly used structural VAR model, for the formal reasons explained below.

Structural representations are important for multi-equation time-series econometrics because they form the basis of standard impulse-response analysis and innovation accounting. However, if the reduced form of a VAR model has infinite-variance shocks, the VAR cannot be transformed into a standard structural form; that is, one with orthogonal (and hence, finite-variance) shocks and a nonsingular matrix of coefficients on the current realizations of the variables. This easily proven mathematical proposition holds regardless of the econometrician's choice among available identification schemes—the Cholesky decomposition, decompositions that make use of different restrictions on the VAR coefficients, or restrictions on short- and long-run impulse responses.

The vector autoregression (VAR) used by Hannsgen closely resembles many of those used in the monetary VAR literature. The variables include industrial production, the consumer price index for all urban consumers, the producer price index for crude materials, the federal funds rate, and the Federal Reserve's nonborrowed reserves and adjusted total reserves series. The monthly data series is for the period January 1959 to November 2007.

The paper begins with a new introduction that reviews the literature, motivates the paper's research question, and justifies its methodology. In subsequent sections, the author provides background on stable distribution theory, presents an infinite-variance critique of SVARs, discusses the data and estimation procedures used in VARs from which he obtains his residuals, and presents estimates of stable parameters for the error terms in the full-sample VAR. Next, he reports the results of new parametric-bootstrap tests of the null hypotheses: that each error term has finite variance, given the assumption that the error term being examined has an alpha-stable unconditional distribution. He then extends his case to the error terms in VARs estimated for sample subperiods, uses a generalized autoregressive heteroskedasticity (GARCH) filtering technique to determine whether heteroskedasticity can account for the thick tails of his VAR residuals, and compares the fits of his estimated stable distributions with the fits of normal distributions, t-distributions, and the estimated GARCH shock models.

Hannsgen adopts a classical hypothesis-testing approach to infer whether the stable-distribution parameter alpha—sometimes known as the index of stability—equals 2 in the error terms of a standard monetary SVAR model, modified to use stably distributed error terms. He finds that in his two full-sample VARs, alpha is less than 2 in most equations, and therefore, infinite variance is present. He also shows that his results are fairly robust to sample splits, changes in specification, and GARCH filtering. Diagnostics presented for the first time in this working paper show that the assumption of a stable distribution is generally appropriate for the VAR shocks, though Student's t-distributions also fit well in many cases. Hannsgen concludes that caution seems warranted in the use of SVARs. *www.levyinstitute.org/pubs/wp_682.pdf*

Permanent and Selective Capital Account Management Regimes as an Alternative in Self-Insurance Strategies in Emerging-market Economies

JÖRG BIBOW
Working Paper No. 683, September 2011

Research Associate Jörg Bibow's hypothesis is that a country's vulnerability and policy space depend on whether its capital account management (CAM) effectively contains the financial flows of non–foreign direct investment (FDI). In terms of the global financial crisis, a country's external positions and policy space determined whether it was able to implement stimulus measures sufficient to recovery.

Bibow focuses on the BRICs (Brazil, Russia, India, and China) and finds that CAM offers three major advantages: it creates macropolicy space, avoids financial vulnerabilities arising from unfettered global finance, and avoids the costs associated with reserve holdings sourced from unwarranted capital inflows. A further advantage is that CAM reduces the incentive for defensive macroeconomic policies and the concomitant need for "overspending" by the United States. CAM regimes can be effective if they are designed properly, says Bibow.

Financial crises in emerging-market economies (EMEs) were more frequent in the era of unfettered global finance (before the early 2000s). Currency appreciation and a corresponding loss in competitiveness, combined with rising asset

prices and consumption spending (by the privileged few), meant that a liberalizing developing country lost both monetary-policy autonomy and control over its financial system. For example, the carry trade is attracted by interest-rate differentials but such trade destabilizes currency-market behavior. And since US monetary policy, along with the peculiar economic conditions in the United States, effectively sets the benchmark for global monetary conditions, many EMEs prefer defensive macroeconomic policies focusing on competitiveness (and exports) in order to reduce vulnerabilities from current account deficits and foreign indebtedness.

This response from the EMEs suits neoliberal interests by keeping a lid on wages, but it magnifies deflation at the center of the global financial system, requires the reserve-currency issuer (i.e., the United States) to neglect the size of its current account deficit, and contributes toward capital flows to the EMEs. In order to resist currency appreciation, the EMEs face two principle policy choices: to follow suit and lose policy autonomy, or to recapture policy space by currency market intervention in support of the dollar. During the global financial crisis, these choices led to soaring foreign exchange–reserve holdings of the dollar (dubbed the "global capital flows paradox"). And when the Fed provided dollar liquidity through a network of bilateral swap arrangements between central banks worldwide, in combination with a renewed surge in private capital flows, there was a "global dollar glut" that severely impacted both the advanced economies and the EMEs.

Bibow notes that the Fed and Treasury rather than the International Monetary Fund have the systemic powers to act as international lender of last resort. It is questionable whether initiatives such as the Global Stability Board or the Financial Stability Oversight Council will reduce EME vulnerabilities, since reforms are merely adapting the preexisting institutional framework without challenging its intellectual presuppositions. Thus, recourse to self-insurance strategies remains the default option, but it comes at a significant cost when the EMEs swap higher-yielding assets for lower-yielding assets.

EMEs should explore CAM as an alternative to self-insurance, says Bibow, because it can be designed to refocus the activities of central banks (and sovereign wealth funds) to capture the alleged microeconomic efficiency gains (as warranted by domestic requirements) while avoiding the premium attached to self-insurance. Capital formation requires liquidity created by the financial system and, according to John Maynard Keynes, investment is driven by aggregate demand—which, in turn, is susceptible to macroeconomic policies. Moreover, the developing countries need to import capital goods rather than "capital." Thus, sufficient policy space is vital for deliberate macroeconomic management in line with domestic requirements.

Bibow investigates the respective BRIC approaches to CAM, from China's tight regulations to Russia's extensive liberalization. China was vulnerable to a collapse in trade because it was open and relied on exports (it did not suffer much damage through financial linkages). Despite its huge foreign reserves, however, its CAM regime mitigated the costs of self-insurance, since only a small part of its reserves was sourced from hot money inflows. China's favorable fiscal space, due to factors such as a very low inflation rate (while pursuing growth-oriented monetary policies) and an incomes policy that kept wages and productivity growth aligned, allowed it to launch a large macroeconomic stimulus package. And despite the link between the renminbi and the dollar, China's monetary policy stance maintained considerable independence from the United States. As a result, China quickly emerged from the crisis as the key engine of the global recovery. Its CAM regime may be a model for other EMEs to follow, suggests Bibow.

India relied on hot money inflows more than China did, so it had greater external vulnerabilities and reduced policy space. Given its healthy banks, however, India was not overly affected by the trade collapse and its economy recovered, supported by a sizable fiscal stimulus and by (monetary policy) easing from the Reserve Bank of India. Overall, India combines its greater reliance on non-FDI inflows with greater exchange rate flexibility, but self-insurance and CAM also play a role.

Brazil bounced back from the collapse in trade and commodity prices because its strength in domestic demand growth was supported by macropolicy (e.g., the role of the Brazilian Development Bank) and higher commodity prices. The country introduced a tax on portfolio inflows and banned short selling by onshore commercial banks to counter the *real*'s sharp appreciation in response to the resurgence of capital inflows. However, its relatively high inflation and real interest rates have attracted carry-trade investors. Brazil's financial openness is comparable to China's, but the greater role of hot

money represents a clear case regarding the costs associated with self-insurance.

Russia—the most financially open of the BRICs—was heavily exposed to global deleveraging in banking flows. Its oil stabilization fund mechanism largely absorbed the oil price windfall, but a credit-driven boom in domestic demand encouraged by foreign currency borrowing, alongside ruble appreciation, created significant self-insurance costs from unwarranted capital inflows and an inability to overcome the crisis by domestic means.

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Central Banking in an Era of Quantitative Easing

ANDREW SHENG
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In a presentation at the Inaugural Sim Kee Boon Institute Annual Conference on Financial Economics, Singapore Management University, Andrew Sheng, Tsinghua University, Beijing, and University of Malaya, Kuala Lumpur outlines various central banking mistakes during the global financial crisis (GFC), including the abandonment of Bagehot's Rule. The GFC stemmed from overconsumption financed by overleverage in association with undersupervised financial sectors in the United States and Europe. It was a crisis of fiat money for reserve-currency issuers because there was no hard budget constraint on the ability of the shadow banking system to create fiat money or oversight for systemic stability. Since finance can seriously harm the real sector, observes Sheng, it has to be regulated.

The three key functions of central banks are the maintenance of monetary stability, financial stability, and a robust payment system. But the emphasis in the last two decades has been monetary stability (i.e., inflation targeting), while neglecting macro-prudential measures. Moreover, the current linear, static, and partial analytical framework is inadequate when applied to the systemic risk and behavior of financial market networks.

The GFC led to the realization that there were independencies between money, credit, financial stability, jobs, and growth. Central bankers had to switch from rules to full discretion to deal with the crisis. The greatest blind spot was the explosive rise of shadow banking assets to $20 trillion that was not included in the measurement of monetary aggregates or systemic risk.

According to Bagehot's Rule, the central bank should lend freely at market interest rates against good collateral in a financial crisis. Under the gold standard, the central bank held gold reserves as a buffer and lent freely during a period of illiquidity, while commercial bankers kept fairly large buffers of liquidity and capital (and lent at fairly high rates). Thus, the gold standard had a direct impact on both businesses and banks, which were regulated by the central bank. When the gold standard was abandoned, fiat money had no hard budget constraint and the shadow banks provided the largest credit expansions.

The central bank, as lender of last resort during the GFC, became a non-elected fiscal agent that violated the principle of no taxation without representation. Furthermore, there were no clear guidelines regarding bailouts. Moreover, the purchase of sovereign debt resulted in a shift from fiscal to monetary debt, which has an inflationary cost and increases the disparity between rich and poor. Meanwhile, the largest financial institutions were bailed out and became larger through consolidation.

Zero interest rate policy or ZIRP is the outcome of a procyclical feedback loop when fiat money is created without hard budget constraints. It stems from historical forces such as globalization, deregulation, technology, and financial engineering. This policy did not lead to massive devaluations that bankrupted countries with net foreign liabilities because it was a collective-action response within the four reserve-currency regions, where the largest region had most of its foreign liabilities denominated in its own currency.

The savings glut of surplus countries may have contributed toward financing deficit-country consumption but most of the loss of monetary control was due to not controlling the credit multiplier of shadow banks. Moreover, netting derivatives for capital calculations disguised the system's true leverage and the central bank's lender-of-last-resort function anchored such feedback loops. Shadow-banking credit drove market interest rates lower, creating the derivative bubble. Finance as a sector (excluding derivatives) was larger than national GDP so the central banks resorted to ZIRP to keep the bubble from imploding. In sum, financial engineering was

the channel for turbo-charging credit but the GFC was the inevitable outcome of the fiat money feedback loop without a hard budget constraint.

Quantitative easing (round 2) and ZIRP arose from a domestic collective-action trap because deficit countries cannot raise taxation. There is also a global collective-action trap because no country is willing to cede sovereignty and support such global issues as reserve money, central banking, regulation and fiscal action. We need systems thinking in central banking, says Sheng. Unconventional monetary policy is both time and logically inconsistent, and it has created high price distortions of capital, labor, and assets.

Systems thinking will lead us toward a better understanding of how to respond in a post-crisis world. It induces us to look for leverage points, where small changes could lead to large changes in behavior. Anti-trust laws for the financial industry would ensure that markets remain level and fair. Avoiding collective-action traps would require moral suasion toward common values for the common good and regulating the commons with mutually agreed taxes such as a Tobin or carbon tax.

Public opinion is at the cusp of believing in either fiat money or commodity money, says Sheng. If reserve-currency economies do not restore fiscal and monetary discipline, then inflation and the flight to gold will continue.

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Quantitative Easing, Functional Finance, and the "Neutral" Interest Rate

alfonso palacio-vera

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This paper explores the potential for the macroeconomic stabilization of debt monetization when conventional monetary policy is unavailable. Alfonso Palacio-Vera, Universidad Complutense de Madrid, Spain, develops a simple macroeconomic model (with Keynesian features) of a closed economy consisting of four sectors: creditor and debtor households, businesses, and government.

The author finds that the expansion from debt monetization operates mainly through a reduction in the financial cost to the treasury of servicing the public debt, and prevents the "neutral" real interest rate from falling into negative territory.

The main policy conclusion is that reaping the benefits requires a very high degree of coordination between the fiscal and monetary authorities in terms of the fiscal policy stance, the inflation target, and the mix of debt monetization by the central bank.

The conventional view is that the setting of short-term interest rates by central banks stems from manipulating the supply of banking-system reserves and the presence of significant "liquidity effects." The central banks guide market interest rates toward their target by injecting or draining base money through open-market operations. According to some scholars, however, this approach is fundamentally misconceived, as (event) studies show a strong disconnect between the level of short-term interest rates and the quantity of liquidity actually supplied.

Over the past two decades, two regimes have controlled overnight interest rates. A reserve regime relies mostly on imposing reserve requirements that must be met on average over a maintenance period of several weeks. By contrast, a pure interest rate–corridor regime relies on standing facilities to achieve a target interest rate. A variant of this regime is a floor system where reserve balances are remunerated at the target overnight rate of the central bank in the interbank market. This allows the central bank to independently target both the amount of bank reserves and the overnight interest rate (the "decoupling" principle). The main reasons for a central bank to adopt a floor system are an increase in broad liquidity, leading to an increase in financial asset prices, and higher treasury revenue in the form of interest income.

A liquidity trap occurs when the real interest rate is negative. This definition is for a closed economy without a government sector, where aggregate saving is equal to the level of output consistent with constant inflation and investment. A "neutral" interest rate is defined as the long-term real interest rate, which is neutral with respect to the inflation rate and tends to neither increase nor decrease the rate in the absence of transitory supply shocks. An economy is in a liquidity trap if the neutral interest rate plus the expected rate of inflation is less than a time-varying term premium (which lenders require to grant credit or purchase long-dated securities). An economy is more likely to exhibit a liquidity trap when the neutral interest rate and the expected inflation rate are lower and the term premium is higher.

Palacio-Vera employs a closed-economy model to analyze the macroeconomic impact of the monetization of public and private debt. He assumes that the degree of "liquidity preference" is exogenous and reflected in the values taken by the relative proportion of debtor households and the long-run debt-to-capital ratios of debtor households and businesses. A key assumption is that the aggregate availability of bank reserves does not constrain loan expansion, and hence an increase in bank reserves does not per se increase the banks' willingness to grant credit.

Steady-growth equilibrium represents a hypothetical period of sufficient length to enable all variables in an economy to settle at constant rates in the absence of new shocks. In steady growth, each sector's stock of debt must grow at a pace equal to the sum of the central bank's inflation target and the "natural" growth rate. The results of the simulations clearly suggest that, for plausible values of the model parameters and initial conditions, the joint interaction of the fiscal and monetary policy rules drives the economy toward its steady-growth equilibrium in the long run.

A key issue in this study is whether changes in the proportion of business and government debt that is monetized by the central bank affect the real interest rate. Under the institutional arrangements outlined by the author, printing money to finance government spending, as advocated by Abba Lerner's functional finance approach (1943), will yield an expansionary and noninflationary effect (even in steady growth), provided the current ex-ante real interest rate falls short of the current growth rate of output. The implementation of an expansionary fiscal policy supported by full monetization of government debt can push the real interest rate into positive territory. Whether this is sufficient to pull the economy out of a structural liquidity trap will depend mainly on the level of the natural rate of growth as well as the size of the risk/term premium on different types of securities. Palacio-Vera also shows that the efficacy of the channel that operates through the compression of the risk/term premium on these securities exhibits considerable uncertainty. As long as a nation can issue its own currency, a structural liquidity trap can be overcome through the monetization of an expansionary fiscal policy, as advocated by Lerner's functional finance approach, says the author. *www.levyinstitute.org/pubs/wp_685.pdf*

Orthodox versus Heterodox (Minskyan) Perspectives of Financial Crises: Explosion in the 1990s versus Implosion in the 2000s

JESÚS MUÑOZ
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Various models have been developed to explain the causes, consequences, and remedies of financial crises. Orthodox models were constructed to explain the financial crises in the 1990s, while heterodox models were formulated to explain what happened in the 2000s. The key variables thought to precipitate crises included the exchange rate, budget deficits, monetary policy, and banking systems. Recent models emphasize the role of company balance sheets and capital flows, where public and private debt play a role in the genesis and aftermath of crises.

Researcher Jesús Muñoz compares the orthodox and heterodox perspectives of financial crises and finds that Hyman P. Minsky's heterodox model links all elements of economic systems. Thus, Minsky's financial instability hypothesis (FIH) produces a more coherent theoretical and policy analysis of recent (and more complex) crises. Orthodox models show that instability is the result of exogenous (random) shocks to the system, so they cannot predict crises (they confuse symptoms with causes). The policy prescriptions in Minsky's model, however, are based on the notion that structures evolve from robust to fragile and that this transformation can be predicted.

Nobel Prize–winning economist Paul Krugman's neoclassical orthodox model (1999) represents a "fourth generation" model, where money plays an in-depth part and investment is the system's engine. His model aims to clarify the role of balance-sheet problems in restricting productive investment and the concomitant impact of the exchange rate in creating a vicious circle that causes a financial crisis. In order to reverse a deteriorating current account, a country must undertake a large depreciation of its currency that worsens the liabilities of local firms. Hence, the exchange rate crisis has a sustained impact on the economy and the economy must repair its balance sheets. Banks do not play an essential role but respond by restraining credit and hence investment.

Krugman acknowledges the roles of investment and debt as the crisis unfolds, says Muñoz, but his model does not address the internal nature of the crisis beyond stating that the crisis started in the real sector (in terms of entrepreneurial

wealth). By not recognizing that productive investment (including the twin processes of asset allocation and financial investment) is endogenous to the financial sector, only emerging economies are deemed vulnerable to balance-sheet problems. As a result, policy is based on ex-post measures such as interest rate hikes, capital controls, and emergency credit lines rather than preventive structural reforms.

Other orthodox explanations of financial crises focus on the contribution of emerging markets to a worldwide shortage of assets due to micro, macro, and political deficiencies. Speculative bubbles and lower inflation are merely market mechanisms for bridging gaps in assets. Asset shortages are the source of instability that produces global imbalances, deflation, recurrent bubbles, and financial panic. The prescription is that financial systems must grow in qualitative terms worldwide and bubbles are necessary to attain equilibrium. Both monetarists and neoclassical economists neglect John Maynard Keynes's message about uncertainty and the absence of a self-regulatory mechanism.

Minsky's FIH describes how the financial sector (investment and debt) is at the heart of the unfolding of crises. The FIH is both an investment theory of the business cycle and a financial theory of investment. Minsky's theories follow Keynes by emphasizing the macroeconomic dangers of speculative bubbles in asset prices, as well as the notion of uncertainty. But while Keynes focuses on cash flows, Minsky focuses on cash flows and debt. Three types of borrowers (hedge, speculative, and Ponzi) contribute to the eventual accumulation of insolvent (private) debt, which is the internal mechanism pushing an economy toward crisis. Debt leads and investment, which is constrained by the firms' finance rather than animal spirits, responds. Hence, Minsky objectively identifies the source of uncertainty.

The core of Minsky's model is that money matters, markets work out of equilibrium, and both governments and central banks play a crucial function. According to Minsky, discretionary intervention from both the government (budget deficits) and the central bank (as lender of last resort) mitigates instability by creating upper and lower limits for constraining the dynamics of the financial system (stabilizing interest rates and asset prices). The suggestion is to replace debt with equity (as a permanent remedy for reducing risks arising from interest rate hikes), address the targets of speculation, and implement

preventive measures with respect to the links between investment and debt. Policies that balance cash flows address the problems of instability and restore equilibrium.

The similarities between the orthodox and heterodox models of financial crises are that crises begin with a large and sudden decline in the price of a main financial asset. And since investment is the engine of the economic system and the business cycle, emphasis must be placed on the financing of investment and debt, and on balance sheets. However, orthodox models rely on exogenous triggering factors, while heterodox models rely on endogenous ones, including speculation, where the role of government is preventive rather than palliative. Moreover, the orthodox models ignore the pivotal role of money in the unfolding of crises.

Keynes and Minsky focus on behavioral finance, while orthodox models rely on equilibrium and rationality, efficient markets, and perfect information (in the neoclassical tradition). The main contributions of heterodox economists to explaining crises are organicism, expectations, the consideration of cash flows and debt, and the role of money. Despite their differences, both sets of models complement each other by drawing attention to specific issues such as the impact of crises on income distribution.

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Program: The Distribution of Income and Wealth

The Measurement of Time and Income Poverty

AJIT ZACHARIAS
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Official poverty thresholds assume that households at or below the income-poverty threshold nevertheless have sufficient time for household production. Senior Scholar Ajit Zacharias reviews existing approaches to measuring time and income poverty within a unified framework and examines the income-time nexus for these types of households. He proposes a time-income poverty measure that accounts for intrahousehold disparities in the division of labor.

Most "time-crunch" studies fail to compare actual time spent by individuals on unpaid work, paid work, and personal care against their respective thresholds. Zacharias adopts Claire Vickery's (1977) measure of time-income poverty and modifies it to account for intrahousehold disparities in time deficits. This approach can be used to identify households suffering from underemployment and overwork, and to develop an antipoverty strategy such as the creation of jobs that pay a living wage.

The Vickery modification to the standard income-poverty threshold is based on the notion that a time deficit represents an uncompensated loss in necessary household production for employed individuals. A time deficit is valued using the unit price of market substitutes for household production. Poverty is evaluated under the hypothetical scenario where all individuals could work full-time and wage income is the only form of income. An advantage of this framework is that it helps to identify individuals who would be poor even if they could work full-time.

The inability to categorically define the income and consumption available to each person in a household favored the choice of the household or family as the unit of analysis in the measurement of income poverty. The difficulties that prevented choosing the individual as the unit of analysis, however, do not apply in the measurement of time poverty (i.e., individuals in a household cannot pool their time). Thus, a two-dimensional poverty measure can be devised in terms of individuals and households. Interhousehold comparisons of time poverty that do not account for intrahousehold disparities in the division of domestic and paid labor can be fundamentally inequitable toward individuals in the household and skew the measurement of poverty (e.g., egalitarian versus nonegalitarian households). In order to account for the time poverty of individuals within a household, it is necessary to change the Vickery definition of time poverty—a household is designated time poor if hours of employment exceed the available time for at least one of its members.

Zacharias modifies Vickery's equations to account for the notion of individual time deficits or surpluses within a household, and to adjust the Vickery threshold for income poverty (to also account for the replacement cost of the foregone amount of household production that accompanies the time deficit of individuals in a household). This approach accounts for intrahousehold disparities and individual time deficits. Using this two-dimensional poverty measure, a household is designated to be poor if its income is less than the Vickery threshold or if any household member has a time deficit.

The standard approach to poverty alleviation via income transfers can be applied to income-poor households according to the Vickery threshold but this may not be effective or desirable, says Zacharias. The problems of missing and imperfect markets can compromise the effectiveness of an antipoverty strategy that relies solely on income transfers. For example, modified measures of time poverty may be useful in identifying the "genuinely" time poor among income-nonpoor households. *www.levyinstitute.org/pubs/wp_690.pdf*

Levy Institute Measure of Economic Well-Being

Quality of Match for Statistical Matches Used in the Development of the Levy Institute Measure of Time and Income Poverty (LIMTIP) for Argentina, Chile, and Mexico
THOMAS MASTERSON
Working Paper No. 692, October 2011

This paper is part of a project supported by the United Nations Development Programme and the International Labour Organization to develop alternatives to conventional income poverty thresholds. Research Scholar Thomas Masterson describes the construction of synthetic datasets to estimate the Levy Institute Measure of Time and Income Poverty (LIMTIP) for Argentina, Chile, and Mexico. Since no single dataset includes all the required data, he creates a synthetic data file for each country by combining various sources of information about demographics, income, transfers, taxes, and time use.

Masterson finds that the quality of his statistical matching is very good on the whole, given the nature of the source datasets. The overall distribution of time use is transferred with reasonable accuracy and the distributions within small subgroups are transferred with good precision. Therefore, the LIMTIP is able to adequately portray the distribution of household production, given the data limitations.

The source datasets for Argentina are the 2005 Dirección General de Estadistica y Censos' Encuesto Annual de Hogares (EAH) and time-use module (UT) for Buenos Aires. Missing values are replaced by the method of multiple imputation with hot decking. Since the UT includes individuals aged 15 to 74, younger and older individuals are discarded from the EAH file. And since the UT survey includes only one individual in each household, total household production is limited to comparisons at the aggregate level.

The time-income poverty measure is estimated by constructing thresholds for the time spent on household production; that is, the average values of time spent on household production differentiated by the number of adults and children. In principle, this represents the average amount of household production required to subsist at the poverty income level. The poverty band for household incomes ranges from 75 percent to 150 percent of the poverty line and includes households with at least one nonemployed adult. The transfer of hours spent by individuals on household production in the reference group includes the use of strata variables such as the poverty band, one or more nonemployed adults, number of children and adults, sex, employment status, and household income.

Since the time-use survey is a subset of the income and demographic survey, there is a very close alignment between surveys along all seven strata variables. The bulk of the matches occur in the first round (69 percent), but this figure is lower than the author's other time-use matches for other countries due to relatively high number of strata variables. An additional 14 rounds were required in the matching process. The quality of match within population subgroups shows generally good results, with the largest deviation related to the sex variable.

The source datasets for Chile are the 2006 Encuesta Caracterización Socioeconómica Nacional (CASEN) and the 2007 Encuesta Experimental sobre Uso del Tiempo en el Gran Santiago (EUT), which only covers greater Santiago. The EUT includes individuals aged 12 to 98 in Gran Santiago, so younger and older individuals, as well as individuals living in areas outside of Gran Santiago included in the CASEN file, are excluded. The strata variables for the match are identical to those used in the Argentina match. There is a very close alignment between surveys for five strata variables, with the exceptions of number of adults and household income (due to the poor income data in the EUT).

The bulk of matches (67 percent) occurred in the first round, but another 23 rounds were used in the matching process. Including 12- to 14-year-olds in the time use survey resulted in higher Gini coefficients and lower percentile values than the figures for Argentina (this age group tends to do less household production work). The quality of match within population subgroups shows generally good results and the ratios by category are well reproduced in the matched file (the largest deviation also related to the sex variable).

The source datasets for Mexico—the 2008 Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) and the 2009 Encuesta Nacional sobre Uso del Tiempo (ENUT)—cover the entire country. The strata variables are identical to those in Argentina and Chile, with the addition of a geographical indicator for rural households. Since both surveys are national in scope and carried out within one year of each other, they are expected to be well aligned. The bulk of the matches (80 percent) occur in the first round, but an additional 61 rounds are required due to the high number of records and strata variables.

The quality of match within population subgroups shows generally good results and the ratios by category are well produced in the matched file, even for categories with the highest average deviation. The distributions within small subgroups such as one adult with two children are transferred with good precision. The largest difference is attributed to single-adult households with children in both rural and urban areas. As expected, the largest difference is by sex in rural areas.

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Program: Gender Equality and the Economy

Estimating the Impact of the Recent Economic Crisis on Work Time in Turkey

EMEL MEMIS and S. A. KAYA BAHÇE
Working Paper No. 686, September 2011

In times of economic crisis, efforts are made to compensate the loss in household income by adjusting hours of work. According to Research Associate Emel Memis and S. A. Kaya Bahçe, Ankara University, Turkey, the consequences of the recent crisis in terms of work time have been neglected. They estimate the change in time-use patterns for men and women in Turkey and find that preexisting gender inequalities in work time are deepened by the economic crisis. Most of the burden relating to paid and unpaid work time is directed toward women.

The authors introduce a methodology to investigate the effects of labor-market conditions on time-use patterns when there is a lack of two distinct datasets. The methodology is based on the endogenous relationship between employment status and time allocation. It is hypothesized that economic crises change the employment status of individuals because of higher unemployment and affect the intrahousehold allocation of work time.

Using the first and only time-use survey compiled by the Turkish Statistical Institute, in 2006, Memis and Bahçe estimate paid and unpaid work time in a two-step process: (1) applying a binary logit model to estimate the unemployment risk of men and women in couple households (i.e., the probability of being unemployed conditional on participating in the labor market); and (2) estimating the effect of unemployment risk on paid and unpaid work time for each spouse. The impact of the economic crisis is then calculated based on actual (national) unemployment rates and specific sectors.

The survey data represent a sample of 2,491 married couples living in nuclear families, where 42 percent of households live in poverty, one-third of couples have no children, and 62 percent of households have only one wage earner. Dual-earner couples and couples without any income each represent 19 percent of the sample. Age and education variables indicate the factors that influence the hiring and firing decisions of employers. Ownership of domestic appliances is used as a control to signal household well-being and living standards. Additional controls are urban/rural residence and number of children.

A marginal change in a spouse's unemployment risk shows that women's paid and unpaid work time rises significantly. Women's unpaid work time, for example, rises at a rate of four times that for men (five times in urban areas). Based on these estimates, women's total work time is shown to increase by 5 percent, while men's total work time increases by only 1 percent. This disparity has widened the existing gender gap by 26 percent (49 percent in urban areas). When a spouse is employed in the industrial sector (the sector hardest hit by the crisis), total work time rises by 12 percent for women and 2 percent for men. These findings support the argument that the adjustments in hours of work differ between men and women, and that preexisting gender inequalities in work time are deepened by economic crises.

Employed women spend nine hours per day on paid and unpaid work, compared to seven hours for men. Unpaid work represents 55 percent of women's total work time, while that for men is only 12 percent. There is no one-to-one substitution between paid and unpaid work time, thus confirming the notion that employed women conduct a double shift.

The first-step estimations suggest that unemployment risk significantly decreases with age for men (at an increasing rate). Women, however, face a higher unemployment risk with age (at a decreasing rate). Individuals (including youths) with a higher level of education are at a higher risk for unemployment due to the rise in unemployment rates among white-collar workers. The likelihood of being unemployed depends on (regional) labor-market conditions and on an individual's sex. Ownership of domestic appliances may save time from housework and influence the time spent on job seeking for men, but such "labor saving" domestic technology does not save work time for women.

The second-step estimations suggest that there is a significant and positive relationship between a husband's unemployment risk and time devoted to paid and unpaid work by his spouse (except in rural areas); that is, married women in Turkey spend more time on both paid and unpaid work when there is an increase in the unemployment risk of their spouse. In rural areas this effect is only observed for women's paid

work time. In contrast, there is no significant relationship between women's unemployment risk and men's paid work time. Controlling for other individual characteristics, paid work time significantly increases (at a decreasing rate) with age, while unpaid work time decreases with age. Education increases women's paid work time and decreases their unpaid work time (perhaps because of higher bargaining power) while increasing men's unpaid work time.

The study shows that gender-based allocation of unpaid work differs between rural and urban areas. It also appears that both men and women share the unpaid work burden with their daughters (younger than 16), and that there is a significant negative relationship between the number of daughters and married women's unpaid work time (except in urban areas). In contrast, more sons (younger than 16) result in less paid work time and more unpaid work time for women. The number of sons does not appear to have a significant impact on women's work time but does influence men's work time, as they spend more time on caring activities (except in rural areas).

As a result of the economic crisis, married women living in nuclear-couple households work almost half an hour longer per day. The gap between men and women decreases in paid work time but increases in unpaid work time for both scenarios. The results provide supporting evidence for the argument that household job losses disproportionately affect women's work burden and that adjustments in hours of work differ between men and women.

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Unpaid and Paid Care: The Effects of Child Care and Elder Care on the Standard of Living

KIJONG KIM and RANIA ANTONOPOULOS
Working Paper No. 691, October 2011

This paper by Research Scholar Kijong Kim and Senior Scholar Rania Antonopoulos extends Working Paper no. 610 by exploring how child care and elder care in the United States can improve the quality of life for care receivers, caregivers, and society. They identify the gaps between the supply of and demand for care services, proposing that these can be narrowed through public provisioning related to early childhood education and geriatric and home-based hospice care services.

The authors evaluate the employment and distributional impacts of expanding social care, and compare their findings with infrastructure investment. Investing in the social care sector ($50 billion) generates twice the number of jobs (1.2 million) as comparable levels of investment in the construction sector, while creating 16 times more jobs for women and 2.5 times more jobs for low-income households (first to fourth deciles). These findings highlight the inclusive nature of social care investment by addressing chronic unemployment and the poverty of disadvantaged workers. Thus, an effective strategy is to expand home healthcare under Medicare and Medicaid, the Head Start programs for low-income households, and state and local pre-K programs.

Early childhood education has long-term benefits in terms of academic achievement, labor market outcomes, lower crime rates and higher productivity. Children also benefit in terms of the development of their cognitive and noncognitive skills, as well as their economic well-being. Home-based health care services enhance the (emotional) quality of life for patients and caregivers, improve medical outcomes, and reduce physical and psychological care burdens.

The demand for early childhood development services is greater than officially recognized, say the authors. In addition, family, friends, and other volunteers currently cover more than half of long-term care responsibilities for the elderly. Moreover, the relative financial burden of care is skewed toward poor households. The United States ranks near the bottom in terms of enrollment in center-based care as public expenditure on child care and early education programs is less than 0.4 percent of GDP. And approximately 27 million people will need some type of long-term care by 2050.

Kim and Antonopoulos maintain that the administration of investment directed toward expanding social care does not require an equal expansion of government nor novel approaches to channel funds through the present delivery systems. Nor does it entail compromises in the quality of care or skill mismatches of newly hired workers (through on-the-job training). Scaling up service delivery would not overwhelm the system or require extra federal scrutiny.

Using input-output analysis, social accounting matrices, and microsimulation techniques, the authors analyze the policy and distributional impacts on disaggregated subgroups of households and industries at the macro and micro levels. This

approach makes it feasible to incorporate a flexible job-targeting scheme in order to maximize the reduction of poverty, and to account for the direct and indirect (multiplier) impacts of stimulating external demand.

Social care investment in the United States is inclusive because it provides employment for people with less than a high school diploma, entry-level jobs for the young, and work opportunities for people with some higher education (e.g., preschool teachers). Social care investment also has a stronger equalizing effect relative to infrastructure-construction investment. It hires more managers and professionals, and these workers receive wages comparable to those in the construction sector. Investment directed toward caring for the elderly and children is effective employment policy. Mobilizing unused domestic labor resources also promotes gender equality. Thus, social care delivery should be a targeted work project.

When the social care sector is expanded by half, 8 of 10 new jobs are within the care sector and more than 90 percent of jobs created go to women. In contrast, more than 80 percent of jobs created in the construction sector go to men. The inclusiveness of social care investment is further reinforced by the fact that 45 percent of jobs go to workers from households with income below the fourth decile. Women, especially minorities and immigrants from poor households, are most likely to benefit from newly created jobs in the care sector.
www.levyinstitute.org/pubs/wp_691.pdf

Time Use of Mothers and Fathers in Hard Times and Better Times: The US Business Cycle of 2003–10

GUNSELI BERIK and EBRU KONGAR
Working Paper No. 696, November 2011

The gender gap in paid work narrowed over the 2003–10 business cycle in the United States. This study examines whether the "Great Recession" contributed to a convergence of the gender disparity in unpaid work, as well as a progression toward gender equity in workloads and time spent on leisure and personal care.

Using the American Time Use Survey (ATUS), Gunseli Berik, University of Utah, and Research Associate Ebru Kongar find that the gender gap in unpaid work followed a U-shaped pattern, narrowing during the recession but widening thereafter. This pattern suggests a return to the prerecession division of unpaid labor, and was driven primarily by gender differences in housework hours and the fact that women reduced the time they spent on unpaid labor while increasing the time they spent on paid labor. In combination, leisure and personal care increased for men but declined for women over the business cycle.

The ATUS comprises 25,430 time-diary respondents between the ages of 18 and 65 who resided in the same household with a spouse and at least one child. Following the recent US empirical literature on time use, the authors distinguish between four uses of time: (paid) market work, unpaid work, leisure and sports activities, and personal care. They divide the most recent US business cycle into three stages: expansion (January 2003 – November 2007), crisis and recession (December 2007 – June 2009), and recovery (July 2009 – December 2010). A replicate-variance methodology recommended by the Bureau of Labor Statistics is used to generate estimates that correct for sampling bias as well as nonsampling errors.

The findings show that mothers' and fathers' distribution across employment categories and work hours converged over the business cycle. During the recession, the convergence was driven primarily by increases in the labor force participation rates of mothers rather than the disproportionate job losses of fathers. The gender difference in both paid and unpaid work hours decreased by 2.6 hours and 2.4 hours, respectively. At this time, men shifted their unpaid work time toward child care, while women increased their paid work hours by reducing the time they spent on unpaid work, personal care, and leisure. After the recession, the convergence continued as mothers dropped out of the labor force and unemployment increased for fathers. The total weekly work hours declined over the business cycle for both men and women, but at a faster pace for men, so that the gender gap widened from 1.9 hours to 4.1 hours. The progress toward a more gender-equitable distribution of unpaid work during the recession was reversed during recovery, when women increased the time they spent on unpaid work, and the gender gap widened in terms of the time spent on leisure and personal care. Thus, the paid – unpaid work trade-off is stronger for women than for men, say the authors.

These findings suggest that the answer to the longstanding macroeconomic question concerning the extent to which home production substitutes for previously purchased goods and services during recessions should include an analysis based on gender. The market-versus-home-provisioning trade-off seems to apply to women but not to men, and the welfare effects of the business cycle vary by gender. Such asymmetric findings are likely driven by rigidities in the gender-segregated nature of housework and childcare.

The standard Duncan-Duncan (1955) segregation index measures gender segregation in paid work and the extent to which women and men perform different types of housework. The authors calculate the index for 24 activities and find that there was a convergence in the time spent on core housework tasks during the recession. After the recession, women increased the hours they spent on core housework tasks by almost an hour per week, while men increased the hours they spent on other housework activities by less than one-half hour per week. Thus, any gender egalitarian effect of the recession on housework was short-lived.

The authors expect that the across-groups effect—the U-shaped pattern in the share of individuals who were out of the labor force over the business cycle—would partly explain the U-shaped pattern in the gender differences in unpaid work over the same period. They also expect that the within-groups effect—changes in the gender differences in unpaid work hours within each employment category—would contribute to a narrowing of gender differences in unpaid work hours during the recession. Before the recession, the majority (82 percent) of the 19.9-hour gender difference in unpaid labor was due to differences within employment categories. During the recession, the within-group effect explained a slightly larger share (84 percent) of the 17.7-hour difference in unpaid labor. While both effects helped narrow the gender disparities in unpaid work during the recession, most of the decline (63 percent) was attributed to the within-groups effect. During the recovery stage, the within-groups effect accounted for an even larger share (89 percent) of the subsequent widening disparity in unpaid work (18.2 hours).

The results of the decomposition analysis suggest that the Great Recession contributed to a more equitable sharing of unpaid work within the household. And as more data become available, it will be possible to examine the paid labor –

unpaid labor nexus; specifically, whether the U-shaped gender difference in unpaid work hours has continued during the recovery stage.

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Program: Immigration, Ethnicity, and Social Structure

Effects of Legal and Unauthorized Immigration on the US Social Security System

selçuk eren, hugo benítez-silva, and eva cárceles-poveda
Working Paper No. 689, October 2011

Undocumented immigrants in the United States represent 11.2 million people, or approximately 3.7 percent of the total population (as of March 2010). Research Scholar Selçuk Eren, and Hugo Benítez-Silva and Eva Cárceles-Poveda, SUNY at Stony Brook, New York, analyze the long-term effects of legal and unauthorized immigration on the financial viability of the US economy and Social Security. Using a lifecycle overlapping generations (OLG) macroeconomic model, they measure remittances, savings, and the labor productivity of immigrants, and explicitly account for the trade-off between the positive and negative effects of a move toward legal status.

The authors find that the legalization of undocumented immigrants has a positive effect on economic aggregates such as capital stock, output, consumption, and labor productivity, and on welfare; for example, a 50 percent legalization rate would add $36 billion to the US economy. This result, however, should be taken with caution as the positive effect may be over- or underestimated, depending on the model assumptions about the social insurance system and taxation, respectively.

The general equilibrium framework explicitly accounts for the decisions made by immigrants regarding domestic savings versus remittances. The authors analyze the differential economic effects between resources saved in the host country versus resources remitted to other countries (e.g., immigrants planning to stay longer are less likely to send money back home, thereby saving more money that increases capital and

future earnings). They also analyze immigrant decisions regarding labor-supply productivity, consumption, wealth accumulation, and retirement, in combination with different incentive structures and eligibility rules for retirement and unemployment benefits. The general equilibrium effects of migration are particularly important when studying the sustainability of social insurance programs because changes in wages, labor productivity, and interest rates directly affect tax revenues and government debt (and the effects of reforming the system). Undocumented immigrants cannot access Social Security benefits but they can receive unemployment insurance (at a slightly lower level than natives and legal immigrants).

In the OLG model, individuals maximize expected discounted lifetime utility and immigrants differ according to three key dimensions: savings, usage of the social insurance program, and labor productivity. The main stylized facts about the immigrant population are derived from the American Community Survey (2009). Information about remittances is derived from the Mexican Migration Project and the Latin American Migration Project. These projects provide a complete life history for both household heads who returned home and those who remained in the United States.

The datasets provide 9,328 observations that represent 10 countries and more than half of the total number of US immigrants. Approximately two-thirds of households sent monthly remittances (averaging $404 per month), and these remittances were more common among unauthorized immigrants than legal immigrants (75 percent versus 55 percent). A key feature in the model is that legal immigrants retain relatively more savings than undocumented immigrants. In addition, more education or time spent in the United States leads to a lower likelihood to remit and a greater likelihood to save. The authors assume that undocumented immigrants have access to 80 percent of the potential wages of other types of immigrants (and natives).

The move toward legalization translates into lower remittances and higher savings, and such positive consequences as lower interest rates, a higher tax base, and more economic growth. In contrast, there is a higher usage of social insurance programs (e.g., unemployment insurance and retirement benefits) and an increase in the labor supply and overall output that puts downward pressure on wages and upward pressure on interest rates. Legalization of undocumented immigrants

as a welfare-improving strategy mainly depends on the trade-off between the decline in remittances and the greater access to social insurance programs. If 30 percent of undocumented immigrants are legalized, Social Security benefits are not affected. However, if 50 percent of immigrants are legalized, there is a slight decline in benefits. A curious finding is that the welfare gains for the newly legalized households are substantial but the other groups are slightly worse off. However, there is an indirect positive effect for natives and legal immigrants living in mixed households.

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Program: Economic Policy for the 21st Century

Access to Markets and Farm Efficiency: A Study of Rice Farms in the Bicol Region, Philippines

SANJAYA DESILVA

Working Paper No. 687, September 2011

The Bicol region is the poorest region in the Philippines because it is isolated and mountainous. Research Associate Sanjaya DeSilva analyzes rice farms in the region and finds that there have been substantial gains in terms of yield, unit costs, and efficiency in the last two decades. The spread of markets was partly attributable to rapid population growth, but public investments also played a role. Thus, the urban-industrial hypothesis proposed by Theodore W. Schultz (1953) may no longer be relevant, says DeSilva.

In Schultz's view, the urban-industrial center functions as a source of technological innovation with relatively efficient factor and product markets. Agriculture situated favorably in relation to the center will benefit from well-functioning economic organizations, including minimal communication and transaction costs.

Using household-level data from the Bicol Multipurpose Surveys in 1978, 1983, 1994, and 2003 for Camarines Sur, one of six provinces in the Bicol region, DeSilva synthesizes two lines of research: (1) investigating the causes and consequences of transaction costs and dysfunctional markets; and

(2) analyzing the determinants of farm productivity and efficiency. Based on insights from previous studies, his primary hypothesis is that greater access to markets enhances both technical and cost efficiencies of farms.

Two proxy variables measure market access at the village level: distance to the market town and population density. Correlating these variables with the ratio of the buying and selling price of rice locally verifies that the variables adequately capture transaction-cost conditions, but they do not fully account for the disadvantages associated with isolation and low population density.

It is expected that villages with greater access to markets have higher average farm yields and lower unit costs. The association between yield and market access met expectations in 1983, but it became markedly weaker thereafter as relative yields improved in the distant and sparsely populated villages. This spatial convergence may have resulted from improvements in transportation and communication infrastructures, the institutional environment, and population growth, says DeSilva. In contrast, unit costs in 1983 were not strongly correlated with distance to the market town and decreased sharply with population density. Since then, the decline in unit costs has been most pronounced in villages with low population density close to market towns (lower labor and land costs may have eroded in the remote villages due to greater labor mobility and improved market infrastructure).

DeSilva estimates the Cobb-Douglas production and cost frontiers for farm households between 1983 and 2003. He finds evidence of scale economies in rice farming, an outward shift of the production frontier, and an inward shift of the cost frontier. He also finds substantial improvements in technical and allocative efficiencies. A further finding supports his hypothesis of market development: a strong negative relationship between cost efficiency and distance to the market town, and a strong positive relationship between cost efficiency and population density in 1983 that has since weakened considerably. Unlike unit costs, cost efficiency is conditional on factor prices. Using a benchmark model, DeSilva finds that his qualitative results were not affected by the addition of household-level control variables such as education, and village-level control variables for factor prices and institutional conditions (e.g., road quality).

A multivariate analysis investigates the underlying causes of differences in farm productivity and efficiency. High yield is determined by the availability of irrigation, educational levels, low prices for fertilizers and tractors, and extension services. Farm size has a negative effect on yield, thus confirming the notion that rice farming involves diseconomies of scale. The relationship between market access and farm productivity has weakened as a result of improvements in infrastructure in the peripheral villages.

The fixed-effect estimates show that increases in population density and improvements in road conditions reduce unit costs. In addition, intertemporal changes in the age of farmers and fertilizer prices are positively correlated with intertemporal changes in unit costs. Village-level market accessibility influences farm outcomes as remote villages had lower yields in 2003, increases in population density had a positive effect on improving yields and reducing unit costs, farms in villages with access to extension services had higher yields in 1983, and the transaction-cost index in the rice market had no effect on either the level of change in yield and unit costs.

The frontier analysis presents several additional insights about how village-level market accessibility influenced farm outcomes in 1983: distance to the market town and transaction costs increased both technical and cost efficiency; population density had a positive effect on cost efficiency (but not on technical efficiency); and road conditions improved technical efficiency (but not cost efficiency). None of the village-level variables could be used to predict technical or cost efficiency in 2003. Thus, it appears that the relationship between village-level institutional conditions and farm efficiency has weakened dramatically in the last two decades.

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Explorations in Theory and Empirical Analysis

Distribution and Growth: A Dynamic Kaleckian Approach

F. PATRIARCA and C. SARDONI
Working Paper No. 697, November 2011

In the mainstream New Keynesian approach to income distribution, inflation, and policy, an increase in wages when an economy is in its "natural" equilibrium will trigger an inflationary process and cannot produce any real effect as the economy will ultimately return to its initial equilibrium, with the same distribution of income and the same level of employment. F. Patriarca and C. Sardoni, Sapienza University of Rome, find that the effects of a distributional shock in favor of wages on aggregate profits (within a long-period context) can give rise to a process of capital accumulation and growth. This virtuous growth process brings an economy to a new steady state characterized by a larger capital stock, output, and employment. The process depends on the relative stickiness of prices and whether the entrepreneurial class is provided with additional credit. It implies that the adopted monetary policy should be the opposite of what is called for by the mainstream approach; that is, expansionary monetary policy coincident with the beginning of an inflationary process that is consequent with the firms' attempts to restore markups.

Michal Kalecki (1991) concluded that an increase in the wage share of income does not necessarily imply a fall in aggregate profits. Patriarca and Sardoni extend the work of Kalecki by developing a dynamic model that considers both the capitalists' expenditure decisions after a wage rise and the capitalists' pricing policy to restore the initial level of markups. Their analysis includes the two contrasting effects of a rise in wages: the positive demand effect generated by higher wages and the negative profit effect due to the initial decline in markups. While their model retains some basic Kaleckian features, it introduces some changes with respect to pricing, the capitalists' consumption function, the investment function, and the degree of capacity utilization.

The authors evaluate the out-of-equilibrium dynamics of an economy subjected to an exogenous distributional shock in favor of wages, with a focus on capital accumulation (i.e., the behavior of net investment). They also introduce an investment function in which financial factors play an explicit role; for example, a financial variable that expresses the availability of external finance to firms. External finance is of crucial importance, since firms must start an expansionary investment process in the presence of markups that are below their equilibrium level. Moreover, this process must be driven by the demand effect produced by higher real wages and the availability of external finance, in spite of the lower profitability of production and the higher degree of financial risk due to the firms' greater indebtedness.

The availability of finance is also crucial for capitalist consumption. The authors assume that the capitalist class reacts immediately to a distributional shock, even though the initial "equilibrium" distribution is not restored at once but rather gradually over time. This capitalist response enables the economy to start a growth process driven by an increase in consumption demand that is not fully neutralized by the price rise. Another assumption is that workers do not ask for higher wages despite an increase in employment generated by investment.

If the wage dynamics are regulated through institutional factors, the wage rate can be maintained after its initial increase by implementing an incomes policy (e.g., a social contract where workers accept the existing distribution of income in exchange for a higher level of employment). The model can be interpreted as depicting an economy in which some sort of incomes policy is at work where the policy mix affects the labor market and the financial sector simultaneously. Such policy allows an initial increase in the nominal wage rate but not further wage increases as a consequence of higher employment. In addition, an expansionary monetary policy must also be implemented during the inflationary process due to capitalists' attempt to restore their equilibrium markups. Such a policy mix is justified because it benefits workers in terms of employment, while ensuring an increase in demand for employers without permanently modifying the employers' income share. Thus, the wage shock can produce positive real effects if firms are provided with additional credit.
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Upcoming Events

21st Annual Hyman P. Minsky Conference
Debt, Deficits, and Financial Instability
Ford Foundation, New York City
April 11–12, 2012

In April 2012, leading policymakers, economists, and analysts will gather at the New York headquarters of the Ford Foundation to take part in the Levy Institute's 21st Annual Hyman P. Minsky Conference. This conference will address, among other issues, the challenge to global growth represented by the eurozone debt crisis; the impact of the credit crunch on the economic and financial markets outlook; the sustainability of the US economic recovery in the absence of support from monetary and fiscal policy; reregulation of the financial system and the design of a new financial architecture; and the larger implications of the debt crisis for US economic policy, and for the international financial and monetary system as a whole.

Additional information will be posted on our website (www.levyinstitute.org) as it becomes available.

The Hyman P. Minsky Summer Seminar
Blithewood, Annandale-on-Hudson, N.Y.
June 16–24, 2012

The Levy Economics Institute of Bard College will hold its third annual Minsky Summer Seminar in June 2012. The Summer Seminar provides a rigorous discussion of both the theoretical and applied aspects of Minsky's economics, with an examination of meaningful prescriptive policies relevant to the current economic and financial crisis. It is of particular interest to graduate students, recent graduates, and those at the beginning of their academic or professional career.

For more information, visit www.levyinstitute.org.

Levy Institute Launches Greek Website

Policy coordination and information exchange are critical to resolving the eurozone's sovereign debt crisis. With this in mind, the Levy Institute is making selected publications that address specific aspects of the crisis—including policy briefs, one-pagers, and working papers—available online in Greek translation. A list of our current titles is available at www.levyinstitute.org, and more will be added weekly.

1967 Israeli Census Now Available Online

In the summer of 1967, just after the Six-Day War brought the West Bank and Gaza Strip under Israel's control, the Israeli Central Bureau of Statistics (ICBS) conducted a census of the occupied territories. The resulting seven volumes of reports provide a snapshot of this population at a critical historical moment, and 30 years prior to the next census benchmark in 1997. As an aid to researchers, the Levy Economics Institute is making the contents of these volumes—census questionnaire, tabular data, and ICBS analysis of the major findings—available in digital format for the first time. To access the Census database, go to www.levyinstitute.org, and click on the Immigration, Ethnicity, and Social Structure program link.

New Research Associate and Policy Fellow

Research Associate and Policy Fellow C. J. Polychroniou is a political economist / political scientist whose primary expertise is in international political economy. His research focuses on globalization, the political economy of the United States, European economic integration, and the deconstruction of neoliberalism's political project. He has taught in universities in Greece and the United States, and was founder and director of the Center for the Study of Globalization in Athens, Greece. He has published five books including *Marxist Perspectives on Imperialism: A Theoretical Analysis* (1991), *Perspectives and Issues in International Political Economy* (ed., 1992), and *Discourse on Globalization and Democracy: Interviews with Leading Thinkers of Our Time* (in Greek; 2002). His articles have

appeared in a variety of journals and magazines, including, among others, *New Politics*, *New Political Science*, *Socialism and Democracy*, *Economic and Political Weekly*, *Theseis*, and *Kyklos*.

Polychroniou holds a Ph.D. from the University of Delaware.

New Research Associate

Ebru Kongar is chair and associate professor of economics at Dickinson College. She is an associate editor of the journal *Feminist Economics* (2008 to present), also guest editing, with Elora Shehabuddin and Jennifer Olmsted, its forthcoming Special Issue on Gender and Economics in Muslim Communities. She served on the International Association for Feminist Economics Travel Fund Scholarship Selection Committee from 2006 to 2007, and as committee co-chair in 2008. Her research focuses on the two-way relationship between gender inequalities and macroeconomic developments (economic crises, globalization, trade expansion in manufacturing, and services and deindustrialization) in the US economy.

Kongar received her BS in economics from Bogazici University (Istanbul, Turkey) and her Ph.D. in economics from the University of Utah.

PUBLICATIONS AND PRESENTATIONS

Publications and Presentations by Levy Institute Scholars

PHILIP ARESTIS *Senior Scholar*

Publications: "Malcolm Sawyer: An Appreciation" and "A Critical Appraisal of the New Consensus Macroeconomics," in P. Arestis, ed., *Microeconomics, Macroeconomics and Economic Policy: Essays in Honour of Malcolm Sawyer*, Palgrave Macmillan, 2011; "An Analysis of the Causes of the 'Great Recession' and Some Policy Implications" (with E. Karakitsos), in T. Niechoj et al., eds., *Stabilising an Unequal Economy? Public Debt, Financial Regulation, and Income Distribution*, Metropolis-Verlag, 2011; "Classifying Monetary Economics: Fields and Methods from Past to Future" (with A. Mihailov), *Journal of Economic Surveys*, Vol. 25, No. 4 (September); "Current Financial Crisis and Regulatory Implications" (with E. Karakitsos), *History of Economic Ideas*, Vol. 19, No. 2 (Autumn); "Trade Flows Revisited: Further Evidence on Globalisation" (with G. Chortareas, E. Desli, and T. Pelagidis), *Cambridge Journal of Economics*, Vol. 35, No. 6 (November); "Eurobonds Will Need a Form of Political Union: Letter to the Editor" (with M. Sawyer), *Financial Times*, August 18; "Economic Policy Implications of the 'Great Recession' (with E. Karakitsos), in H. Herr et al., eds., *From Crisis to Growth? The Challenge of Imbalances and Debt*, Metropolis-Verlag, 2012.

Presentations: "Fiscal Policy: Time for the Renaissance of Keynesianism," conference in honor of the 75th anniversary of John Maynard Keynes's *The General Theory of Employment, Interest and Money*, Austrian Chamber of Labour, Vienna, Austria, September 29, 2011; "Economic Policy Implications of the 'Great Recession,'" and "Modelling Accumulation: An Empirical Application of the Accelerator Principle Under Uncertainty" (with A. R. Conzalez Martinez and O. Dejuan), 15th annual conference of The Research Network Macroeconomics and Macroeconomic Policies, "From Crisis to Growth? The Challenge of Imbalances, Debt, and Limited Resources," Macroeconomic Policy Institute (IMK), Berlin, Germany, October 28–29; "The Dysfunctional Nature of the Economic and Monetary Union" (with M. Sawyer and G.

Fontana) conference on "The European Union's Economic and Social Model—Still Viable in a Global Crisis?" School of Law, University of Leeds, England, December 8–9.

JAMES K. GALBRAITH *Senior Scholar*
Publications: "Four Crisis Books: A Review Essay," a review of *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System* by Henry M. Paulson Jr., *This Time Is Different: Eight Centuries of Financial Folly* by Carmen M. Reinhart and Kenneth S. Rogoff, *Fault Lines: How Hidden Fractures Still Threaten the World Economy* by Raghuram G. Rajan, and "The Financial Crisis Inquiry Report: Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States," *International Finance*, Volume 14, No. 2 (Summer); "Stop Panicking About Our Long-Term Deficit Problem: We Don't Have One," *The New Republic*, August 9, 2011; "Fixing the Economy: We Got It Wrong," *Los Angeles Times*, August 15; "Economist Argues Deficit Helps Economic Crisis Mend," NPR.org, August 18; "Reducing Poverty—What Might We Learn?" *European Journal of Development Research*, Vol. 23, No. 4 (September 2011); "WWKD: He Wouldn't Use Debt As an Excuse," in "What Would Keynes Do? A Forum," *The Nation*, October 6; "Economist Blames Credit Markets," *San Antonio Express-News*, October 20; "Is Income Inequality Rising in the USA?" WOAI 1200 News Radio, San Antonio, Texas, October 21.
Presentations: "Economic Policy: Undermining the American Dream?" Cambridge Forum, Cambridge Mass., September 8, 2011; remarks on technology and development and the European crisis, SAP World Tour 2011, Athens, Greece, October 4; keynote speech, Alpbacher Finanzsymposium, Alpbach, Austria, October 5; panelist, "Poverty and Inequality—Lessons to be Learnt," Graduate Institute of International and Development Studies, Geneva, Switzerland, October 12; keynote address, 2011 FEPS/TASC Autumn Conference, Dublin, Ireland, October 15; "The Ethics and Economics of Inequality," Frank Bryant, Jr. Memorial Lecture series, The University of Texas Health Science Center at San Antonio, October 20.

JAN KREGEL *Senior Scholar and Program Director*
Publication: "Will Restricting Proprietary Trading and Stricter Derivatives Regulation Make the US Financial System More Stable?" *PSL Quarterly Review*, Vol. 64, no. 258 (2011).
Presentations: "Debtors' Crisis or Creditors' Crisis? Who Pays for the European Sovereign and Sub-prime Mortgage Losses?" workshop on "Is the Debt Crisis Over?" Universidad Autónoma Metropolitana (UAM), Unidad Xochimilco, Mexico City, Mexico, July 12, 2011; "The Case for Global Collective Action in Financial Regulation," workshop on "A Global Architecture for Effective Financial Regulation," Global Economic Governance Programme, University College, Oxford, England, June 30; "Strategies for Growth after the Crisis," IV Annual Meeting of the Associação Keynesiana Brasileira, Rio de Janiero, Brazil, August 3–4; "The State of International Regulation since the Financial Crisis—Reregulation in the US: The Dodd-Frank Act," conference on "Managing the Capital Account and Regulating the Financial Sector: A Developing Country Perspective," organized by the Initiative for Policy Dialogue, Instituto de Pesquisa Econômica Aplicada, and UN Department of Economic and Social Affairs, Brazilian Development Bank (BNDES), Rio de Janiero, August 22–24; "Heroes or Villains? Correct Forecasts of the Sub-Prime Financial Crisis," keynote lecture, 14th Annual Summer School on History of Economic Thought, Economic Philosophy and Economic History, Institute of Social Sciences, University of Lisbon, Portugal, September 1; "Too Big to Fail and the Gramm-Leach-Bliley Act: We Can't Solve the First without Reversing the Second," conference on "Too Big to Fail Financial Institutions? International Perspectives and Possible Remedies," Center for Interuniversity Research and Analysis on Organizations, Montreal, Canada, September 15; "Finance, Development and Democracy," Ford Foundation Conference on "Financial Institutions for Sustaining Broad-based Democratic Development," School of Oriental and African Studies, University of London, England, September 25; "Debtors' Crisis or Creditors' Crisis? Who Pays for the European Sovereign and Sub-prime Mortgage Losses?" conference on "Ponzi Finance, Public Debt and Financial Crisis: The European Case and How to Prevent It from Happening Again," Instituto Valenciano de Investigaciones Económicas, Valencia, Spain, September 29; three lectures on "Financial Crisis or Crisis in Economic Theory?" Semana de las Ciencias

Economicas, UAM, Unidad Xochimilco, Mexico City, October 3–7; "A Critical Assessment of the Proposals to Resolve the Euro Crisis," Department of Public Administration, Tallinn Technical University, Estonia, October 26; "Embedding Monetary Production," Ford Foundation Conference on "Building Bridges: Keynes-Minsky-Polanyi," University of California, Berkeley, October 30–31; "Summing Up and Conclusions," workshop on the Ford Foundation Project "Research and Policy Dialogue Project on Improving Governance of the Government Safety Net in Financial Crises," Ford Foundation, New York, N.Y., November 4; panelist, "The BICs Strategies for Weathering the Crisis" and "From Weathering the Crisis to Re-Building Prosperity: New Policy Perspectives," Minds Conference on "New Economic Thinking, Teaching and Policy Perspectives—A Brazilian Perspective within a Global Dialogue," Rio de Janeiro, November 7–9; "Recent US Legislation: The Dodd-Frank Bill and Financial Instability," workshop on "New Directions in Financial Regulations," organized by the International Development Economic Associates and Centre for Banking Studies of the Central Bank of Sri Lanka, Colombo, November 22–26; "How Reformed Is International Finance?" Central Bank of Sri Lanka Public Lecture Series, Colombo, November 22.

ELLEN CONDLIFFE LAGEMANN *Senior Scholar and Program Director*
Publications: *What Is College For? The Public Purpose of Higher Education* (edited with H. Lewis), Teachers College Press, 2011; "What College Can Mean: Lessons from the Bard Prison Initiative," *Change* (November).
Presentations: "What is College for?" Harvard Club of New York City, October 2011; panel discussion on Oliver Zunz's *Philanthropy in America*, Bradley Center for Philanthropy and Civic Renewal, Hudson Institute, Washington, D.C., November 16.

THOMAS MASTERSON *Research Scholar*
Presentations: "Let's Talk Local," "Hello Etsy: A Summit on Small Business and Sustainability," Hudson, N.Y., September 18, 2011; "Living Standards in the United States in a Historical and Comparative Perspective: Some Results from the LIMEW Project," 3rd Triennial Research Conference of the International Confederation of Associations for Pluralism in Economics:

"Re-thinking Economics in a Time of Economic Distress," University of Massachusetts Amherst, November 12.

DIMITRI B. PAPADIMITRIOU *President*
Publications: "Fed's $1.2 Trillion in Financial Sector Loans 'A Classic Case of Moral Hazard,'" *The Huffington Post*, August 22, 2011; "Historically GDP Growth Is Off by 11.9% and Labor Markets Should've Already Bounced," *Forbes*, August 30; "The Die-Hard Recession Heads Off the Charts," *New Geography*, September 8; "Endgame for the Euro," *The Huffington Post*, September 18 (published in *Eleftherotypia* under the title "A Euro Skeptic," September 22); "The Achilles' Heel of the Eurozone," *Los Angeles Times*, November 2; "Greece and the Eurozone Crisis," *Kathimerini*, November 13; "The Future of the Eurozone and Greece's Place in It," *Eleftherotypia*, November 20; *Contributions in Stock-flow Modeling: Essays in Honor of Wynne Godley* (edited with G. Zezza), Palgrave Macmillan, 2012.
Presentations: Interview regarding the US unemployment rate with Marília Ávila, Agência Leia, September 1; interview regarding a Greek default and the eurozone with Ian Masters, *Background Briefing*, September 20; interview regarding Standard & Poor's rating downgrade of Italy with Paula Selmi, Agência Leia, September 21; interview regarding the European economy with Andrew Hiller, *Voice of Russia*, September 28; interview regarding lessons to be learned from other countries' experience as the United States tackles the jobs crisis, Catherine Hollander, *National Journal*, October 7; speaker, International Working Group on Gender, Macroeconomics and International Economics (GEM-IWG) Knowledge Networking Program on Engendering Macroeconomics and International Economics, 1st Regional European Workshop on "Monetary Policy in Historical Perspective: Changing Objectives of Monetary Policy—Gender Implications," Istanbul, Turkey, October 13; "The End of the Eurozone? Structural Imbalances, Fiscal Austerity and the Inadequacy of Current Responses to the Sovereign Debt Crisis," keynote address, symposium on "Gender Perspectives on the Current Economic Crisis in Europe and Beyond," organized by GEM-IWG, GEM-Europe, and GEM-Türkiye, Istanbul, Turkey, October 17; interview regarding the banking crisis in the United States and Greece with Nefeli Lygerou, *Pandora's Box* (Greek television), October 21; interview regarding the Greek crisis with Ian Masters, *Background Briefing*, October 23.

AJIT ZACHARIAS *Senior Scholar*

Presentations: "Measuring Poverty in Mexico: The Time–Income Dimension," Conferencia Internacional del 70 Aniversario de la Revista Investigación Económica, UNAM, Mexico City, September 6–9, 2011; "Living Standards in the United States in a Historical and Comparative Perspective: Some Results from the LIMEW Project," conference on "A Brighter Future: Improving the Standard of Living Now and for the Next Generation," Colorado Policy Studies Center, University of Colorado, Colorado Springs, October 20–22; "Time–Income Poverty Nexus: A Neglected Dimension of Poverty in the Process of Economic Development," V Congreso Internacional de Economía Ética: BRICS en el Orden Económico Mundial, Universidad Santo Tomás, Bogota, Colombia, October 26–28.

GENNARO ZEZZA *Research Scholar*

Publication: *Contributions in Stock-flow Modeling: Essays in Honor of Wynne Godley* (edited with D. B. Papadimitriou), Palgrave Macmillan, 2012.

Presentations: "Stock-Flow-Consistent Models: With Some Thoughts on the Eurozone Crisis," seminar, Università di Bergamo, October 4, 2011; "Is a New Bancor Feasible?" seminar, Università di Roma "La Sapienza," October 7.

25TH ANNIVERSARY
LEVY ECONOMICS INSTITUTE
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