

Levy Economics Institute of Bard College

Summary

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The State of the US and World Economies

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Why Minsky Matters: An Introduction to the Work of a Maverick Economist, by

L. RANDALL WRAY

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LETTER FROM THE PRESIDENT

To our readers:

This issue opens with a policy brief by Mario Tonveronachi under the State of the US and World Economies program that elaborates on his earlier proposal for the creation of debt certificates to advance the project of a single European financial market. Tonveronachi examines the implications of his proposal in terms of the euro area's fiscal rules and suggests that much progress can be made within the current legal structure. Research Associate Emilios Avgouleas and I follow with a policy note in which we argue that Greece's most recent round of bank recapitalizations must be accompanied by top-to-bottom reforms. Absent such reforms, Greece may well miss another opportunity to repair its banking sector and allow its economy to recover.

In the first of three working papers under this program, Alberto Botta describes the financial channels through which Dutch disease can lead to economic dysfunction in natural resource—rich developing countries. Esteban Pérez Caldentey and Matías Vernengo offer their analysis of the Spanish financial crisis and find that the crisis was a symptom of underlying imbalances in the nonfinancial corporate sector created following the adoption of the euro, and not a result of profligate household or public spending. Research Associate Jörg Bibow evaluates of the European Central Bank's performance before, during, and after the crisis, and discusses the creation of a Euro Treasury as part of a strategy to promote growth and stability.

Three working papers are included under the Monetary Policy and Financial Structure program. Using a stock-flow consistent model of full reserve banking, Patrizio Lainà investigates the dynamics of full reserve banking, money creation, and public spending. Avgouleas contributes a working paper on bank leverage ratios as a macro- and microprudential strategy to foster more resilient financial institutions and support financial stability. And Josh Ryan-Collins discusses monetary financing in light of Canada's experience between 1935 and 1975, and finds ample evidence in support of monetary financing of public spending and little to justify fears that properly managed policy will lead to inflation or economic dysfunction.

In a working paper under the Distribution of Income and Wealth program, Research Associate Eckhard Hein reviews the recent debates on secular stagnation and finds them lacking in historical grounding. He offers a Steindlian perspective and model as an alternative, and argues that recent stagnation is a result of deliberate policy choices, not arcane forces.

Research Associate İpek İlkkaracan, Research Scholar Kijong Kim, and Tolga Kaya contribute a research project report under the Gender Equality and the Economy program. Their analysis shows that investing in an expansion of early childhood care and preschool education programs yields greater benefits in terms of employment and gender equality than an equivalent investment in the construction sector.

Under the Employment Policy and Labor Markets program, a working paper by Research Scholar Fernando Rios-Avila examines the evolution of labor force participation rates for different demographic groups in the US labor force between 1989 and 2013. His analysis reveals that the development of the US labor market over this period and, more recently, the weak US recovery have not created the conditions for sustained increases in labor force participation, and that some groups have in fact lost ground.

Pedro Leão contributes a working paper under the Economic Policy for the 21st Century program in which he examines the controversy surrounding high public debt levels. Using a modified functional finance approach, he argues that public debt need not lead to high taxes, government default, or inflation.

Finally, I invite our readers to consider three new books by our scholars. Senior Scholar L. Randall Wray recently published an accessible yet rigorous treatment of the key themes in Hyman Minsky's work, providing a valuable bridge for the lay audience. Wray has also updated his primer on Modern Money Theory in a new edition. It remains essential reading, and is an important alternative to mainstream monetary theory. Finally, Rainer Kattel, Senior Scholar and Director of Research Jan Kregel, and Mario Tonveronachi offer an edited collection of country studies on financial regulation in the European Union. This volume provides a much-needed analysis of national financial systems, shedding light on some of the antecedents of the recent global financial and sovereign debt crises. It also raises questions as to whether efforts such as greater regulatory harmonization will be sufficient going forward.

As always, I look forward to your comments.

Dimitri B. Papadimitriou, President

Program: The State of the US and World Economies

The ECB, the Single Financial Market, and a Revision of the Euro Area Fiscal Rules

MARIO TONVERONACHI Public Policy Brief, No. 140, November 2015

Mario Tonveronachi, University of Siena, builds on his earlier proposal (Public Policy Brief No. 137, *The ECB and the Single European Financial Market*) to advance financial market integration in Europe through the creation of a single benchmark yield curve based on debt certificates (DCs) issued by the European Central Bank (ECB). In this policy brief, Tonveronachi discusses the implications for member-state fiscal rules should the ECB embrace his DC proposal. He argues that his DC proposal would support debt discipline while mitigating the overly restrictive, counterproductive fiscal stance required today. This approach would simultaneously expand national fiscal space while ensuring debt sustainability under the Maastricht limits, and offer a path out of the self-defeating policy regime currently in place.

In addition to creating a single financial market, DCs offer a legal mechanism for the ECB to act within its existing mandate and expand the fiscal space for all national governments within the euro area. The use of DCs would support the ECB's purchase of national sovereign debt, making the remaining national debt more sustainable by virtue of higher ratings and lower debt service costs, and seigniorage remitted to national governments according to their capital key. For governments currently not meeting the Maastricht limits, this would bring them into or closer to compliance and would eliminate the need to generate budget surpluses. Countries in compliance with the Maastricht limits would also experience greater fiscal latitude and could, for example, engage in higher levels of public spending. Tonveronachi's proposal focuses on the revision of the current fiscal rules as a result of the impact of DCs

on national debt dynamics. Under his proposal member-states would have a greater ability to engage in spending that would both encourage economic growth in their own economies and increase demand for the euro area as a whole. Moderating the deflationary stance of current euro-area rules would also facilitate debt adjustment. As noted above, countries with high debt-to-NGDP ratios would benefit from increased spending by their less-indebted peers, supporting economic growth, healthy levels of inflation, and debt repayment throughout the euro area.

Far from creating fiscal moral hazard, Tonvernoachi argues that his proposal, as compared to the status quo, would better support compliance with the Maastricht Treaty's definition of debt discipline. He suggests that fiscal deficit limits should be seen in terms of their intention—that is, to guarantee debt sustainability. Debt-to-NGDP ratios are currently set at 60 percent, and under the DC proposal this limit would be respected. As the ECB acquires sovereign debt, member countries with debt ratios in excess of 60 percent would be able to achieve debt ratio reductions without generating a fiscal surplus. The additional fiscal space would result from seigniorage paid back to the member country by the ECB and from lower interest rates on that country's national debt.

The author provides several scenarios in which he explores the consequences of ECB debt acquisition based on 2014 data. His analysis using the capital key of individual countries and the initial debt acquisition levels (one-half or one-third of total securities) by the ECB shows that debt dynamics are highly sensitive to the size of the ECB's initial debt acquisition. Furthermore, he finds that below the 60 percent debt ceiling, rigid deficit rules would not be necessary. However, if preferred, strategies could be devised to implement such rules. For example, the total sovereign debt held by the market could remain constant, so that as GDP increased, the ratio of sovereign debt to GDP would decrease; or alternatively, maintaining a constant debt-to-GDP ratio could be the target.

Tonveronachi questions the wisdom of a one-size-fits-all approach (i.e., structural deficits capped at 0.5 percent of NGDP) given the variety of conditions in the euro area and the domestic priorities of member-states. His proposal would create the flexibility to run deficits while maintaining debt discipline. This would shift the current deflationary stance

toward a reflationary one, raising the overall growth rate and supporting adjustment.

Furthermore, the sensitivity of the author's simulations to the initial debt acquisitions by the ECB and the NGDP growth rate indicates that the success of this policy will depend on the political cohesion of euro-area countries. While this proposal is not a cure-all, it does provide greater fiscal latitude, greater capacity to respond to shocks and crises, and a set of dynamics geared toward growing the European economy. Questions of moral hazard associated with seigniorage earned from the creation of sovereign debt and its acquisition by the central bank might cause some to call for new or revised institutional or legal mechanisms. However, the author notes, for the purposes of this proposal, adequate protections are already in place. www.levyinstitute.org/pubs/ppb_140.pdf

What Should Be Done with Greek Banks to Help the Country Return to a Path of Growth?

EMILIOS AVGOULEAS and DIMITRI B. PAPADIMITRIOU Policy Note 2015/6, October 2015

As Greek banks approach another round of recapitalization, Research Associate Emilios Avgouleas and President Dimitri B. Papadimitriou analyze the recent history of the recapitalization of Greek banks and offer recommendations to improve bank governance and avoid repeating past mistakes. They observe that today, despite cash infusions and corresponding guarantees, credit expansion remains weak, and the much-discussed liquidity crunch, resulting from capital flight and the ongoing Greek recession, masks another issue: namely, injecting vast amounts of public money into the banking sector was not followed by eliminating the influence of the former majority, now minority, shareholders; firing incumbent managers; or radically restructuring bank loan portfolios. The authors recommend the creation of a "bad bank" to manage nonperforming loans and corporate governance reforms as necessary steps to put the Greek banking sector back on a path to financial health.

They begin their policy proposal with a review of recent developments in the Greek banking sector. While it is clear that austerity and recent capital flight continue to harm the economy, the banking sector itself, and its governance issues, represents a persistent concern. Before and after 2008, and

despite numerous charges of corruption, Greece's banking sector did not comply with accepted best practices under the Dodd-Frank Wall Street Reform and Consumer Protection Act, the European Union's Bank Recovery and Resolution Directive, or the standard practices defined by the US Federal Deposit Insurance Corporation. Instead, Greek banks received an enormous infusion of public money but did not restructure bank loan portfolios, terminate existing bank management, or remove the old, controlling shareholders. Thus, the 40 billion euros provided to Greek banks in 2012-13 went to the same banks, and to support the same crony relationships, that were in place before and during the crisis. In addition, these banks retained a set of perverse incentives, specifically with regard to nonperforming loans (NPLs). Not surprisingly, banks have not restructured their loan portfolios. Reluctant to record massive losses on their balance sheets, banks stopped lending but did little to resolve the NPL crisis, which in turn has stifled credit and economic recovery.

The authors argue that the next round of bank recapitalization is an opportunity to break this cycle. Under their proposal, a publicly backed "bad bank" would assume responsibility for NPL workouts and management, and, where appropriate, hold currently nonperforming loans to maturity. This would allow Greek banks to begin to make new, responsibly underwritten loans and expand the supply of credit. Recapitalization would thus have a better chance of achieving its goals and supporting the expansion of the Greek economy. There is, the authors note, ample evidence that such a strategy would work. For example, Sweden used a similar approach to quickly resolve the Scandinavian banking crisis in the early 1990s, and the United States' Troubled Asset Relief Program played a pivotal role in stemming the crisis while returning a small profit to the public purse.

This strategy has the added advantage of enabling bank recapitalization to proceed without a creditor bail-in. And, if paired with long-overdue bank governance reforms, the Greek banking sector could return to financial health. Greece, the authors emphasize, is entering a critical phase, and the health of the banking sector is perhaps the most important issue facing the country at the moment. The Greek government can repeat the mistakes of the past or use recapitalization as an opportunity to set its house in order. The solution requires the willingness of the government, the European supervisors, and

Greece's creditors. The authors warn that failure to address these issues will have the gravest consequences for Greek savers, businesses, and Greece's continued membership in the euro. www.levyinstitute.org/pubs/pn_15_6.pdf

The Macroeconomics of a Financial Dutch Disease

ALBERTO BOTTA

Working Paper No. 850, October 2015

Alberto Botta, Mediterranean University of Reggio Calabria, explores the medium-run macroeconomic effects and long-run development implications of what he terms a "financial" Dutch disease. The paper builds on his earlier research on foreign direct investment (FDI) flows and their consequences for the health of the Colombian economy. This paper extends his analysis and proposes a more general theoretical framework focusing on the financial channels through which this phenomenon operates. For the purposes of this analysis, the author limits his investigation to a small developing country with abundant natural resources, open trade, free capital movements, and a freely floating nominal exchange rate. He begins with a description of the macroeconomic characteristics of financial Dutch disease and what these imply for the sectoral composition and labor productivity of an economy.

Financial Dutch disease, Botta argues, begins with an initial surge in FDI in response to, for example, the rapid exploitation and export of a natural resource, such as oil. The inflow of FDI creates exchange rate fluctuations and financial turbulence, which then lead to a vicious cycle between capital flows and exchange rates, with destabilizing short- and medium-term capital flows. These FDI flows to natural resource export sectors may give rise to unstable portfolio capital flows, and permanent exchange rate appreciation may lead to a longterm reduction in the rate of labor productivity and the pace of development in the real economy. The author also presents a model to illustrate these dynamics. The model consists of two nonlinear equations and builds on Lance Taylor's work on financial cycles in developing countries. Botta's model, however, employs a flexible exchange rate version of Taylor's external balance equation. His results show that exchange rate dynamics are strongly influenced by factors such as interest rate differentials and country-factor risk premia.

Botta next turns to a discussion of policies to moderate the negative impacts of FDI flows, reduce the risk of boom-and-bust cycles, and promote medium- and long-run growth. He argues that the long-run negative effects of financial Dutch disease can be tamed, since the impact of FDI depends on how it is integrated with the domestic economy and existing industrial policies. Traditional responses to Dutch disease typically rely on, for example, restrictive fiscal and monetary policies to contain the negative effects of the natural resource—driven foreign investment boom. Monetary policy is often deployed to promote price stability or increase the target inflation rate. And finally, the traditional prescription frequently includes structural measures (e.g., wage policies and infrastructure investment) as a means to achieve a competitive real exchange rate.

In contrast, Botta's analysis emphasizes the financial processes of how Dutch disease can develop through channels overlooked by a mainstream approach. He therefore recommends macroeconomic policy responses rather than traditional long-run industrial policy responses, though there is certainly overlap between the two. His policy proposals center on financial flow controls and exchange rate management by domestic monetary authorities. For example, the author suggests reducing the sensitivity of capital flows to exchange rates using tax policy to target capital gains resulting from exchange rate appreciation. He notes that FDI targeting natural resources would still drive up the exchange rate and thus undermine domestic manufacturing, but with far less financial instability in the system. And reduced financial turbulence would support the conditions necessary for long-term investment in manufacturing.

To combat exchange rate appreciation, says Botta, the national central bank could intervene in the currency market by increasing its foreign reserves, and moderate some of the perverse effects of FDI. Monetary policy should also actively support domestic production by targeting real and nominal exchange rates that are internationally competitive, while supporting growth and employment. Naturally, all of these proposals require that the central bank play a more active, developmentalist role in supporting the domestic economy, one that goes well beyond price stability. Inflation, Botta notes, should be controlled using coordinated monetary, fiscal, and social policies. In conclusion, financial Dutch disease poses a number of threats to the real economy of developing countries

rich in natural resources and experiencing large FDI flows, but policy remedies become clear once the financial dynamics of this disease are better understood.

www.levyinstitute.org/pubs/wp_850.pdf

Integration, Spurious Convergence, and Financial Fragility: A Post-Keynesian Interpretation of the Spanish Crisis

ESTEBAN PÉREZ CALDENTEY and MATÍAS VERNENGO Working Paper No. 847, October 2015

Esteban Pérez Caldentey, Economic Commission for Latin America and the Caribbean, and Matías Vernengo, Bucknell University, explore the origins of the Spanish crisis. Rather than accepting the well-worn explanations of a construction boom during a period of high real estate prices, excessive household spending, and profligate public expenditures on social welfare programs, they argue that the crisis was the result of a widening deficit position of Spain's nonfinancial corporate sector, declining profitability under financial liberalization, and dysfunctional lending practices. The authors provide an analysis of Spain's sectoral balances and recent economic performance, and conclude that the main cause of the Spanish crisis was financial fragility in the nonfinancial sector.

Their analysis begins with Spain joining the European Community in January 1986. During the 1990s and 2000s, the performance of the Spanish economy was extremely stable compared to that of other European economies. However, recent research has shown that Spain's labor productivity had been on a downward trend since the 1970s. The authors explain that much of the country's economic performance gains were due to an abundant inflow of investment from Europe and from financial liberalization. Rising corporate profits, easy access to credit, financial openness, and wage compression contributed to a false sense of prosperity while masking important weaknesses in the economy.

The authors next review the drivers of aggregate demand, with an evaluation of the financial balances of the three major sectors (i.e., government, private, and external) between 1980 and 2011. Their analysis reveals that the main driver of the Spanish economy between 1980 and 1994 was government deficit spending, while the private sector remained in surplus.

Between 1994 and 2008, the government tightened its fiscal stance. During this period, private sector deficit spending sustained aggregate demand, which was mirrored by a rising imbalance in the external sector. Households and nonfinancial corporations became net borrowers from roughly the mid-1990s through the 2000s, with nonfinancial corporations as the main contributor to the evolution of the financial balance and debt accumulation. The authors note that the imbalance in the nonfinancial corporate sector was seven times that in the household sector between 2003 and 2008.

The authors also provide a decomposition of the financial balances of nonfinancial corporations. They observe that the decline in the savings capacity of firms, increasing debt levels, and rising debt-service payments occurred within an environment of declining profits—a decline that preceded rather than followed the increase in debt. These two trends (i.e., higher debt and lower profitability) gave rise to financial fragility, which can be seen in the growing number of firm bankruptcies prior to the crisis. Turning to an analysis of the balance sheet and net worth position of the nonfinancial corporate sector, they note that it had the weakest financial position in the Spanish economy; specifically, this sector exhibited a negative and deteriorating trend in net financial worth between 1990 and 2011. This process began before the adoption of the euro in 2002, the authors note, but accelerated afterward. During this same period, the financial sector's liabilities were increasingly issued by the rest of the world. These and other trends point to the collapse of real estate prices as a symptom rather than the cause of an extremely fragile economy. The authors recall that Spain experienced a real estate boom in the 1980s that rivaled the most recent boom, yet no crisis ensued. The explanation, they suggest, is found in the fact that the most recent real estate boom was a European-wide phenomenon.

The authors conclude that explanations of the Spanish crisis that rely on fiscal profligacy or a housing price bubble do not square with the facts. Rather, the rise in the nonfinancial sector's deficit was at the center of the imbalances. This deficit was financed by domestic and international lenders. Commercial banking and the financial system also required external funding, most of which was in the form of portfolio investment. A process akin to a Ponzi scheme took root, growing until the global financial crisis produced a credit crunch.

Excessive leverage in the nonfinancial sector, not fiscal policy or a housing bubble, was the chief cause.

www.levyinstitute.org/pubs/wp_847.pdf

The Euro's Savior? Assessing the ECB's Crisis Management Performance and Potential for Crisis Resolution

JÖRG BIBOW

Working Paper No. 845, September 2015

Research Associate Jörg Bibow provides a detailed examination of the European Central Bank's (ECB) crisis management performance, and discusses its strengths and weaknesses in terms of its ability to manage future crises. He examines both the institutional and functional limits of the ECB's ability to act during crises, beginning with a review of the economic record under the euro and a discussion of central banking as envisioned under the Maastricht Treaty. The author next investigates the ECB's role in fostering financial stability prior to the crisis and then reviews the bank's actions between 2007 and 2014. The paper also includes a close reading of the bank's evolving role in financial stability efforts and the banking union project. Bibow closes with an analysis of the ECB's recent actions and offers conclusions and policy recommendations.

Bibow characterizes the euro area's economic record as going from unimpressive in the years prior to the crisis to dismal following the crisis. He observes that the first 10 years of the ECB's history were lackluster. It was during this period that severe divergences and large imbalances occurred. Following the crisis, Europe's economic performance has been weak at best, with domestic demand in 2014 standing below 2008 levels and negative inflation as measured by the Harmonised Index of Consumer Prices.

The ECB may not have fared much worse than some of its national and regional peer institutions but its performance has been unsatisfactory, Bibow concludes. He argues that the ECB has always been afflicted by a monetary policy approach and a mindset that amounts to an antigrowth bias. It is preoccupied with the specter of inflation while remaining complacent in the face of deflation and stagnation risks. This focus on its primary objective has not met with great success.

Bibow explains that this stance is partly explained by the unusual architecture of the ECB, a bank modeled on the German Bundesbank and the narrow banking vision in the Maastricht Treaty. While it was granted monetary authority, it has limited ability to serve other banks or governments. The strict separation of fiscal and monetary policies in the monetary union and the ECB's circumscribed role in promoting financial stability outside the euro payments system limit its scope. Further, the bank's role in policy remains incomplete since the currency union is not a fiscal union—the euro lacks federal fiscal capacity.

The author also addresses the ECB's legal scope and policy structure, finding that they hinder the bank's ability to act as a lender of last resort. To repair these deficiencies, the author argues for partnering the ECB with a federal fiscal authority. He notes that the ECB to this day remains under the dominance of German policymakers and their restrictive policy preferences. However, following the crisis, the ECB was granted expanded powers, making it somewhat more like a typical central bank. However, without proper fiscal backing it remains to be seen whether or not the current banking union will prove sufficiently robust to avert or manage future crises. Furthermore, while the ECB has introduced its own version of quantitative easing, the author voices his skepticism regarding the ability of such policies to increase domestic demand or bolster economic recovery. Rather, the euro area needs a longterm fiscal stimulus focused on public infrastructure and funded by a newly created Euro Treasury.

In conclusion, the ECB's actions compare favorably to those of other euro-area and national institutions, but ultimately, it did too little, too late to prevent recession and stagnation. Furthermore, the optimism surrounding its most recent initiatives, notably the use of its balance sheet, is misplaced. Saving the euro, Bibow argues, requires a shift to fiscal policy. A Euro Treasury is the vehicle needed for central funding of public investment using newly created common Euro Treasury debt securities. To leave the euro incomplete as a currency, he concludes, will only overburden the ECB and lead to the eventual demise of the European project.

www.levyinstitute.org/pubs/wp_845.pdf

Program: Monetary Policy and Financial Structure

Money Creation under Full-reserve Banking: A Stock-flow Consistent Model

PATRIZIO LAINÀ Working Paper No. 851, October 2015

In this working paper, Patrizio Lainà, University of Helsinki, offers a stock-flow consistent model of full reserve banking. The results of his analysis show that in a steady state, fullreserve banking can support a zero-growth economy (i.e., no pressure for economic growth or collapse) and ensure both full employment and zero inflation. The paper also includes an experiment that demonstrates that money creation through government spending generates a small, temporary increase in GDP and inflation. However, it also leads to a permanent reduction in government debt. The author notes that fears that full reserve banking would result in a credit crunch or interest rate volatility find scant support in his results. The paper begins with a discussion of the balance sheet, revaluation, and transaction flow matrices, followed by the specification of the model and equations. Lainà then reviews the "old" (baseline) steady state before conducting a money creation experiment. The transition phase and "new" steady state are then analyzed and conclusions presented.

Lainà begins with a stock-flow consistent model of full reserve banking based on a model developed by the late Distinguished Scholar Wynne Godley and Marc Lavoie. The key features of the author's model include: banks are required to hold reserves equal to their deposits, the central bank sets the amount of reserves through purchases of government bills, households are the residual buyer of bills (i.e., the bill rate is endogenous), and banks adjust the interest rate on time deposits to attract sufficient deposits to fund loans. The balance sheet matrix closely follows Godley and Lavoie's model but with several differences (e.g., households do not hold cash, banks do not hold bills, etc.). The transaction flow matrix is largely the same as Godley and Lavoie's but differs in terms of national income (i.e., the stocks of advances or bills do not change and households do not hold cash, and thus there are no interest payments on central bank advances or bank holdings of bills). The author also provides a detailed discussion of the equations used to model the behavior of firms, households, government, and the central bank.

Because of the complex, path-dependent nature of the model, the steady-state solution for each set of parameters is obtained through simulation. He finds that the steady state for his model is stationary (i.e., includes no pressure toward economic growth or collapse under full reserve banking) and is therefore a zero-growth economy with full employment, no inflation, and no pressure to increase or reduce nominal debt levels. The author also observes that there is no shortage of credit under full reserve banking: banks adjust the interest paid on time deposits to attract the capital needed to fund loans. To investigate the stability of these results, the author next conducts a money creation experiment.

The experiment consists of the central bank purchasing a quantity of bills, which increases reserves; the government then increases its spending by an equal amount for one period and thereafter returns to its previous spending level. The effects on the model include a temporary increase in real GDP and inflation, followed by a return to the initial values. The increased reserves do not immediately translate into an equal increase in demand deposits; in the subsequent period, however, demand deposits increase and loans return to their steady-state values as a result of firms adjusting their expected sales and inventories upward. On balance, a three-unit increase in reserves ultimately leads to a two-unit increase in demand deposits. In terms of the interest rate paid on time deposits, the model shows a 0.03 percentage point lower rate at the end of the analysis period. Further, it demonstrates that even a 30 percent change in the money supply does not lead to greater interest rate volatility on bills.

The model shows that private wealth and government debt are exactly equal, allowing for a small discrepancy arising from loans to firms. Most noteworthy, however, is the permanent reduction in consolidated government debt. This finding has important implications for the euro crisis. Specifically, money creation by the European Central Bank could provide a way to reduce government debt and provide fiscal stimulus. www.levyinstitute.org/pubs/wp_851.pdf

Bank Leverage Ratios and Financial Stability: A Micro- and Macroprudential Perspective

EMILIOS AVGOULEAS
Working Paper No. 849, October 2015

Research Associate Emilios Avgouleas discusses bank leverage ratios in terms of their potential as both micro- and macroprudential policy measures. The author notes that while bank leverage ratios have historically been seen as a microprudential measure aimed at improving the resilience of individual banks, they are increasingly seen as macroprudential measures to support systemic stability. This paper explores many of the current policy arguments for their use and describes the role of the leverage cycle in causing financial instability. The author reviews a number of the limitations of leverage ratios, drawing on recent regulatory and academic debates. He begins his analysis with a discussion of the leverage cycle, emphasizing the drivers of excessive leverage in banking, and the impacts of excessive leverage in terms of financial stability and allocative efficiency. He then discusses how leverage ratios can be used to enhance financial stability, from both a mircoprudential and a macroprudential perspective.

Avgouleas begins with a brief survey of regulatory roles and functions of bank capital requirements. These requirements, he explains, are essential tools for absorbing bank losses, restraining risk, monitoring markets, and maintaining discipline. Excessive leverage, as seen during the global financial crisis, undermined creditor confidence and influenced both shareholder preferences and bank manager behavior. While there are three broad categories of leverage (i.e., balance sheet, economic, and embedded), there is no single measure that encompasses all of them. For example, the European Union Capital Requirements Regulation provides a definition of leverage that captures balance sheet and economic leverage directly but measures embedded leverage indirectly. Historically, leverage has been an imperfect means by which to regulate banks, due precisely to these issues of scope and definition. This shortcoming was evident in the failure of US bank leverage ratios to detect the weakness in the banking sector in the run-up to the collapse of Lehman Brothers. Today, the use of bank leverage ratios has returned, and they are commonly applied in combination with risk-weighted capital requirements, in part to counter the excesses of the leverage cycle.

The leverage cycle is created by the dynamic interaction of leverage, volatility, and asset prices. Market participants tend to be procyclical in their behavior. Despite significant research, the mechanism that triggers deleveraging remains unclear. However, it is clear that the most important risk associated with the leverage cycle is the speed of deleveraging in a downturn. A "leverage cycle crash" typically involves increased margin calls, followed by a lack of liquidity in the system and a credit crunch. Thus, excessive levels of leverage, both for individual institutions and the system as a whole, drive or attend asset bubbles. Interestingly, bank leverage tends to rise during boom times and fall during downturns, behaving procyclically and amplifying rather than containing the credit cycle.

Avgouleas suggests that properly calibrated leverage ratios may prevent wasteful use of capital and create more resilient financial institutions. Leverage ratios also help to control asset substitution and risk shifting. Furthermore, unweighted leverage ratios are relatively simple to apply, monitor, and discourage regulatory arbitrage, which can help to restore confidence in bank capital data. Similarly, leverage ratios offer a remedy for many of the shortcomings of creditor monitoring of often complex and opaque banks.

The author concludes that well-designed leverage ratios may prove an effective way to control rent seeking, moderating the leverage cycle to improve bank governance and align the priorities of bank managers and shareholders with the long-term health of the institution. Leverage ratios can also serve as an effective macroprudential measure to support financial stability in the system as a whole. This is not to say that leverage ratios can replace monetary policy, the author cautions. The financial stability issues surrounding loose monetary policy continue to pose important questions. However, using leverage ratios to make the banking sector more resilient will at minimum reduce endogenous risks and moderate financial panics, contributing to greater stability in the larger system. www.levyinstitute.org/pubs/wp_849.pdf

Is Monetary Financing Inflationary? A Case Study of the Canadian Economy, 1935–75

JOSH RYAN-COLLINS Working Paper No. 848, October 2015

Josh Ryan-Collins, The New Economics Foundation, offers a historical analysis of the Bank of Canada's use of monetary financing to boost demand and/or relieve debt burdens. He argues that there is scant evidence in the case of Canada to support the now dominant perspective of the New Macroeconomic Consensus that prohibits monetary financing. He begins with a discussion of the literature on government money creation, its relationship to inflation, and the origins of the current policy framework. He then follows with a detailed case study of the Bank of Canada and presents empirical findings on inflation trends for the Canadian economy. He concludes with policy recommendations that are especially relevant in light of Canada's recent change of government.

Ryan-Collins recalls that monetary financing has a history of more than 300 years in Western economies. He notes that the theoretical and empirical arguments against monetary financing remain flawed, with the correlation between monetary financing and inflation weak at best. During the 1960s and '70s, monetarist and rational expectations theories warned of "political inflation" due to time-inconsistency problems that would inevitably arise if not constrained by strict rules to prevent government debt monetization.

However, the Bank of Canada offers an example of how monetary financing has been used to foster growth and development without creating burdensome inflation. Ryan-Collins examines the role of the bank in the economic recovery following the Great Depression, during World War II, and throughout the 25-year period of stable, high growth following the war. Canada also saw declining public debt, budget surpluses, and full employment between 1935 and 1970. The Bank of Canada supported these results by financing debt, managing public debt markets, and creating domestic credit using quantitative controls and persuasion. For most of the period reviewed, the central bank was not independent of the government; rather, it was tasked with creating conditions for growth and full employment, not price stability (though prices remained remarkably stable during this period).

The postwar period (1945-75) began with explicitly Keynesian expansionary economic policies to maintain the high levels of income and employment seen during the war. One of the primary mechanisms by which the Canadian government implemented support for small- and medium-size businesses was through the Industrial Development Bank (IDB). The IDB worked with the central bank, fitting into a larger monetary policy framework. Over its 31-year history, the IDB funded more than 65,000 loans. And, during the last 10 years of its operation, the IDB provided the equivalent of 25 percent of total domestic lending to the private nonfinancial sector. The IDB was funded entirely by money created by the Bank of Canada. This followed a larger pattern in the central bank's policy strategy—one that more closely approximates a functional finance or Modern Money Theory approach. However, by the mid-1970s, inflation and unemployment had become serious problems. The government allowed interest rates to rise and the proportion of government debt held by the bank fell from 20 percent to 7 percent. The author notes that the major casualty of this policy shift was government capital investment. By 1982, the monetarist experiment was abandoned and an explicit exchange rate target with the US dollar was adopted. It is important to note that since the 1990s output growth has been lower and inflation nearly double the levels seen between 1946 and 1974.

Ryan-Collins also provides an empirical analysis of the development of the Canadian economy that provides support for his historical analysis. However, he cautions that debt monetization is not the sole explanation for Canada's economic growth and stability during the period; additional research is needed. The author cautions that when debt monetization declined, it was capital investment rather than expenditures that fell, with negative impacts on productivity down the road.

The results of this partial history of the Canadian economic experience are provocative. There are, the author suggests, a number of potentially fruitful examples to explore further, including the experience of the Bank of Japan between 1931 and 1934, and New Zealand's central bank, which was nationalized in 1936 and supported a variety of public works initiatives. In the case of Canada, it is clear that the mainstream fears surrounding monetary financing find little basis in history. www.levyinstitute.org/pubs/wp_848.pdf

Program: The Distribution of Income and Wealth

Secular Stagnation or Stagnation Policy? Steindl after Summers

ECKHARD HEIN Working Paper No. 846, October 2015

In this working paper, Research Associate Eckhard Hein examines the debate surrounding modern capitalism's tendency toward secular stagnation, drawing upon the insights of Josef Steindl. The author observes that the current debate, launched by comments made by Lawrence Summers to the International Monetary Fund in 2013, includes both demand- and supply-side arguments, and has coalesced around a definition in which stagnation is the state of the economy in which negative real interest rates in the capital market are needed to establish an equilibrium of saving and investment. It is both remarkable and unfortunate, Hein notes, that there is almost no reference to the history of economic thought in this debate.

To address this deficiency, the author begins with a review of the current debate, examines Steindl's "maturity and stagnation" approach, and provides a Steindlian model of distribution, growth, and stagnation. He also examines the role of institutions, power relationships, and economic policies within the context of the 1950s and '60s, followed by a discussion of the stagnation that arose in the 1980s and thereafter under finance-dominated capitalism, and concludes with policy suggestions.

The author observes that the theoretical foundations of today's debate on secular stagnation are often vague and vulnerable to criticism on several levels. For example, the mainstream literature tends to assume that the natural or potential rate of growth is independent of aggregate demand factors, and ignores the possibility of feedback or endogenous dynamics. The debate also largely neglects the role of institutions and power relations between social classes. Given these deficiencies, Hein suggests, the diagnosis and policy prescriptions of mainstream literature are, at minimum, incomplete and, more likely, highly problematic.

The current descriptions of secular stagnation, Hein observes, tend to fall under one of three general approaches.

The first approach attributes lower growth potential to lower growth of factor inputs, innovations, and technological knowledge; the second argues that growth is and will be below potential growth because of the decline in the "equilibrium" real interest rate, which balances saving and investment; and the third explains lower growth following a severe recession as the result of labor market hysteresis. He suggests that Steindl's work represents a viable alternative as it is unencumbered by an equilibrium real interest rate balancing savings and investment at full employment. Rather, Steindl's allows potential growth to become endogenous to demand-driven growth while including the role of institutions, power relations, and economic policy.

Hein next provides a brief overview of the salient features of Steindl's "maturity and stagnation" approach and then specifies a Steindlian model of growth, distribution, and stagnation. He finds that his model enters into a period of stagnation as a result of a decline in investment, or flagging animal spirits; a decline in the rate of productivity enhancing investments; an increase in the target rate of capacity utilization; an increase in the propensity of rentiers to save; a rise in the profit share; and changes in the rentiers' rate of return (which varies by scenario).

Turning to the role of institutions and policies during the "golden age" of mature capitalism (i.e., the 1950s through the mid-1970s), Hein identifies four main factors driving growth: increased public spending, technological competition between East and West (the Cold War), close cooperation between Western countries under US leadership, and European countries catching up in their economic growth. However, Hein emphasizes that the most important factor underlying the changes in the past four decades is the reemergence of stagnation policy—the deliberate decision not to maintain full employment. To further explore this point, Hein offers a model of the major channels through which stagnation policies depress the economy. These are: decreases in autonomous spending growth and animal spirits; lower public investment and R&D spending; increased profit share; greater propensity to save; and rising real rates of interest leading to a higher rentiers' rate of return, and higher real debt-capital and outside finance-capital ratios.

The author argues that against the backdrop of financedominated capitalism two extreme but complementary growth regimes have emerged: debt-led consumption booms and export-led mercantilist regimes. Reversing this pattern of stagnation, Hein argues, requires a focus on stabilizing and increasing expenditure growth; implementing anticyclical fiscal policy; boosting public investment; increasing the wage share through full employment policies; improving workers' bargaining power; lowering interest rates; reregulating the financial sector; redistributing income downward through higher, progressive taxes; and coordinating economic and monetary policy in order to prevent severe current account imbalances. In conclusion, Hein calls for a global Keynesian New Deal based on the three pillars of reregulation of the financial sector, macroeconomic policy to stimulate and stabilize domestic demand, and a coordinated "new world financial order" to avoid export-led mercantilist strategies.

www.levyinstitute.org/pubs/wp_846.pdf

Program: Gender Equality and the Economy

The Impact of Public Investment in Social Care Services on Employment, Gender Equality, and Poverty: The Turkish Case

ÎPEK ÎLKKARACAN, KIJONG KIM, and TOLGA KAYA Research Project Report, September 2015

Research Associate İpek İlkkaracan, Research Scholar Kijong Kim, and Tolga Kaya, Istanbul Technical University, working in a multilateral partnership with the International Labour Organization, the United Nations Development Programme, and UN Women, offer a proposal to promote inclusive growth, alleviate poverty, promote gender equality, and create decent jobs in Turkey. They evaluate the demand-side economic rationale for public investment in the social care sector, focusing on the relative benefits of a large public investment in early childhood care and preschool education (ECCPE) and an equal investment in a traditional public infrastructure program aimed at the construction sector. The report begins with a discussion of the care economy in Turkey as well as the patterns of gender inequality. It then examines the scope and

character of employment segregation by gender and its links to social care provisioning. A survey of the current state of early childhood care and preschool services is also provided, followed by an analysis of relative impacts and short-run fiscal sustainability of an ECCPE expansion.

The authors report that Turkey continues to have the lowest rate of female labor force participation and the lowest ECCPE enrollment rates of all Organisation for Economic Co-operation and Development (OECD) states. These two measures are clearly linked and present obstacles to women, children, and the Turkish economy as a whole. For example, based on figures for 2013–14, Turkey would have to create over three million new places in preschool programs to match the current OECD average. This represents a commitment of slightly more than 20 billion TRY in new public expenditures. The authors note that public expenditures to stimulate job growth have historically gone to physical infrastructure projects. The question is, how does an equivalent ECCPE investment compare in terms of gender impacts, decent job creation, and fiscal sustainability?

The authors estimate that the employment impact in the construction sector would amount to some 290,000 jobs. However, the same level of public spending on ECCPE expansion would produce approximately 720,000 jobs—nearly 2.5 times as many jobs. Moreover, 73 percent of the jobs created under an ECCPE expansion would go to women, whereas only 6 percent of jobs are estimated to go to women as a result of expanded public investment in the construction sector. An ECCPE expansion would also provide a substantial number of jobs for men: roughly 72 percent of the total number of jobs that would be created for men under a construction expansion. However, the impact of an ECCPE expansion is dramatically different in that it would draw large numbers of women previously engaged in unpaid domestic work into the paid labor market. In addition, an ECCPE expansion would create a large number of jobs for unemployed men. Thus, as compared to construction, increasing spending on the social care sector would provide more jobs for the unemployed.

In addition, the quality of jobs (i.e., what the UN calls "decent" jobs) under an ECCPE expansion would be markedly better than those added by an expansion of the construction sector. The authors estimate that 85 percent of the jobs created under an ECCPE expansion would come with social security

benefits, versus slightly more than 30 percent in an expansion of the construction sector. The duration or status of new jobs would also be better in terms of the percentage of permanent jobs, the share of temporary contract jobs, and the share of occasional jobs without a contract.

An increase in construction spending does appear to perform better in terms of its impact on poverty—nearly twice as many jobs would go to workers below the poverty level. However, accounting for the demand- and supply-side effects, the authors find that an ECCPE expansion targeting primeworking-age poor mothers of young children has the potential to reduce the poverty rate by nearly three times as much as the construction expansion. Finally, the authors estimate that the fiscal sustainability of an ECCPE expansion would be superior in terms of fiscal sustainability in that such an expansion recovers approximately 77 percent of the expenditure through increased revenue collections, while a construction expansion would recover only 52 percent.

On balance, the authors conclude that there is a strong demand-side rationale for a public investment in ECCPE services in terms of decent employment creation, gender equality, poverty reduction, and fiscal sustainability. This analysis demonstrates both the efficacy of applying a gender-budgeting approach to public investment decisions as well as the macroeconomic benefits of investing in social care infrastructure as a vehicle for inclusive and sustainable growth.

www.levyinstitute.org/pubs/rpr_8_15.pdf

Employment Policy and Labor Markets

Losing Ground: Demographic Trends in US Labor Force Participation

FERNANDO RIOS-AVILA Policy Note 2015/7, November 2015

US labor force participation continues to fall in the wake of the Great Recession. Improvements in the unemployment rate reflect the fact that Americans are falling out of the labor force, while job growth remains weak. Research Scholar Fernando Rios-Avila investigates demographic trends in labor force participation, and finds that not all groups have lost ground equally. Controlling for demographic changes in the labor force, he describes trends across and within various groups between 1989 and 2013. Throughout his analysis, Rios-Avila compares current nominal rates with an adjusted measure of labor force participation that holds demographic changes constant, allowing for an "apples to apples" comparison of the labor market over time.

Labor force participation rates (LFPRs) reflect a myriad of labor market conditions, including job creation rates, institutional biases, how people balance their preferences for income and leisure, etc. However, given weak job creation, declining real wages, and high unemployment rates in the United States in recent years, it is difficult to argue that LFPRs, which had been rising, are declining because a growing share of US workers prefers not to work. More likely, the author suggests, LFPRs reflect the health of the US job market and the expectations of job seekers regarding employment and compensation. Within this context, the author reports that the LFPRs for people aged 25-64—the core of the working population—rose over the period 1989-99 and then declined through the early 2000s. This decline in the LFPR then accelerated during the Great Recession. Two disturbing facts emerge from this simple description: (1) the decline in unemployment is in part due to a large number of people falling out of the labor market, and (2) the longterm overall gains in labor force participation have been increasingly undermined in the recent "recovery." These declines are even more severe when we account for demographic changes in the age and education structure of the labor force. While some of these trends have been reported in official statistics, there has been scant discussion of LFPRs by demographic group.

The LFPRs for men have been declining since the 1960s, and this trend continued during the period analyzed: the nominal rates for men fell from 89 percent to slightly less than 84 percent while the adjusted rates were roughly 1.5 percentage points lower. Women's LFPRs had been rising consistently until the 2001 recession, when their participation rate stood at 73 percent; the boom years preceding the Great Recession saw a slight decline but far less than for men. However, after 2009, the labor force participation of women declined sharply. The LFPR of men and women aged 25–44—arguably the group

most likely to be in the workforce—followed these same trends, with men showing a steady decline while women exhibited a less dramatic decline. Interestingly, the labor force participation of women aged 45–54 increased between 1989 and 2013 while the participation of men in this age group declined. Most notable are the rising rates of labor force participation among men and women aged 55–64 (the baby boomers): women saw a dramatic increase of over 10 percentage points in their nominal participation rates during this period.

The analysis also includes a detailed description of labor force participation by education group (i.e., less than high school, high school, some college, college degree, and graduate degree). Men and women with a high school and some college education appear to have the weakest level of labor force participation while people with less than a high school education have seen less of a decline over time. These least-educated workers appear to have adjusted to the weaker job market and lower wage levels while many of their more-educated peers have been leaving the labor market steadily for the past two and a half decades. Men with college or graduate degrees have slightly lower LFPRs than they did in 1989 while the rate for women with a graduate education appears to have remained stable during the last 15 years.

Finally, the racial composition of the LFPRs for men and women holds some valuable insights. Hispanic men surpassed white men in terms of labor force participation (both nominal and adjusted) following the 2001 recession, while in 2013 labor force participation among black men stood markedly below its 1989 level. Labor force participation rates among white and black women have been declining somewhat compared to 2001 levels. However, Hispanic women, with a much lower level of participation at roughly 65 percent in 2013, show a clearly rising trend in labor force participation.

Clearly, the policies of the last two decades have resulted in lost ground for a number of groups. If a robust labor market is to be a goal of federal and state governments, Rios-Avila concludes, policies must not only target the overall health of the labor market but also ensure that job growth reaches all groups in the American labor force.

www.levyinstitute.org/pubs/pn_15_7.pdf

Program: Economic Policy for the 21st Century

Is a Very High Public Debt a Problem?

PEDRO LEÃO

Working Paper No. 843, July 2015

Pedro Leão, Lisbon School of Economics and Management, proposes a policy strategy to prevent large public debt from leading to high taxes, government default, or inflation. He also demonstrates that public deficits do not face a financing constraint. Leão begins his analysis with the recollection that Abba Lerner argued for printing money as a way to prevent default and for taxation as a means to prevent inflation. The author's approach differs from Lerner's in two important respects. First, he proposes an alternative strategy to prevent public default and eliminate the need to levy taxes to meet interest payments on the debt. His proposal extinguishes the debt burden altogether. Second, his approach requires flexible exchange rates and stipulates that the central bank must impose near-zero nominal government bond yields for as long as necessary, during which time fiscal policy is used in place of monetary policy to control inflation. The author also demonstrates that government deficits associated with full employment do not face a financing problem, arguing that after debt is initially financed through the creation of base money, private sector savings come in the form of government bond purchases or, if there is fear of default, acquisitions of new money.

Leão begins with a discussion of countries with floating exchange rates that have cut their interest rates to zero, such as the United States and the UK. He notes that such countries have not used fiscal policy to expand demand to full employment because of the belief that such actions will lead to onerous tax increases, default, or inflation. By contrast, Japan has run deficits for over two decades and has managed to keep demand within sight of full employment. Indeed, Japanese debt stood at nearly 250 percent of GDP in 2014 yet it maintains government bond yields such that its interest payments on its debt are less than 1 percent of GDP. However, there is still the possibility that high debt levels will cause problems in the future, and it is to this question that Leão turns next.

The concerns surrounding high debt levels tend to focus on their potential to contribute to a panic among investors, leading to a sell-off that in turn pushes up yields and reduces the ability of the government to meet its payment obligations. However, a central bank could counter such a panic by simply buying all of the bonds offered using newly printed money. The mainstream response is that this would lead to rampant inflation under a fractional reserve system and an increase in credit creation (and increased cash held by bond sellers). Leão argues that credit would only be created if it was demanded, which would happen only if excess reserves led to lower interest rates—an impossibility when interest rates are already at zero.

Another fear associated with high public debt ratios is that when an economy moves out of a liquidity trap, rising demand and low interest rates will lead to inflation. The central bank will then raise rates to tame inflation with the economy below full employment, and this will result in a situation in which government interest payments are unsustainable compared to tax revenue collections. The author counters that inflation driven by renewed demand could be managed using restrictive fiscal policy rather than monetary policy. Under such a regime, inflation could be avoided, full employment maintained, and bond yields held close to zero, while government interest payments on the debt would remain manageable. Further, government surpluses would reduce the level of the debt over time. Thus, high public debt would not lead to a permanent increase in taxes but only a temporary increases as the need arose.

The author next discusses fiscal policy aimed at full employment in relation to debt-to-GDP ratios. He explains that the debt levels needed to maintain full employment grow more slowly than GDP and thus become proportionately smaller relative to GDP over time. Thus, governments face no obstacle financing their deficits, assuming an open economy and flexible exchange rates. Leão notes that if some investors abandon the domestic currency, their money ends up in the hands of other private agents. He also provides a brief discussion of the fairness of imposing a zero nominal interest rate over a long period of time, and observes that in the presence of a positive rate of inflation such a policy would erode the real value of money obtained through past work and enterprise. However, he points out that zero nominal rates may be justified to discourage saving during liquidity trap periods and thus keep public debt burdens at manageable levels.

On balance, the author concludes, a country with high levels of public debt should replace monetary policy with fiscal policy. Taxes and public expenditures are more appropriate tools for managing demand and inflation than central bank interest rates.

www.levyinstitute.org/pubs/wp_843.pdf

INSTITUTE NEWS

New Research Associate

Research Associate Emilios Avgouleas holds the International Banking Law and Finance Chair at the University of Edinburgh Law School. He was formerly University Professor of International Financial Markets and Financial Law at the University of Manchester and has also held visiting posts at other leading academic institutions. He acts as an external examiner for the London School of Economics (LSE) LLM programs and has served as scientific assessor for numerous European and UK research organizations, including the European Social Fund, the National Science Research Trusts of Switzerland, Luxembourg, and Belgium, the Leverhulme Trust, and the Economic and Social Research Council.

An expert in banking law and finance, financial market regulation, and global economic governance, Avgouleas has advised governments, development organizations, and central banks on issues ranging from bank rescues and sovereign debt restructuring to financial stability, economic development, and market integrity. He is a member of the sovereign debt group of the Financial Markets Law Committee (operating under the auspices of the Bank of England) and the Stakeholder Group of the European Banking Authority, as well as the Royal Economic Society. His current areas of research include bail-in and bank resolution, agency costs of bank leverage, financial stability and monetary policy, financial regulation and longterm growth, and Asian financial integration. Avgouleas is the author of two monographs, Governance of Global Financial Markets: The Law, the Economics, the Politics (Cambridge University Press, 2012) and The Mechanics and Regulation of Market Abuse: A Legal and Economic Analysis (Oxford University Press, 2005), and coauthor, with Sir Ross Cranston, of the latest edition of *Principles of Banking Law*, forthcoming from OUP in 2016. He holds an LLM in banking and finance law and a Ph.D. in law and economics from the LSE.

New Books by Levy Institute Scholars

Financial Regulation in the European Union

Edited by Rainer Kattel, Jan Kregel, and Mario Tonveronachi Routledge, October 2015

This new collection edited by Rainer Kattel, Senior Scholar and Research Director Jan Kregel, and Mario Tonveronachi offers detailed analyses of the impact of financial regulation in eight European economies, a discussion of alternative responses to financial crises (notably in the Nordic countries during the 1990s and in the United Kingdom more recently), and concludes with a discussion of postcrisis regulatory standards and their inclusion in the European framework. The Introduction provides a compact survey of the evolution of the regulatory framework in the European Union (EU). This frames the discussion of the wide variance in financial market regulation regimes among the national governments of Europe, which is the primary focus of the eight country studies (i.e., France, Germany, Italy, Spain, Estonia, Hungary, Poland, and Slovenia). The country studies are organized around the national implementation of the European Directives on banking and finance during the period between the Single European Act through the global financial crisis in 2007–08, and the steps taken in the aftermath of the crisis. The regulatory and supervisory activities analyzed in these studies fall under three broad headings: those which were fully incorporated into EU regulation, those lightly or partially regulated, and those left outside the scope of formal EU regulation.

The country studies also discuss how greater national discretion allowed for more variety in lightly or partially regulated financial operations, including in such areas as deposit guarantee schemes, recovery and resolution procedures, and accounting standards. The specific regulatory issues covered include liquidity rules, bank resolution, competition policy, usury, and taxes, all of which have exhibited substantial variation within

the EU. However, the recent global financial and European sovereign debt crisis revealed the limits of precrisis regulatory efforts and led, in some cases, to expanded and/or stricter implementation, as in, for example, Basel II.5 and Basel III and the creation of European Supervisory Authorities. Indeed, the need for greater harmonization led to the formation, in 2014, of the EU banking union and its two main pillars, the Single Supervisory Mechanism and the Single Resolution Mechanism.

Following the theme of stricter regulation, the next chapter takes up the interplay between financial innovation, bank crises, and regulatory reforms as reflected in the British experience. The UK's response to the recent crisis was more marked than on the continent, due perhaps to its role as an international financial center. Another example of crisis response, and one that offers relevant lessons, is taken up in chapter 11, which discusses the response of the Nordic countries to a systemic crisis in the early 1990s. The book concludes with a discussion of the efforts by the G20, the Financial Stability Board, and international standard setters to arrive at a new regulatory balance for the banking industry. Among the observations offered, the author of this chapter suggests that while the scope of regulatory and supervisory activity has deepened and widened post crisis, the idea of a level regulatory playing field continues to evolve, and lingering questions remain for some nations regarding the choice between exchanging national discretion for the as yet unproven benefits of greater harmonization.

Regulatory reforms, when they have occurred, have largely focused on repairing the weaknesses of the previous regulatory and supervisory system without limiting the ability of private operators to innovate. Further, when structural measures have been introduced, their scope has been so constrained as to call into question their efficacy. These and other issues raised collectively by the authors invite the reader to consider the approach to financial regulation taken in the EU to date, and the lessons to be learned thus far.

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Modern Money Theory: A Primer on Macroeconomics for Sovereign Monetary Systems, 2nd rev. ed.

By L. Randall Wray Palgrave Macmillan, September 2015

In recent years, Modern Money Theory (MMT) has received growing attention in the media and among policymakers, with some former critics now claiming that they had embraced MMT all along. Yet despite this expanding audience for MMT there remains a gap between its presentation in academic journals and the uneven treatment it receives in the popular press and blogosphere. In this new edition, Senior Scholar L. Randall Wray provides a rigorous yet accessible presentation of the basics of MMT for policymakers, journalists, scholars, and the general reader. This edition both reflects the developments in MMT since the first edition appeared in 2012 and extends Wray's analysis in areas such as inflation, taxation, the euro crisis, trade, and developing economies.

Wray begins with an introduction to MMT and its relevance today. He then surveys the fundamentals of macroeconomic accounting, with particular attention to the concepts of stocks, flows, and balance sheets. The text provides a clear and accessible exposition of the main ideas of MMT as well as technical notes on advanced topics; responses to frequently asked questions can be found in technical boxes throughout the book. Wray notes that some have criticized MMT as too focused on the United States and largely irrelevant to the rest of world, as most countries do not issue a global reserve currency. This primer addresses these concerns, including those critiques focused on the application of MMT to countries with fixed exchange rate regimes. However, as the author explains, the purpose of the present volume is to make a positive contribution to economics, not to catalogue the various critiques of the theory.

He next discusses spending by a sovereign government issuing its own currency and how its policy choices differ from those of a country that is a mere user of currency. An explanation of the banking system and central banks follows, and includes a discussion of IOUs denominated in the national currency, central bank and treasury operations, and the concept of the lender of last resort. Wray also discusses fiscal policy for governments that issue their own currency, treating such topics as public deficits and their impact on savings, and

reserves and interest rates. The next chapter focuses on the nature and function of tax policy. MMT and alternative exchange rate regimes are also explored, as are the implications of a gold standard, fixed and floating exchange rates, sovereign defaults, and the policy space associated with the various currency regimes. The purposes of monetary and fiscal policy for sovereign currency governments brings in the functional finance approach before the discussion turns to policy questions such as full employment and price stability. This chapter also explores job guarantee and employer-of-lastresort policies, with reference to their applicability in developing countries and real-world examples of their application. The topic of inflation is taken up in the penultimate chapter. MMT, the author notes, carries no implicit policy agenda—it can be applied to any policy goal. Thus, the normative goals of policy are not explored in detail, so as to emphasize MMT as a framework for analyzing any policy. Wray closes with observations on the role of MMT in resolving the global financial crisis and the eurozone debt crisis, which have added to a growing recognition of how money operates in the modern world.

In sum, this new and expanded edition will be of interest to scholars, journalists, and policymakers seeking an introduction to modern money and its implications for how we understand global and national economies.

www.levyinstitute.org/publications/modern-money-theory-aprimer-on-macroeconomics-for-sovereign-monetary-systems

Why Minsky Matters: An Introduction to the Work of a Maverick Economist

By L. Randall Wray Princeton University Press, November 2015

The global financial crisis (GFC) prompted renewed interest in Hyman P. Minsky's work, with some observers calling him the most important economist since John Maynard Keynes. Drawing on both his scholarship and his long association with Minsky—a Levy Institute Distinguished Scholar from 1990 until his death in 1996—Wray offers a rigorous survey of the major themes in the late economist's contributions. This volume is organized around Minsky's writings on financial instability; his work on employment, inequality, and poverty; and research undertaken during the last decade and a half of his

career, notably the development of his ideas about money manager capitalism. Interest in Minsky's work outside academic circles has grown, but, as Wray observes, it requires translation—for the policymaker as well as the lay reader. This volume fills this void at a time when Minsky is more relevant than ever.

As has been frequently noted, the GFC vindicated one of Minsky's central theoretical, and heterodox, contributions: that stability leads to instability. His insights were further substantiated with his diagnosis of the dangers of securitization under money manager capitalism as well as the globalization of finance and the decline of banks compared to other financial institutions—developments that the Federal Reserve and mainstream economists failed to comprehend. Although the idea of the "Minsky moment"—the sudden collapse of asset values following an extended period of market speculation—has received a great deal of attention, as Wray notes, the scope Minsky's insights goes far beyond the most recent crisis.

As much as Minsky's work has been embraced by heterodox economists and "rediscovered" by those in the mainstream, little has been done to correct the underlying problems in the global financial system. Minsky understood that it was not a matter of "tweaking" orthodox models. In his view, there is no general market equilibrium. When markets experience equilibrium, they try to escape using financial innovations, and, because of the iterative nature of innovation and instability, regulation must coevolve with markets, not stand by and wait for the next crisis to erupt.

Wray's exegesis includes a review of Minsky's main early contributions to the field. Reflecting on the development of economic theory during the postwar period, he observes that Minsky's project was to clarify and elaborate some of the more radical elements of Keynes's work. He then moves to a discussion of Minsky's financial theory of investment and his financial instability hypothesis. Wray next presents Minsky's views on banking, drawing a clear contrast with orthodox economists' deposit-multiplier approach.

Turning to Minsky's work on unemployment and poverty, the author reviews his critique of the Johnson administration's War on Poverty. Minsky emphasized that the goal of the program was misplaced and that the elimination of involuntary unemployment should be the focus of poverty reduction

policies. He also observed that poverty reduction through increased employment contributes to economic stability.

Wray next addresses Minsky's "stages" approach to the economy and his work on financial reform. Minsky argued that the financial system is best understood as a long-term transformation, describing the latest stage in this transformation (in the late 1980s) as "money manager capitalism." Within this context, Wray introduces Minsky's perspectives on the banking system, regulation, and prudent banking.

The volume closes with a discussion of the implications of Minsky's work for the problems policymakers continue to grapple with nearly a decade after the GFC. Wray surveys Minsky's proposals to promote economic stability while promoting democracy, security, and equality. For example, Minsky argued that modern capitalism is financial in nature and therefore fundamentally unstable, but that it can be constrained through monetary and fiscal policy. However, measures to constrain this instability will give rise to innovative behavior that requires continual reevaluation of regulations and policy. Going forward, a Minskyan policy framework would include such things as promoting the capital development of the economy; a large and active public sector to stabilize the economy with countercyclical spending; a central bank to constrain lending during booms and act as the lender of last resort in a crisis; an employment strategy in the form of an employer of last resort that, in combination with other programs, would replace welfare transfer payments; corporate reforms to induce consumption and growth in the real economy; financial reforms such as better management of the payments system; a system of small community development banks; and regulatory reform that would allow individual banks and firms to fail, in order to ensure market discipline and reduce the incentives for bigness (no "too big to fail"). These and other proposals reflect Minsky's contributions over several decades, and remain remarkably relevant to conditions facing policymakers both in the US and globally.

The volume also includes extensive sections on suggested readings and a guide to the collected writings of Minsky, including articles, book reviews, and working papers. www.levyinstitute.org/publications/why-minsky-matters-an-introduction-to-the-work-of-a-maverick-economist

Upcoming Events

Gender and Macroeconomics: Current State of Research and Future Directions

Blithewood, Annandale-on-Hudson, N.Y. March 9–11, 2016

Organized by the Levy Institute with the generous support of The William and Flora Hewlett Foundation, this workshop aims to advance the current framework that integrates gender and unpaid work into macroeconomic analysis and enables the development of gender-aware and equitable economic policies. Both theoretical and empirical studies employing innovative methodologies and new datasets will be presented, as well as papers that provide a comprehensive picture of the state of the art, identify gaps, and indicate directions for future research.

Topics will include the relationships between economic structure, growth regime, and gender inequities; mechanisms and the extent to which unpaid work constrains women's participation in paid work and access to economic opportunities; the implications of women's labor market participation for their well-being and for intrahousehold allocation of time; structural, macroeconomic, and microeconomic aspects of women's employment in the informal sector; formulation and analysis of gender-aware policy interventions; and frameworks for integrating the role of unpaid work in measures of well-being. For more information, visit www.levyinstitute.org.

25th Annual Hyman P. Minsky Conference

Will the Global Economic Environment Constrain US Growth and Employment?

Blithewood, Annandale-on-Hudson, N.Y. April 12–13, 2016

The Levy Economics Institute's 25th Annual Hyman P. Minsky Conference will take place at Blithewood, on the Bard College campus, in April. Organized with underwriting support from the Ford Foundation, the conference will address, among other issues, the state of financial reform six years after Dodd-Frank; monetary policy in a framework of zero interest rates; the "new" normal for fiscal policy; budget deficits and debt;

and policies aimed at achieving sustainable growth and full employment.

Invited speakers include Viral V. Acharya, C. V. Starr Professor of Economics, New York University Stern School of Business; Lakshman Achuthan, cofounder and COO, Economic Cycle Research Institute; Richard Berner, director, Office of Financial Research, US Department of the Treasury; Vítor Constâncio, Vice President, European Central Bank; Barney Frank, Former US Representative (D-MA, 4); Bruce C. N. Greenwald, Robert Heilbrunn Professor of Finance and Asset Management, Columbia University; Peter Hooper, managing director and chief economist, Deutsche Bank Securities; Robert A. Johnson, president, Institute for New Economic Thinking, and director, Franklin and Eleanor Roosevelt Institute; Stephanie A. Kelton, chief economist, US Senate Budget Committee; William Krehm, publisher-editor, COMER; Dennis P. Lockhart, president and CEO, Federal Reserve Bank of Atlanta; Michael Masters, founder and managing member, Masters Capital Management; Paul McCulley, former managing director and chief economist, PIMCO; Frank N. Newman, chairman, Promontory Financial Group China Ltd.; Sarah Bloom Raskin, deputy secretary, US Department of the Treasury; Nydia M. Velázquez, US Representative (D-NY, 7); and Albert M. Wojnilower, economic consultant, Craig Drill Capital.

Program details will be posted on the Institute's website as they become available.

The Hyman P. Minsky Summer Seminar

Blithewood, Annandale-on-Hudson, N.Y. June 10–18, 2016

The Levy Institute's seventh annual Hyman P. Minsky Summer Seminar will be held on the Bard College campus in June 2016. The Summer Seminar provides a rigorous discussion of both theoretical and applied aspects of Minsky's economics, and is geared toward recent graduates, graduate students, and those beginning their academic or professional careers. For more information, visit our website.

PUBLICATIONS AND PRESENTATIONS

Publications and Presentations by Levy Institute Scholars

JAMES K. GALBRAITH Senior Scholar

Publications: La grande crise: Comment en sortir autrement, Le Seuil, 2015; "How Dangerous Is Vladimir Putin to the West?" The International Economy, January-February; "The Greek Hope," Social Europe, January 27; "US Must Rally to Greece," Op-ed, The Boston Globe, February 19; "L'hétérodoxie en économie, une chance pour la France," Mediapart, February 24; "A Comparison of Major World Inequality Data Sets: LIS, OECD, SILC, WDI and EHII" (with J. Choi, B. Halbach, A. Malinowska, and W. Zhang), UTIP Working Paper No. 69, March 7; "The Great German Greek Grexit Game?" openDemocracy, March 9; "Un gobierno europeo contra la austeridad," Ola Financiera, No. 21, May-August; "What is Reform? The Strange Case of Greece and Europe," The American Prospect, June 12; "The IMF's 'Tough Choices' on Greece," Project Syndicate, June 16; "Greece: Death Spiral Ahead," Politico, July; "9 Myths about the Greek Crisis," Politico, July; "Greece: Only the 'No' Can Save the Euro," *The American Prospect*, July 1; "Is Greece to Blame for the Crisis? Foreign Affairs' Brain Trust Weighs In," Foreign Affairs, July-August; "The Future of Europe" Suddeutsche Zeitung, August 12.

Presentations: "The Call for More Outreach and Opportunity," presented at the "New Agenda" Conference, sponsored by Professors Responding to a Crisis, Seattle, Wash., January 30, 2015; "Inequality and Power," Power and Economics Symposium, House of Lords, London, England, March 23; "Inequality in the World Economy: What Do We Know?," Jno. E. Owens Memorial Foundation Conference, sponsored by Austin College, Sherman, Tex., March 31.

TAMAR KHITARISHVILI Research Scholar

Publication: "The Great Recession and Unpaid Work Time in the United States: Does Poverty Matter?" (with K. Kim), *Electronic International Journal of Time Use Research*, Vol. 12, No. 1, 2015.

Presentations: "Direct Estimates of Food and Eating Production Function for 2004–2012 Using ATUS/CEX Synthetic Dataset" (with F. Rios-Avila and K. Kim), International Association of Time Use Research 37th Annual Conference, Ankara, Turkey, August 5–7, 2015; "Position Paper on Gender and Employment in South Caucasus and Western CIS," UNDP-ILO-World Bank Subregional Conference on Employment: "Promoting Job Rich and Sustainable Growth in Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine," Tbilisi, Georgia, October 28–29.

KIJONG KIM Research Scholar

Publication: "The Great Recession and Unpaid Work Time in the United States: Does Poverty Matter?" (with T. Khitarishvili), *Electronic International Journal of Time Use Research*, Vol. 12, No. 1, 2015.

Presentations: "Measurement of Time and Income Poverty in Korea" (with A. Zacharias, T. Masterson, and T. Kwon) and "Direct Estimates of Food and Eating Production Function for 2004–2012 Using ATUS/CEX Synthetic Dataset" (with F. Rios-Avila and T. Khitarishvili), International Association of Time Use Research 37th Annual Conference, Ankara, Turkey, August 5–7, 2015; "The Impact of Public Investment in Social Care Services on Employment, Gender Equality and Poverty: The Turkish Case" (with İpek İlkkaracan and T. Kaya), Research Report Launch Meeting, Istanbul Technical University, Istanbul, Turkey, September 18.

JAN KREGEL Senior Scholar and Director of Research

Publications: Financial Stability and Growth: Perspectives on Financial Regulation and New Developmentalism (ed. with L. C. Bresser-Pereira and L. Burlamaqui), Routledge Studies in Development Economics, 2014; "Regulating the Financial System in a Minskyan Perspective," in L. C. Bresser-Pereira, J. Kregel, and L. Burlamaqui, eds., Financial Stability and Growth: Perspectives on Financial Regulation and New Developmentalism, Routledge; "Minsky and Dynamic Macroprudential Regulation," PSL Quarterly Review, Vol. 67, No. 269; "Economists and Depression: Did It Happen Again? On Minsky's Financial Macroeconomics," History of Economic Ideas, Vol. 22, No. 3; "In Memoriam: Frederic S. Lee, 1949–2014" (with L. R. Wray), in T.-H. Jo and Z. Todorova, eds., Advancing the Frontiers of Heterodox Economics: Essays in Honor of Frederic S. Lee,

Financial Institutions after the Crisis: A New Financial Deal in the Making?," in L. Burlamaqui, R. Sobreira, and M. Vianna, eds., The Present and Future of Development Financial Institutions: Theory and History, Multidisciplinary Institute for Development and Strategy (MINDS); "Emerging Markets and the International Financial Architecture: A Blueprint for Reform," Brazilian Journal of Political Economy, Vol. 35, No. 2, April-June. Presentations: "Banking, Finance, and Emerging Markets' Financial Instability Today," Project Conference: Banking, Financial Instability, and Financial Governance in Brazil, Getúlio Vargas Foundation (FGV/EESP), São Paulo, Brazil, July 24, 2015; "Financial Governance and Financing for Development after the Great Recession: What Changed and What Didn't?," International Seminar on the Role of the State in the 21st Century: Challenges for Public Management, Brasilia, September 3–4; "How Can the World Get Rid of Its Debt Pile?," Allianz GI Investment Forum, New York, N.Y., September 9; "Deuda externa y flujos de capitales como condicionantes externos al crecimiento en América Latina" and "Perspectivas macroeconómicas globales y sus efectos sobre América Latina," 1st Latin American Economic Thought Congress, Metropolitan University for Education and Labor (UMET), Buenos Aires, Argentina, September 24-25; "The Crisis of International Capitalism," 50th Anniversary Conference: International Capitalism Restructuration, University of Campinas, Brazil, October 7-8; "Debate: The United States Should Break Up the Big Banks," University of California, Berkley, November 18.

Routledge Studies in Development Economics, 2015; "Public

DIMITRI B. PAPADIMITRIOU President

Publications: "The New Bank Recapitalization and How to Avoid the Traps of Those Previously," *Kathimerini*, October 18, 2015; "ECB and How to Revise the Financial Rules of the Eurozone," *Kathimerini*, November 22; "Complementary Currency and Economic Stability," *Kathimerini*, December 13. **Presentation:** Radio interview regarding current economic and social issues in Greece with Pericles Vassilopoulos, Koinoniapoliton.gr, August 20, 2015.

JOEL PERLMANN Senior Scholar

Presentation: "Ethno-racial Origin in U. S. Federal Statistics, 1980–2020" (with P. Nevada), Social Science History Association Annual Meeting, Baltimore, Md., November 14, 2015.

FERNANDO RIOS-AVILA Research Scholar

Publication: "The Persistent Effect of Banking Crises on Investment and the Role of Financial Markets" (with F. Rioja and N. Valev), *Journal of Financial Economic Policy*, Vol. 6, No. 1, 2014 (*JFEP* 2015 Outstanding Paper Award).

Presentation: "Direct Estimates of Food and Eating Production Function for 2004–2012 Using ATUS/CEX Synthetic Dataset" (with T. Khitarishvili and K. Kim), International Association of Time Use Research 37th Annual Conference, Ankara, Turkey, August 5–7, 2015.

L. RANDALL WRAY Senior Scholar

Publications: Why Minsky Matters: An Introduction to the Work of a Maverick Economist, Princeton University Press, 2015; Modern Money Theory: A Primer on Macroeconomics for Sovereign Monetary Systems, 2nd rev. ed., Palgrave Macmillan, 2015; "The Job Guarantee, Full Employment and Human Rights," in U. Mattei and J. D. Haskell, eds., Research Handbook on Political Economy and Law, Edward Elgar.

Presentations: Lecture, "Modern Money Theory," National Autonomous University of Mexico (UNAM), Mexico City, November 5, 2015; lecture, "Minsky and the Capital Development of the Economy," UNAM, November 6.

TAI YOUNG-TAFT Research Scholar

Presentations: "Beyond the Accounting: Macroeconomics Limits on Deficit Spending in a Continuous-time SFC-PK Model" (with G. Hannsgen), 19th Conference of the Research Network Macroeconomics and Macroeconomic Policies, Berlin, Germany, October 22–24, 2015; "Education, Intelligence, and the Quotidian: Considering Aspects of Control and Liberation," Academy and Polity: The Political Classroom in an Era of Austerity, Bard College at Simon's Rock, Great Barrington, Mass., November 12–13.





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