Levy Economics Institute of Bard College

Summary

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LETTER FROM THE PRESIDENT

To our readers:

We begin this issue with a working paper under the State of the US and World Economies program by Research Scholar Michalis Nikiforos, featuring a critical discussion of the Sraffian supermultiplier approach to growth and distribution that argues the model detrimentally ignores the role of investment. It is followed by a working paper from Esteban Pérez Caldentey, Nicole Favreau-Negront, and Luis Méndez Lobos that undertakes an empirical analysis of the macroeconomic implications of corporate debt in Latin America, using data from a sample of over 2,000 nonfinancial firms in the region's six largest economies.

Under the Monetary Policy and Financial Structure program, a public policy brief by Mario Tonveronachi offers his assessment of the European Commission's proposal for regulating sovereign bond-backed securities (SBBS) and presents an alternative approach to addressing the problems that are supposed to be solved by an SBBS scheme—an alternative that envisions the European Central Bank issuing debt certificates along the maturity spectrum to create a common yield curve while absorbing a share of each eurozone country's national debts. In the first of three working papers in the program, W. Lee Hoskins and Walker F. Todd consider the costs of the failure of state-managed intervention in financial markets and the increase in moral hazard in the period following the fall of the Berlin Wall, while Tanweer Akram and Huiqing Li continue their investigations into the dynamics of bond yields, this time focusing on Japan. A contribution by Frank Veneroso looks to the writings of Joseph Schumpeter, Irving Fisher, John Maynard Keynes, and Hyman P. Minsky to evaluate how supposedly stable and efficient markets embark on disequilibrium paths.

Under the Distribution of Income and Wealth program, Research Scholar Thomas Masterson and Senior Scholar Ajit Zacharias apply the Levy Institute Measure of Time and Consumption Poverty to data from Ghana and Tanzania to address the nexus between wage employment, consumption poverty, and time deficits, particularly as they affect women's economic empowerment. Also in this program, J. W. Mason examines the impetus behind the increase in household debt relative to consumption to determine if what he calls the "debt-distribution-demand" story is supported by empirical evidence.

A research project report under the Employment Policy and Labor Markets program presents an outline and analysis of a Public Service Employment (PSE) program that would offer a federally funded, locally administered job at a living wage to anyone seeking one. Senior Scholar L. Randall Wray, Flavia Dantas, Scott Fullwiler, and Research Associates Pavlina R. Tcherneva and Stephanie A. Kelton estimate that offering a job with a $15 per hour wage (with benefits) will increase economic growth over the ten years of their projections, with only a minor impact on inflation, and will disproportionately benefit women and minorities, allowing one full-time worker to lift a family of five out of poverty. A policy note by Wray follows, addressing early critics of the PSE report, while a policy note by Wray, Dantas, Fullwiler, Tcherneva, and Kelton summarizes the larger report.

Two working papers are also included in the Employment Policy and Labor Markets program. In his contribution, Senior Scholar John F. Henry examines popular New Deal–era programs through the lens of the evolving definition of "liberal democracy," contending they represented a striking departure from what was then considered liberal or progressive, serving instead what Thorstein Veblen called the "vested interests" of oligopolistic business organizations. Finally, Research Associate Pavlina R. Tcherneva submits a blueprint for implementing a job guarantee program, with an appendix addressing a list of frequently asked questions about the costs and benefits of such a program.

As always, I welcome your comments and suggestions.

Dimitri B. Papadimitriou, *President*

Program: The State of the US and World Economies

Some Comments on the Sraffian Supermultiplier Approach to Growth and Distribution

MICHALIS NIKIFOROS

Working Paper No. 907, May 2018

Research Scholar Michalis Nikiforos presents a critical discussion of the Sraffian supermultiplier (SSM) model approach to growth and distribution, as introduced in the mid-1990s by Franklin Serrano. The model, built primarily on the works of Pierangelo Garegnani and John Hicks, combines an autonomous role for aggregate demand with the classical-Sraffian theory of distribution. Given its convergence toward an exogenous-to-demand, "normal" degree of capacity utilization, the author notes it is sometimes preferable to the Kaleckian growth model—with several scholars integrating the SSM framework while preserving the main conclusions of the canonical Kaleckian model, such as the paradox of thrift and the paradox of costs as level effects—however, he suggest that this combination detrimentally ignores the role of investment.

Within the SSM model, the system converges to a balanced growth path in the medium and long run where the rate of capital accumulation and the growth rate of output are driven by the rate of autonomous, non-capacity-generating expenditure, defined as expenditure (such as debt-financed consumption, residential investment, and government expenditure) that is independent of income and other economic variables. In the model, changes in autonomous spending are transmitted to output through the supermultiplier. Changes in variables such as the savings rate, income distribution, and propensity to invest (which play a more central role in demand-driven models) have growth effects that fade and remain only as level effects in the long run, leading Nikiforos to contend that in the short run the SSM provides no novel results when compared to a standard demand-led model, and therefore its assumptions and conclusions should only be evaluated with reference to the long run.

Evaluating the model over this time horizon, Nikiforos is unconvinced that expenditure can be truly autonomous in the long run, pointing out that it is unlikely that households and governments make long-term decisions without reference to their expected rate of income growth. Additionally he argues that in the SSM model, the related debt-to-income ratios converge to a constant value; however, stock-flow consistency requires that debt-financed autonomous expenditure leads to the accumulation of debt. While the increasing debt-to-income ratios can be seen as an autonomous process in the short-to-medium run, in the long run, expenditure must decrease relative to income and, Nikiforos argues, is therefore no longer autonomous. Alternatively, the system enters a Ponzi phase, accompanied by a characteristic debt-deleveraging cycle that (nonautonomously) decreases debt-to-income ratios, as seen in recent financial crises around the world.

Turning to the normal, long-run rate of capacity utilization, the author notes the importance of the convergence to a supply-determined rate of utilization in the SSM model and the lack of such convergence in the Kaleckian model, arguing that the SSM model can be considered an effort to reconcile the "Keynesian hypothesis" (the determination of investment is independent from saving), the classical theory of distribution, and convergence to a supply-determined rate of utilization. However, he suggests that a better way to approach this in a capitalist system is to endogenize the desired rate, leading to a long-run equilibrium that maintains the short-run results of the model, therefore allowing the growth effects of changes in distribution, the savings rate, or autonomous spending to carry over, making the long-run state of the economy path dependent. As an example, Nikiforos cites Greece's extreme austerity over the past decade, suggesting it will have a lasting effect on the ability of the Greek economy to grow, even if the exogenous decrease in fiscal spending is reversed and government spending returns to its trend growth rate. With capital standing idle and productive capacity diminished, he contends this "new normal" utilization rate is the permanent effect of the austerity-induced demand shock.

Nikiforos concludes that the SSM's assumption of autonomous expenditure is a theoretical flaw of the approach, since in the long run debt-financed expenditure cannot be autonomous,

as income and other economic variables influence expenditure decisions. Additionally, because all expenditure decisions become endogenous in the long run to stabilize debt-to-income ratios, the SSM's assumption of autonomy makes it unusable for the meaningful analysis of debt and financial crises.
www.levyinstitute.org/pubs/wp_907.pdf

Corporate Debt in Latin America and Its Macroeconomic Implications

esteban pérez caldentey, nicole favreau-negront, and luis méndez lobos
Working Paper No. 904, May 2018

Esteban Pérez Caldentey, Economic Commission for Latin American and the Caribbean (ECLAC), Nicole Favreau-Negront, ECLAC, and Luis Méndez Lobos, University of Santiago Chile, present an empirical analysis of the macroeconomic implications of the corporate debt of nonfinancial firms in six large Latin American countries (namely, Argentina, Brazil, Chile, Colombia, Mexico, and Peru). Distinguishing between bond-issuing and non-bond-issuing firms, their sample includes 2,241 firms listed on the stock markets of their respective countries and represents 34 sectors of economic activity for the period 2009–16.

As bank lending was restricted following the global financial crisis (GFC) of 2008–09, exchange rate appreciation and favorable commodity prices gave developing countries an incentive to issue debt in international bond markets, which were already benefiting from quantitative easing policies in developed countries that increased the relative profitability of financial assets. In the case of Latin America, the authors note the total stock of outstanding international debt securities issued more than doubled in the period following the end of the GFC. Decomposing the debt stock by issuing sector, they find that while the government accounted for the majority of the debt, its importance as a debt issuer declined compared to the private financial and nonfinancial sectors, both of which registered a more than fivefold increase in the period since 2007. Though the total number of firms issuing debt was relatively small, the authors point out that they accounted for a large share of total assets in their respective countries, especially with respect to total expenditure on fixed assets and long-term investment.

To gain an understanding of the financial situation of the nonfinancial corporate sector in the countries they examined, Pérez Caldentey, Favreau-Negront, and Méndez Lobos looked at financial indicators to assess the state of each firm's liquidity, solvency, profitability, and net profit margin, revealing deteriorating performance of the sector, as reflected in the rise in leverage and decline in profitability over the period from 2009–16, particularly for bond-issuing versus non-bond-issuing firms. The authors compliment the financial indicator data with a Minskyan analysis of the financial fragility of the firms under study, classifying each into hedge, speculative, and Ponzi categories for data from 2010 and 2015, based on criteria from five separate reports detailed in their text. Their findings indicate that non-bond-issuing firms barely experienced changes in their financial positions during the period under study, while an increasing number of bond-issuing firms moved from hedge to more fragile positions. They assert that given the outsized share of fixed tangible assets and long-term investment among bond-issuing firms in the nonfinancial corporate sector, this deterioration in the financial situation can have significant macroeconomic implications, with overleveraging resulting in a negative relationship between debt and investment as firms restrict investment in the face of higher interest payments or retain earnings to protect against illiquidity. Additionally, the authors cite evidence indicating bond flows are more sensitive than bank loans to changes in external interest rates, making firms that seek finance in international capital markets even more likely to experience deteriorating financial positions.

Given the increasing importance of foreign capital for financing in Latin America, Pérez Caldentey, Favreau-Negront, and Méndez Lobos conclude that more attention must be paid to the international bond market when analyzing the transmission mechanisms of the monetary and financial impulses from developed economies to gain a better understanding of the reasons for the declining investment and low growth among the firms in their study.
www.levyinstitute.org/pubs/wp_904.pdf

Program: Monetary Policy and Financial Structure

European Sovereign Bond-Backed Securities: An Assessment and an Alternative Proposal

MARIO TONVERONACHI

Public Policy Brief No. 145, June 2018

In response to a proposal put forward by the European Commission (EC) for the regulation of sovereign bond-backed securities (SBBSs), Mario Tonveronachi, University of Siena, provides his analysis of the SBBS scheme and attendant regulatory proposal, and elaborates on an alternative approach to addressing the problems that have motivated this high-level consideration of an SBBS framework.

The EC's regulatory proposal follows the release of a report sponsored by the European Systemic Risk Board on the feasibility of an SBBS framework. SBBSs would be created through a securitization process similar to that of a collateralized debt obligation (CDO) structure: by pooling national sovereign bonds and slicing the pool into senior, mezzanine, and junior securities, each with a range of maturities. The senior tranche is to be designated a "safe asset," with at least the same rating and return as German bonds.

Tonveronachi explains that this SBBS scheme is designed to address two problems afflicting the euro area's financial system. First, the absence of a common yield curve means that the euro area does not truly have a single financial market. The SBBSs would serve as the common asset required to create such a yield curve. Second, the SBBS proposal is supposed to break the link between bank crises and sovereign debt crises in the eurozone by shielding banks from sovereign crises and preventing banking crises from turning into sovereign debt crises.

As he argues, it is doubtful the proposal would yield its intended results. First, hardly any financial operators in triple-A-rated countries would agree to swap their national debt with equally profitable but more uncertain synthetic assets—thus preventing the scheme from reaching the necessary scale. Second, given the limited number of systemically correlated assets involved and the participation of national assets according to the European Central Bank's (ECB) capital key, the pool would not be sufficiently diversified to permit using the usual CDO methodology, which means the multiplier effect necessary to drive the production of safe assets would not be generated. Further, a range of underestimated costs—along with the need to maintain sufficiently enticing profit margins for the private financial institutions originating and distributing them—would significantly complicate the plan to make the requisite amount of senior tranches of SBBSs equivalent, in terms of safety and yield, to the highest-rated national sovereign bonds. It is therefore doubtful that private operators could produce a sufficiently large and stable volume of safe assets with the initial maturities required to build a risk-free yield curve.

The proposed EC regulation, which aims at subjecting SBBSs to the same financial regulatory requirements as their underlying national sovereign bonds, does not appear to surmount the aforementioned difficulties. Attempts to add flexibility to address complications with the SBBS scheme undermine the ability of the scheme to establish a common yield curve for the euro area. Worst of all, the scheme, though regarded by the EC as just a "market test," may in several ways undermine rather than bolster financial stability.

There are, Tonveronachi points out, better options. His alternative—discussed in evolving forms in Levy Institute Public Policy Briefs Nos. 137 and 140—would involve the ECB issuing debt certificates along the maturity spectrum to create a common yield curve. Through corresponding operations, the ECB would absorb a share of each eurozone country's national debts (according to ECB capital keys). Alongside these financial operations, new fiscal rules incorporating more ambitious targets for sovereign debt ratios would be imposed—with more drastic consequences for noncompliance, but a more favorable influence on euro area economic growth. This alternative proposal not only better addresses the two problems targeted by the SBBS scheme, but also promotes national sovereign debt sustainability.

www.levyinstitute.org/pubs/ppb_145.pdf

Twenty Years after the Fall of the Berlin Wall: Rethinking the Role of Money and Markets in the Global Economy

W. LEE HOSKINS and WALKER F. TODD
Working Paper No. 908, June 2018

In remarks originally written in 2010 and updated in 2018, W. Lee Hoskins, Pacific Research Institute, and Walker F. Todd, Middle Tennessee State University, consider the costs of the failure of state-managed intervention in the financial markets and the increase in moral hazard in the period since the fall of the Berlin Wall. Contending that it is against the self-interest of regulators to follow through with thoughtful economic advice focused on market-based solutions, the authors assert that meaningful change will only come from an educated citizenry exercising their power at the ballot box.

Beginning their examination of regulations with those put in place following the savings and loan crisis of the late 1980s, the authors suggest the legislation—the Financial Institutions Reform Recovery and Enforcement Act (1989) and the Federal Deposit Insurance Corporation Improvement Act (1991)—was not stringent enough and could easily be circumvented, by institutions and regulators alike. Using the too-big-to-fail doctrine as an example, the authors note that while it had been declared against public policy by the 1991 act, representatives of large banks operated through regulators and the Treasury Department to carve out an exception for systemic risk, allowing the Federal Reserve to make emergency loans to securities firms and other nonbank entities. While such entities were routinely allowed to fail through the 1990s, the systemic risk exception came to the rescue of others, shielding depositors and creditors from losses and weakening the market restraint on inappropriate risk-taking. Compounded by the effects of the "Greenspan put," Hoskins and Todd argue that an increase in moral hazard set the stage for the next crisis.

Moving forward to 2010, the authors note that despite the obvious failures, the same policy of increased regulation and low interest rates was followed around the globe in the aftermath of the 2008 housing bubble, resulting in a surge of federal debt levels worldwide. The bailouts of Bear Stearns and AIG, Hoskins and Todd suggest, not only increased these debt levels, but also put the Federal Reserve in the business of making fiscal policy. With their $1.7 trillion purchase of mortgage-backed securities amounting to a credit allocation that favored one sector of the economy over another, the Fed set a damaging precedent that troubled institutions would be saved, expanding the federal safety net and further increasing moral hazard.

If we are to have a stable economy in the future, Hoskins and Todd suggest we need to stop government intervention in financial markets and allow unsound institutions to fail. As an alternative to the current interventionist policy, they propose a commodity standard for money or a regime of competitive money supplies, with supervision of participating banks taking place through risk-sharing arrangements with existing clearing houses. They also suggest the scaling back of federal guarantees and deposit insurance, establishing mandatory closure rules to be enforced by bankruptcy judges, and ending the Fed's nonstatutory warehousing of the foreign reserve holdings of the Treasury (which the authors consider backdoor funding for Treasury intervention in financial markets), leaving the Fed with the single objective of maintaining domestic price level stability.

Though they acknowledge the difficulty of passing even modest reforms through Congress, Hoskins and Todd consider the populist wave in the 2016 elections a sign that voters are ready for changes to the current system of government intervention in the private sector and the attendant consequences.
www.levyinstitute.org/pubs/wp_908.pdf

The Dynamics of Japanese Government Bonds' Nominal Yields

TANWEER AKRAM and HUIQING LI
Working Paper No. 906, May 2018

Employing a Keynesian perspective that central bank actions affect government bond yields through the influence of the policy rate on the short-term interest rate, Tanweer Akram, Thrivent Financial, and Huiqing Li, Central University of Finance and Economics, investigate the low nominal yields of Japanese government bonds (JGBs) over the past two decades. Their work builds on previous studies for Japan (Levy Institute Working Papers 818 and 862), and uses a vector error correction (VEC) framework to empirically model the dynamics of long-term bond yields.

Akram and Li begin by presenting some stylized facts about the Japanese economy since the 1990s, which has been characterized by slow growth and low inflation (with periods of deflation), with the ageing of the population resulting in a declining labor force. They note that JGB yields fell sharply in the 1990s and have remained extremely low ever since (falling into negative territory in 2016), in spite of Japan's deteriorating fiscal conditions. During the same period, the Bank of Japan's (BoJ) accommodative monetary policy kept policy rates and short-term interest rates low. Additionally, Japan's primary/fiscal balance ratios have been negative since the mid-1990s, with the ratios widening as the economy experienced slower growth over the period, resulting in elevated gross and net debt ratios. The authors point out that given the low interest rate on government bonds, net interest payments on government debt as a share of nominal GDP are low, implying that the net interest income receipts of the nongovernment sectors are also low despite substantial holdings of government debt.

The authors continue with a description of their quarterly data, including the short- and long-term interest rate, the rate of core inflation (year-over-year percentage change in the consumer price index minus fresh food and energy), government fiscal ratios (primary balance as a share of nominal GDP and government net lending/borrowing as a share of nominal GDP), the pace of economic activity (year-over-year percentage change in the volume of industrial production), and a dummy variable for business cycle conditions that is set to one when the economy is in a recession and zero when it is not. They next specify and estimate their VEC model, beginning with unit root tests for each series and its first difference, followed by tests to determine whether the variables are cointegrated and to detect structural breaks. Akram and Li present the results of these tests in several tables, showing that, except for the growth rate of industrial production, all series are integrated of the first order. Through the use of the Gregory–Hansen test, they find two structural breaks that roughly coincide with two major economic and financial events: the emergence of Japan's bubble economy in the mid-1980s and the late 1990s East Asian financial crisis. By incorporating these two structural breaks into the model, they find evidence of cointegration between the long-term interest rate, the short-term interest rate, the rate of core inflation, and the government fiscal ratio at the 1 percent significance level.

Interpreting the results of their VEC model, Akram and Li find there is a significant long-run relationship between the variables after incorporating structural breaks into the cointegrating vector, with a significant positive relationship between the short-term interest rate and the long-term interest rate. Contrary to conventional wisdom, they also find that an increase in the government's net debt ratio and the primary/fiscal deficit ratio reduces the long-term interest rate on JGBs, though they contend that theories of modern money, endogenous money, and others can provide plausible explanations for these observed dynamics.

The authors conclude that their findings show that the BoJ's monetary policy measures have a decisive effect on JGBs' nominal yields, mostly through the short-term interest rate, though it has other avenues for influence. They emphasize the crucial role of monetary policy in determining the long-term interest rate on government bonds and point out that low policy rates are not inherently inflationary, casting doubt on conventional fears around the consequences of expansionary fiscal policy and low interest rates in response to economic stagnation and low inflation, lending credence to the view that Japan will be able to service its debt and keep interest payments as a share of national income low without operational difficulties.
www.levyinstitute.org/pubs/wp_906.pdf

The Economics of Instability: An Abstract of an Excerpt

FRANK VENEROSO
Working Paper No. 903, April 2018

Considering the current financial climate of an overvalued stock market and record levels of private indebtedness, Frank Veneroso, Veneroso Associates, looks to the writings of Joseph Schumpeter, Irving Fisher, John Maynard Keynes, and Hyman P. Minsky to evaluate how supposedly stable and efficient markets can embark on disequilibrium paths. In contrast to orthodox general equilibrium theory, which sees market disruptions as exogenous, Veneroso offers his assessment from a heterodox point of view, contending that the system is endogenously unstable—a situation that asset market instability and the deepening of private debt have made apparent in the postwar period.

Beginning with Adam Smith's invisible hand and culminating in highly mathematized general equilibrium models, postwar orthodox theory asserts that in free and unfettered markets, rational economic agents seeking to maximize their own self-interest will drive markets to a stable equilibrium position. Veneroso claims it is the enshrinement of this orthodox theory as the basis for policy in the postwar period that has created a situation where disequilibrium positions are more frequent and have more significant consequences.

Looking at the prewar writings of Schumpeter, Fisher, and Keynes, Veneroso outlines their positions on the natural instability of unfettered markets, citing Schumpeter's analysis of innovation in the economy driving euphoric expectations that lead to a build-up of debt in the household and corporate sectors that is then fanned by the financial sector's expectations of returns (what Fisher called "debt disease"), and Keynes's assessment of the "waves of optimistic and pessimistic sentiment" that cloud investors' judgement in the short run, leading to an overshooting of any possible equilibrium. Following World War II, these theories fell out of favor as the Walrasian general equilibrium school—which placed the rational economic agent at its center—rose to prominence, creating a new orthodoxy based on forward-looking rational expectations rather than the backward-looking extrapolative expectations at the core of heterodox theories. Coupled with the rise of managed money in pursuit of quick gains, Veneroso argues that investment professionals have made the markets more like casinos with their short-term originate-to-distribute models at the expense of the long-term value of their clients' portfolios.

It is against this backdrop that Minsky began his writings on financial instability, expanding on the prewar heterodox literature that recognized the endogeneity of fragility in the markets, where euphoric expectations fuel investment booms that end in cash-flow shortfalls and, eventually, financial crisis. Additionally, Minsky observed the tendency for boom-time stability to lower perceptions of risk, as "stability begets instability." With the establishment of the Federal Reserve and its "bailouts" of indebted private agents, Veneroso contends that markets should have become less fragile; however, the activist intervention in the markets led to an increase in moral hazard, and private firms and households took on more risk, creating top-heavy structures of private debt.

By the mid-1980s, as the credit market became more securitized and the financialization of the economy increased, banks became too disconnected from the principals they served to enforce the prudential behavior they had practiced in the past, intensifying speculative excess. Veneroso notes these practices extended to the corporate sector, giving corporate managers incentive to lift their stock prices through speculation and increased indebtedness, illustrating once again that while the agents may be acting "rationally," they are misguided by incorrect assumptions about future outcomes. Citing studies by behavioral economist Vernon Smith, Veneroso notes this type of behavior (what Smith calls "myopic rational expectations") is observable in laboratory studies, reinforcing his contention that the general equilibrium postulate of rationality is "an academic economist's plaything and nothing more."
www.levyinstitute.org/pubs/wp_903.pdf

Program: The Distribution of Income and Wealth

Wage Employment and the Prospects of Women's Economic Empowerment: Some Lessons from Ghana and Tanzania

THOMAS MASTERSON and AJIT ZACHARIAS
Policy Note 2018/4, May

Research Scholar Thomas Masterson and Senior Scholar Ajit Zacharias address the nexus between wage employment, consumption poverty, and time deficits in the context of Ghana and Tanzania. The authors apply the Levy Institute Measure of Time and Consumption Poverty (LIMTCP) to estimate whether the jobs that are likely to be available to potential employment-seeking, working-age individuals in consumption-poor households—who are predominantly female and (under)employed on their family farm in both countries—can serve as vehicles of "economic empowerment." They investigate this question using two indicators of empowerment, asking (1) whether the individual would be able to move their household to at least a minimal level of consumption via the additional earnings from their new job, and (2) whether the individual would be deprived of the time required to meet the minimal needs of care for themselves (personal care), their homes, and their dependents.

The LIMTCP is intended to correct an error in most official poverty statistics. These official measurements tacitly assume that households with a poverty-level income either have enough time to perform the requisite tasks of household production (unpaid household activities such as cooking, cleaning, caring for children, etc.) or enough resources to compensate for deficits in household production by purchasing market substitutes. For those households without the requisite time, Masterson and Zacharias explain, poverty lines do not represent the minimum amount of resources necessary to avoid material deprivation, because they will have to purchase market substitutes to fill gaps in household production. Adjusting the consumption poverty line to take such hidden poverty into account requires adding the replacement cost of the time deficit (the cost of buying goods and services to fill gaps in household production) to the poverty line of time-deficient households. As for time poverty, a person is considered time-poor if the sum of their hours of employment, required hours of commuting, required minimum hours of household production, and required minimum hours of personal care exceed the amount of physically available time (168 hours per week).

For their simulation of the effects of wage employment on consumption and time poverty, the authors assume that those individuals from consumption-poor households identified as potential wage workers receive a job that someone with their characteristics (such as age and sex) is likely to obtain. (Note that, as Masterson and Zacharias emphasize, this is not a simulation of a "full employment" policy scenario.) In Ghana, 69 percent of likely job recipients would be able to escape consumption poverty, while the number would be 87 percent in Tanzania. This reduces the incidence of consumption poverty among their households, with roughly 62 percent and 83 percent of recipient households in Ghana and Tanzania, respectively, able to escape consumption poverty.

However, the majority of recipients (53 percent in Ghana and 72 percent in Tanzania) would encounter time deficits. Only a minority of job recipients ended up neither consumption- nor time-poor (37 percent in Ghana and 25 percent in Tanzania) in the simulation. As the authors explain, among the policy implications of these results is that addressing poverty through wage employment requires also addressing conditions of overwork.

Moreover, the authors detail significant gender disparities in these results. A larger proportion of female than male recipients continued to be consumption-poor in the simulation. Compared to men, a larger proportion of women encountered the double bind of time and consumption deficits and a smaller proportion faced neither bind (male recipients are almost twice as likely as female recipients to end up with neither time nor consumption deficits). The authors note the gender disparity in the intrahousehold division of household work, even when hours of employment are similar. On average, female recipients faced weekly hours of required household production that exceeded their male counterparts' hours by a factor of five in Ghana (30 hours versus 6 hours) and 3.6 in Tanzania (32 hours versus 9 hours). Policy must address the conditions that contribute to or aggravate this unequal burden—including gender discrimination in wage employment and underinvestment in social and physical infrastructure (such as childcare centers)—and that limit the empowering potential of wage employment for women.

www.levyinstitute.org/pubs/pn_18_4.pdf

Income Distribution, Household Debt, and Aggregate Demand: A Critical Assessment

J. W. MASON

Working Paper No. 901, March 2018

J. W. Mason, John Jay College–CUNY and the Roosevelt Institute, examines the impetus behind the increase in household debt relative to income, the increase in consumption as a fraction of GDP, and the increase in income inequality that began in the 1980s. Referencing the often-cited narrative for these increases—that lower-income households increased borrowing to maintain rising consumption in the face of stagnant incomes—he asks several questions to test if what he calls the "debt-distribution-demand" story is supported by empirical evidence.

First, the author asks: To what extent does household borrowing finance consumption? In contrast to the orthodox view that sees households borrowing to smooth consumption over the lifecycle, Mason contends that most household borrowing is used to finance asset purchases (i.e., homes, cars, education) that are strongly linked to the household's reproduction as a social and wage-earning unit. These types of transactions, that see debt and asset positions increasing simultaneously, tend to happen early in the lifecycle and typically involve a reduction in current consumption as households increase saving (for down payments) and incur debt (mortgage). Given this, Mason notes that a fall in income should be associated with less borrowing, as declining income makes the upfront costs of asset ownership less affordable.

Mason continues by looking at how much of the apparent rise in consumption spending over the past four decades actually represents an increase in consumption spending by households. He notes that spending has been flat since 1980 and any perceived changes in consumption during that time are actually due to nonmonetary and third-party factors, such as owner's equivalent rent and expenses paid by government- or employer-sponsored health plans, which are counted as consumption in the national accounts. While housing-based borrowing did increase during the period, especially during the early 2000s, Mason argues much of the funds went to pay for increased interest on existing debt and other costs associated with the housing boom (i.e., transactions costs associated with the faster pace of home sales). He asserts that any increases in consumption were more than reversed in the five years following the collapse of the bubble and therefore cannot account for the secular rise in debt relative to income in the past decade.

In answering his third question—to what extent changes in the household debt–income ratio over the past four decades reflect increased borrowing by households and to what extent they represent other factors—Mason cites the assumption that an increase in household debt–income ratios are due to an increase in new borrowing. However, his evidence suggests it is changes in interest rates on existing debt, nominal income growth, and debt write-offs that account for the increase in the past 50 years. Using the macroeconomic accounting identity known as "the law of motion of government debt," Mason decomposes the changes in household debt ratios to account for the contribution of each variable and finds that in the period from 1980 to today, households borrowed less, but the combination of higher interest payments and lower inflation resulted in the growth of debt relative to income. Running the equation again while holding these factors constant to their pre-1980s levels, Mason finds no contribution to the long-term growth in household debt from borrowing.

Finally, Mason asks how household debt, both levels and changes, is distributed across incomes and how the distribution of consumption across households evolved relative to income distribution. Counter to the stories that link rising debt to increased income inequality, the facts show most debt is owned by households at the top of the income distribution. Using a stock-flow consistent framework, Mason illustrates that, with an exception in the early 2000s (which he attributes to the housing bubble), debt ratios rise monotonically with income and the highest are consistently found between the 75th and 90th income percentiles. Though there is little in the way of reliable data on consumption inequality, Mason notes most of the recent literature concludes that it is increasing and tracks income inequality, with living standards stagnating and even declining among lower-income households. To reverse these trends, he recommends looking at the distributional effects of monetary policy, as well as implementing policies, such as stronger tenant protections for renters, that provide alternatives to debt-financed home ownership.

www.levyinstitute.org/pubs/wp_901.pdf

Program: Employment Policy and Labor Markets

Public Service Employment: A Path to Full Employment

L. RANDALL WRAY, FLAVIA DANTAS, SCOTT FULLWILER, PAVLINA R. TCHERNEVA, and STEPHANIE A. KELTON

Research Project Report, April 2018

Senior Scholar L. Randall Wray, Flavia Dantas, State University of New York College at Cortland, Scott Fullwiler, University of Missouri–Kansas City, and Research Associates Pavlina R. Tcherneva and Stephanie A. Kelton analyze the economic impacts of a new job guarantee proposal. The authors propose the creation of a Public Service Employment (PSE) program that would offer a job at a living wage to all who are ready and willing to work. Federally funded but administered by local governments and nonprofit organizations, the PSE program would pay $15 per hour for both full- and part-time positions and offer benefits (the nonwage benefit costs are set at 20 percent for the purposes of the report's macro simulation, while the program's materials and other costs are assumed to be equal to 25 percent of wage costs). This report simulates the economic impact over a ten-year period of implementing the PSE program, which would begin in 2018Q1 in this scenario and be fully phased in by 2019Q1.

The authors run four macroeconomic simulations, using two settings for each of two sets of scenarios: higher- and lower-bound versions of the PSE program, both simulated with and without the Federal Reserve's interest rate reaction function "turned on." The higher-bound version adopts assumptions that lead to greater participation in the program, while the lower-bound assumptions lead to a smaller program. With the Fed's reaction function "turned off," the report assumes that the Fed does not raise interest rates in response to faster economic growth as the program increases employment and GDP growth; with it turned on, the Fed is presumed to raise rates to "lean against the wind."

Based on the higher-bound estimates of likely participants, the program would attract roughly 15 million people into the PSE workforce, drawing from the unemployed, underemployed, and those who are out of the labor force. While the report also presents lower-bound estimates, the results highlighted in what follows correspond to this higher-bound scenario.

Real, inflation-adjusted GDP (2017Q4 dollar values) would be boosted by $560 billion per year on average, once the PSE program is at full strength (from 2020 to 2027). The economic stimulus generated by the PSE program would also increase private sector employment by up to an additional 4.2 million private sector jobs relative to the baseline, due to the "multiplier effects" of the program. Despite these positive macroeconomic impacts, the authors find that the program's impact on inflation is minor: the boost to inflation peaks at 0.74 percentage points higher than the baseline projection and then progressively falls to a negligible 0.09 percentage points higher than the baseline by the end of the simulation period.

The program's net impact on the federal budget averages 1.53 percent of GDP in the first five years of the program (2018–22) and 1.13 percent of GDP in the last five years (2023–27). The authors caution that these net budgetary impacts represent overestimates, since the simulation makes very cautious assumptions about offsetting reductions in Medicaid and Earned Income Tax Credit (EITC) expenditures that would result from higher employment and wages. Moreover, they note that the PSE program would lower spending by all levels of government, as well as by businesses and households, on a range of costly problems created by unemployment, such that the program could deliver much higher offsetting savings due to reduced crime, improved health, greater social and economic stability, and larger reductions in Medicaid and EITC expenditures than those assumed in the simulations. State-level government budgets are improved by a total of $53 billion per year by boosting employment and growth.

Based on the demographics of estimated PSE participants, the report finds that the program would disproportionately benefit women and minorities. One full-time worker in the PSE program could lift a family of up to five out of poverty. With one full-time and one part-time worker, a family of eight could rise above the poverty line.

Finally, the report presents a blueprint for the design, jobs, and implementation of the PSE proposal for the United States. The projects undertaken in every community would meet specific local needs through work that involves caring for people, strengthening communities, and protecting and renewing the environment.

www.levyinstitute.org/pubs/rpr_4_18.pdf

A Consensus Strategy for a Universal Job Guarantee Program

L. RANDALL WRAY

Policy Note 2018/3, May

Senior Scholar L. Randall Wray observes that the idea of a universal job guarantee (JG) policy for the United States has become the subject of renewed public debate due to a number of high-profile political endorsements, with several variants of a JG program having been outlined. As a coauthor of the Levy Institute's April 2018 report estimating the economic impact of a particular JG proposal—"Public Service Employment: A Path to Full Employment"—Wray seeks in this policy note to establish common ground among the major JG plans and provides an initial response to critics.

Given the proliferation of different plans, Wray identifies what he regards as the essential components of a JG program. Among the components discussed are the following. The JG should pay a living wage ($15 per hour) with good benefits, including healthcare and childcare. Exceptions to the uniform wage and benefit package may be made for states and localities with particularly high costs of living. The JG should not become workfare, in the sense that no existing social safety net program should be replaced by the JG and those who choose not to work in the program should be able to continue receiving existing benefits. Training and education programs, as long as they are time limited, should be allowed to be part of a JG program. Implementation and management of the particular JG projects should be decentralized, and the JG should not be used to subsidize the wages of workers in for-profit firms. Although direct employment by the federal government may be a part of the program, most JG employment should be administered at the local level (by state and local governments and not-for-profit organizations), with projects taking account of local prevailing wage laws and union wage rates (which may mean, Wray notes, that the JG cannot be used for infrastructure/construction projects in certain areas). Limited pilot programs that deviate from the aforementioned details should be considered.

Responding to critiques of the JG, Wray notes that, contrary to some claims that upwards of 50 million workers would join the program, participation is likely to be closer to 15 million, at the high end, and that the larger, 50 million figure requires assuming that no current low-wage and low-benefit employers will provide benefits or match the $15 per hour wage (by 2022). Wray notes that the intent of setting the program's wage at $15 per hour is to effectively establish a national minimum wage at that level. Firms whose business models require that their workers live in poverty, he argues, should either find a new model or go out of business. However, Wray emphasizes, the experience with previous minimum wage hikes suggests that most firms can stay competitive, as their competitors raise wages as well and the higher consumption flowing from higher wages also means increased sales for firms. He notes, in this context, that the macroeconomic simulation of the Public Service Employment (PSE) program showed that the JG would increase real economic growth. Wray also points out that the PSE proposal would phase in the wage hike over four years, which would represent a yearly increase (just over 18 percent each year) that would not be entirely out of the range of some previous significant federal and state minimum wage hikes. Responding to claims that the JG would not just raise the minimum wage, but create a spillover effect raising the pay of those who make above-minimum wages, Wray notes that the real GDP created would be more than adequate to meet the extra wages and benefits. Moreover, he adds, the macroeconomic simulation of the PSE program suggests that the inflationary impact of a JG would be subdued: for the PSE, at its peak inflation increases by 0.74 percent over the baseline and then quickly declines to barely above the baseline by the end of the ten-year simulation period. There is no mechanism, he explains, that would generate a wage-price spiral, as that would require the PSE wage to move significantly in response to inflation (Wray does not recommend the indexation of the PSE wage, which might introduce an inflationary bias).

Finally, Wray states that while he supports tax increases for general countercyclical purposes (to control inflation), he does not propose raising taxes to offset the projected spending for a JG program. To the question of how the program would be "paid for," he responds that it would be paid for in the same manner as the last several wars and tax cuts: through budgetary authorization. Moreover, Wray argues that elimination of involuntary unemployment would more than "pay for itself," once the multitude of benefits are properly accounted for.
www.levyinstitute.org/pubs/pn_2018_3.pdf

Guaranteed Jobs through a Public Service Employment Program

L. RANDALL WRAY, FLAVIA DANTAS, SCOTT FULLWILER, PAVLINA R. TCHERNEVA, and STEPHANIE A. KELTON
Policy Note 2018/2, March

This policy note by Senior Scholar L. Randall Wray, Flavia Dantas, State University of New York College at Cortland, Scott Fullwiler, University of Missouri–Kansas City, and Research Associates Pavlina R. Tcherneva and Stephanie A. Kelton is derived from the Research Project Report "Public Service Employment: A Path to Full Employment" (see p. 11).

It presents an overview of the goals and structure of the PSE program in the context of current labor market trends and the prospects of poverty reduction.
www.levyinstitute.org/pubs/pn_18_2.pdf

Reflections on the New Deal: The Vested Interests, Limits to Reform, and the Meaning of Liberal Democracy

JOHN F. HENRY
Working Paper No. 905, May 2018

Turning away from the often-debated aspects of New Deal–era programs, such as their pro- or anti-business bias, Senior Scholar John F. Henry casts doubt on their supposed progressive nature by focusing on the evolving definition of "liberal democracy." Examining how New Deal policies fit into the standard institutional setup of a liberal democracy, Henry contends that the programs under study represented a striking departure from what was then considered liberal or progressive, serving instead what Thorstein Veblen called the "vested interests" of oligopolistic business organizations.

Beginning with Adam Smith's distinction between use value and exchange value, Henry asserts that the Great Depression accentuated the contradiction between the two. He notes that at the onset of the Depression the agricultural sector was suffering from loss of income, as decreased demand resulted in plummeting prices for output in spite of high levels of productivity. Searching for a way to control output and administer prices, as was being done in the manufacturing sector, the Roosevelt administration passed the Agricultural Adjustment Act of 1933 to "provide a collective mechanism to sabotage production and raise prices," a move that Henry contends demonstrates the administration's favor of exchange value over use value, while consumers, facing falling incomes, preferred use value.

Framing the New Deal in historical context, Henry turns to the definition of "liberal democracy," suggesting that the classical liberalism upon which capitalism was founded was already fading by the 1930s, as the government intervened in economic relations and small-scale enterprises were replaced with large-scale oligopolies, creating what Veblen termed "the New Order." And with this New Order, Henry argues, the competitive framework of capitalism was already beginning to be replaced with collectivist organizations (on both the business and labor sides) that restricted the market's ability to allow the internal adjustments that produce optimal outcomes.

The onset of World War I saw the United States undertake economic planning at the federal level. The increased demand for wartime production not only demonstrated that the "normal" levels of production were below the economy's potential, but also the efficiency with which an entity unconcerned with profit maximization could allocate resources. These interventions, presented as "emergency" acts of a temporary nature, were embraced by many, with some going so far as to call for the elimination of money in favor of an economy based solely on use values. Henry claims it is this shift in thinking about the meaning of liberal democracy, together with the Emergency Banking Relief Act of 1933 (which gave the executive branch unprecedented authority), that paved the way for Roosevelt to enact the New Deal programs. (Though these programs operated outside of what was normal for the times, Henry emphasizes that they were not radical but created mainly to operate within the limits of the capitalist order and be phased out as the economy improved.)

Analyzing specific programs of the New Deal, including the Banking Act of 1933 (Glass-Steagall), the Agricultural Adjustment Act (AAA), and the Works Progress Administration (WPA), Henry maintains that while each had some positive effect, they were severely limited by the desires of vested interests. Specifically, the policy of separation of commercial and investment banking at the heart of Glass-Steagall was, Henry contends, a boon to the Rockefeller banking interests at the expense of the Morgan's while doing nothing to change the substance of the sector's operations. With respect to the AAA, the policies implemented were crafted to benefit large (mostly white) landowners at the expense of poor (mostly minority) tenant farmers and sharecroppers. The infrastructure and educational programs of the WPA provided a great deal of benefit to the common man, both economically and psychologically; Henry asserts, however, that the "sound money men" of Roosevelt's administration were concerned more about the costs to the vested interests and curtailed the scope of the program, preventing it from reaching its full potential.

Citing Smith's assertion that "civil government . . . is really instituted for the defence of . . . those who have some property

against those who have none at all," Henry concludes that looking at the New Deal's policies through the lens of liberal democracy demonstrates that though they are not without merit, the programs of the New Deal were at their core a gift to the vested interests at the expense of the common man.
www.levyinstitute.org/pubs/wp_905.pdf

The Job Guarantee: Design, Jobs, and Implementation

PAVLINA R. TCHERNEVA
Working Paper 902, April 2018

Research Associate Pavlina R. Tcherneva presents a blueprint for implementing a job guarantee (JG) program in the United States that is federally funded and locally administered, providing a living wage to all job seekers through voluntary, on-demand employment, asserting that the costs of operationalizing such a program are already paid for in the form of spending on programs to address societal ills related to unemployment (e.g., malnutrition, mental health, and crime). The working paper compliments the recently issued Levy Institute Research Project Report, "Public Service Employment: A Path to Full Employment." An appendix provides answers to many frequently asked questions about JG programs.

Tcherneva begins with a macro-level overview of the phenomenon of unemployment, noting that it is a consequence of a combination of profit-seeking behaviors by the private sector, improper policy measures, and inadequate management of the monetary system by the government, leading to a "silent epidemic" of social and economic ills that must be paid for by society at large. She suggests a JG offers a macroeconomically sound solution to those ills while supporting the production of valuable public goods.

Her proposed program creates a public option for work, providing an employment safety net and establishing an effective minimum wage (which she suggests setting at $15) for the economy as a whole. Projects in the program would be federally funded but designed and executed at the local level in order to ensure the jobs provide the most benefit to the community in which they are implemented. Operating as an employment buffer stock, Tcherneva notes the program will help stabilize business cycle fluctuations and enhance price stability while addressing the needs of modern society. The program is envisioned as a permanent one, where workers transition from unemployment to employment or from JG employment to work in the private, public, and not-for-profit sectors as economic conditions (and personal preferences) warrant. Through the creation of Community Jobs Banks that serve as repositories for employment opportunities, the author emphasizes that appropriate and useful jobs that serve the public good will always be available to those who seek them. Explicitly noting that the large-scale infrastructure projects often proposed are unsuited to the permanent and on-demand program outlined here, she instead suggests projects should be community directed—part of what she calls a "National Care Act"—and could include providing care to the young and the elderly, neighborhood cleanup efforts that focus on reclamation and reuse of materials, and the repurposing of disused industrial sites.

Modeling the JG in part on federal disaster response and emergency relief programs, the author suggests it has potential to restrain the usual contagious effects of mass unemployment, as those who lose their jobs spend less, throwing others out of work as the economy contracts. Budgeting for the JG would be done in a manner similar to emergency relief programs, with Congress passing base appropriations each year, and increasing funding as needed through supplemental appropriations bills. Her estimates suggest the program could employ 11–16 million people at the outset, at a wage of $15 per hour and benefits equal to 20 percent of wages, for a total cost of 1.3–2.4 percent of GDP, which she notes is less than the current annual spending on elementary and secondary education combined. She expects the program enrollment to contract as the economy expands, reducing the need for funding in subsequent years.

Enumerating the benefits of a JG, Tcherneva expects the program to eliminate involuntary employment, and with it the associated social afflictions, while establishing a minimum wage and benefit package for the entire economy. By offering a public option for employment, she argues that "bad" jobs will be eliminated as employers increase compensation and benefits to attract and retain workers. By raising income at the bottom of the income distribution faster than income at the top, as well as improving the distribution of income between labor and capital, she expects that the JG will decrease income inequality and increase the employment opportunities

of low-skill, less-educated workers who currently face poor employment prospects. She also expects the program to be a superior inflation stabilizer compared to current practices, which deliver jobless recoveries and discouraged workers.
www.levyinstitute.org/pubs/wp_902.pdf

INSTITUTE NEWS

In Memoriam
Senior Scholar Fernando J. Cardim de Carvalho

Senior Scholar Fernando J. Cardim de Carvalho, most recently professor of Macroeconomics and Latin America Finance courses in the Levy Institute graduate programs, passed away on Wednesday, May 16, 2018, at his home in Portugal. His wisdom, amazing sense of humor, excellent taste in music, and incredible charisma will forever remain in our hearts. Professor Cardim de Carvalho was emeritus professor of economics at the Federal University of Rio de Janeiro and the former chairman of the Brazilian National Association of Graduate Schools in Economics (ANPEC).

Over his long career, he worked as a consultant to both public institutions and financial industry associations, including the Central Bank of Brazil, the Brazilian National Bank for Economic and Social Development (BNDES), the Central Statistical Office of Brazil (IBGE), and the National Association of Financial Institutions of Brazil (Anbima), as well as with NGOs such as IBASE (Brazil) and ActionAid USA. Cardim de Carvalho's work has been published in, among other journals, the *Cambridge Journal of Economics*, *Banca Nazionale del Lavoro Quarterly Review*, *International Journal of Political Economy*, *Intervention*, *Brazilian Journal of Political Economy*, and *Journal of Post Keynesian Economics*, of which he was associate editor. He wrote several books, including *Mr. Keynes and the Post Keynesians* (Edward Elgar, 1992) and *Liquidity Preference and Monetary Economies* (Routledge, 2105).

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