



# Summary

---

Winter 2018

Vol 27, No. 1

## Contents

---

### INSTITUTE RESEARCH

#### **Program: The State of the US and World Economies**

- 4 JAN KREGEL, A Two-Tier Eurozone or a Euro of Regions? A Radical Proposal Based on Keynes's Clearing Union
- 5 TANWEER AKRAM and HUIQING LI, An Inquiry Concerning Long-term US Interest Rates Using Monthly Data

#### **Program: Monetary Policy and Financial Structure**

- 6 JAN KREGEL, The Concert of Interests in the Age of Trump
- 7 CAMERON HAAS and TAI YOUNG-TAFT, Quantitative Easing and Asset Bubbles in a Stock-flow Consistent Framework
- 8 ERNANI TEIXEIRA TORRES FILHO, NORBERTO MONTANI MARTINS, and CAROLINE YUKARI MIAGUTI, Minsky's Financial Fragility: An Empirical Analysis of Electricity Distribution Companies in Brazil (2007–15)
- 9 OSCAR VALDES VIERA, The Neoclassicals' Conundrum: If Adam Smith Is the Father of Economics, It Is a Bastard Child
- 10 CHARLES J. WHALEN, Understanding Financialization: Standing on the Shoulders of Minsky

#### **Program: The Distribution of Wealth and Income**

- 11 AJIT ZACHARIAS, How Time Deficits and Hidden Poverty Undermine the Sustainable Development Goals

#### **Program: Economic Policy for the 21st Century**

- 12 L. RANDALL WRAY, Why the Compulsive Shift to Single Payer? Because Healthcare Is Not Insurable
- 13 PAVLINA R. TCHERNEVA, Unemployment: The Silent Epidemic

### INSTITUTE NEWS

#### **SAVE THE DATES**

- 14 27th Annual Hyman P. Minsky Conference
- 14 The Hyman P. Minsky Summer Seminar

## Scholars by Program

### The State of the US and World Economies

DIMITRI B. PAPADIMITRIOU, President and Program Director (*on leave*)  
JAN KREGEL, Director of Research  
JAMES K. GALBRAITH, Senior Scholar  
L. RANDALL WRAY, Senior Scholar  
MICHALIS NIKIFOROS, Research Scholar  
GENNARO ZEZZA, Research Scholar  
GIORGOS ARGITIS, Research Associate  
MARSHALL AUERBACK, Research Associate  
EMILIOS AVGOULEAS, Research Associate  
CLAUDIO H. DOS SANTOS, Research Associate  
STEVEN M. FAZZARI, Research Associate  
JESUS FELIPE, Research Associate  
GREG HANNSGEN, Research Associate  
ECKHARD HEIN, Research Associate  
MICHAEL HUDSON, Research Associate  
ROBERT W. PARENTEAU, Research Associate  
ANDREA TERZI, Research Associate

### Monetary Policy and Financial Structure

JAN KREGEL, Director of Research and Program Director  
DIMITRI B. PAPADIMITRIOU, President (*on leave*)  
FERNANDO J. CARDIM DE CARVALHO, Senior Scholar  
JOHN F. HENRY, Senior Scholar  
L. RANDALL WRAY, Senior Scholar  
PETER BOFINGER, Research Scholar  
LEONARDO BURLAMAQUI, Research Scholar  
MARSHALL AUERBACK, Research Associate  
EMILIOS AVGOULEAS, Research Associate  
JÖRG BIBOW, Research Associate  
STEVEN M. FAZZARI, Research Associate  
JESUS FELIPE, Research Associate  
ECKHARD HEIN, Research Associate  
MICHAEL HUDSON, Research Associate  
THORVALD GRUNG MOE, Research Associate  
ROBERT W. PARENTEAU, Research Associate  
SUNANDA SEN, Research Associate  
ANDREA TERZI, Research Associate  
ÉRIC TYMOIGNE, Research Associate

### The Distribution of Income and Wealth

DIMITRI B. PAPADIMITRIOU, President (*on leave*)  
JAN KREGEL, Director of Research  
AJIT ZACHARIAS, Senior Scholar and Program Director  
THOMAS MASTERSON, Research Scholar and Director of Applied Micromodeling  
FERNANDO RIOS-AVILA, Research Scholar  
ROBERT HAVEMAN, Research Associate  
CHRISTOPHER JENCKS, Research Associate  
SUSAN E. MAYER, Research Associate  
BRANKO MILANOVIC, Research Associate  
JACQUES SILBER, Research Associate  
BARBARA WOLFE, Research Associate  
EDWARD N. WOLFF, Research Associate

### Gender Equality and the Economy

DIMITRI B. PAPADIMITRIOU, President (*on leave*)  
RANIA ANTONOPOULOS, Senior Scholar and Program Director (*on leave*)  
NANCY FOLBRE, Senior Scholar  
AJIT ZACHARIAS, Senior Scholar  
TAMAR KHITARISHVILI, Research Scholar  
KIJONG KIM, Research Scholar  
NILÜFER ÇAĞATAY, Research Associate  
LEKHA S. CHAKRABORTY, Research Associate

PINAKI CHAKRABORTY, Research Associate  
VALERIA ESQUIVEL, Research Associate  
INDIRA HIRWAY, Research Associate  
İPEK İLKKARACAN, Research Associate  
EBRU KONGAR, Research Associate  
EMEL MEMİŞ, Research Associate  
YANA VAN DER MEULEN RODGERS, Research Associate  
TAUN TOAY, Research Analyst

### Employment Policy and Labor Markets

DIMITRI B. PAPADIMITRIOU, President (*on leave*)  
JAN KREGEL, Director of Research  
RANIA ANTONOPOULOS, Senior Scholar (*on leave*)  
JAMES K. GALBRAITH, Senior Scholar  
L. RANDALL WRAY, Senior Scholar  
GIORGOS ARGITIS, Research Associate  
VALERIA ESQUIVEL, Research Associate  
MATHEW FORSTATER, Research Associate  
FADHEL KABOUB, Research Associate  
PAVLINA R. TCHERNEVA, Research Associate

### Immigration, Ethnicity, and Social Structure

JOEL PERLMANN, Senior Scholar and Program Director  
YINON COHEN, Research Associate  
SERGIO DELLAPERGOLA, Research Associate  
SANJAYA DESILVA, Research Associate  
YUVAL ELMELECH, Research Associate  
BARBARA S. OKUN, Research Associate  
SEYMOUR SPILERMAN, Research Associate

### Economic Policy for the 21st Century

DIMITRI B. PAPADIMITRIOU, President (*on leave*)  
JAN KREGEL, Director of Research  
RANIA ANTONOPOULOS, Senior Scholar (*on leave*)  
FERNANDO J. CARDIM DE CARVALHO, Senior Scholar  
JAMES K. GALBRAITH, Senior Scholar  
JOHN F. HENRY, Senior Scholar  
L. RANDALL WRAY, Senior Scholar  
AJIT ZACHARIAS, Senior Scholar  
PETER BOFINGER, Research Scholar  
LEONARDO BURLAMAQUI, Research Scholar  
TAI YOUNG-TAFT, Research Scholar  
PHILIP ARESTIS, Research Associate  
GIORGOS ARGITIS, Research Associate  
MARSHALL AUERBACK, Research Associate  
JÖRG BIBOW, Research Associate  
MARTIN BINDER, Research Associate  
LEKHA S. CHAKRABORTY, Research Associate  
PINAKI CHAKRABORTY, Research Associate  
SANJAYA DESILVA, Research Associate  
STEVEN M. FAZZARI, Research Associate  
JESUS FELIPE, Research Associate  
GIUSEPPE FONTANA, Research Associate  
MATHEW FORSTATER, Research Associate  
MICHAEL HUDSON, Research Associate  
THOMAS KARIER, Research Associate  
STEPHANIE A. KELTON, Research Associate  
WILLIAM H. LAZONICK, Research Associate  
MARY O'SULLIVAN, Research Associate  
ROBERT W. PARENTEAU, Research Associate  
JAMES B. REBITZER, Research Associate  
MARTIN SHUBIK, Research Associate  
ÉRIC TYMOIGNE, Research Associate  
MICHAEL STEPHENS, Senior Editor and Policy Fellow

---

The Levy Economics Institute of Bard College, founded in 1986, is a nonprofit, nonpartisan research organization devoted to public service. It depends on the financial support from individuals, corporations, and private foundations to carry out its scholarship and economic research generating viable, effective public policy responses to important economic issues.

The *Summary* is published three times a year (Winter, Spring, and Fall) and is intended to keep the academic community informed about the Institute's research. To accomplish this goal, it contains summaries of recent research publications and reports on other activities.

Editors: Elizabeth Dunn and Michael Stephens

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

To comment on or inquire about publications, research, and events, contact the Institute online at [levyinstitute.org](http://levyinstitute.org).

Inquiries regarding contributions could be sent to Dimitri B. Papadimitriou, President, Levy Economics Institute of Bard College, Blithewood, Annandale-on-Hudson, NY 12504-5000. Phone: 845-758-7700 Fax: 845-758-1149 E-mail: [info@levy.org](mailto:info@levy.org) Website: [levyinstitute.org](http://levyinstitute.org)

## LETTER FROM THE DIRECTOR OF RESEARCH

---

### To our readers:

This issue begins in the State of the US and World Economies program with my public policy brief on the insights that can be found in the contributions of John Maynard Keynes and Richard Kahn to the design of the European Payments Union as a basis for reform of the current euro-based European Union.

Also under this program, a working paper by Tanweer Akram and Huiqing Li extends their existing work on the determinants of interest rate spreads with an empirical inquiry into the determination of long-term interest rates on US Treasury securities from a Keynesian perspective.

Under the Monetary Policy and Financial Structure program, I present a policy note that addresses the Trump administration's campaign promises to this age's "forgotten" men and women and expresses doubts about whether the administration has learned the broader lessons of the 1930s. Simply eliminating regulations and reducing the role of government will not remedy the fragility in the financial system or the secular stagnation afflicting many struggling communities.

Four working papers are also included under this program. Cameron Haas and Research Scholar Tai Young-Taft build on the work of Distinguished Scholar Wynne Godley to construct a stock-flow consistent model to examine the relationship between quantitative easing and economic instability. Ernani Teixeira Torres Filho, Norberto Montani Martins, and Caroline Yukari Miaguti use Distinguished Scholar Hyman P. Minsky's concept of financial fragility to build a framework for the evaluation of financial fragility and regulation of public utilities. They apply their model to the electricity distribution sector in Brazil to demonstrate its usefulness in the assessment of financial soundness of individual entities, as well as the sector as a whole. Oscar Valdes Viera offers his thoughts on Adam Smith's *The Theory of Moral Sentiments* and *The Wealth of Nations* to discuss the change from the philosophical study of political economy to the "science" of economics. And Charles J. Whalen explores the contributions Minsky made to the financialization literature in the final years of his life to find answers to today's pressing economic questions, such as how to deal with the rise in retirement insecurity.

In the Distribution of Wealth and Income program, Program Director and Senior Scholar Ajit Zacharias argues that pursuit of the UN's Sustainable Development Goals will be undermined unless policymakers recognize the relationship between poverty and "time deficits" in household production. In his policy note, Zacharias summarizes the findings from applying the Levy Institute's comprehensive measure of time and income poverty to seven countries.

Finally, under the Economic Policy for the 21st Century program, Senior Scholar L. Randall Wray offers a policy note calling for the implementation of a universal single-payer healthcare program. Even if the Affordable Care Act is not repealed, Wray argues, the US healthcare system is still far too reliant on private for-profit health insurance.

In a working paper in this program, Research Associate Pavlina R. Tcherneva compares the propagation mechanism and socioeconomic costs of unemployment to those of a disease epidemic and suggests a three-pronged approach to identify, contain, and inoculate against the multiple deprivations brought on by job loss.

As always, I welcome your comments.

Jan Kregel, *Director of Research*

## Program: The State of the US and World Economies

---

### A Two-Tier Eurozone or a Euro of Regions? A Radical Proposal Based on Keynes's Clearing Union

JAN KREGEL

Public Policy Brief No. 144, 2017

Senior Scholar and Director of Research Jan Kregel looks to early debates over the design of the postwar international financial system—particularly the contributions of John Maynard Keynes and Richard Kahn—for insight into what ails the eurozone project and possible reforms of the current setup. These attempts at grappling with the challenges of managing international settlements hold lessons for how to understand the defects in the eurozone's financial system, he explains. Kregel argues that the outlines of a solution can be found in early clearing union proposals developed by Keynes and his close associate, Kahn, as well as in Kahn's assessment of the European Payments Union (EPU).

Keynes died before the postwar discussions of European political unification and economic reconstruction really took off. However, Kregel suggests that we can begin to reconstruct how Keynes might have regarded the ultimate design for the Economic and Monetary Union (EMU) by examining his critique of the Treaty of Versailles and his contributions to the design of the post-World War II international financial architecture, in particular Keynes's focus on making the provision of liquidity less dependent on external surpluses. Kregel argues that since the euro-based financial system resembles a reimposition of the gold standard, Keynes's analysis of the standard might form the basis of a critique of the setup of the EMU. Much like the gold standard, Kregel observes, the EMU strips countries of policy independence, imposing the same monetary and fiscal policies on nations experiencing dissimilar domestic economic challenges. Kregel also illustrates how Keynes saw that, under a gold standard, a lack of

symmetry in the adjustment mechanism supporting a fixed exchange rate would mean that countries in need of using domestic policy tools to address employment and growth crises would be unduly burdened—much like under a single currency. For Keynes, currency flexibility and the ability to control cross-border capital flows were crucial—and both are lacking under the euro system, Kregel notes.

Kregel argues that Keynes's early clearing union proposal contains the elements of an alternative to the current euro setup. The solution would be to establish a clearing system in which members use a common unit of account in order to register debits and credits for the purpose of settlement. The 1950 EPU was a short-lived arrangement loosely based on the clearing union scheme. Kregel turns to Kahn's discussion of the EPU to help further flesh out the idea of a clearing union approach that might improve on the status quo. From the premise that a successful clearing arrangement depends upon creating incentives to avoid excessive imbalances, Kahn conceived of a multilateral arrangement under which the members of the clearing union would see their debit and credit balances liquidated at the end of a given period. Settlement of balances resulting from intra-European trade would be made on the basis of a "discount" established at the beginning of each settlement period, such that surplus countries would have an incentive to increase their imports from the deficit countries. This arrangement would enable a symmetric adjustment process—something still lacking both within the eurozone and between the eurozone and the rest of the world, Kregel observes—and would curtail the manner in which euro exchange rates exacerbate internal and external imbalances.

Kregel outlines two possible forms that an alternative clearing arrangement informed by the Keynes-Kahn approach might take. The first would be a multilateral clearing union among member states using the euro for clearing purposes and applying Kahn's "discount." The other emerges from Keynes's suggestion of the creation of regional groupings sharing certain economic and cultural characteristics. Each regional grouping would make up a currency union with its own unit of account and internal settlements system. At the same time, the regional groupings would take part in a European-level clearing union, using a common, Europe-wide unit of account. This European federation of regions

would then participate in a wider clearing union with other such federations around the world.

Kregel argues that these alternative clearing structures would better preserve cultural and economic diversity, with policy and exchange rate flexibility enhanced for each regional unit. This would implicitly create the sort of limitations that Keynes thought necessary on cross-border capital flows within the European federation. Kregel emphasizes that these arrangements would better preserve domestic policy independence and allow members to pursue full employment—an objective that has been badly neglected due to the flaws of the current system, he laments.

[www.levyinstitute.org/pubs/ppb\\_144.pdf](http://www.levyinstitute.org/pubs/ppb_144.pdf)

### **An Inquiry Concerning Long-term US Interest Rates Using Monthly Data**

TANWEER AKRAM and HUIQING LI

Working Paper No. 894, August 2017

Elaborating on Keynes's assertion that the short-term interest rates set by the central bank are the key drivers of long-term government bond yields, Tanweer Akram, Thrivent Financial, and Huiqing Li, Central University of Finance and Economics, present an empirical investigation of long-term interest rates on US Treasury securities. Building on recent literature that uses quarterly rates, the authors' use of monthly data provides a closer look at regularities and patterns in the short and long run in order to gain a better understanding of the dynamics of long-term interest rates on government bonds in the United States.

Keynes recognized that the ultimate foundation of interest rates lies in human psychology, social convention, and liquidity preference. Keynesian theory posits that investors rely on current conditions to form expectations about the future, therefore the current inflation and growth rates provide the best information about future inflation and growth rates. With the forward rate a function of the current rates of growth and inflation, and long-term interest rates dependent on short-term rates and the forward rate, it follows that the long-term rate is a function of the short-term rate of interest and the current rates of growth and inflation. Plotting the difference between long-term interest rates on Treasury

securities versus short-term rates on Treasury bills, Akram and Li find a strong positive correlation between the two, implying that short-term rates influence long-term rates.

With most of the existing theoretical and empirical research on nations with sovereign currencies emphasizing government fiscal variables (such as ratios of government net lending/borrowing to nominal GDP, gross debt to nominal GDP, or net debt to nominal GDP) as the key drivers of interest rates in both the long and short run, the authors choose to employ a Keynesian framework that focuses on short-term interest rates, as influenced by a central bank's policy rates and other monetary policy tools. Building a simple model that controls for the government fiscal variables to assess the changes in long-term interest rates, Akram and Li use time-series monthly data on short- and long-term interest rates, inflation, economic growth, business cycle conditions, and the ratio of federal government net borrowing/lending (fiscal balance ratio), and apply the autoregressive distributive lag (ARDL) framework to examine the dynamic relations among the variables. After testing for unit roots and structural breaks, the authors apply the bounds test procedure to cointegration and the vector error correction (VEC) model to assess the significance of the long-run equilibrium relationship between their variables and how deviations from the equilibrium adjust over time. They find that in all their models, the main variables (i.e., short-term interest rates, the rate of inflation, and the pace of economic activity) are all positively correlated with the long-term interest rates, confirming their hypothesis.

Akram and Li suggest that their findings are applicable to the current policy debate on topics such as government debt sustainability, fiscal austerity, and the liquidity trap in advanced economies. They recommend that future research using their Keynesian framework use different measures of the government fiscal variable to see if their results hold when alternative measures of federal fiscal conditions are employed.

[www.levyinstitute.org/pubs/wp\\_894.pdf](http://www.levyinstitute.org/pubs/wp_894.pdf)

# Program: Monetary Policy and Financial Structure

---

## The Concert of Interests in the Age of Trump

JAN KREGEL

Policy Note 2017/2

In this policy note, Senior Scholar and Director of Research Jan Kregel argues that if the Trump administration is going to be able to fulfill its campaign promises to struggling communities, it needs to learn the broader lesson of the 1930s with respect to the role of the government in addressing economic change. Kregel compares the message of the Trump campaign with that of Franklin Delano Roosevelt in 1932, who pledged to take action to support the “forgotten man” by offering a “new deal.” While we might be able to give credit to the Trump campaign for identifying significant problems faced by a large portion of the working population, Kregel writes, the current administration’s approach to solving these problems—particularly their approach to fiscal policy and regulatory reform—is rooted in a set of critical errors committed by opponents of the New Deal in the 1930s.

What was notable about the New Deal, according to Kregel, was its recognition of the principle that the federal government bore responsibility for the economic well-being of the population, marking a fundamental change in the role of government. Kregel emphasizes that this change was not primarily driven by ideology, but rather was based on the view that the structure of the economy had changed significantly: no longer a collection of independent producers competing in free markets, the economy had become defined by large corporations exercising various degrees of monopoly power. The question facing Roosevelt and his administration in the 1930s was how to organize this new productive structure so as to yield socially beneficial results. Kregel notes that the reconsideration of the role of government represented by the New Deal was also necessitated by the perceived urgency of offering a democratic “third way” between fascist and communist alternatives.

He observes that the problems facing the Trump administration are similar to those of the 1930s, including income inequality, the absence of a robust fiscal policy in support of

full employment, and the challenges associated with managing external trade and payments. He also notes that calls to eliminate regulations and shrink the size of government—today referred to as the “dismantling of the administrative state”—were as present in the 1930s as they are today. Kregel warns that by calling for such a “dismantling” under current circumstances, the Trump administration risks repeating what Walter Lippmann described as the “obvious error” committed by critics of the New Deal: the belief that reducing regulation will restore a laissez-faire market liberalism. According to Lippmann, such a laissez-faire ideal never truly existed, and chasing the ideal renders the government incapable of dealing with the harmful social consequences resulting from changes in the productive structure of the economy.

Kregel also points out that the Trump administration seems inclined to repeat an error made by Roosevelt himself, who was at one point committed to the idea of balancing the budget. According to Kregel, one of the central reasons for the secular stagnation afflicting the US economy is that the federal government abdicated its responsibility for using budget stimulus to support household purchasing power in the wake of the mortgage crisis and subsequent weak recovery. He recommends Hyman Minsky’s employer-of-last-resort program as a modern solution that would support full employment through fiscal policy.

Kregel highlights Minsky’s view that structural reform of the financial system is a prerequisite for more sustainable economic growth and employment. And despite the 2010 Dodd-Frank Act, Kregel argues that the overall structure of the financial system has remained largely unchanged since the recent crisis. The regulatory response to the most recent failure of the system has been to push for higher capital ratios and to impose liquidity requirements in the form of asset characteristics. With respect to the latter, Kregel notes Minsky’s view that the true source of liquidity is the ability to turn an asset into a means of payment—an ability ultimately based on access to the regulated banking system, which is in turn based on banks’ access to the Fed discount window. However, Kregel points out that the Fed’s role in providing systemic liquidity through section 13(3) of the Federal Reserve Act has been limited somewhat by Dodd-Frank. As for higher capital ratios, Kregel notes Minsky’s view that this would eventually lead to the equivalent of 100 percent banking, which

undermines the ability of the financial system to provide the financing for the capital development of the economy. Kregel outlines a number of potential paths forward on financial regulatory reform, but warns that early indications suggest the Trump administration is falling into Lippmann's "obvious error" in this realm as well.

[www.levyinstitute.org/pubs/pn\\_17\\_2.pdf](http://www.levyinstitute.org/pubs/pn_17_2.pdf)

## Quantitative Easing and Asset Bubbles in a Stock-flow Consistent Framework

CAMERON HAAS and TAI YOUNG-TAFT  
Working Paper No. 897, September 2017

As quantitative easing (QE) ascended as a policy tool throughout the 2000s, empirical studies attempted to assess its impacts with mixed results. Some claimed that it would lead to a depressed economy with uncontrollable inflation, others that it would cause the overvaluation of assets and lead to bubbles, and still others asserted that it would be irrelevant once equilibrium was achieved. Adding to these studies, Cameron Haas, Bard College at Simon's Rock, and Research Scholar Tai Young-Taft construct a stock-flow consistent (SFC) model to examine the relationship between QE and economic instability.

Previous studies on the effects of QE used dynamic stochastic general equilibrium (DSGE) models to investigate the role bubbles play in creating instability. However, Haas and Young-Taft argue that these models treat bubbles as exogenous shocks rather than, as argued by Hyman Minsky, the endogenous byproduct of the fundamental instability of complex monetary systems. To better capture the endogenous nature of bubbles, where equity booms are burst by panics, Haas and Young-Taft use the SFC modeling approach of Levy Distinguished Scholar Wynne Godley and Marc Lavoie, first laid out in their 2007 text, *Monetary Economics*, to construct a balance-sheet matrix and a transactions-flow matrix that formalize the accounting requirements for a closed economy. With the rows and columns of both matrices summing to zero, they are able to visualize the flow of money within the system that is balanced both intra- and intersectorally.

Haas and Young-Taft then present 46 equations, representing four distinct sectors—the government, central

bank, firms, and households—as well as equations to represent market clearing, QE, and endogenous bubbles. In their model, the government spends to bolster firm output and taxes to finance spending; the central bank sets the interest rates and adjusts the price of long-term bonds; firms produce output for consumption and pay wages to households; and households use income to finance consumption and pay taxes. With their basic equations set for the four main sectors of the economy, as well as constructing market-clearing equations for each, the authors turn to modeling the endogenous variables to assess the effects of QE.

Assuming that QE is set exogenously and that the central banks buy long-term government bonds until the QE regime's end date (but then no more), they model the effects of the policy on the various sectors of the economy. Closing out their model by describing its endogenous bubbles, they look at changes in Tobin's  $q$  (i.e., market valuation over real assets) to investigate how bubbles turn into panics. With the appropriate parameters and initial conditions in place, Haas and Young-Taft solve the model. Given the model's size, they focus on QE's effect on household propensity to consume out of income, the size and duration of central bank bond buy-outs, and a firm reactivity parameter, which they found to be of vital importance.

Their results show that in an economy with a low propensity to consume out of income, the introduction of QE does not fundamentally alter the model's long-term behavior. However, in the short run, consumption is noticeably boosted by the introduction of QE. While consumption is smoothed over the long run and both economies (with and without QE) have nearly identical peaks and troughs, the authors note that the introduction of a QE policy speeds up cyclical boom-bust behavior, resulting in more frequent panics. In an economy with a high propensity to consume out of income, the QE "phase shift" happens in the opposite direction, resulting in an economy with a lower overall GDP, as households consume more, leaving less wealth in the next period, and therefore constraining investment and crippling long-term growth.

The main cause of instability in their model comes from the firm reactivity parameter that captures the rate at which firms try to bridge gaps between current and target inventories as they attempt to match output to demand. Haas and Young-Taft find the misalignment of expectations captured

in this parameter has the largest potential to destabilize an economy, while QE merely shifts the timeline of economic events with little effect on their course.

[www.levyinstitute.org/pubs/wp\\_897.pdf](http://www.levyinstitute.org/pubs/wp_897.pdf)

### **Minsky's Financial Fragility: An Empirical Analysis of Electricity Distribution Companies in Brazil (2007–15)**

ERNANI TEIXEIRA TORRES FILHO, NORBERTO MONTANI MARTINS, and CAROLINE YUKARI MIAGUTI  
Working Paper No. 896, September 2017

Applying Hyman Minsky's concept of financial fragility to electricity distribution companies in Brazil for the period between 2007 and 2015, Ernani Teixeira Torres Filho, Norberto Montani Martins, and Caroline Yukari Miaguti, Federal University of Rio de Janeiro, build a framework that goes beyond traditional accounting instruments to provide regulators with a simple and transparent method for assessing the financial soundness of public utilities.

Contrary to the mainstream approach to crises that views instability as the result of exogenous shocks to the system, the authors assume that the possibility of a crisis is endogenous and that indicators of financial soundness should focus on detection of fragility during periods of stability. To accomplish this, they use firm-level data to construct two indices, classifying Brazilian electrical distribution companies into Minskyan risk categories (hedge, speculative, and Ponzi) to assess the financial stability of individual companies as well as the sector as a whole. Because financial fragility is a prerequisite for financial instability, the authors hope their indices will aid regulators in the identification of fragile units, allowing them to be restructured before a crisis.

Building on the existing financial fragility literature that focuses mainly on macro-level indicators, the authors stress the importance of the microeconomic component of Minsky's hypothesis. Their empirical approach employs Minskyan categories, determined by an index of current liquidity that compares financial inflows and outflows of a firm-level unit at a given point in time. Making some adjustments for the regulatory accounting conventions in the Brazilian electricity sector, they are able to classify 64 individual firms by their

ability to discharge their financial obligations with resources from their current activities.

Their results show the electricity distribution sector in Brazil was well financed at the start of their sample, with 75 percent of the total firms in a hedge position, and the remaining firms evenly split between speculative and Ponzi positions. As expected by the authors, the majority of those in a Ponzi position did not remain so for long, as they were restructured to improve their financial situation. However, thanks to public subsidies, those firms held by the government tended to remain in a Ponzi position for an extended period of time, leaving the sector open to crisis, as happened in 2012.

Because the electricity distribution sector provides a government-subsidized public service, the authors contend that regulators should be concerned about its exposure to risks with regards to a crisis, but also with the implications this has on capital investments. Adding an accounting depreciation variable to their liquidity index, they proxy the minimum investment each firm must make in the long term in order to maintain the capacity of their physical assets and their ability to provide quality service to their customers. Those who are in a position to make such investments are categorized as "robust," with others in weaker positions categorized as "exposed" or "fragilized." Calculating the financial fragility of the sector as a whole, the authors look at the frequency of companies in each risk category on a year-by-year basis to create an index (weighted and unweighted) to understand how financing patterns evolve over time. On the firm level, their findings indicate the number of "fragilized" government-owned firms increased and that the sector as a whole became more fragile over their period of study.

Their results suggest that employing a Minskyan taxonomy can be a useful framework for regulators to classify a heterogeneous set of companies into different risk categories for monitoring the evolution of fragility on a sectoral basis. They assert that their indices can be applied to identifying managerial, sectoral, and macroeconomic determinants responsible for making economic units at the firm and sectoral levels fragile and can serve as a useful tool in reorienting regulatory efforts toward identifying instability before a crisis occurs.

[www.levyinstitute.org/pubs/wp\\_896.pdf](http://www.levyinstitute.org/pubs/wp_896.pdf)



## The Neoclassicals' Conundrum: If Adam Smith Is the Father of Economics, It Is a Bastard Child

OSCAR VALDES VIERA

Working Paper No. 893, July 2017

Arguing that the mathematical approach practiced by orthodox economists represents a point of departure from the Smithian tradition in which theory was a servant of observations, Oscar Valdes Viera, Americans for Financial Reform, traces the evolution of the discipline from its beginnings in political economy to its modern-day incarnation as the science of economics.

In an effort to emulate the success of the natural sciences in explaining the world around us, economists of the late nineteenth century sought to provide a legitimate doctrine for establishing the capitalist system as rational and harmonious. To achieve these ends, they introduced mathematical models that relied on assumptions—often detached from observable phenomena—to reduce a complex and irrational society to a small, rational one where profit motive and competition align the self-interests of individuals to produce a collective good. While neoclassicals claim these models support a laissez-faire system, traceable to Adam Smith and his “invisible hand” metaphor, Valdes Viera argues that their work is at odds with the theories of political economy Smith laid out, first in *The Theory of Moral Sentiments*, and later in *The Wealth of Nations*.

Close reading of Smith’s texts illustrates that he was in favor of direct government participation, and saw the invisible hand as the manifestation of social influences rather than a divine force operating in a vacuum. Citing the oft-quoted passage from *The Wealth of Nations* that “it is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest,” Valdes Viera claims Smith recognized these citizens worked to produce a benefit to their community, and it was the alignment of both the individual and collective interests that lay at the heart of the free market. By looking at social behavior from the perspective of an “impartial observer,” Smith made clear that while individuals are naturally more concerned about their own affairs than the affairs of others, they tend to examine their actions by considering what others might think of them, thereby forming their morality on the basis of empathy rather than egoism.

It is the departure from Smith’s notion of the empathetic individual toward the marginalist idea of a profit-maximizing economic actor where Valdes Viera locates a major change in the study of economics: from a philosophical approach, open to opinion and value judgment, to one that attempts to present itself as scientific and irrefutable. The works of Jean-Baptiste Say and Jeremy Bentham are among the earliest contributions that attempt to divorce political economy from both politics and philosophy. Moving from a labor theory of value to a utility-based theory of value, Valdes Viera contends Say narrowed the scope of political economy and disconnected its theorizing from social relationships, politics, and institutions, paving the way for the marginalist revolution of the late nineteenth century.

Authors such as William Stanley Jevons presented economic decisions as a “calculus of pleasure and pain,” where the study was of the relationship between people and things, rather than the relationship between people, absolving the “science” from any examination of exploitation or class conflict. An excerpt from Irving Fisher’s 1892 text, *Mathematical Investigations*, illustrates how Fisher applied economics jargon to existing physics models (i.e., a particle in physics corresponds to an individual in economics) to lend credence to his theories. However, Valdes Viera notes that this approach to economics necessitated assumptions that caused individuals to lose their social setting—a central characteristic of Smithian political economy—in order to represent one profit-maximizing individual.

Given this detachment of modern economic models from the reality of the subjects they are meant to study, Valdes Viera concludes that their work represents a disconnect from Adam Smith’s notions of value and his understanding of the economic individual, and it is this incongruence that is at the foundation of all orthodox theory.

[www.levyinstitute.org/pubs/wp\\_893.pdf](http://www.levyinstitute.org/pubs/wp_893.pdf)

## Understanding Financialization: Standing on the Shoulders of Minsky

CHARLES J. WHALEN

Working Paper No. 892, June 2017

Reflecting on Hyman Minsky's observations on the rise of money manager capitalism, Charles J. Whalen, The Baldy Center for Law and Social Policy, SUNY Buffalo Law School, explores Minsky's contributions to the financialization literature during the final years of his career.

While Minsky is best known for his financial instability hypothesis, much of what he wrote during the last decade of his life focused on the emergence of money managing institutions, such as pension funds and bank trust departments, as the masters of private-sector activity and the dangers he believed this posed to the US economy. Citing a 1996 paper cowritten by Minsky and Whalen, Whalen notes that corporate equities under money managers' control had increased more than sevenfold in the years between 1950 and 1990, leading to a decrease in the long-term "buy and hold" strategy of passive managers to a short-term view where active managers were driven to maximize the total value of investments made by fund holders. He claims this growing influence of money managers forced business leaders to be increasingly focused on shareholder value at the expense of capital investment, with nonfinancial corporations scaling back costly manufacturing operations, merging at an unprecedented pace, and engaging in activities more traditionally associated with financial firms.

These changes in the nonfinancial sector were accompanied by institutional innovations in the financial sector as well. With fund managers outgrowing portfolios of high-quality stocks and bonds, there was a need to find new returns, resulting in the development of block trading, securitized mortgages, portfolio insurance, and junk bonds. Minsky worried that fund managers did not see themselves as guardians of capital development, but rather focused on "the quick return of the speculator," where profits came from assuring corporate liabilities were fully priced in the financial markets. He argued that this would make innovation sluggish and give incentive to firms to merge and restructure in order to boost near-term portfolio value, with the shift from production to speculation as the primary source of profits

leading to an increasingly fragile economy. In an environment of financial fragility coupled with global financial integration, Whalen notes that Minsky was concerned with the possibility of market panic and the concomitant likelihood of an international economic crisis—a fear that was realized in 2007 with the onset of the global financial crisis.

Another concern Minsky addressed in his later writings was the rising level of worker insecurity and income inequality. As employers cut labor costs through layoffs and offshoring, those who were left faced decreased compensation and benefits packages, as well as increased job insecurity. For those who were still receiving a paycheck, the overvalued dollar (resulting from the portfolio choices of money managers driving exchange rates) made their stagnating incomes worth less. With nearly 70 percent of today's domestic equity market actively managed and shareholder value driving corporate governance, Whalen asserts it has become impossible to ignore the realities of worker insecurity in the United States and other advanced industrial nations.

To this end, Whalen proposes we look to the analytical framework Minsky developed in order to extend his work to the present-day situation. Minsky viewed business cycles (and economic dynamics in general) as endogenous and the natural consequence of self-interested behavior taking place in a complex system of economic and financial relations. Using this view of the economy, Whalen reasons that we can create policies and institutions that are better equipped to withstand bouts of instability. Minsky recognized that the Schumpeterian forces of creation and destruction were in play in financial markets and stressed that any theory of economic development must necessarily include the recognition of the central role that credit and finance play in a capitalist economy. Whalen suggests that it is through the combination of Schumpeterian ideas with Keynesian insight that Minsky arrived at his theory of long-term US development, which focuses on the interaction of finance and industry rather than consumer choice. And it is from this starting point that economists can extend Minsky's theories to examine present-day economic situations, such as the rise in retirement insecurity or the technology-driven boom that preceded the dot-com bust.

[www.levyinstitute.org/pubs/wp\\_892.pdf](http://www.levyinstitute.org/pubs/wp_892.pdf)

# Program: The Distribution of Wealth and Income

---

## How Time Deficits and Hidden Poverty Undermine the Sustainable Development Goals

AJIT ZACHARIAS

Policy Note 2017/4

Senior Scholar and Director of the Distribution of Wealth and Income program, Ajit Zacharias draws attention to the relationship between two targets identified in the United Nations' Sustainable Development Goals (SDGs). The SDGs call for (1) reducing the incidence of poverty by 50 percent by 2030 and (2) providing recognition and support for the unpaid household work performed predominantly by women. These two goals, Zacharias argues, are far more intimately connected than policymakers recognize. The reason this interconnection between poverty and household production falls into a blind spot, Zacharias explains, is that we have an incomplete conceptualization of poverty that undergirds official statistics throughout the world. The predominant approach to measuring poverty simply takes it for granted that everyone has enough time to perform necessary household work, or enough money to buy substitutes for whatever household production might be missing. This assumption, Zacharias demonstrates, leads to a significant portion of poverty being “hidden” by the official numbers.

To correct this bias, the official statistics need to take time deficits in household production seriously. Zacharias summarizes the results of seven years of research using the Levy Institute Measure of Time and Income Poverty (LIMTIP). The LIMTIP attempts to create a more accurate, comprehensive picture of the depth and breadth of deprivation by adjusting official poverty thresholds to take time deficits into account. For those without sufficient time to perform necessary household tasks like cooking, cleaning, and care work, the official poverty line does not represent the minimum income necessary to avoid material deprivation, since households with time deficits will need to use some portion of their income to purchase market substitutes for whatever household production is lacking. The LIMTIP accounts for this by adding the replacement cost of missing production

for households with time deficits—that is, the extra monetary resources necessary to purchase market substitutes.

Zacharias notes that the LIMTIP is also distinctive in that it attempts to measure *intra*household poverty. While it is generally assumed that every individual within an income-poor household is income-poor, the LIMTIP allows for distinctions within the household. This is particularly important, Zacharias stresses, due to the unequal division of labor within the household—with women performing the bulk of unpaid work. This gender-based disparity persists, he points out, even when men and women within a household perform a similar number of paid working hours. Measuring time deficits at both the household and individual level allows for the possibility that not every individual in a time-poor household need be time-poor.

In this policy note, Zacharias summarizes the LIMTIP estimates for seven countries, in each case in a given year: Argentina (2005); Chile (2006); Ghana (2012–13); Korea (2009); Mexico (2008); Tanzania (2011–12); and Turkey (2006). In all seven countries, the incidence of time deficits among employed individuals was substantial, falling within a range of 32 percent at the low end (Ghana) and 52 percent at the high end (Tanzania). Moreover, across all seven countries, women registered higher rates of time poverty due to bearing a higher share of household production. Zacharias notes that this unequal sharing of household burdens was unaffected by differences in the number of hours of paid employment—for either sex. Once the monetized value of time deficits was included in the poverty threshold, a remarkable amount of hidden poverty was revealed. Korea's official poverty rate was the lowest among the seven countries studied—but its poverty rate nearly doubled once time deficits were taken into account. Zacharias also demonstrates that the price of “buying off” time deficits—of buying market substitutes for missing household production—is quite significant, even for middle-income households. The LIMTIP studies revealed the extent of the gender disparity with regard to poverty: the proportion of women who were both time-poor and income-poor was much higher than the proportion of men who experienced this double burden, and the proportion of women who were neither time-poor nor income-poor was much lower.

Among the policy lessons to be derived from this research, Zacharias notes that a strategy focused on providing

employment as a path out of poverty should consider that the extra income earned through employment must be sufficient to compensate for any time deficits created by spending more time on the job. Among other considerations, policymakers must address low wages (particularly for women), the regulation of hours of employment (to prevent overwork), and a lack of social care provisioning, which leaves households with few affordable options to address time deficits.

[www.levyinstitute.org/pubs/pn\\_17\\_4.pdf](http://www.levyinstitute.org/pubs/pn_17_4.pdf)

## Program: Economic Policy for the 21st Century

---

### Why the Compulsive Shift to Single Payer? Because Healthcare Is Not Insurable

L. RANDALL WRAY

Policy Note 2017/3

According to Senior Scholar L. Randall Wray, whether or not Republican attempts to repeal and replace the 2010 Affordable Care Act (ACA) succeed, the United States should move toward the creation of a universal, single-payer healthcare program. While the ACA did reduce the ranks of the uninsured, gaps in coverage and affordability problems (high deductibles and copayments) remain. The US system is still overly reliant on private, for-profit health insurance, Wray argues in this policy note.

The fundamental problem with the private system, he contends, is that basic healthcare is not an insurable expense—the insurance model is a poor way to organize a payment system for healthcare coverage. In most instances, insurance is supposed to be a “bad deal,” Wray observes, in the sense that customers pay small premiums to cover rare but expensive events (fires or car accidents) and hope to never receive a payout—it is a “good deal” only for those unlucky few who do receive payouts. Even for the insured pool as a whole, the total of the premiums paid should be greater than the payouts. Healthcare expenses are ill-suited to being covered in this way, according to Wray. He observes that most healthcare needs are either routine—that is, they are predictable, and

can even be welcome or life enhancing—or due to chronic illness, which he contends is comparable to insuring a house that has already caught fire. The premiums that should be charged to cover a preexisting condition would be equivalent to the cost of all expected future treatments plus the insurers’ operating costs and profits—in which case patients would be better off simply paying out of pocket.

Since, roughly speaking, 20 percent of the population incurs 80 percent of healthcare costs, insurers must find a way to overcharge healthy customers in order to spread the costs incurred by the unhealthy members of the pool. To thrive, for-profit health insurers need to be able to exclude the unhealthy (people with preexisting conditions)—but in the absence of said ability, healthier customers must be required to enter the insured pool and subsidize the unhealthy, which in turn requires the government to provide large subsidies to customers. This is essentially the model of the ACA, Wray observes (he mentions that the ACA also increased coverage through an expansion of the existing single-payer system—Medicaid—but that this expansion was ultimately attenuated by a court ruling allowing states to opt out). Under the ACA, the government requires all individuals to purchase insurance, with tax penalties assessed on individuals who do not join the insured pool. In turn, the ACA provides subsidies to low-income customers to help pay insurance premiums and imposes regulations on participating private insurers—most notably preventing the exclusion of individuals with preexisting conditions.

Wray points out that US healthcare is far more expensive than other developed nations and produces health outcomes that are no better, all while the US share of its population lacking adequate healthcare coverage is the largest in the developed world—even after implementation of the ACA. To replace the existing expensive and complex payment system, Wray suggests we look to the models of Social Security and Medicare. Wray describes Social Security as the United States’ “single-payer retirement system.” Despite being initially sold as an “insurance” program to provide old-age security, with “premiums” paid in the form of payroll taxes, Wray argues that Social Security is not best analogized to insurance. It is, Wray contends, an “intergenerational *assurance* program,” with current workers taking care of current retirees. When looked at from the perspective of the economy as a whole,

he explains, taxing workers reduces their spending, leaving resources that can be directed to the elderly. And, broadly speaking, the spending side of Social Security (and Medicare) ensures that the resources made available are actually directed to the elderly's retirement (and healthcare) needs. The proper balance between spending and taxes, Wray argues, depends on the state of the macroeconomy (that is, whether or not the economy is at full employment).

The best way to ensure a diversified pool for healthcare coverage, according to Wray, is to ensure that everyone is included, which can be done by extending Medicare to all. He points out that a universal, Medicare-style single-payer program would still be compatible with the existence of private health insurance offering supplemental coverage.

[www.levyinstitute.org/pubs/pn\\_17\\_3.pdf](http://www.levyinstitute.org/pubs/pn_17_3.pdf)

## **Unemployment: The Silent Epidemic**

PAVLINA R. TCHERNEVA

Working Paper No. 895, August 2017

Contending that the propagation mechanism and socio-economic costs of unemployment mimic those of a disease epidemic, Research Associate Pavlina R. Tcherneva proposes that we look to literature from the fields of health economics, cognitive sciences, and public health to find ways to stem the contagion. By focusing on the transmission mechanism of unemployment, its macroeconomic behavior, and its socio-economic impact, she recommends a fundamental shift in the policy response to tackling joblessness toward an approach based on prevention and preparedness.

Because conventional theory treats unemployment as an unavoidable market failure (due to wage rigidities, search frictions, or other market imperfections) or market feature (in the case of the nonaccelerating inflation rate of unemployment), policy responses aim at tolerating a “desirable” level of unemployment rather than eradicating it. Mapping the county-level Bureau of Labor Statistics data from three recessions and recoveries over the period from 1990 to 2016, it is clear to see the evolution of unemployment over time, as a region affected by mass layoffs sees unemployment spreading across an ever-increasing area with declining aggregate demand leading to more unemployment. When the economy

recovers, unemployment shrinks in the periphery, but recovery never fully reaches the core of the affected region, with joblessness persisting even at the peak of an expansion and giving rise to negative labor market outcomes, such as an increase in the share of the long-term unemployed in total unemployment.

In addition to the economic costs of continued unemployment, Tcherneva notes the social costs joblessness exacts, including permanent loss in earnings over the lifecycle; depressed social capital formation; increased healthcare costs; increased incidence of alcoholism, depression, and suicide; and decreased levels of educational attainment, labor market outcomes, and social mobility for children in affected households. Areas particularly affected by unemployment have seen an increase in both property crime and violent crime, as well as a rise in extremism among unemployed youth, as the social exclusion experienced by the unemployed has been found to exacerbate antisocial and criminal behavior.

By focusing on the three key characteristics of an epidemic—namely its pattern and recurrence, its virulence, and the impact on the host—Tcherneva argues that we can design better policies to limit the social and economic costs of unemployment. She advocates for a three-pronged approach of identification, containment, and inoculation to address the multiple deprivations that employment loss brings. Unemployment data can identify locations that experience ongoing high levels of joblessness, and mapping this information with data on other forms of socioeconomic hardships—such as lack of decent food, housing, and health services—gives a clearer picture of where interventions are needed to contain the spread of these deprivations. Emphasizing the final prong of inoculation, she stresses the necessity of a federally funded job guarantee program to provide a proactive solution for preventing the contagion effects brought by increases in unemployment.

Different from conventional policies (such as unemployment insurance and Temporary Assistance for Needy Families), which only put a temporary floor on collapsing aggregate demand, a job guarantee program is a pro-employment, pro-growth policy that stabilizes spending patterns and prevents the exacerbation of unemployment's social costs. Additionally, the jobs offered by the guarantee aim at satisfying unmet needs in the workers' communities, in programs that provide

services such as healthy food, child care, and clean public spaces. Because the public sector is already paying for unemployment in the form of lost output and the redirection of resources to programs dedicated to tackling social ills, she notes that the job guarantee simply redistributes these expenditures toward more socially productive uses.

A federally funded job guarantee could also have positive effects on state budgets, as states reduce spending on antipov-erty programs and crime. Pointing out that average annual spending per inmate comes close to the annual cost of providing a living wage to an employee in a job guarantee program, Tcherneva suggests that the program can be doubly beneficial in not only reducing the cost of incarceration, but also the incidence of recidivism.

[www.levyinstitute.org/pubs/wp\\_895.pdf](http://www.levyinstitute.org/pubs/wp_895.pdf)

## INSTITUTE NEWS

---

### Save the Dates

---

#### **27th Annual Hyman P. Minsky Conference Financial Stability in a World of Rising Rates and the Repeal of Dodd-Frank**

Levy Economics Institute of Bard College  
Annandale-on-Hudson, New York  
April 17–18, 2018

The 27th Annual Hyman P. Minsky Conference will take place at Blithewood, on the Bard College campus, in April 2018. The conference will address, among other issues, the economic policies introduced by the Trump administration, the opportunities available to central banks, and how to return the economy to positive wage and employment growth. Additional information will be posted on our website, [levyinstitute.org](http://levyinstitute.org), as it becomes available.

#### **The Hyman P. Minsky Summer Seminar**

Levy Economics Institute of Bard College  
Annandale-on-Hudson, New York  
June 16–23, 2018

The Levy Institute's ninth annual Hyman P. Minsky Summer Seminar will be held on the Bard College campus in June 2018. 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 application and other information, please visit our website.



## INNOVATIVE RESEARCH. EFFECTIVE SOLUTIONS.

Innovation is central to the Levy Institute’s strategy for producing research that leads to constructive public policy. Over the past three decades we’ve developed new, accounting-based macro models and more comprehensive poverty measures. We’ve devised new approaches to financial regulation, as well as employment strategies to ensure true economic recovery and long-term stability. In areas like macroeconomic and trade policy, income inequality, sustainable development, job creation, gender equity, institutional reform, and democratic governance we’ve provided the nonpartisan, objective research and analysis policymakers need to make smart decisions.

Your support helps make this work possible. Our donors play a key role in sustaining the independence and impact of our work, which is essential to informing policy debates and developing effective solutions to public policy challenges. They help fund our people, ideas, and outreach. And they provide scholarship support to deserving students in our master’s degree programs in economic theory and policy, which are centered on active research initiatives to solve real-world problems.

The work of the Levy Economics Institute is literally indispensable, and probably irreplaceable. Levy researchers delve deeply into areas to which other think tanks barely pay attention, such as income inequality, for example. Thank heaven for Levy.

—Alan S. Blinder, former vice chairman of the Federal Reserve Board

## Become a Friend of the Levy Institute by making a gift today.

We offer a number of ways to give:

### Friends of Levy Fund

This unrestricted fund provides the broadest level of support for our core activities. Your gift, regardless of size, helps us advance important research, expand our public outreach, and strengthen our scholarship program. To contribute to the Fund, please use the attached form, or you may donate online at [levyinstitute.org](http://levyinstitute.org).

### Matching Gifts

Many employers match philanthropic gifts made by employees or their families, doubling the impact of your gift. You can request a matching gift form from your company’s human resources office. Send the completed form to us along with your gift or pledge. We’ll do the rest.

### Partnerships

Donors may choose to partner with the Institute by directing their gift toward the support of a specific program, research project, or event. To learn more about specific giving opportunities, please call us at 845-758-7700 or e-mail [dbp@levy.org](mailto:dbp@levy.org).

### Planned Giving

Including the Levy Institute in your estate planning is a great way to have lasting impact on our work. For more information, contact the President’s Office at 845-758-7700 or check the appropriate box on the form below.

---

### Friends of Levy Fund

Support the Levy Institute with a single gift of  \$30,000  \$3,000  \$300  \$30  \$\_\_\_\_\_ or make a monthly gift of \$\_\_\_\_\_ for \_\_\_\_\_ months.

### Method of Payment

- A check made payable to the Levy Economics Institute of Bard College is enclosed.  
 Bill my (check one)  American Express  Discover  MasterCard  Visa

Account number

Expiration date

Name as it appears on card

Name as it should appear in donor listings

- I would like to remain anonymous in all donor listings.

Address

City

State

Zip

Telephone

E-mail

- Please send me details on ways to provide for the Levy Institute in my will or through other estate-planning gifts.

**Thank you for your continued support.**

**Please return your donation to:** Levy Economics Institute of Bard College, Blithewood, PO Box 5000, Annandale-on-Hudson, NY 12504-5000

All donations to the Levy Economics Institute of Bard College are tax deductible to the fullest extent of the law. The College is a 501(c)(3) organization.



Blithewood  
PO Box 5000  
Annandale-on-Hudson, NY 12504-5000  
Address Service Requested

Nonprofit Organization  
U.S. Postage Paid  
Bard College

## Levy Economics Institute

# Graduate Programs in Economic Theory and Policy

Designed as preparation for a professional career in economic research and policy formation, these programs combine coursework in economic theory, policy, and modeling with the exceptional opportunity to engage in advanced research at the Levy Economics Institute.

Small class sizes, rigorous academics, and faculty-mentored research within a professional environment provide those seeking appointments in the nonprofit and government sectors or in private consulting and investment firms the experience they need. It also provides excellent preparation for students who ultimately go on to pursue a Ph.D.

For more information, including an application checklist and financial aid forms, visit [bard.edu/levygrad](http://bard.edu/levygrad).



Levy Economics Institute  
of Bard College

---

Graduate Programs in  
Economic Theory and Policy

### Application deadlines

Early Decision: November 15 | Regular Decision: January 15

### Contact

845-758-7776 | [levygrad@bard.edu](mailto:levygrad@bard.edu)