



Summary

Winter 2019

Vol 28, No. 1

Contents

INSTITUTE RESEARCH

Program: The State of the US and World Economies

- 4 DIMITRI B. PAPADIMITRIOU, MICHALIS NIKIFOROS, and GENNARO ZEZZA, Can Greece Grow Faster?
- 5 LIUDMILA MALYSHAVA, External Instability in Transition: Applying Minsky's Theory of Financial Fragility to International Markets

Program: Monetary Policy and Financial Structure

- 6 IGNACIO RAMIREZ CISNEROS, German Economic Dominance within the Eurozone and Minsky's Proposal for a Shared Burden between the Hegemon and Core Economic Powers
- 7 JÖRG BIBOW, Twenty Years of the German Euro Are More than Enough
- 8 TANWEER AKRAM and ANUPAM DAS, Australian Government Bonds' Nominal Yields: An Empirical Analysis

Program: The Distribution of Income and Wealth

- 9 AJIT ZACHARIAS, THOMAS MASTERSON, and FERNANDO RIOS-AVILA, Stagnating Economic Well-Being and Unrelenting Inequality: Post-2000 Trends in the United States
- 11 AJIT ZACHARIAS, THOMAS MASTERSON, FERNANDO RIOS-AVILA, KIJONG KIM, and TAMAR KHITARISHVILI, The Measurement of Time and Consumption Poverty in Ghana and Tanzania: The Levy Institute Measure of Time and Consumption Poverty
- 12 FERNANDO RIOS-AVILA, Quality of Match for Statistical Matches Using the American Time Use Survey 2013, the Survey of Consumer Finances 2013, and the Annual Social and Economic Supplement 2014
- 12 AJIT ZACHARIAS, THOMAS MASTERSON, and FERNANDO RIOS-AVILA, The Sources and Methods Used in the Creation of the Levy Institute Measure of Economic Well-Being for the United States, 1959–2013

Contents (continued)

Program: Employment Policy and Labor Markets

- 14 THOMAS MASTERSON, Black Employment Trends since the Great Recession

INSTITUTE NEWS

- 15 Levy Institute at Bard College Berlin

UPCOMING EVENTS

- 15 28th Annual Hyman P. Minsky Conference
15 The Hyman P. Minsky Summer Seminar

LETTER FROM THE PRESIDENT

To our readers:

This issue opens with a Strategic Analysis for Greece under the State of the US and World Economies program in which I, along with Research Scholars Michalis Nikiforos and Gennaro Zezza, investigate the reasons for the Greek economy's return to GDP growth and examine the prospects for increasing the pace of the recovery. In addition to providing estimates for two medium-term scenarios—one “business as usual” scenario and another simulating the impact of an acceleration in investment—we analyze the sustainability of Greek government debt. Also under this program is a working paper by Liudmila Malyshava, which considers the transition processes in the countries of the former Soviet Union, suggesting that their progress has been constrained by existing institutions and low levels of technological progress.

In the first of three working papers under the Monetary Policy and Financial Structure program, Ignacio Ramirez Cisneros reflects on Germany's dominant role in the European Union (EU) and its implications for the stability of the eurozone as a whole. A contribution by Research Associate Jörg Bibow also explores Germany's role in the EU, with a focus on what the euro's German roots mean for the future of the monetary union. In the third working paper in this program, Tanweer Akram and Anupam Das continue their investigation into the drivers of long-term bond yields by undertaking an empirical analysis that models the dynamics of Australian government bond yields.

This issue continues with several works under the Distribution of Income and Wealth program. The first, a public policy brief by Senior Scholar Ajit Zacharias and Research Scholars Thomas Masterson and Fernando Rios-Avila, updates the Levy Institute Measure of Economic Well-Being (LIMEW) through 2013. The LIMEW, developed in 2001, takes into account not only market income, but also income from wealth, net government expenditures, and the value of household production, to provide a more comprehensive assessment of trends in household living standards. A research project report by Zacharias, Masterson, Rios-Avila, and Research Scholars Kijong Kim and Tamar Khitarishvili analyzes time deficits in Ghana and Tanzania using the Levy Institute Measure of

Time and Consumption Poverty (LIMTCP) to highlight the role time constraints play within households in an attempt to meaningfully inform poverty reduction strategies. The two working papers under this program relate to the creation of the synthetic dataset necessary for the LIMEW's estimation. The first, by Rios-Avila, assesses the quality of the match for the LIMEW's 2013 dataset, while the second, from Zacharias, Masterson, and Rios-Avila, describes the sources and methods used in constructing the LIMEW for 1959–2013.

Finally, under the Employment Policy and Labor Markets program, Research Scholar Thomas Masterson examines employment trends since the Great Recession, with a focus on the narrowing of the employment–population ratio gap between black and white workers.

As always, I welcome your comments and suggestions.

Dimitri B. Papadimitriou, *President*

Program: The State of the US and World Economies

Can Greece Grow Faster?

DIMITRI B. PAPADIMITRIOU, MICHALIS NIKIFOROS, and
GENNARO ZEZZA

Strategic Analysis, November 2018

The Greek economy has begun to recover. Greece's real GDP started growing in 2017 and continued through at least 2018Q2, employment growth began accelerating in 2015, and the Greek government has emerged from the stability support program after producing a primary budget surplus. However, viewed in the context of the historic downturn the country experienced beginning with the Great Recession and continuing through the post-2010 austerity period, the past six consecutive quarters of economic growth have been modest. Levy Institute President Dimitri B. Papadimitriou and Research Scholars Michalis Nikiforos and Gennaro Zezza analyze the sources of the current turnaround and the prospects for increasing the pace of the recovery.

The authors note that austerity has disarmed fiscal policy since 2010, causing it to act as a drag on the economy, and that consumption and domestic investment have essentially been flat for the last five years (although there was a modest increase in investment in 2017). In other words, the recovery has largely been driven not by domestic demand, but by net exports.

Their report notes there is some evidence that improvements in price competitiveness contributed to export gains in tourism. For the most part, however, they observe that Greece's export growth has tracked developments in the incomes of the country's trade partners. And from 2009 to 2017, the average growth rate of Greek exports was the same as that of the eurozone as a whole—that is, Greece has not made substantial gains in trade *relative to competitors*. Whatever progress may be attributed to “internal devaluation”—shrinking incomes through austerity and structural reforms in order to increase

price competitiveness—direct measures of Greece's competitiveness indicate that, after advances in the 2010–14 period, there has been minimal improvement since 2015 (even as exports continued to grow). The performance of the Greek trade sector is better explained, they suggest, as part of a broader trend in which a growing portion of trade is becoming intra-industry: driven not so much by movements in price competitiveness but by greater integration of businesses in global value chains.

The baseline projection for 2018–20 represents a business-as-usual scenario, using the International Monetary Fund's projections for foreign demand and inflation and an essentially status quo assumption for monetary and fiscal policy (no changes in interest rates and overall tax rates, and nominal spending increases in concert with real GDP growth). In this baseline scenario, after low but stable real GDP growth in 2018 and 2019, the growth rate slows down in 2020. This slowdown is the result of the authors' assessment that an unsustainable dynamic currently lending some support to the Greek economy—an increase in consumption and investment since 2017 that has apparently been financed by a reduction of the private sector's holdings of financial assets—will wind down by the end of the projection period.

The government's primary surplus, which was 4 percent of GDP in 2017, is projected to remain above that level over the remaining years of the baseline scenario. Papadimitriou, Nikiforos, and Zezza point out that if the government were to use some of this growing budget surplus to increase public investment or take other expansionary fiscal steps, the growth rate could be improved. However, Greece's fiscal policy is still constrained to some degree by the terms of its bailout agreements, the next stage of which (the “enhanced surveillance framework”) requires maintaining a primary surplus of at least 3.5 percent of GDP.

With the domestic private sector essentially waiting on the sidelines, fiscal policy still inhibited, and little more to be expected from the pace of improvement in net exports, the authors look at the prospects of an acceleration of the recovery driven by foreign direct investment (FDI). Their alternate scenario models the effects of an increase in investment driven by private foreign capital that would result in investment being €3 billion higher than the baseline in 2019 and €6 billion higher in 2020. In this scenario, the GDP growth rate increases to 3.5

percent in 2019 and 2020. The primary surplus grows to 6.1 percent and 5.9 percent in those respective years, while the current account turns negative. The authors recommend that such an influx of foreign capital be directed so as to encourage an increase in real assets in Greece, much as a fraction of FDI in 2017 was focused on strategic investments in indebted corporations with the capacity to expand production geared toward exports.

As for the lingering question of the sustainability of Greek government debt, according to Papadimitriou, Nikiforos, and Zezza, everything hinges on borrowing costs remaining below nominal GDP growth. They calculate that, with inflation at 1 percent and the average interest rate on Greek debt at 2.3 percent (a weighted average of low rates on European Stability Mechanism loans and higher rates paid on the market), any real GDP growth rate above 1.3 percent would mean that even a primary surplus around zero would reduce the debt-to-GDP ratio over time. If borrowing costs more closely approximate the 4.17 percent currently faced on financial markets, a primary surplus of 2 percent or more would be sufficient to see a declining debt ratio. The authors point out that in both the baseline and alternate scenarios, the government's budget is on track to exceed these sustainability targets. They emphasize that, moving forward, the issue of debt sustainability is more a question of interest rates—and thus of the role of the European Central Bank as lender of last resort to sovereigns. www.levyinstitute.org/pubs/sa_gr_11_18.pdf

External Instability in Transition: Applying Minsky's Theory of Financial Fragility to International Markets

LIUDMILA MALYSHAVA

Working Paper No. 909, July 2018

When the Soviet Union collapsed in the early 1990s, mainstream economists blamed centralized planning and state ownership of the means of production, advising the newly independent economies to embrace a system of free markets and private ownership. While some countries were able to weather the institutional shocks of the change with minimal spillover effects, others experienced a sharp increase in unemployment, hyperinflation, and unsustainable debt burdens that

could not be overcome through the imposition of supposedly efficient and self-regulating free market reforms. Liudmila Malyshava, Siena College, presents an inquiry into the transition process in the countries of the former Soviet Union, suggesting that it has been constrained by the existing institutions and low levels of technological progress.

Malyshava claims that from a post-Keynesian perspective, the major issue with a Soviet-style economy is related to extensive (vs. intensive) output growth and the persistence of a seller's (vs. consumer's) market, phenomena that occur as a result of the Soviet strategy of satisfying basic social needs via government financing in a planned and strictly supervised manner, creating a situation where demand is fueled by overinvestment and supply is not constrained by profitability, leading to bottlenecks, supply distortions, and low growth rates. The resulting shortages mean that supply will be absorbed without incentivizing quality improvements or cost reductions. In the 1990s, a series of market reforms promoted by the Washington Consensus were implemented to resolve central planning's inefficiency problems. By imitating policy proposals developed under a different set of institutions, Malyshava contends these reforms crucially ignored the sociocultural barriers to the changes associated with market shock therapy, resulting in economic disarray. Though some countries, such as Poland and Hungary, were able to absorb the effects of the shock, others reverted to a command-style production process when faced with the mass unemployment, negative growth rates, and hyperinflation of the second half of the 1990s.

Malyshava suggests that these results are consistent with the evolutionary economic paradigm that institutions must emerge slowly and in a path-dependent manner, noting that the uneven pace of working capital's contraction and sluggish output growth in declining sectors were too great to be overcome by the potential expansion of the newly privatized enterprises. Rather than dismantling the entire system of planning, she asserts that an organized restructuring of the Soviet system—one focused on modifying the incentive structure by directing the production mechanism to profit-based autonomous spending to drive income growth, and recognizing market forces and central planning elements as complements—would have smoothed the transition process. Instead, the abrupt price liberalization and mass privatization of state enterprises failed to address the preexisting lack of demand

that characterized Soviet-style economies, resulting in policy failure and a retreat to a Soviet institutional structure in order to relieve the havoc wrought by market reforms.

Additionally, the former Soviet economies were unable to “insert” themselves into foreign markets, creating a shortage of productive investment necessary for technological improvement, with their increased reliance on imported goods and services resulting in chronic trade deficits. Malyshava notes these economies’ unsophisticated financial systems became increasingly fragile and placed them at a disadvantage in dealing with market-oriented nations. In response to dysfunction in official exchange markets, central banks have pursued aggressive monetary policies to suppress inflation and maintain stability, but inflationary pressures continue to grow. Insufficient discretionary investment financing, import dependence, and exchange rate instability have required external funding to finance foreign debt and resulted in a balance of payments crisis, with aid organizations ignoring the long-term prospects of repayment to focus on meeting current debt commitments, further increasing fragility.

Given the sluggish growth rates and the stock of debt already outstanding, what Malyshava calls the “conventional” approach of relying on external borrowing will only push these economies to dramatically cut spending or into a Ponzi position of permanent dependence on external funds. A positive current account balance can only be reached through a more long-term policy of building real and financial capital, with a focus on technological innovation to increase net exports as a share of GDP. She asserts that this can be achieved through structural reforms aimed at transforming input allocation to increase productivity, economic growth, and export competitiveness.

www.levyinstitute.org/pubs/wp_909.pdf

Program: Monetary Policy and Financial Structure

German Economic Dominance within the Eurozone and Minsky’s Proposal for a Shared Burden between the Hegemon and Core Economic Powers

IGNACIO RAMIREZ CISNEROS

Working Paper No. 913, August 2018

Reflecting on the economic developments in the post–World War II era, Ignacio Ramirez Cisneros, University of Missouri–Kansas City, considers Germany’s dominant role in the European Union and its implications for the stability of the eurozone.

At the end of World War II, the United States redesigned the global economic landscape—promoting movements for colonial independence, gaining control of oil exports, ending trade blocs, and leading technological innovation in civilian and military industries—to become the market of preference for exports from other modern industrial nations with the goal of preventing Soviet influence by creating new and stable markets for itself and its allies. Together with aid from the Marshall Plan, the United States was able to support the reconstruction of Europe and Japan while carving out a large sphere of influence that kept the manufacturing bases of those nations profitable and growing.

Unconstrained by affordability issues and delinked from the rules governing external balances, the United States acted as consumer of first resort to its allies, which, Cisneros asserts, is essential to the proper functioning of the international financial system in the absence of a Keynesian-style international clearing union. Its role as the leader of the monetary production economies implied that the United States would meet certain obligations, most importantly bringing financial stability to the global system by looking after the general economic and political interest. Though the US’s affluent consumer markets and the use of the dollar as a reserve currency further integrated industrialized countries in the US economic order, Cisneros notes that limits to this strategy were beginning to become evident by the 1970s, as the United States ignored balance of trade issues, such as loss of market share and a

worsening domestic employment situation, in favor of pursuing its Cold War policies.

Recalling Hyman Minsky's proposals for a shared burden between the dominant economic powers to sustain international liability structures, Cisneros suggests that international cooperation is needed to help developing nations acquire the necessary dollar income for financial market stability. With plans such as Minsky's (or Keynes's *bancor* proposal) losing out to neoliberal paradigms of the Washington Consensus, the burden currently falls on the "hegemon" to create conducive conditions, often imperiling their own stability. However, because most international financial liabilities are dollar denominated, Minsky rejected the notion that the United States could establish protectionist policies, as it had a responsibility to pursue medium- and long-term international stability over its own short-term domestic prerogatives, stating "there is no solution without a large United States trade deficit."

Noting that German economic indicators currently are strong—with a sizable trade surplus and a gross domestic product representing 29 percent of total eurozone GDP—Cisneros contends there is no disputing that Germany now plays the dominant economic role in the eurozone and it must therefore offer concrete solutions for the region's issues, such as unemployment and slow growth in the periphery. The author suggests that the hegemon's support for healthy and stable consumer markets can overcome this stagnation; however, this requires the dominant state to implement macroeconomic policies targeting full employment, providing income streams that ensure financial solvency in the periphery. Considering a breakup of the eurozone the only alternative to such policies, he notes that in this scenario, the eurozone would function as it did prior to unification—with trade-dependent European nations competing for export markets (now with a focus on Asia as the United States adopts a more protectionist economic stance) rather than working together to cultivate a large domestic market.

Cisneros concludes that though there are limits to a single country's use of balance of payments to stabilize external economies, Germany must fill this role for now if the eurozone is to remain viable. He suggests that current austerity policies are anathema to these goals and Europe should instead harness the untapped potential of its consumer markets rather than downsize them. Absent German leadership on these

issues, he notes the most prudent strategy would be a breakup of the currency union.

www.levyinstitute.org/pubs/wp_913.pdf

Twenty Years of the German Euro Are More than Enough

JÖRG BIBOW

Working Paper No. 911, August 2018

Asserting that the euro was primarily created as an instrument to overcome interregional instability in Europe, with monetary unification supposedly providing a means to joint prosperity and lasting peace, Research Associate Jörg Bibow assesses the euro's performance over the past 20 years. Noting that divergence rather than convergence has been the reality among European economies, the author addresses the challenges that have resulted from an "incomplete" monetary union based on flawed intellectual roots.

Bibow argues the euro was "made in Germany," with the German preference for price stability built into the currency's fabric. Examining the roots of the "German model," he presents a culture of stability created by central-bank-enforced internal discipline and currency undervaluation to foster export-led growth. The resultant surpluses and increases in prosperity as productivity grew, Bibow contends, led to the belief that price stability caused growth. Conditions in Germany changed in the mid-1970s, as rising inflation, currency appreciation, and terms-of-trade deterioration resulted in soaring unemployment and episodes of "stagflation." The procyclical fiscal tightening of the 1980s provided little relief as the Germans embraced expansionary austerity, and the recovery was sluggish and marked by high levels of unemployment. It was under these conditions that the European Monetary System (EMS) began to take shape, with participating countries accepting German leadership across Europe. German reunification of the early 1990s illustrated the perils of exporting the German model when an asymmetric shock hit the *deutschmark*, then the anchor currency for the EMS, wreaking havoc on Europe's economic affairs. By overlooking the fact that the German model only worked because and as long as Germany's main trading partners behaved differently, Bibow suggests the euro was built on a fallacy of composition. Coupled with

fiscal austerity as euro-aspirant countries tried to bring deficits down to the Maastricht Treaty's 3 percent mark, growth crumbled across the continent, and by the early 2000s, intra-area divergences were taking hold.

Bibow notes that US dollar depreciation in the early 2000s cut Europe off from the global boom, leaving Germany with insufficient market growth for its exports. An appreciating euro meant that Europe could not rely on external stimulus for growth and domestic-demand-led growth proved unsuccessful, leaving the euro area struggling to recover from the 2001 global slowdown, followed by a lasting legacy of intra-area divergences that laid the groundwork for future crises. At the onset of the Great Recession, a European banking crisis exposed the euro area's lack of macro defenses and when banking problems hit national public finances, Europe's deep market integrations were without commensurate policy integration or a lender of last resort to prop up failing banks. As banking losses weakened the fiscal outlook, the critical relationship between the banks and their sovereigns deteriorated, resulting in what Bibow calls a "bank-sovereign doom loop" that destabilized the euro area with little fiscal stimulus forthcoming in response. A brief bout of stimulus in Germany in 2009–10 provided some relief, but the Greek crisis paved the way for a return to austerity across the continent. When the crisis deepened, the medicine that had made Germany sick in the 1990s and early 2000s was prescribed for the euro area, pushing Europe into a protracted recession. Citing Spain as a case study of the flawed euro, the author lists the conditions of liberalized banking providing unchecked lending, loss of competitiveness (particularly within the euro area), and amplified imbalances as critical factors in Spain's euro crisis.

Given the above, Bibow identifies the three main flaws of the euro regime: namely, market integration without policy integration; inattention to intra-area divergences in competitiveness positions; and the lack of sufficient stabilization capacity to deal with inevitable downturns. In order to overcome the "German euro," Bibow contends that market integration must go hand in hand with policy integration to provide a common

safe asset for the euro area and divergences in competitiveness positions must be prevented. Most importantly, because the euro is a currency without a state, Bibow asserts that a euro treasury must be created to act in partnership with the European Central Bank. This arrangement would recouple monetary and fiscal authorities to complete the monetary regime and provide a safe footing for Europe's common currency.

www.levyinstitute.org/pubs/wp_911.pdf

Australian Government Bonds' Nominal Yields: An Empirical Analysis

TANWEER AKRAM and ANUPAM DAS

Working Paper No. 910, August 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 Anupam Das, Mount Royal University, investigate the drivers of the nominal yields of Australian government bonds (AGBs). Their work builds on their previous studies for Japan (Levy Institute Working Paper No. 818), India (Nos. 834 and 881), and the eurozone (No. 889), and undertakes an empirical analysis employing the autoregressive distributed (ARDL) technique to model the dynamics of bond yields.

The authors begin by pointing to indicators of Australia's strong economic performance over the past several decades, including the steady growth of per capita income, declining inflation, favorable trade terms, and strong demand, all of which prevented a decline in output during the global financial crisis. However, they note the Australian government tends to pursue conservative fiscal policies, and long-term interest rates on government bonds have declined since the 1980s. Citing the recent empirical literature regarding the determinants of bond yields, Akram and Das indicate that the studies for Australia are sparse and the debate is unsettled as to whether it is the short-term interest rate or other factors, such as the ratio of government debt to nominal gross domestic product (nGDP), that are more relevant when determining long-term bond yields.

The government bond market in Australia includes AGBs—issued by the country's independent central bank, the Reserve Bank of Australia (RBA)—and semi-governmental

bonds issued by various subnational authorities; however, the authors focus only on AGBs in their assessment. Though it is mandated to ensure the stability of the Australian dollar, maintain full employment, and provide for the economic prosperity and welfare of its people, the authors assert that for the past three decades, the RBA has focused mainly on keeping inflation within a 2–3 percent range over the course of the business cycle.

Akram and Das contend that the evolution of AGBs' nominal yields reflect key developments in Australia's economy and are influenced by monetary policy and inflation, with short-term interest rates moving in tandem with the RBA's cash rate target. Since the early 1980s, inflation has decreased by 10 percentage points, remaining in a fairly narrow range around 2 percent since the global financial crisis, with nominal bond yields largely on trend with the fall in inflation. The authors note the amount of outstanding government debt as a share of nGDP is moderate, as the country tends to pursue conservative fiscal policies, and despite occasional incidences of fiscal deficits, the debt as a share of nGDP is noticeably lower than other advanced economies. Plotting short-term interest rates against the yield of AGBs of various tenors, the authors illustrate a clear positive relationship, though the correlations are stronger for bonds of shorter tenors.

Focusing their analysis on long-term yields using quarterly data, Akram and Das examine the relationship between long-term yields and variables such as the short-term interest rate, inflation, economic activity, and fiscal ratios (i.e., the ratio of government debt to nGDP). Employing the ARDL approach, the authors find that while fiscal ratios may exert marginal influences, the short-term interest rate has the strongest influence on long-term bond yields, with approximately 77–82 percent of any movement in long-term yields explained by movements in short-term interest rates. Their findings indicate that inflation is not statistically significant in these equations and is mainly captured through changes in the short-term interest rate as the RBA changes its cash rate targets in response to actual or expected inflation. Diagnostic tests for robustness and structural stability confirm the validity of their findings.

Akram and Das conclude that the Keynesian hypothesis that short-term interest rates have the most influence on long-term bond yields holds true for the case of ABGs and suggest that their conclusion is useful in the analysis of macroeconomic

controversies around the fiscal theory of the price level, the effects of fiscal policy, and modern money theory.

www.levyinstitute.org/pubs/wp_910.pdf

Program: The Distribution of Income and Wealth

Stagnating Economic Well-Being and Unrelenting Inequality: Post-2000 Trends in the United States

AJIT ZACHARIAS, THOMAS MASTERSON, and

FERNANDO RIOS-AVILA

Public Policy Brief No. 146, August 2018

Urgent debates about economic inequality and middle-class stagnation in the United States tend to be undertaken in the context of rough measures of market income. While these measures are vital in their own right, such a narrow focus can leave us with an inadequate understanding of the actual changes taking place in households' material well-being. As part of a research program launched in 2001, the Levy Institute Measure of Economic Well-Being (LIMEW) is aimed at delivering a more comprehensive assessment of the trends in household living standards. In this policy brief, Senior Scholar Ajit Zacharias and Research Scholars Thomas Masterson and Fernando Rios-Avila analyze the latest data for the LIMEW of US households. The authors report on the developments in well-being over the period 2000–13 at all levels of the LIMEW distribution, with a particular focus on the significant role played by net government expenditures.

Alongside base income (which consists mainly of money earnings), the LIMEW includes the following: income from wealth (gross imputed rent of owner-occupied homes and imputed income from nonhome wealth); net government expenditures that support household consumption (cash and noncash transfers from all levels of government, plus public consumption, minus taxes paid); and the value of household production (measured by multiplying hours of household work by their replacement cost).

The overall picture for the 2000–13 period is one of historic stagnation in the growth of economic well-being. Beneath the surface, there was a major shift in the composition of well-being. Post-2000, the authors report a growing dependence on the government to sustain living standards, with rising net government expenditures offsetting a sharp drop in base income. That is, without government support, most US households would have seen a decline in their measured well-being, rather than “mere” stagnation. This stagnation (falling base income offset by rising net government expenditures) was not just a function of the Great Recession—it began well before, and continued well after.

As the authors observe, the entire period registered the slowest LIMEW growth on record for the median household (compared to 1959–72, 1972–89, and 1989–2000). For the median household, a sharp decline in base income was offset by a slightly larger increase in net government expenditures. Zacharias, Masterson, and Rios-Avila emphasize that net government expenditures played a crucial role, not just for the median household, but for all. By 2013, the bottom 80 percent of households in the pre-fiscal (that is, before the effects of net government expenditures) income distribution were net beneficiaries of government support—up from 70 percent in 2000. Post-2000, this support became increasingly vital for maintaining living standards. For middle-income households, the rise in net government expenditures (\$8,000) over the 2000–13 period was composed almost entirely (\$7,000) of an increase in transfers. It is notable that this increase was not solely a consequence of the swollen ranks of the unemployed due to the Great Recession. Although a 2007–10 jump in unemployment insurance and disability payments (Social Security) contributed to the overall growth of transfers, transfers rose in 2000–07 and 2010–13 as well—and the largest component of the entire post-2000 increase in transfers was represented by government medical expenditures (Medicare and Medicaid). Although tax payments tend to be positively correlated with base income, taxes barely changed for the middle-income group over this entire period, despite plummeting earnings.

The story is different for the most well-off households. Although their overall LIMEW was likewise supported by changes in net government expenditures, this mainly took the form of decreases in taxes. While households in the top quintile of the pre-fiscal distribution are net payers on average,

they benefitted the most from changes in net government expenditures over the 2000–13 period: that is, the net payments of the average household in the top quintile declined by more than the increase in the net benefits received by the average household in any of the other quintiles (the key factor being the decrease in taxes paid by the top quintile). In other words, redistributive policy over this period came to be oriented around supporting the economic well-being of the richest households. Although net government expenditures have an overall progressive structure—providing the greatest boost to the poorest, and then dwindling as one climbs the distribution—this progressivity eroded post-2000 (the progressivity of net government expenditures is almost entirely a function of taxes, as transfers and public consumption combined tend to be relatively equally distributed).

The overall stagnation in the growth of well-being affected all quintiles of the LIMEW distribution. The poorest quintile experienced the slowest LIMEW growth of all—a mere 0.07 percent average annual growth (ten times slower than the 1989–2000 period)—and the richest quintile experienced the steepest drop in LIMEW growth relative to the prior period (from 3.1 percent per annum to 0.25 percent). During the 1990s, a significant gap in the LIMEW growth rate between the top quintile and the rest of the population occasioned a historic rise in the inequality of well-being, as measured by the Gini coefficient. By contrast, 2000–13 saw the inequality of LIMEW remain high but relatively stable: LIMEW inequality narrowed somewhat in the early part of the twenty-first century, remained constant during the Great Recession, and then widened between 2010 and 2013, leaving it roughly where it began the period.

The United States is one of the only developed nations that does not routinely publish official statistics on the post-tax, post-transfer distribution of income. As such, the LIMEW research program continues to fill an unfortunate gap in our understanding of the changes in economic well-being affecting US households.

www.levyinstitute.org/pubs/ppb_146.pdf

The Measurement of Time and Consumption Poverty in Ghana and Tanzania: The Levy Institute Measure of Time and Consumption Poverty

AJIT ZACHARIAS, THOMAS MASTERSON, FERNANDO RIOS-AVILA, KIJONG KIM, and TAMAR KHITARISHVILI
Research Project Report, August 2018

Time constraints that stem from the overlapping domains of paid and unpaid work are of central concern in the debates surrounding economic development in general and the countries of Sub-Saharan Africa in particular. Time deficits due to household reproduction are especially acute in these countries due to the poor state of social and physical infrastructure, constraining peoples' choices for time allocation, with particularly serious consequences for women given their disproportionate share of household responsibilities.

Because standard measures of poverty fail to capture hardships caused by these time deficits, Senior Scholar Ajit Zacharias, and Research Scholars Thomas Masterson, Fernando Rios-Avila, Kijong Kim, and Tamar Khitarishvili undertake a study of poverty in Ghana and Tanzania by applying a methodological approach that incorporates time use into the measurement of poverty, known as the Levy Institute Measure of Time and Consumption Poverty (LIMTCP). By recognizing the role of time constraints, the authors suggest the LIMTCP has the potential to meaningfully inform the design of policies aimed at poverty reduction and the improvement of individual and household well-being.

Their analysis illustrates the prevalence of time deficits in Ghana and Tanzania that were previously unaccounted for in traditional poverty measures. Though time deficits are more widespread in Tanzania than in Ghana—with 42 percent of the Tanzanian working-age population being time-poor compared to 27 percent in Ghana—in both countries, they are most common among employed individuals and affect women much more than men, primarily due to the gender disparity in the division of household responsibilities. Accounting for time deficits in Ghana results in an adjusted poverty rate among employed persons of 30 percent, which is 8 percentage points higher than the official poverty rate of 22 percent and represents nearly a million additional people among the working poor. In Tanzania, they find the LIMTCP-adjusted poverty rate is 10 percentage points higher than the official poverty rate of

26 percent, corresponding to close to two million additional people in the ranks of the working poor.

Employment creation is commonly viewed as an important tool for tackling poverty and the LIMTCP simulations demonstrate that providing paid employment indeed reduces official and adjusted poverty rates in both countries, though the authors note the drop is more sizable in Tanzania, where the official poverty rate drops by 20 percentage points and the adjusted poverty rate drops by 24 percentage points, thereby reducing the extent of hidden poverty. In Ghana, the official and adjusted poverty rates decrease by 14 percentage points, leaving the extent of hidden poverty unchanged. Their simulations further illustrate that, whereas income from paid employment indeed makes increased consumption possible, the provision of paid employment can also increase the incidence and depth of time poverty, with time poverty rates among consumption-poor employed individuals in Tanzania spiking by 14 percentage points and those in Ghana increasing nearly 5 percentage points as a result of paid employment provision.

The authors' findings highlight that while the "buying off" of time deficits may be an option for some households, exercising that option for many middle-income families may be viable only by cutting back on other expenditures (such as clothing or healthcare) or going into debt. By emphasizing the need to account for the alleviation of not only income but also time constraints, Zacharias, Masterson, Rios-Avila, Kim, and Khitarishvili suggest their analysis has strong implications for policies aimed at poverty reduction. As time poverty is more relevant for women due to their disproportionate burden of household responsibilities, they conclude that policies aimed at improving women's labor market outcomes can only succeed at improving their well-being if they also address issues caused by time constraints.

http://www.levyinstitute.org/pubs/rpr_8_18.pdf

Quality of Match for Statistical Matches Using the American Time Use Survey 2013, the Survey of Consumer Finances 2013, and the Annual Social and Economic Supplement 2014

FERNANDO RIOS-AVILA

Working Paper No. 914, September 2018

In a companion text to Levy Institute Public Policy Brief No. 146, “Stagnating Economic Well-Being and Unrelenting Inequality: Post-2000 Trends in the United States” (coauthored with Senior Scholar Ajit Zacharias and Research Scholar Thomas Masterson), Research Scholar Fernando Rios-Avila evaluates the quality of the statistical matching between the three datasets used as the basis for Levy Institute Measure of Economic Well-Being (LIMEW) estimates for 2013.

Because no single dataset contains all the information necessary for constructing the LIMEW, the authors create a synthetic dataset by combining data on demographic, social, and economic characteristics from the Annual Social and Economic Supplement (ASEC) to the Current Population Survey (CPS), the American Time Use Survey (ATUS) for time use data, and the Survey of Consumer Finances (SCF) for information on household wealth. The authors use the information that is common between the surveys to perform the match, while preserving the distributional characteristics of the combined data. Beginning with the recipient dataset, the ASEC supplement to the CPS, the authors remove data on respondents under the age of 15, leaving them with a base dataset of over 100,000 observations representing the demographic characteristics of over 250 million individuals when weighted.

To transfer the information as closely as possible, the authors begin the match between the 2014 ASEC and 2013 ATUS by choosing five strata variables—namely, sex, parental status, labor force status, marital status, and spouse’s labor force status—creating 24 subsamples (cells) that are used to perform a within-cell match. The match reveals a near identical distribution with respect to sex and parental status, with some imbalances in the distribution of labor force status (for both the respondent and the respondent’s spouse) and marital status. Other variables, such as age, race, and educational attainment, are well matched across surveys; household income shows some imbalance, suggesting an undersampling

of high-income households in the ATUS. As expected, there were some differences in the distributions between the surveys, but they were small and did not affect the quality of the matching process. Within each of the 24 cells, the authors estimate propensity scores using logit models and find that over 90 percent of the records are matched in the first round, indicating a high-quality match.

For the matching between the 2014 ASEC and the 2013 SCF, the chosen strata variables were income category, homeownership, family type, and race and age of the householder. Using the household rather than the individual as the unit of observation, the authors created 360 cells to perform their match. They found the largest distributional differences between the two surveys occurred across family type and homeownership, with the SCF registering more “couple” households and the ASEC underrepresenting households with mortgages. Given the availability of information and the requirements imposed for consistent estimation of propensity scores via logit models, the authors use only 162 of the original 360 cells (representing 92 percent of the whole sample). As expected, the quality of the match is good, with just over 80 percent of the matches occurring in the first round and under 1 percent unmatched after the final round.

Rios-Avila concludes that, with the exception of some small subsets of strata variables, the data are well-aligned, showing good balance between the recipient and donor surveys.

www.levyinstitute.org/pubs/wp_914.pdf

The Sources and Methods Used in the Creation of the Levy Institute Measure of Economic Well-Being for the United States, 1959–2013

AJIT ZACHARIAS, THOMAS MASTERSON, and

FERNANDO RIOS-AVILA

Working Paper No. 912, August 2018

In a companion paper to Public Policy Brief No. 146, Senior Scholar Ajit Zacharias and Research Scholars Thomas Masterson and Fernando Rios-Avila document the data sources and methods used in updating the Levy Institute Measure of Economic Well-Being (LIMEW) for the United States through 2013. Because the necessary data for LIMEW construction is not contained in any one dataset, the authors employ statistical

matching or other imputation techniques to combine existing datasets, creating a synthetic data file.

To create the synthetic dataset, the authors choose a recipient dataset to receive data from the donor sets using a constrained statistical matching technique. They then select strata variables that are common to both datasets and considered to be of the greatest importance to the match (for example, age and employment status), only combining records where those variables overlap and assigning a penalty weight to the distance function according to the size and ranking of the coefficients of each. Within each strata, they use a number of variables of secondary importance as match variables and for every recipient in the recipient file they match an observation from the donor file with the same or nearest-neighbor value of propensity scores without replacement, keeping the weighted total population identical between the files. Finally, they evaluate match quality by comparing the marginal and joint distributions of each variable in the donor and statistically matched files.

Because the empirical strategies for constructing the 1959 and 1972 synthetic datasets are sufficiently different from each other and from later years, the authors provide separate descriptions of their processes. For the datasets covering 1982 through 2013, the methodology is consistent except when survey redesign made changes necessary.

For 1959, the authors use the Integrated Public Use Microdata Series (IPUMS) from the 1960 census as the recipient file. Recipient files include the Consumer Expenditure Survey (CES) of 1960–61 to determine proportions of money income other than earnings (including government transfers); the Survey of Financial Characteristics of Consumers of 1962 to ascertain assets and liabilities for each IPUMS household; the Individual Tax Model File of 1960 to determine capital gains and losses, and deductions for each potential tax unit in the IPUMS; and the Americans' Use of Time of 1965–66 and Time Use in Economic and Social Accounts of 1975–76 to impute weekly hours of household production.

For 1972, the recipient data file was the special version of the Social Security Administration's March Current Population Survey (CPS). The CPS provides detailed demographic and money income data to which the authors matched the CES of 1972–73, the Augmented Individual Income Tax Model File of 1972 (AIITM), and the Time Use in Economic and Social Accounts of 1975–76. For 1972, the authors were

unable to find a suitable survey of household wealth, so principal nonhome assets were estimated from a statistical match with the AIITM. Home values and outstanding mortgage and consumer debt were estimated from a match with the CES.

From 1982 through 2013, the core structure of the synthetic data files is consistent in terms of sources and methodology, with minor changes to account for survey redesign. For these years, the recipient file is the Census Bureau's Annual Demographic Supplement to the CPS, currently known as the Annual Social and Economic Supplement. Donor files include the SCF for data on assets, liabilities, and wealth, and the Americans' Use of Time Project and American Time Use Survey for data on household production.

For all years of LIMEW, estimates of households' public consumption were constructed by obtaining total expenditures by function and level of government, allocating these expenditures between the household sector and other economic sectors, and distributing expenditures allocated to the household sector among individual households.

Finally, to estimate wealth and rates of return for the 1959 and 1982–2013 LIMEW, they divide net worth into two categories—gross value of owner-occupied housing and mortgage debt on owner-occupied housing, and nonhome wealth—calculating real rates of return using the average annual rates of return on nonhome wealth reported in the Federal Reserve's Flow of Funds accounts and the annual Economic Report of the President. As there was no survey on household wealth for 1972, the authors calculated nonhome wealth based on equity in real estate, interest-bearing assets, and corporate stock, minus consumer debt. Rates of return for 1972 were calculated as above, with requisite modifications.

For more information about the quality of the match for the 2013 round, see Working Paper No. 914.

www.levyinstitute.org/pubs/wp_912.pdf

Program: Employment Policy and Labor Markets

Black Employment Trends since the Great Recession

THOMAS MASTERSON

Working Paper No. 915, September 2018

Current Population Survey (CPS) data for the 2000–18 period shows an increase in the employment–population ratio for blacks after the Great Recession, while that of whites remained flat, resulting in a narrowing of the gap between black and white workers. Research Scholar Thomas Masterson examines labor force participation and employment by race, sex, and age to ascertain what is driving this unusual pattern of recovery.

Employment–population ratios for blacks, already historically low compared to other groups, fell precipitously during the Great Recession; starting in mid-2011, their employment–population ratio rose steadily, gaining over 7 percentage points by early 2018. The stylized facts of black employment indicate that labor force participation for black males is typically lower than that of white males, and black males experience unemployment at a rate of around twice that of their white counterparts. It is in this context that the author asserts the narrowing of the employment–population ratio is so remarkable.

Noting that the employment–population ratio is a product of intersecting processes—entry into the labor force and attainment of employment—Masterson details factors driving its changes, such as population growth, and changes in the unemployment and labor force participation rates (LFPR). Though population is unlikely to have a dramatic effect in the short term, it has grown faster for blacks over the 2001–18 period. At the same time, the LFPR fell for nearly all groups, except Latinas, black men, and black women, whose LFPR rose. Relative unemployment rates fell during the recession, but they ended the period essentially unchanged, with black males two to two-and-a-half times more likely than white males to be unemployed. Given the divergence in the LFPR across race and the lack thereof in the unemployment rates, the author contends that the narrowing of the employment–population gap is most likely due to the increasing LFPR of black men since the end of the Great Recession.

Turning to the reasons why individuals choose to engage in the labor force, Masterson narrows the discussion to males, ages 16–25, since this group exhibits the most striking difference in participation in 2017. Here he finds that young white males have opted out of the labor force for reasons of illness or disability at double the 2007 rate, while the opt-out rate of young black males has remained level. The author decomposes the overall convergence in the employment–population ratios by sex and age and finds that increases in participation among people under the age of 35 are responsible for one-half of the decrease in the gap.

Analyzing his findings, Masterson addresses biases in labor supply analysis, such as the sample selection bias that occurs as a result of ignoring selection into the labor force when analyzing unemployment rates. Using data from the 2007, 2010, and 2017 Annual Social and Economic Supplement to the CPS on civilian individuals ages 16–35, he examines the extent to which labor force participation and employment status are related to an individual’s characteristics. To confirm the contention that the increase in LFPR among young people is driving the convergence of the employment–population ratio between races, Masterson runs a second stage of estimates, revealing that even after controlling for confounding factors, there are still important differences in the shift in participation, especially between young males. In spite of the increase in their LFPR, young blacks are still less likely to find employment compared to their white counterparts, and they suffered greater losses as a result of the Great Recession. To determine the relative importance of characteristics and the returns to these characteristics in labor force participation, Masterson decomposes the intersectional gaps and changes in participation by race and sex. Using a Oaxaca-Blinder decomposition, he finds that young black males have been boosted by the returns to their characteristics since the end of the recession while young white males have seen the opposite.

Masterson concludes that further elaboration is needed, including analysis of the decomposition of the returns to characteristics, as well as a deeper look at what is driving the exclusion of black individuals from labor markets and how this is changing over time.

www.levyinstitute.org/pubs/wp_915.pdf

INSTITUTE NEWS

Levy Institute at Bard College Berlin

In partnership with Bard College Berlin, the Levy Institute is pleased to announce the creation of the Levy Economics Institute of Bard College Berlin. Beginning in Spring 2019, the Institute will operate as a parallel program to study critical issues in the European economy, including use of the Institute's stock-flow consistent accounting-based macroeconomic models to generate strategic analyses for Greece, Italy, and other countries, and application of the Levy Institute Measure of Economic Well-Being (LIMEW) and Levy Institute Measure of Time and Income Poverty (LIMTIP) to the study of time poverty and well-being in the region.

Please visit our website, levyinstitute.org, for more details as they become available.

UPCOMING EVENTS

28th Annual Hyman P. Minsky Conference

Levy Economics Institute of Bard College
Annandale-on-Hudson, New York
April 17–18, 2019

The 28th Annual Hyman P. Minsky Conference, “Trade Policies and International Adjustment Mechanisms: Implications for Global Economic and Financial Stability,” will take place at Blithewood, on the Bard College campus, April 17–18, 2019. Additional information will be posted on our website, levyinstitute.org, as it becomes available.

The Hyman P. Minsky Summer Seminar

Levy Economics Institute of Bard College
Annandale-on-Hudson, New York
June 16–22, 2019

The Levy Institute's 10th annual Hyman P. Minsky Summer Seminar will be held on the Bard College campus, June 16–22, 2019. 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.

Scholars by Program

The State of the US and World Economies

DIMITRI B. PAPADIMITRIOU, President and Program Director
JAN KREGEL, Director of Research
JAMES K. GALBRAITH, Senior Scholar
L. RANDALL WRAY, Senior Scholar
MICHALIS NIKIFOROS, Research Scholar
GENNARO ZEZZA, Research Scholar
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
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
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
RANIA ANTONOPOULOS, Senior Scholar and Program Director (*on leave*)
NANCY FOLBRE, Senior Scholar
AJIT ZACHARIAS, Senior 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
JAN KREGEL, Director of Research
RANIA ANTONOPOULOS, Senior Scholar (*on leave*)
JAMES K. GALBRAITH, Senior Scholar
L. RANDALL WRAY, Senior Scholar
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
JAN KREGEL, Director of Research
RANIA ANTONOPOULOS, Senior Scholar (*on leave*)
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
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
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.

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 Website: levyinstitute.org

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.



Levy Economics Institute
of Bard College

Graduate Programs in
Economic Theory and Policy

Application deadlines

Early Decision: November 15 | Regular Decision: April 15

Contact

845-758-7776 | levygrad@bard.edu



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.

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.

Graduate School Scholarship Fund

Gifts can also be directed to support students in our master's programs. Current opportunities include a gift in the amount of your choosing to the Hyman P. Minsky scholarship fund for our most promising students, the Ifigenia Martinez scholarship fund for outstanding female economists from Latin America, or named scholarships in perpetuity with gifts of \$200,000 or on an annual basis with gifts of \$10,000 each year.

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 \$ _____ or make a monthly gift of \$ _____ for _____ months.

Scholarship Funding \$ _____

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.