



Summary

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LETTER FROM THE PRESIDENT

To our readers:

This issue opens with our most recent strategic analysis for Greece, which has agreed to a new round of austerity measures in order to achieve the fiscal targets specified in its latest bailout agreement. But policies aimed at reducing the government deficit will simply deepen the country's recession unless other components of aggregate demand increase enough to more than offset the negative impact of fiscal austerity on output and employment. Using a pair of alternative policy scenarios contrasted with a baseline projection for the Greek economy over the next three years, Research Scholars Michalis Nikiforos and Gennaro Zezza and I demonstrate that cleaning up the government's arrears accounts and boosting public investment would improve GDP growth, but that growth and employment would best be promoted through the implementation of a direct job creation program underwritten by an innovative financing mechanism.

Also under the State of the US and World Economies program, Research Associate Pinaki Chakraborty examines rule-based fiscal controls at the state level in India to determine their impact on a state's fiscal space for public investment expenditures. Based on the existing literature and his own panel data analysis, he concludes that while the fiscal rules implemented at the recommendation of India's 12th Finance Commission have reduced fiscal and revenue deficits in the states, they have not increased capital spending for public investment.

In a working paper under the Monetary Policy and Financial Structure program, Giuseppe Mastromatteo and Lorenzo Esposito contend that authorities missed an opportunity for meaningful reform of the "big bank" model in the wake of the 2008 financial collapse, setting the stage for a bigger crisis in the future. They offer a series of alternatives for increasing the effectiveness of banking supervision, focusing on the use of a global cap rule to break up large banks and eliminate the issue of too-big-to-fail from the supervisory framework.

Two working papers are included under the Distribution of Income and Wealth program. Research Scholars Thomas Masterson, Kijong Kim, and Fernando Rios-Avila simulate the effects of employment gains on household production in

Ghana and Tanzania using their estimates of the Levy Institute Measure of Time and Consumption Poverty (LIMTCP). The LIMTCP takes into account both the necessary consumption expenditures and the household production time required to achieve a minimum standard of living. Poverty-reduction initiatives typically focus on increasing wage income, with the unintended consequence of reducing the time available to households to meet their most basic needs through unpaid, productive activities. A companion paper by Rios-Avila describes the construction of the synthetic datasets used in the estimation of the LIMTCP for Ghana and Tanzania.

In a policy note under the Immigration, Ethnicity, and Social Structure program, Rios-Avila and Gustavo Canavire-Bacarreza examine US Current Population Survey data for 2001–13 to identify the impact of state-level immigration rates on the native-born unemployed. They find that while the native-born unemployed are less likely to remain unemployed from month to month in high-immigration states, this is a function of their being more likely to leave the labor force. Rios-Avila and Canavire-Bacarreza assess the role of expectations in creating a discouraged worker effect in states with higher concentrations of immigrants. A related paper provides a more in-depth look at the data and methodology used in the study.

In a working paper under the Economic Policy for the 21st Century program, Abhishek Anand and Research Associate Lekha S. Chakraborty evaluate the impact of incorporating gender criteria into the fiscal devolution formula proposed by India's 14th Finance Commission, and determine that doing so would lead to more equitable tax transfers across states.

As always, I look forward to your comments.

Dimitri B. Papadimitriou, *President (on leave)*

Program: The State of the US and World Economies

Strategic Analysis

Greece: Getting Out of the Recession

DIMITRI B. PAPANIMITRIOU, MICHALIS NIKIFOROS, and GENNARO ZEZZA
 Strategic Analysis, September 2016

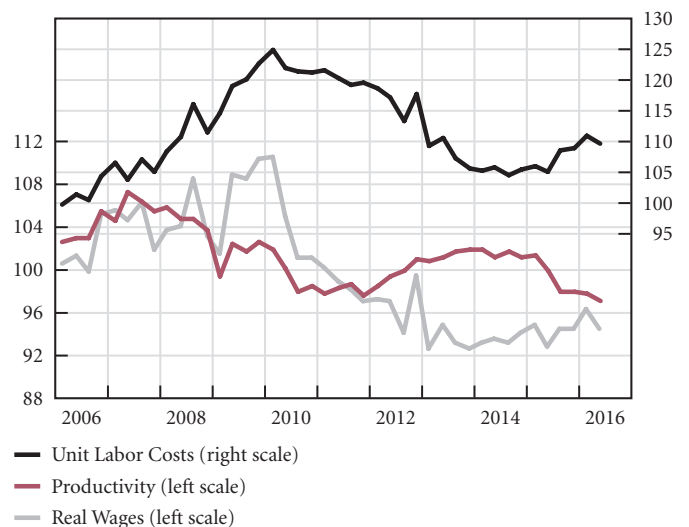
If the Greek government carries out its planned implementation of further fiscal austerity measures—a condition for receiving the next round of funds from its international lenders, as laid out by the third Memorandum of Understanding (MOU) of August 2015—the country’s beleaguered economy will likely be dragged back into recession, according to this latest strategic analysis based on the Levy Institute’s accounting-based model of the Greek economy. President Dimitri B. Papanimitriou and Research Scholars Michalis Nikiforos and Gennaro Zezza argue that the damage to aggregate demand caused by the continuation of austerity will not be sufficiently attenuated by the other components of aggregate demand to prevent a renewed slump in 2016. Using a pair of alternative policy scenarios contrasted with a baseline projection for the Greek economy over the next three years, the report demonstrates that cleaning up the government’s arrears accounts and increasing public investment would improve GDP growth, but that growth and employment would best be promoted through the implementation of a direct job creation program underwritten by an innovative financing mechanism.

The data indicate the Greek economy is still in a fragile condition. Over the last year, nominal GDP and disposable income and wealth have deteriorated, while more children have fallen into poverty. Although there are some indications of a job market recovery in 2016, with significant monthly employment gains, the authors stress that the rate of job separation and number of involuntary part-time workers remain

quite high. The unemployment rate was at 23.4 percent in June 2016, compared to 24.9 percent a year earlier. A period of capital controls, which began with the bank closures in June 2015, created liquidity constraints for households and private businesses, and may have contributed to a collapse of export revenues, particularly in services.

According to the official strategy of “internal devaluation,” austerity and labor market reforms were intended to reduce unit labor costs in Greece, and this in turn was supposed to have spurred an increase in net exports sufficient to more than offset the drag on aggregate demand due to fiscal consolidation. As the authors demonstrate, as they have in previous strategic analyses, this export-led strategy has failed. Imports did shrink, falling 32.5 percent (26 percent at constant prices) from their previous peak in 2010Q1. This was largely a result of austerity’s role in dragging down domestic demand, and only partly due to an improvement (up until 2014) in price competitiveness. And while the strategy also succeeded in lowering wages and unit labor costs (see Figure 1), exports have not risen sufficiently to lead a recovery in the face of the headwinds of austerity. The authors attribute this failure in part to three factors: (1) a slow decline in prices, relative to the fall in wages and unit labor costs; (2) low trade elasticities with respect to prices; and (3) a collapse in exports of transport services, one of Greece’s largest export industries,

Figure 1 Greece: Labor Cost Indices (2005=100)



Source: ElStat

after capital controls were introduced in June 2015. While tourism was expected to play a major role in generating a current account surplus, in 2015 the decrease in revenues from transport activities was greater than the increase in revenues from tourism. The authors note that the latter sector appears to be specializing in low-cost tourism, which limits the impact on revenues. Moreover, the fall in wages and labor costs in the tourism industry (and thus any further improvements in price competitiveness) appears to have reached a lower limit.

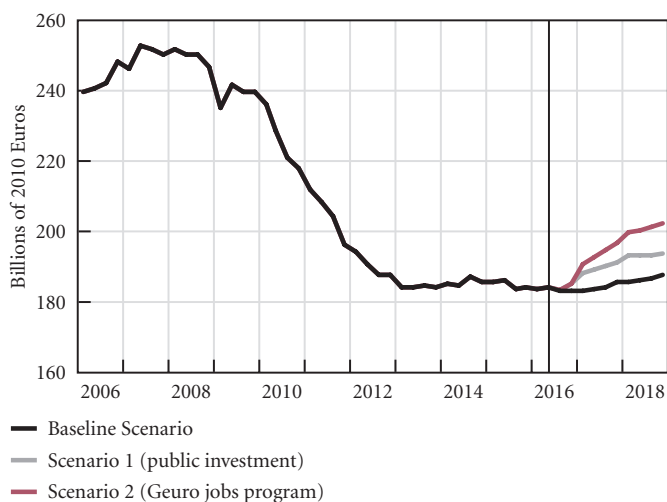
The baseline scenario in this report, which assumes the implementation of austerity as required by the MOU—largely taking the form of tax increases and pension cuts—shows the Greek economy falling into recession in 2016, with real GDP shrinking 0.7 percent. The recession projected in the baseline scenario is not due solely to austerity, but also to the aforementioned decline in exports of transport services that began in 2015 (at annual rates, a drop of more than €6 billion). The baseline also includes €1.6 billion in payments toward the Greek government’s accounts in arrears (which include withheld tax refunds) in 2016, with an additional €1 billion in arrears payments in 2017 and 2018, and an increase in public investment of €1 billion in 2017; this, along with a recovery in exports of services in 2017 (relative to 2016), should see Greek GDP growing in 2017 (0.2 percent) and 2018 (1.4 percent). In this baseline, the Greek government is expected to attain an

above-target primary surplus of €4.4 billion in 2016, which will expand further in 2017 and 2018.

In their first alternative scenario, the authors estimate the impact of a greater outlay for public investment and more significant payments toward the government’s accounts in arrears. Scenario 1 assumes €3.5 billion in arrears paid in 2016 and €2 billion in 2017, along with an increase in public investment, relative to the baseline, of €2 billion in 2017 and €4 billion in 2018. For the purposes of this scenario, the arrears payments are treated as an increase in the disposable income of payment recipients—albeit a temporary increase. The results for real GDP growth (-0.4 percent in 2016; 3.0 percent in 2017; 1.9 percent in 2018) are illustrated by the gray line in Figure 2. To secure a more rapid pace of employment growth, however, more ambitious measures are required.

In their second scenario, the accelerated arrears payments and public investment from scenario 1 are assumed, and in addition the government finances a direct job creation program through the issuance of a fiscal currency, the Geuro. In this scenario, the government begins issuing Geuros—a nonconvertible complementary currency along the lines of the Swiss WIR—in the first quarter of 2017 (for more on the Geuro proposal, see Policy Note 2016/1, “Complementary Currencies and Economic Stability”). Up to 20 percent of tax payments would be permitted to be made in Geuros, which implies annual demand for tax purposes equivalent to €14.1 billion. A program ultimately supporting 550,000 public benefit jobs paying a monthly wage of €586, which would require a gross annual outlay of €7.5 billion (including all other, non-wage expenses), would be funded half by euros and half by Geuros. The annual increase in euro payments entailed, once the job creation program is fully scaled up, amounts to €3.8 billion, which would be covered by making 10 percent of public sector wage payments and 5 percent of pension and other social benefits payments in Geuros instead of euros. The public benefit jobs program would be scaled up gradually, however, increasing by 25,000 jobs per quarter. As this pace only amounts to 200,000 jobs by the end of the projection period, scenario 2 envisions a further Geuro-funded fiscal expansion: additional public investment of 800 million per year and a 10 percent increase in pension payments amounting to 3.2 billion per year. The authors note (for those who believe an increase in the money supply leads to a proportional increase

Figure 2 Greece: Real GDP under Alternative Scenarios



Source: Authors’ calculations

in the price level) that Geuro issuance in this scenario would not create inflationary pressures, as the potential demand for Geuros for tax purposes would still exceed the supply.

In this Geuro-funded fiscal expansion scenario, which would avoid the baseline's fall in nominal wages and pensions, the government could still meet its primary budget surplus targets (in euros) and would not jeopardize the current account. Results for GDP growth are illustrated by the red line in Figure 2: 5.2 percent in 2017; 3.7 percent in 2018.

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Federalism, Fiscal Space, and Public Investment Spending: Do Fiscal Rules Impose Hard Budget Constraints?

PINAKI CHAKRABORTY

Working Paper No. 872, August 2016

Research Associate Pinaki Chakraborty discusses the implementation of rule-based controls and performance-based incentives as mechanisms for better fiscal management in India. Focusing on state-level capital spending, he examines whether the application of fiscal rules resulted in an increase in fiscal space for public capital investment spending in Indian states.

Facing a combined state and federal fiscal deficit of 9.9 percent of GDP in 1991, India undertook a major reform initiative to overhaul its complex tax system. Reductions in the personal income tax rate (from 50 percent in 1991 to 20 percent by 1997), coupled with sharp cuts in indirect taxes, left the federal government with a revenue shortfall, requiring states to reduce capital expenditure on public investment to contain the deficit.

To deal with the subnational fiscal management issues of the 1990s and 2000s, the 12th Finance Commission (2005–10) recommended that each of India's 29 states enact a Fiscal Responsibility Act (FRA), specifying 3 percent of its gross state domestic product as an upper bound for fiscal deficits. Reductions in state-level deficits were incentivized through the promise of debt consolidation and rescheduling if the target was met by 2009. With the primary objective of improving public capital investment through the elimination of revenue deficits, the FRAs also imposed an overall cap on borrowing to ensure fiscal sustainability of subnational debt through a

hard budget constraint. The rules were applied using a coordinated approach, with uniform deficit reduction targets across the states.

As a result of the rules framework adopted in 2005, some fiscal correction had occurred by 2009, with 26 states reaching their expenditure and debt targets ahead of schedule. Making note of the differences across states, a state-specific descriptive analysis of fiscal balances suggests that overall state-level fiscal balances improved with the introduction of fiscal rules, and that most states remained within the prescribed 3 percent target as outlined by the FRAs. Despite this prudence at the state level, the decentralized nature of the economy caused India to experience fiscal imbalances at the federal level with the onset of the global financial crisis. The report of the 13th Finance Commission (2010–15) noted that the combined debt-to-GDP ratio was still high, and recommended the elimination of the revenue deficit as the long-term and permanent target for both the state and central governments, in order to ensure that net public borrowing was used exclusively for growth-enhancing public investment.

Though the literature on fiscal rules in emerging market economies is scant, Chakraborty suggests that fiscal rules have been found to promote consistency in policy commitments, mitigate a country's susceptibility to crises, and, in decentralized economies, incentivize better fiscal performance and promote fiscal prudence when the rules are designed in a way that prevents the circumvention of transfer conditionalities (with issues related to states circumventing fiscal rules resolved through budget transparency and the imposition of fines for those found engaging in "creative accounting"). Citing studies that find fiscal rules provide no incentive for governments to practice fiscal consolidation during periods of growth and only encourage them to keep the deficit just below the limit to avoid sanctions, the author notes that these rules can indirectly have large negative effects on welfare, as spending cuts often come at the expense of critically important social programs.

Chakraborty's analysis shows that the era of rule-based fiscal control has witnessed a sharp reduction in the overall fiscal imbalance at the state level, achieved through a combination of increased tax revenue (with the introduction of a value-added tax and greater devolution from the central government to the states) and a reduction in spending relative to

revenue generation, expanding fiscal space at the state level. However, an econometric analysis shows that many states overadjusted their deficits, resulting in an accumulation of cash holdings and depressed capital spending, implying that while a coordinated, one-size-fits-all approach may encourage states to meet their FRA targets, it may come at the detriment of capital investment.

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Program: Monetary Policy and Financial Structure

Minsky at Basel: A Global Cap to Build an Effective Postcrisis Banking Supervision Framework

GIUSEPPE MASTROMATTEO and LORENZO ESPOSITO

Working Paper No. 875, September 2016

Focusing on Distinguished Scholar Hyman P. Minsky's theories of investment, financial stability, and the role of government, Giuseppe Mastromatteo, Università Cattolica del Sacro Cuore, and Lorenzo Esposito, Bank of Italy, investigate whether the success in mitigating the effects of the recent crisis without meaningful reform of the "big bank" business model has increased the possibility of a future crisis. Ultimately proposing a global cap for bank assets, the authors suggest that attention should be paid to the neglected link between financial innovation, deregulation, and systemic risks when crafting effective banking regulation.

Reviewing the literature on trends in the financial system over the past 50 years, the authors determine four causes of the crisis, namely, the growth of the financial sector relative to the nonfinancial sector and the real economy; deregulation facilitating concentration of big banks at the expense of smaller banks; globalization depressing wages and limiting social mobility; and the unacknowledged link between financialization and income distribution leading to incorrect policy prescriptions. Reflecting on these sources of instability, they argue that we must heed Minsky's assertion that financial reform can only be effective as part of a general system of reform.

Because profits shrink as capitalism matures and individual sectors converge toward an average rate of profit, the search for the "new" increases leverage, creating bubbles that generate financial fragility. Given the acknowledged limits of models and the existence of "model risk" (where the entire model is incorrect), stress tests or early-warning indicators cannot accurately anticipate when a bubble will burst and trigger a crisis. The authors contend that since the dynamics of one level cannot be interpreted to hold for all levels of the system, and with big banks convincing supervisors to let them use their own internal models of risk to regulate the system as a whole, micro efficiency creates macro bubbles. Coupled with a reduction in diversity in the banking system through concentration and an increase in economic and political power through the deregulation of the 1980s, big banks have become too interconnected to fail.

Mastromatteo and Esposito advise that without recognition that diversification decreases risk, and appropriate regulation to limit both the size and the interconnectedness of the banking system, systemic risk will continue to grow, setting the stage for another crisis. Moving away from orthodox wisdom that relies on market discipline to reduce moral hazard on the part of bank managers, they suggest that prudential supervision is no longer appropriate.

Proposing a plan to coordinate monetary policy and banking supervision, the authors support eliminating prudential supervision in favor of a system similar to the cash flow-oriented bank examination process proposed by Minsky in the 1960s, which measures liquidity of a single institution relative to the system as a whole and ties banking supervision to the central banks via lending of last resort. With euphoria during a bubble infecting regulation and promoting a laissez-faire attitude toward policy, the authors assert that rules of this nature would be better able to withstand the political pressure to deregulate at the time when regulation is most needed. Since the most profitable banks are the least risk averse and rule-based regulation is rapidly outgrown by innovation, they cite Minsky's claim that any regulation must not only be simple to understand and apply but also reassessed frequently to remain effective.

To this end, Mastromatteo and Esposito recommend a global cap on assets that is not risk weighted and applies at the group level, forcing too-big-to-fail banks to break themselves

up into smaller institutions. Arguing that this is the most transparent and easily applied standard, they contend that this plan would offer the widest options for banks to establish their own business model while decreasing the size and interconnectedness of institutions globally, thereby reducing systemic risk. This simple and transparent rule would eliminate many other rules, reducing the cost of compliance and making smaller institutions more competitive. Refuting possible objections to the imposition of a global-cap rule, the authors claim that reducing the political and economic influence of big banks is a necessary step for the establishment of a strong economic infrastructure.

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Program: Distribution of Income and Wealth

Quality of Match for Statistical Matches Used in the Development of the Levy Institute Measure of Time and Consumption Poverty (LIMTCP) for Ghana and Tanzania

FERNANDO RIOS-AVILA

Working Paper No. 873, September 2016

Statistical matching is a widely used technique in empirical studies and has been applied in cases where no single survey contains all the relevant information needed to draw important inferences. In a companion paper to Working Paper No. 871 (see p. 10), Research Scholar Fernando Rios-Avila describes the quality of match of the statistical matches used in analyzing the effects of paid employment on the time and consumption poverty of individuals in Ghana and Tanzania.

Using information common across two independent surveys conducted in each country (for Ghana, the 2012 Ghana Living Standards Survey and the 2009 Ghana Time Use Survey; for Tanzania, the 2012 Household Budget Survey and the time-use module of the 2006 Integrated Labor Force Survey), Rios-Avila creates a single dataset for each country that preserves the distributional characteristics of the

combined information, under the assumption that both surveys represent the same population.

Matching the base (recipient) data—comprising detailed demographic and income/consumption data for both individuals and households—to the time-use (donor) data, a unique dataset is created, allowing for the extraction of time-use patterns for all members of a household. This new dataset is then used to estimate the LIMTCP poverty level of each potential recipient in the larger study.

While the survey data are matched at the individual level, all time thresholds must be constructed at the household level, using time spent on household production by all its members, to correctly estimate time and consumption poverty. To identify the time thresholds, the author establishes a reference group consisting of households with at least one nonemployed adult and total household income that falls between 75 percent and 150 percent of the official poverty line. Those households falling outside this poverty band are discarded in subsequent regressions in order to focus on households subsisting at or near the official consumption poverty line.

With a gap of three years between the household and time-use surveys for Ghana and six years for the Tanzanian surveys, the author notes some sampling differences, but finds that most of the matched variables are structural characteristics (i.e., gender, educational attainment, etc.) and remain stable over time. To address the consistent misalignments and reduce bias, survey weights are adjusted so that the time-use and household budget surveys have the same structure with respect to the individual's household composition (number of adults and children) and gender. These adjusted statistics are then put through several rounds of matching to complete the alignment of recipient and donor data. For Tanzania, nearly 80 percent of the records are matched after the fourth round; for Ghana, the bulk of the matching happens between rounds 7 and 18. The match quality is assessed based on an analysis of the ratio of the average value of the transferred variables over the true averages in the original sample.

Rios-Avila finds that, barring a few exceptions with respect to family size and presence of children in the household, the household survey data and the time-use data are well aligned and the quality of match between the two surveys is strong.

levyinstitute.org/pubs/wp_873.pdf

Simulations of Employment for Individuals in LIMTCP Consumption-poor Households in Tanzania and Ghana, 2012

THOMAS MASTERSON, KIJONG KIM, and

FERNANDO RIOS-AVILA

Working Paper No. 871, August 2016

In order to estimate the real impact of a poverty-reduction policy that promotes paid employment, Research Scholars Thomas Masterson, Kijong Kim, and Fernando Rios-Avila present a method for assessing the trade-off between paid employment and the reduced production in farm and non-farm household enterprises when individuals are placed in paid employment. Using the Levy Institute Measure of Time and Consumption Poverty (LIMTCP), they create simulations for Tanzania and Ghana to test the impact of paid employment on the time and income poverty of both individuals and households.

Synthetic data files are created through statistical matching of household surveys with time-use surveys (for Ghana, the Ghana Living Standards Survey of 2012 was matched with the 2009 Ghana Time Use Survey; for Tanzania, the 2012 Household Budget Survey was matched with the 2006 Integrated Labor Force Survey time-use module), enabling the authors to calculate the LIMTCP for each country. To identify donors and recipients for the job assignments, the authors looked at individuals between the ages of 18 and 70 who were not retired, in school, or disabled. From this pool of eligible individuals, the recipients were further identified as being LIMTCP poor and either unemployed, engaged in paid employment for less than 10 hours per week, or working on a household farm or other home-based enterprise. The donors were those working for pay for 10 or more hours per week.

Going a step further than previous studies that examined the impact of paid employment in Mexico and Turkey, this simulation accounts for those already working in some farm or nonfarm household enterprise by assigning paid employment to individuals only if the new, paid position does not make them worse off in terms of income.

Using the results of a log-linear production function to approximate the potential reduction in output in home-based enterprises, the authors produce an estimate of the gross contribution of each individual family member to gross output.

The sum is scaled to equal the gross output for the household and subtracted from the costs of operating expenses that would not be used as a result of the recipient leaving the household enterprise, arriving at an estimate of each individual's net contribution to a family farm and/or nonfarm business.

A multinomial logit procedure matches each recipient to the industry and occupation corresponding to the largest predicted likelihoods. A three-stage Heckit procedure determines the earnings and usual weekly hours of paid work for those already employed, and the results are used to perform the hot-decking procedure for imputing missing data. Randomly drawing matches for each individual in the recipient pool from the donor records with the highest affinity score, the industry, occupation, earnings, and hours from the donor are then transferred to the recipient.

Comparing the earnings of each recipient with the value of the production lost through their disengagement from the household farm or business, the authors cancel any assignments resulting in a "large enough" negative impact (defined as earnings less than 75 percent of the estimated net contribution to the family farm/business output, plus reported individual earnings). For those remaining in the recipient pool, the authors account for the change in paid/unpaid work by reallocating the shares of required household production to other members of the recipient's household, in order to recompute the time deficits/surpluses of everyone in the household as a result of the simulation. A second round of hot decking assigns new weekly hours of household production and care activities to each of the other individuals in the household based on the updated labor force participation variables from the first round of hot decking conducted for job recipients, resulting in new income and time-use variables that are used to recalculate the time and income poverty of recipient households. Comparing the earnings from these preliminary assignments to the individual recipients' current estimated contributions to home-based enterprises, the authors find that for many poor people in both Ghana and Tanzania, family farm work is a better option than paid employment.

levyinstitute.org/pubs/wp_871.pdf

Program: Immigration, Ethnicity, and Social Structure

The Impact of Immigration on the Native-born Unemployed

FERNANDO RIOS-AVILA and GUSTAVO CANAVIRE-BACARREZA
Policy Note 2016/3, August 2016

While there has been a fair amount of research on the effects of immigration on the prospects of native-born workers, there is comparatively little on the impact on the unemployed in particular, argue Research Scholar Fernando Rios-Avila and Gustavo Canavire-Bacarreza, Universidad EAFIT. In this policy note, they attempt to fill the void by investigating the effects of state-level immigration rates on unemployed native-born workers.

Using monthly Current Population Survey data from 2001 to 2013, Rios-Avila and Canavire-Bacarreza focus on the “transition behaviors” of the native-born unemployed. That is, they examine the likelihood that, from month to month, the unemployed (1) remain unemployed; (2) shift to employment; (3) leave the labor force (stop looking for work); or (4) emigrate (move to a labor market in a different state). Against this baseline of transition behaviors, the authors investigate how differential rates of immigration at the state level—here measured as the share of immigrants in the state’s population—affect these behaviors in one direction or another. The authors control for state-level demographic variations that may affect observed transition behavior differences (based on sex, age, education, and race), as well as the variation in household characteristics (civil status, household size, and the number of children in the household under age 13) and state-level differences in unemployment rates and generosity of unemployment insurance.

The results of their research indicate that while living in a state with a higher concentration of immigrants reduces the probability a native-born unemployed worker will remain unemployed in the following month, this is a function of an increased likelihood that the native-born unemployed will leave the labor force. The magnitude of the effect is small, the authors note (a 1 percentage point increase in the share of immigrants in a state’s population increases the probability of

labor force exit among the native-born unemployed by 0.30 percentage points and the likelihood of remaining unemployed declines by 0.34 percentage points), but statistically significant. Neither the chances of securing employment (that is, of moving from unemployment to employment) nor the likelihood of migration appear to be affected by living in a state with a higher share of immigrants. The authors note that while their results do not indicate that living in a high-immigration state affects the likelihood of finding employment for the native-born unemployed, the possibility remains that immigration affects the job stability of employed native-born workers or the employment opportunities of those currently out of the workforce who would like to return.

The policy note then examines whether demographic characteristics shape how the native-born unemployed are affected by shares of immigrants in their local labor markets. Younger unemployed native-born workers are the age group most affected as rates of immigration increase, exhibiting the largest decrease in the probability of remaining unemployed and the largest increase in the probability of leaving the labor force. And the lower the educational attainment level of the unemployed worker, the more he or she is affected by higher concentrations of immigrants in a state’s labor market.

Rios-Avila and Canavire-Bacarreza note that even if immigration does not impact the wage and employment prospects of the native-born unemployed, the *expectation* of a negative impact could itself drive labor market exit, thus creating a discouraged worker effect in high-immigration states that pushes individuals out of the workforce who would otherwise have continued seeking employment. The authors share additional results that may point to this role of negative expectations in driving transition behaviors. First, they find that higher immigration rates do not affect the labor market transition probabilities (that is, there is no observed higher rate of labor market exit) among the following subpopulations: foreign-born citizens, individuals who identify as Hispanic, and children whose parents were immigrants—populations that might be less likely to be driven by negative expectations regarding the impact of immigration. Second, they observe that the labor market behavior of the native-born unemployed is only affected by the concentration of likely unauthorized immigrants. Higher shares of naturalized citizens or authorized immigrants do not increase the probability of

labor market exit (and decrease the probability of remaining unemployed) among the native-born unemployed.

This policy note derives from an extended working paper on the topic (Working Paper No. 870), which includes a review of the research on the effects of immigration on the job market prospects of native-born workers more generally. levyinstitute.org/pubs/pn_16_3.pdf

Unemployed, Now What? The Effect of Immigration on Unemployment Transitions of Native-born Workers in the United States

FERNANDO RIOS-AVILA and GUSTAVO CANAVIRE-BACARREZA
Working Paper No. 870, August 2016

This working paper formed the basis of Policy Note 2016/3, “The Impact of Immigration on the Native-born Unemployed,” summarized on pp. 11–12.

levyinstitute.org/pubs/wp_870.pdf

Program: Economic Policy for the 21st Century

“Engendering” Intergovernmental Transfers: Is There a Case for Gender-sensitive Horizontal Fiscal Equalization?

ABHISHEK ANAND and LEKHA S. CHAKRABORTY
Working Paper No. 874, September 2016

Abhishek Anand, Ministry of Finance, Government of India, and Research Associate Lekha S. Chakraborty investigate the equity-inducing effects of incorporating a gender variable into the fiscal devolution formulas proposed by India’s Finance Commissions. Citing existing studies that examine the amount rather than the effect of intergovernmental fiscal transfers, the authors seek to add to the literature by analyzing the criteria of each of the Finance Commissions for their impact on efficiency and equity.

Since 1951, the Government of India has convened 14 Finance Commissions to submit recommendations for the

devolution of taxes from the federal government to the states. In recognition of the shifting demographic realities in India, these tax-devolution formulas have changed over the decades, with the first seven commissions basing their recommendations on only two criteria (population and collection of taxes), and subsequent commissions placing greater emphasis on factors related to equity and fiscal efficiency. The authors identify the four broad categories of criteria used by the current (14th) Finance Commission as those related to need, such as population and area; a measure of revenue disability (i.e., fiscal capacity distance); cost disability factors, including a recognition of the costs of conserving forested areas; and fiscal efficiency indicators, such as tax effort and fiscal discipline. Anand and Chakraborty note that in spite of these developments, as well as the recognition of the need to address gender inequality in other areas of the government, the Finance Commission still lacks a gender variable in its expanded criteria.

The Constitution of India provides independent revenue-raising and spending capacity for both the state and federal governments; however, the most productive sources of revenue belong to the central government, while the states face a higher burden of expenditures. With a gap of 12 percent between the revenue-raising capacity of the states and their share of total expenditures, the Finance Commission establishes the devolution formula to offset these imbalances (both horizontal and vertical) present in fiscal federalism. Existing discussions about the formulas presented by the 14 Finance Commissions allude to the fact that transfers have historically been too small to help states augment their resource bases. They can also be regressive in nature, contributing to a lack of fiscal discipline at the state level. The authors expand this conversation by critically analyzing the evolution of the existing criteria and examining the plausibility of adding a gender component to an already complex formula.

Anand and Chakraborty’s analysis notes the increasing importance of criteria that consider environmental and welfare issues. They find that while these criteria do make the devolution more progressive, they do not go far enough to reduce inequalities, especially for female children in India. They insist that while a gender-equality component is not specifically laid out in their terms of reference, future Finance Commissions must take this broader dimension of human

development into consideration when framing their devolution formulas. To address the human development issues related to gender, the authors suggest the inclusion of an indicator based on each state's child sex ratio (number of females per thousand males, ages 0–6) as a proxy for gender inequality. They find that the addition of such an indicator has the potential to make the devolution more progressive by incentivizing states to take measures to improve gender equality. Additionally, since poorer states have a higher child sex ratio (more girls than boys aged 0–6), the inclusion of this indicator increases the share of taxes they receive, making the post-devolution per capita income across states more equitable.

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INSTITUTE NEWS

Upcoming Events

26th Annual Hyman P. Minsky Conference

**The New Administration Meets the New Normal:
Economic Policy to Offset Secular Stagnation**

Levy Economics Institute of Bard College

Annandale-on-Hudson, N.Y.

April 18–19, 2017

The 26th Annual Hyman P. Minsky Conference will take place at Blithewood, on the Bard College campus, in April 2017. The conference will address, among other issues, the economic policies introduced by the new 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, as it becomes available.

The Hyman P. Minsky Summer Seminar

Levy Economics Institute of Bard College

Annandale-on-Hudson, N.Y.

June 10–16, 2017

The Levy Institute's eighth annual Hyman P. Minsky Summer Seminar will be held on the Bard College campus in June 2017. 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.

Call for Papers

Gender and Macroeconomics Workshop: Theory, Empirics, and Policy

New York City

September 13–15, 2017

**Organized by the Levy Economics Institute of Bard College
with the generous support of The William and Flora
Hewlett Foundation**

The goal of this workshop is to advance the current framework that integrates gender and unpaid work into macroeconomic analysis and enables the development of gender-aware and equitable economic policies. We are interested in contributions that address the gender implications of macroeconomic processes and policies and examine the mechanisms that link gender inequalities to macroeconomic outcomes. These include but are not limited to:

- Incorporation of unpaid productive activities into economy-wide models (e.g., SAM, CGE)
- Analysis of the links that connect economic structure (e.g., sectoral composition of economy, degree of openness) and growth regimes (e.g., wage-led versus investment-led growth) with women's and men's economic outcomes and gender inequalities
- Assessment of the channels through which macroeconomic policies influence women's and men's economic outcomes

and gender inequalities. These include fiscal policies and monetary policies related to interest rates, exchange rates, and financial markets.

- Evaluation of the mechanisms whereby gender inequalities influence macroeconomic outcomes, such as aggregate output and employment and their sectoral composition, inflation, budget deficits, and current account balance
- Examination of the interconnections between unequal international economic relations (trade and finance) and gender inequalities

The types of gender inequalities to be modeled may potentially encompass inequalities in care and unpaid work, labor force participation, employment composition (by sector and/or type of employment, such as formal or informal), education, and access to and utilization of social and financial services.

We invite theoretical contributions that utilize existing and novel macroeconomic modeling approaches as well as empirical studies, in particular those focusing on the dimensions of gender inequalities relevant to the countries of Sub-Saharan Africa and other low-income economies. We also invite papers that provide a comprehensive picture of the state of the art, identify gaps, and indicate directions for future research.

If you are interested in presenting a paper, please submit an abstract (maximum 500 words) of your proposed paper by January 25, 2017; submissions may be made online at levyinstitute.org/events. Acceptance notifications will be e-mailed on March 1, with final papers due by July 31. Accommodation and travel-related expenses will be covered by the workshop organizers.

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

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