THE INSTITUTE FOR ECONOMIC DEVELOPMENT

RESEARCH REVIEW

Contents

Spring 2016

Recent Discussion Papers **Page**

BOSTON UNIVERSITY

The Institute for Economic Development (IED) is a research center within Boston University's Department of Economics focusing on development economics and related fields of finance, trade, foreign investment, health, education, political economy, organizations and economic history.

Local Government Proliferation, Diversity, and Conflict

By: Samuel Bazzi and Matthew Gudgeon

Discussion Paper 271

As government activities become decentralized in developing countries, new local governments are typically created. The pervasiveness of this redistricting process suggests that forming new local governments may bring benefits, such as reducing the costs of government public goods provision. Yet, the process of redistricting may also impose costs. The process of redistricting has implications for the allocation of resources among competing groups, and this may lead to conflict. In an ethnically and linguistically diverse country such as Indonesia, the optimal size of political units may involve a complicated trade-off between the broader benefits of decentralization, the direct costs of increased violence, and the state capacity to address violent disputes.

This paper uses newly-available high-frequency geospatial data on violence in Indonesia to study the effects of decentralization on conflict. Reforms begun in the late 1990s eased the process of redistricting and led to a 70% increase in the number of local governments over the following 15 years. However, because of a brief moratorium on redistricting in the middle of this period, the timing of local government splitting was staggered in a plausibly exogenous way. This allows the authors to test not only whether redistricting led to changes in violence, but also whether the composition of the local population and the placement of district boundaries affects the rate of violent conflict.

The authors find that although redistricting has a small overall effect on the level of local conflict, there is considerable heterogeneity in these effects. In places where redistricting leads to the creation of new districts that are more linguistically or ethnically homogeneous, violence declines. On the other hand, highly diverse child districts see increases in political conflict, especially around the time of the first election. These findings suggest that ethnolinguistic diversity may lead to conflict over new, contestable public resources.

Obama, Katrina, and the Persistence of Racial Inequality

By: Robert A. Margo

Discussion Paper 272

A sample of recent American history quickly yields images of great achievement within the African-American community, but also seemingly disparate images of exceptional poverty and inequality. This paper serves to rationalize these disparate views of the economic progress of the African-American community by reviewing and revising the economic history of racial differences in per capita income from 1870 to the present. Because of the long history of African-American enslavement, a thorough understanding of contemporary black-white income gaps requires a thorough understanding of how these gaps evolved in the aftermath of emancipation.

The consensus narrative in the literature suggests a basic overall pattern. Modest convergence in earnings occurred prior to WWII, in spite of the early phases of the "Great Migration" of Southern blacks to Northern cities and of rapid declines in illiteracy. The post-WWII period saw more rapid convergence through the 1970s, and this convergence was driven largely by improvements in the relative incomes of Southern blacks, likely as a result of Federal desegregation policies. Since the late 1970s, the overall rate of black-white income convergence has slowed considerably, with a large literature still attempting to explain this fact.

Roughly since the end of World War II, Census data provide a fairly straightforward confirmation of this narrative by providing a reliable measure of relative per capita income. These data have also allowed economists to identify specific impacts of government desegregation policies. However, prior to WWII, the patterns of relative black-white per capita income have remained much less clear. Most of the literature cites a single set of estimates constructed by economic historian Robert Higgs (1977, 1989). The Higgs estimates suggest an uneven pace of antebellum income convergence, with somewhat rapid convergence from 1870 to 1900, and much slower convergence from 1900 to 1940.

Reconsidering in detail the assumptions of the Higgs estimates, the author constructs an alternative estimate of the black-white income gap in this period. Although the revised time series shows a similar rate of overall convergence from 1870 to 1940, the time series suggests that the rate of convergence was considerably less variable over time than had been suggested by the Higgs estimates. This pattern of slow but persistent convergence of incomes is consistent with a story that emphasizes the intergenerational impacts of slavery and segregation, suggesting that the income gap between blacks and white may continue to persist long into the future.

Do Consumers Benefit from Supply Chain Intermediaries? Evidence from a Policy Experiment in Edible Oils Market in Bangladesh

By: M. Shahe Emran, Dilip Mookherjee, Forhad Shilpi, and M. Helal Uddin

Discussion Paper 273

Because of their market power and potential to collude, commodity market intermediaries are frequently distrusted. In particular, private commodities traders are often seen as a source of high food prices, and for this reason, during the 1950s and 1960s, many developing countries formed marketing boards to limit the role of traders. Although these boards were often later disbanded in agricultural reforms, the underlying lack of trust in middlemen has remained widespread and deeply ingrained, especially as international commodity prices spiraled in 2007-2008.

In spite of the widely-held view that market power among commodities traders leads to higher consumer prices, little rigorous evidence exists to support this view. While traders may exercise market power, they may also enhance efficiency through mechanisms such as the provision of credit to downstream distributors, supply assurance, and quality inspections. To disentangle these plausible mechanisms, the authors study the effects of a short-lived policy reform which banned a particular layer of middlemen called Delivery Order traders (DOTs) in the edible oils market in Bangladesh in 2011. Up until the reform, these DOTs purchased contracts for future delivery from refiners and sold them to wholesalers. It was replaced by a Sale Order system in which edible oil refiners sold directly to a large number of newly appointed dealers among the set of wholesale traders.

Using a difference-in-difference approach with wheat as a comparison commodity, the authors find that post-reform prices definitely contradict the predictions of a model in which DOTs exercise market power without lowering distribution costs. Rather, wholesale prices for palm oil rose significantly following the reform, and oil imports fell even as the world price of oil declined. Furthermore, after DOTs were banned, the pass-through by refiners of fluctuations in crude oil prices fell.

These results are consistent with a model in which DOTs relax the credit constraints faced by wholesalers, thereby limiting the market power of refiners and improving overall market efficiency. Even in the event that market intermediaries such as DOTs are able to exert market power, the authors conclude that the financing role of intermediaries may lead them to have an overall positive impact on market efficiency and consumer welfare.

Simulating Russia's and Other Large Economies' Challenging and Interconnected Transitions

By: Seth G. Benzell, Eugene Goryunov, Maria Kazakova, Guillermo Lagarda, Kristina Nesterova, Laurence J. Kotlikoff, and Andrey Zubarev

Discussion Paper 274

For a country with large natural resource endowments such as Russia, optimal policy decisions may depend critically not only on the country's own resource endowments, but also on its demographic trends, and on the resource endowments, fiscal policies, and demographic transitions of other countries. Since global fossil fuel endowments are widely expected to be depleted over time, an understanding of the forthcoming policy environment requires a model including fossil fuel prices, demographic trends, and fiscal institutions.

This paper develops a computable general equilibrium (CGE) dynamic life-cycle simulation model that simulates demographic and fiscal transition under favorable and unfavorable fossil fuel price regimes. The model includes six geographic regions and an overlapping generations model with individuals living up to 90 years. It is calibrated to capture each region's current and projected future demographic conditions as well as its fiscal institutions. The key assumptions made in the model are that birth rates stabilize by 2058, so that regional populations eventually stabilize, and that fossil fuels are exhausted by 2084.

In the authors' baseline simulation, effective wage tax rates rise dramatically over the next few decades in the U.S., India, and the EU as the populations of these regions age, and by smaller amounts in the rest of the world. However, once fossil fuels are exhausted, tax rates increase globally, especially for Russia as a result of its government's dependence on fossil fuel sales for revenues. The marginal tax rates predicted by the model are so high, in fact, that they may be politically infeasible, rendering these countries' fiscal policies unsustainable. From the perspective of Russian fiscal policy, several policy solutions to this dilemma are considered. These include phasing out Russia's current pension system, replacing corporate taxes with increased consumption and income taxes, and increases in fertility. Each of these approaches are found to increase long-term Russian welfare.

Does Competition Eliminate Discrimination? Evidence from the Commercial Sex Market in Singapore

By: Huailu Liy, Kevin Lang, and Kaiwen Leong

Discussion Paper 275

In Becker's (1957) canonical economic model of discrimination, competition eliminates discrimination by firms in the long run, because the law of one price prevails and discriminatory firms are competed out of existence. However, as shown by Diamond (1971), in the presence of sequential search costs, the law of one price need not hold. Firms can charge higher prices to those consumers who are willing to pay more, and this allows them to indulge discriminatory tastes. Yet, although this model has far-reaching conclusions, the empirical tests of Diamond's model have occurred primarily in laboratory settings. Observing discrimination in a competitive market setting with a large number of buyers and sellers has generally proven difficult.

This paper provides empirical evidence for Diamond's model of discrimination using data from the market for street sex workers in Singapore. The market is large, legal for customers, and relatively safe from social stigma because the area is frequented by many individuals who are not involved in the market. Sex workers negotiate their price freely, but prices are not publicly observable, and sex workers do not interfere with others' ongoing negotiation, which makes search sequential and allows for price discrimination to arise. Detailed survey data allows the authors to identify both the prices offered to different types of clients, and to control for heterogeneity in the sex workers themselves.

The authors find strong evidence that sex workers use ethnicity to price discriminate based on their assessment of the client's willingness to pay. This behavior is in keeping with the broader literature on statistical discrimination. The authors also find evidence of taste-based discrimination against one ethnic group in particular. These observations are not well explained by other features of the market structure, such as the existence of pimps of whom there are a large number in the market. These results suggest that the Diamond model of discrimination has validity beyond the laboratory setting, and that understanding search costs may be important to understanding the ongoing presence of discrimination in markets.

Demand-Driven Integration and Divorcement Policy

By: Patrick Legros and Andrew F. Newman

Discussion Paper 276

Traditionally, industrial organization economists and regulators have been concerned with vertical integration mainly insofar as it affects the prices consumers pay. While standard models of imperfect competition allow for both the possibility that vertical integration can increase prices through market foreclosure or reduce them through enhanced productive or allocative efficiency, they also suggest that observing post-integration prices is sufficient to determine whether foreclosure or efficiency effects are dominant. In particular, so the argument goes, if prices and integration have been rising together, the increase in prices must be due to foreclosure generated by the increase in integration, and forcing firms to divest assets (divorcement) can benefit consumers. Several policy episodes, particularly in U.S. retail gasoline and British beer, in which divorcement followed a trend of rising prices and integration, were rationalized by this kind of reasoning. But instead of the expected fall in prices after divorcement, prices continued to rise while profitability fell, opposite to what traditional models would predict.

This paper considers the implications of recent models in organizational economics, which emphasize a reverse causal relationship -- from prices to vertical integration -- to explain these episodes, to show that that price-integration trends are insufficient to infer whether vertical integration increases or reduces efficiency, and to evaluate the efficacy of divorcement policy. Specifically, in a world where integration enhances efficiency by reducing marginal production costs, but has fixed costs that inhibit firms from integrating maximally, firms have greater incentives to integrate when prices are higher, since they will want to produce more output and can amortize the cost of integration over this increased production volume. The paper generalizes this observation to a Cournot oligopoly environment to show that an increase in consumer demand will always increase the level of integration, thereby reducing costs. The net effect on price will then depend on the source of demand increase -- elasticity declines also raise prices, while market size increases will tend to lower them. Thus, it is possible for a positive trend in price and integration to be the result of shifting demand, not foreclosure, and in this case divorcement will be counterproductive, increasing costs and raising prices further. The evidence on the gasoline and beer episodes fits this picture.

In this model, there is a conflict of interest between firms and consumers: because integration reduces costs, it confers a negative, business-stealing externality on other firms, and so consumers want more vertical integration, while producers want less. In a richer framework with repeated interactions among firms, the existence of this externality has key implications for firm collusion. Although collusion may actually reduce integration, the threat of higher integration may be used to sustain it. Thus a potential benefit of divorcement policies is to inhibit collusion by eliminating that threat, but in that case there are consumer-superior policies -- namely capping integration at existing levels, rather than forcing asset sell-offs -- that also inhibit collusion. In other cases, divorcement can only harm consumers by raising costs. Demand-driven integration thus has drastically different implications for optimal policy than those generated by the traditional IO perspective.

Pathbreakers? Women's Electoral Success and Future Political Participation

By: Sonia Bhalotra, Irma Clots-Figueras, and Lakshmi Iyer

Discussion Paper 277

Women are broadly under-represented in political office throughout the world, as they are in numerous other leadership positions. This is particularly true in India, where only 12% of national legislators are female, and less than 5% of candidates for state legislatures were female over the period 1980-2007. A recent literature has shown that increasing women's political representation leads to policies that are more favorable for women, and this suggests that the relative lack of political representation of women could be a source of broader disadvantage for women. For these reasons, it may be valuable to understand the reasons why relatively few women choose to become political candidates.

Using data from India's state legislative assembly elections, the authors investigate whether women's electoral successes encourage more women to participate as political candidates in the future. If women respond to the successes of previous women by running for office in greater numbers, then a trend of increasing female candidacy may be self-reinforcing. The authors develop a regression discontinuity design, comparing elections in which female candidates narrowly won election to elections in which female candidates narrowly lost election. A variety of tests support the key assumption that the victor of closely contested elections is effectively random, and this implies that the authors can identify the causal impacts of women's electoral victories.

Results show that although there is an increase in the share of women candidates from major parties in the next election following a woman's victory, this increase is primarily driven by incumbents running for re-election. Despite a lack of term limits, incumbents frequently do not run for re-election in India, and female incumbents are even less likely to do so. Therefore, an increase in the intensive margin response of women remains important to increasing women's overall representation in politics.

The election of a woman does not lead to an increase in new female candidates, and may in fact discourage the entry of new candidates. This "discouragement" effect is strongest in states that are characterized by entrenched gender bias. Patterns of voter turnout suggest that a "backlash" effect in states with high levels of gender bias could explain a portion of the discouragement of new female candidates, while evidence from the implementation of a gender quota in local governments suggests that a shortage of suitable political candidates does not drive the results. The similarity of candidate patterns between women and Muslims--another historically underrepresented group in India--suggest that institutional and cultural barriers to entry may still play a substantial role in limiting the number of women who seek public office.

Outward FDI and Domestic Input Distortions: Evidence from Chinese Firms

By: Cheng Chen, Wei Tian, and Miaojie Yu

Discussion Paper 278

The emergence of multinational corporations (MNCs) based in developing countries has led to a need to better understand their behavior. Outward FDI flows from developing countries have grown substantially in that time, and they now account for more than 33 percent of overall FDI flows. Yet, large firms in many developing economies are still subject to considerable input market distortions. So, it is important to understand the ways in which firms' production and investment strategies abroad may be influenced by their exposure to input distortions at home.

This study investigates the production and investment strategies of manufacturing MNCs in China. The Chinese context is important for two reasons. First, China is the source of much outward FDI: China is now the third largest home country of FDI outflows globally, and its outward FDI flows exceed inward FDI flows. Secondly, Chinese firms face large input market distortions as a result of government interventions in the financial sector and the government ownership of land. These patterns of government ownership favor state-owned enterprises (SOEs). So, the authors develop a model based on a prior model by Helpman, Melitz, and Yeaple (2004), in which private firms pay higher input prices than SOEs when producing domestically, but all firms pay the same input prices when they produce abroad.

Three stylized facts arise from this paper's empirical analysis. First, private MNCs are less productive than state-owned MNCs on average. This is in spite of the fact that non-MNC private firms are more productive than their state-owned counterparts. Second, a smaller proportion of SOEs undertake outward FDI as compared with private firms. Finally, the relative size of MNCs is smaller among private firms than among SOEs. The authors show that their model explains these three stylized facts, and that it yields two key predictions: private firms will sell disproportionately more in foreign markets compared with SOEs, and the overall size of private firms will increase more when they undertake FDI than will the size of SOEs.

Finally, the authors calibrate their model using the firm-level data. Their results demonstrate that when foreign investment is liberalized, the presence of asymmetric distortions leads to larger relative increases in the share of MNCs and in overall productivity. These results are consistent with patterns observed in the Chinese economy in recent years.

Delay Cost, Knowledge Hierarchy, and Wages

By: Cheng Chen and Wing Suen

Discussion Paper 279

Business decisions are often time-critical. Delayed decision-making may prove costly, especially in the presence of competition. Accordingly, existing empirical evidence shows that the organizational structures of the firm are heavily influenced by the potential for delay costs. Yet the theoretical literature linking delay costs to firms' organizational structure is scant, and tends to predict organization structures that are inconsistent with reality. The broader questions linking delay costs to firm productivity and to workers' knowledge and wages are also left unanswered by existing models.

In this paper, the authors adopt a model from the literature on firms as knowledge-based hierarchies to explicitly model the effects of potential delay costs on organizational forms. As in the seminal papers in this literature, agents must solve problems that arise in the production process, and problem solving requires them to acquire knowledge. Subordinate workers learn less knowledge than their supervisors, and they deal with routine problems, while supervisors deal with complex but infrequent problems. The authors then introduce heterogeneous delay costs; delay costs are larger at higher points in the task hierarchy, due both to larger delays in time and to losses in revenue.

The authors show that increased delay costs make firms less hierarchical, more knowledge-intensive, and more productive. Firms recruit more knowledgeable workers at all levels so that there are fewer problems waiting to be solved by upper management. However, the increase in knowledge acquisition is disproportionately higher for lower-level workers, and this implies that delay costs cause intra-firm wage inequality to shrink. Higher delay costs also lead fewer yet more knowledgeable agents to produce, so firms are smaller, yet more productive.

Finally, the authors examine plant-level data from Colombia to assess several key predictions of the model. In keeping with these predictions, the Colombian data show that exporting firms have fewer layers, larger spans of managerial control, and that they pay higher wages at all layers, after controlling for other observable characteristics.

Employment Protection and the Labor Informality of the Youth: Evidence from India

By: Daniel Schwab

Discussion Paper 280

Nearly every country in the world has some form of employment protection laws (EPL). These laws take many forms, but they typically limit the ability of employers to fire workers. Despite the potential benefits of EPL in the presence of incomplete markets, these laws carry the risk of creating significant labor market distortions. For example, employment protections that depend on a worker's age may lead to an older workforce relative to what would arise without these protections, and this distortion may make firms less productive. Previous research has shown that EPL may have negative impacts on the employment prospects of the young, and also that EPL may negatively impact firms' productivity. This study aims to link those mechanisms by demonstrating that in India, firms' productivity is reduced as a result of the age-distortionary policies of EPL. Such an effect is consistent with a model in which firms are willing to hire less productive older workers in order to preserve flexibility in their ability to fire those workers. The nature of employment protections varies considerably across Indian states, which allows the author to exploit the timing of various laws' implementation to identify those laws' effects.

Using detailed data on India's manufacturing sector, the author first shows that in states with strong EPL, older workers are more likely to be employed in the formal sector. Then, using heterogeneity in rates of involuntary job separation across manufacturing sectors, the author shows that the age distortion is largest in firms that would fire their workers most often absent EPL. This is consistent with a causal relationship from EPL to labor force composition. Finally, the author uses firm-level productivity data to show that sector-states with a large "age shift" from EPL also have lower total factor productivity among EPL-affected plants. The relationship between the age shift and TFP is driven by old firms which are most affected by EPL, and it is not present in smaller firms that are not subject to EPL. This points strongly to the direct role of EPL's age effects in reducing TFP.

Property Rights and Gender Bias: Evidence from Land Reform in West Bengal

By: Sonia Bhalotra, Abhishek Chakravarty, Dilip Mookherjee, and Francisco J. Pino

Discussion Paper 281

In countries such as India, where large fractions of the population are dependent on agriculture, land reform has long been favored as a key method of promoting economic development. By ensuring that property rights are secure, land reforms may increase agricultural productivity, facilitate access to credit, and reduce poverty and cross-household asset inequality. However, these improvements may come at the cost of increasing within-household inequality. Where land rights are heritable, and primarily inherited by sons, land reform may exacerbate an underlying desire to ensure that they give birth to a son. Parents may choose not only to engage in sex-selective abortions, but they may also invest unequally in their children, even to the point of neglect or mortality.

The authors exploit variation in land rights created by Operation Barga, a tenancy reform in the Indian state of West Bengal which has previously been shown to have increased agricultural productivity and farm incomes. As with many patrilineal societies, sons in this region tend to co-reside with parents, work on the land, and subsequently inherit it. Daughters, in contrast, often take their bequest at marriage as a dowry and marry to form households some distance from their family home. This provides an incentive for many families to ensure that one of their children is a son.

The authors find that the reform led to a significant shift in the sex ratio at age one among children of second or higher birth order. However, this effect is only evident in households in which the first born child is a girl; these are precisely the households who are predicted to possess sex selective preferences. The effect is also evident primarily in Hindu families, who are generally believed to be more prone to exhibit son-preference owing to differences in legal rules, social custom and religious beliefs. Finally, the shift in the sex ratio appears to have been the result of both sex selection at birth and in the year after birth; while land reform was associated with substantially reduced infant mortality risk for boys, mortality rates for girls remained steady or increased. Taken collectively, these effects strongly suggest that the land reform policy exacerbated gender inequality within a large proportion of Hindu households in the region.

FACULTY PROFILES

Kehinde Ajayi continues to focus her research on economic development and the economics of education. She is particularly interested in how information affects decision-making and in understanding the resulting implications for policies aimed at reducing inequality. Her current research projects examine school choice, educational mobility, youth employment, and financial inclusion in Africa.

Marianne Baxter's research is in the fields of macroeconomics and international economics. In research related to her prior work on macroeconomic consequences of home production, she has been engaged in a large-scale econometric analysis of household expenditures and household time use as they pertain to home production. She is also working with a data set using IKEA catalogs from many countries and up to twenty years to study the determinants of departures from the law of one price.

Samuel Bazzi's research interests span labor and macroeconomics. His current research examines the role of labor mobility in the development process. His studies look at how income growth in poor countries affects international migration, the role of recruiter intermediaries in facilitating international labor mobility, the importance of migrants' skill transferability for regional economic development, and the effect of trade liberalization on labor reallocation across firms. Other work investigates the causes of conflict and barriers to the entry and growth among small firms. His primary ongoing projects are in Brazil and Indonesia.

Christophe Chamley's research is on social learning, coordination of expectations and markets in macroeconomics, and in the history of states' finances from 5000 BC to the 19th century.

Francesco Decarolis specializes in industrial organization with a focus on auctions, health insurance, and anti-competitive behavior. His recent research concerns the effects produced by different auction formats in the context of public procurement auctions and the effects on insurers competition of government subsidies in Medicare.

Randall Ellis' recent research focuses on how payment systems affect consumers, health care providers and health plans. He is particularly knowledgeable about using big data to address policy issues and understand market behavior. He continues to conduct research on risk adjustment and predictive modeling, which resulted in the payment models used in the US since 2000 and Germany since 2009, with similar models being evaluated in other countries. During the past year Ellis has given talks in the US, France, Italy and Switzerland. He is currently collaborating with researchers in the US, Australia, and China, and as well as with graduate students on US and developing country topics.

Raymond Fisman has completed his first year in the BU economics department, after 15 years at Columbia University's business school. He works in two main areas of political economy --- the causes and consequences of inequality, and corruption. His study on distributional preferences was published last year in Science, while his work on the impact of corruption on worker safety in China appeared in the Review of Economic Studies. In addition to continuing to do research in these areas, Fisman is completing a book on corruption, with political scientist Miriam Golden.

Martin Fiszbein joined Boston University in 2015 after completing his doctoral studies at Brown University. His interests lie in the fieldsof economic growth, development, history, and urban economics. Inparticular, his research seeks to understand the dynamics ofstructural change, human capital formation and economic growth. In aseries of current projects, he studies the effects of the productionstructure on patterns of long-run growth. This works examines predictions from a variety of macro-development and urban economics models using rich subnational data from the United States and from Argentina.

Ivan Fernandez Val specializes in theoretical and applied econometrics. He has recently been working on nonlinear panel data and distributional methods with applications to labor economics and other fields.

Stefania Garetto is an applied trade economist with a strong interest in multinational corporations. Her most recent publications analyze the risk implications of firms' international operations. She integrates new trade theory and theoretical asset pricing models to analyze both qualitatively and quantitatively the economic drivers of international activity and their consequences. In a series of related papers, she analyzed the relationship between export/FDI status and financial indicators. Her current work focuses on the dynamic behavior of multinational corporations, and on the activities of global banks.

Simon Gilchrist's research examines the effects of financial market imperfections and financial crises on real economic activity, with particular focus on the implications for investment behavior, business-cycle dynamics, and the conduct of monetary policy. Recent work explores the predictive content of credit spreads for macroeconomic activity, and the effect of uncertainty on investment and output, and the consequences of financial frictions for firm-level price setting and aggregate inflation dynamics.

John Harris works on issues of applied macroeconomic theory, regional and urban economics, and migration theory. His recent research includes comparative analysis of economic development in Africa and Southeast Asia. He also has extensive field experience in Africa and Asia, with emphasis on Indonesia, Uganda, Botswana, Kenya, Nigeria, Sudan, and Tanzania.

Leroy Jones specializes in policy-oriented micro issues in developing countries. Particular areas of interest include public enterprise, privatization, government-business solutions and industrial organization. He has substantive experience in Indonesia, Korea, Pakistan, Venezuela and thirteen other countries. Professor Jones directs the Institute's Program in Public Enterprise.

Robert King focuses his research on monetary policy and macroeconomics. Particular areas of current interest are the nature of price dynamics, the influence of reputation and credibility on optimal monetary policy, and the history of banking markets.

Kevin Lang's research concerns education and labor markets, with a particular focus on discrimination. While his work is primarily centered on the United States, he is currently involved in projects in Israel (on the motherhood pay penalty among university graduates) and Singapore (on discriminatory behavior among street sex workers).

Laurence Kotlikoff specializes in fiscal policy, macroeconomics, money and banking, computational economics, healthcare, and personal finance. He also works on the economics of robots. The author or co-author of 17 books and hundreds of journal articles, Kotlikoff is also a prolific columnist and a #1 NY Times Best Seller author. His columns have appeared in the New York Times, the Wall Street Journal, Bloomberg, Forbes, PBS.org, and many of the other top newspapers and magazines in the U.S. and overseas. His recent work has focused on generational policy, banking reform, corporate tax reform, social security reform, healthcare reform, computing large scale life-cycle models with aggregate shocks, and modeling the economic impacts of robots.

Robert Lucas's recent work focuses on migration. In the last couple of years his chapter on African migration appeared in the North-Holland Handbook series and he edited a handbook on international migration and economic development, which was published by Elgar during 2015. For that volume Lucas prepared a chapter on the link between bilateral trade and international migration, including fresh evidence derived from the most extensive data available to date. In May 2015 Lucas gave the key-note speech on "Migration and Economic Development" at the United Nations, NY, leading to adoption of the UN Post-2015 Development Agenda in September. Lucas's current work is on internal, rural-urban-rural migration in developing countries using a very large, micro data set on some 60 countries. He also continues to act as a member of the advisory committee on remittances to G8 countries.

Robert A. Margo had a book published this past year, a co-edited NBER conference volume entitled Enterprising America: Businesses, Banks, and Credit Markets in Historical Perspective (University of Chicago Press). Two chapters by Margo, one co-authored with William Collins (Vanderbilt) appear in the volume. Margo's presidential address to the Economic History Association, entitled "Obama, Katrina, and the Persistence of Racial Inequality," will be published in the June issue of the Journal of Economic History.

Jianjun Miao continues to work on two lines of research. The first concerns macroeconomic implications of financial frictions, specifically business cycle and growth implications of bubbles and credit constraints. The second involves new models of ambiguity sensitive preferences and applications to macroeconomics and finance.

Dilip Mookherjee has been working on a combination of theoretical and empirical topics related to development economics. Current empirical projects include land policies, political economy, financial development and food marketing supply chains in South Asia; theoretical topics include inequality, poverty and corruption control.

Andrew Newman is currently engaged in several research projects pertaining to development, organizational economics, inequality, and the economics of the household. Recent work involves developing a testable competitive equilibrium framework for studying how firms' internal organization decisions such as outsourcing or vertical integration interact with markets and how those decisions in turn affect product market performance, particularly in the face of globalization. He has been contributing to the economic theory of matching markets and applying that to affirmative action policies. He is also exploring how the processes by which people learn about their economic environment can lead to organizational dysfunction and change.

Daniele Paserman specializes in labor, applied microeconomics, political economy and behavioral economics.

Pankaj Tandon concentrates on technological change, microeconomics, public enterprises, and food policy. He has worked on evaluating privately financed infrastructure projects and privatization programs. His main field experience has been in Egypt, India, Mexico, and Venezuela.

Professors Emeriti: Peter Doeringer, Shane Hunt, Gustav F. Papanek, Paul P. Streeten and Andrew Weiss

IED Research Visitors

Cheng Chen an Assistant Professor of Economics from the School of Economics and Finance, University of Hong Kong, visited IED for a period of 5 months from July through December 2015. Professor Chen worked on two research projects in the field of trade and organizations. In the first project, he collaborated with Dr. Ryan Monarch from the FRB in investigating the effect of intensified import competition on management quality and decentralization within US manufacturing firms. The second project develops theoretical models of productivity and wage distribution within hierarchical firms.

Abhishek Chakravarty an Assistant Professor of Economics at the University of Essex,visited IED from September to October 2015. He works on gender and development, and conducted joint research with Dilip Mookherjee on a project which resulted in IED Working Paper No. 281.

Lakshmi Iyer of Harvard Business School visited for the entire academic year. She was working on several projects examining the representation of disadvantaged groups such as women and religious minorities in political institutions. One of these resulted in Working Paper No. 277.

Masatoshi Tsumagari of Keio University, Japan is visiting IED from March 2015 to March 2017. He is working with Dilip Mookherjee on theories of organizational design in the presence of costs of communication or corruption.

Student Activity

PhD Students Completed Dissertations and Placement

As of May 1, 2016, twenty three new BU Ph.D students have accepted job offers. Fourteen of them will go to academic positions at universities, four to government or central bank jobs and five to the private industry. We congratulate the following students on their new positions:

Levent Altinoglu, Columbia University, Graduate School of Business (post doc), then Federal Reserve Bank, Board of Governors, DC; **Mirko Fillbrunn,** Harvard Medical School, Mass General Hospital, Disparities Research Unit, Boston MA (post doc); **Francois Guay,** Cornerstone Research, Boston, MA,; **Apoorva Javadekar,** Reserve Bank of India, Center for Advanced Financial Research and Learning, Mumbai India (research director); **Matt Johnson,** Duke University, Sanford School of Public Policy, Raleigh NC (post doc); **Kavan Kucko,** Cornerstone Research Chicago, IL; **Tim Layton,** Harvard Medical School, Department of Health Care Policy, Boston MA (asst. prof.); **Ying Lei,** Peking University, Marketing, Guanghua School of Management, China (asst. prof.); **Jiaxuan Li,** Amazon, Seattle, WA; **Mengmeng Li,** Ernst & Young, NYC; **Shuheng Lin,** Xiamen University, Department of Economics and Wang Yanan Institute for Studies in Economics (WISE), China (asst. prof.); **Sara Machado,** London School of Economics, Department of Social Policy and Imperial College, School of Public Health, Health Economics Group, London UK (joint position, post doc); **Benjamin Ogden,** Texas A&M, Department of Political Science, TX (asst. prof.); **Elisabeth Perlman,** US Census Bureau, Center for Economic Studies; MD, **Alex Poterack,** Wellesley College, Department of Economics, MA (lecturer); **Dan Schwab,** Holy Cross College, MA (visiting asst. prof.); **Yao Shu,** Shanghai University of Finance and Economics, School of Economics, China (asst. prof.); **Ben Solow,** ECARES, Universite Libre de Bruxelles, Belgium (post doc); **Patricio Toro,** Central Bank of Chile; **Ye Wang,** Harvard Medical School, Mass General Hospital, Disparities Research Unit, Boston, MA, (lecturer/research scientist); **Ei Yang,** Shanghai University of Finance and Economics, School of Finance, China (asst. prof.); **Guihai Zhou,** Bank of Canada, Ottawa, Canada; and **Fan Zhuo,** Amazon, Seattle, WA.

Funding Opportunities for Research

The Weiss Foundation grants for Junior Faculty and PhD Students continued this year. The Weiss Family Program Fund for research in development economics was established last year by the generosity of past IED Affiliate and Emeritus Professor of Economics, Andrew Weiss. Kevin Lang helps manage it along with faculty members in the Harvard and MIT economics departments, and it is administered by Harvard University. The Fund supports research by undergraduates, graduate students, and junior faculty at Harvard, MIT, and Boston University working on development economics.

This year the Institute for Economic Development assisted Kehinde Ajayi, Assistant Professor, Samual Bazzi, Assistant Professor, and Mesay Melese Gebresliasse, fouth year PhD candidate, with applications to the Weiss Foundation for funding on their developmental economics projects for a total of $107,248.94. All three applications were successful with their funding requests:

Assistant Professor **Kehinde Ajayi** was awarded $64,448.94 to continue her research "Short Run Effects of Guidance and Information for Improved Decisions in Education".

Assistant Professor **Samuel Bazzi** was awarded $38,000 to continue his research project in Brazil "Firm Entry Barriers, Growth Constraints, and Job Creation: Theory and Evidence from Brazil".

Ph.D. candidate **Mesay Melese Gebresliasse** was awarded $4,800 in support of his research project "Priority Sector Targeting and Structural Transformation in Ethiopia" enabled him to spend a month in to gather data necessary for the project.

Mesay Gebresliasse was able to fund a MA Research Assistant for 2 months.

Professor Randall Ellis was awarded $102,032 from Verisk Health Inc. in support of his reserach project "Using Risk Adjustment to Predict Within-and Across-Year Utilization and Disease Patterns."

Distinguished Visitors 2015/16

Sylvain Chassang (Princeton University) visited from September 29th through October 2nd. He gave one seminar and two lectures on microeconomics.

Atif Mian (Princeton University) visited from October 5th through October 8th. He gave one seminar and two lectures on macroeconomics.

Kaivan Munshi (University of Cambridge) visited from November 2nd through November 6th. He gave one seminar and two lectures on development.

Mark Roberts (Pennsylvania State University) visited from December 7th through December 11th. He gave one seminar and two lectures on IO/ Health.

Richard Blundell (University College, London) visited from April 4th through April 8th. He gave one seminar and two lectures on labor.

Pete Klenow (Stanford University) visited from April 25th through April 29th. He gave one seminar and two lectures on macroeconomics.

Oliver Linton (University of Cambridge) visited from May 2nd through May 6th. He gave one seminar and two lectures on econometrics.

2016 Rosenstein-Rodan Prize

The Rosenstein-Rodan prize is awarded annually for the best paper in a development-related area written by a PhD student. The 2016 Rosenstein-Rodan prize will be awarded to **Mesay Melese Gebresilasse** for his paper titled "Industrial Policy and Misallocation in the Ethiopian Manufacturing Sector."

The paper uses a rich plant-level census data from 1996-2009 to examine distortionary effects of two policies that were intended to support prioritized sub-sectors and regions on productivity of the Ethiopian manufacturing sector. The first phase implemented during 1996-2002 was an activist industrial policy favoring import substitution. The second phase from 2003-2012 emphasized export promotion. The policies were associated with large misallocation (measured by dispersion of within-industry revenue productivity a la Hsieh-Klenow). These were smaller though still sizable (with industry level TFP gains ranging from 90-180% estimated from removal of the policy) in the second phase. Most of these arose from cross-sectoral (rather than cross-regional) variations in support. The paper finds that priority sector support policies lessened the extent of misallocation.

Annual Distinguished Alumni Award

The Institute for Economic Development and the Department of Economics continued the annual award to honor a distinguished alumnus. The Department Chair and IED Director, along with a few senior faculty, established this award to recognize the remarkable accomplishments of our alumni and to inspire and motivate current students in the department.

2016 recipient of the Distinguished Alumni Award is **Dr. Tejash Shah.** Dr. Shah completed the BA/MA in Economics at Boston University in 2001 and went on to obtain a Doctor of Medicine degree from the Albert Einstein College of Medicine at Yeshiva University, New York, in 2005. After practicing medicine as a physician at New York Presbyterian Hospital for two years, Dr. Shah joined McKinsey and Company as a Management Consultant. He spent nearly five years with McKinsey before being appointed Director of Corporate Strategy for Merck, one of the largest pharmaceutical companies in the world. In 2014, he moved from New Jersey to the San Francisco Bay Area where he is currently Director of Strategy and Business Development for Samsung, the giant Korean multinational conglomerate.

Tejash Shah was honored at an alumni reception at the BU Castle on May 12th, 2016, attended by students, faculty and alumni. He was presented with the award at commencement and spoke eloquently to the graduates and guests.

Seminars

IED organizes a weekly seminar during the academic year where visiting speakers present their research. The following is the list of seminars for the 2015-16 year:

Fall 2015

9/21/15
Claudio Ferraz, PUC-Rio
"Human Capital Persistence and Development"

9/28/15
Omer Moav, University of Warwick
"Cereals, Appropriability and Hierarchy" (joint paper by Joram Mayshar, Omer Moav, Zvika Neeman, and Luigi Pascali)

10/19/15
Ben Olken, MIT
"Privatization at the Bottom of the Pyramid: Experimental Evidence on Subsidized Food Distribution in Indonesian Villages"

10/26/15
Cristian Pop-Eleches, Columbia University
"Understanding Interactions between Family and School Environments in Human Capital Formation" (joint w/ Ofer Malamud and Miguel Urquiola)

11/9/15
Nathan Nunn, Harvard University
"The Evolution of Culture and Institutions: Evidence from the Kuba Kingdom"

11/16/15
Imran Rasul, University College London
"Nation-Building Through Compulsory Schooling During the Age of Mass Migration"

11/23/15
Michael Kremer, Harvard University
"Joint Liability, Asset Collateralization, and Credit Access"

11/30/15
Taryn Dinkelman, Dartmouth College
"Labor migration and the structure of rural labor markets"

12/7/15
Gani Aldashev, ECARES (Université libre de Bruxelles) and CRED (University of Namur)
"Colonization and changing social structure: Theory and Evidence from Kazakhstan"

Spring 2016

3/21/16
Anant Nyshadham, Boston College
"Management and Shocks to Worker Productivity"

3/28/16
Phil McCalman, University of Melbourne
"International Trade, Income Distribution and Welfare"

4/4/16
Rohini Somanathan, Delhi School of Economics
"Caste connections and government transfers: The Mahadalits of Bihar"

4/11/16
Tarek Ghani, Princeton University
"Competing for Relationships: Markets and Informal Institutions in Sierra Leone"

4/25/16
Eliana La Ferrara, Universitá Bocconi
"Shaping educational careers of immigrant children: Aspirations, cognitive skills and teachers' beliefs"

5/2/16
Namrata Kala, Harvard University/MIT
"Learning and Adaptation: Evidence from Indian Agriculture"

Boston University
The Institute for Economic Development
Research Review
264 Bay State Road
Boston, MA 02215

IED Affiliates

Kehinde Ajayi
Marianne Baxter
Samuel Bazzi
Christophe Chamley
Francesco Decarolis
Randall Ellis
Raymond Fisman
Martin Fiszbein
Stefania Garetto
Simon Gilchrist
John Harris
Leroy Jones
Robert G. King
Laurence Kotlikoff
Kevin Lang
Robert E. B. Lucas
Robert Margo
Jianjun Miao
Dilip Mookherjee
Andrew F. Newman
Daniele Paserman

Contact Information:

The Research Review is published annually by the Institute for Economic Development at Boston University. The Review is also posted on the IED website at www.bu.edu/econ/centers/ied.

Editors:
Dilip Mookherjee, Director;
Eleanor Langdon, Administrative Manager;
and Lee Tucker, PhD Candidate

Copies of most IED discussion papers are available as PDF files from our website:
http://www.bu.edu/econ/centers/ied

The Institute for Economic Development welcomes questions or comments:
e-mail: ied@bu.edu
phone: 617/353-4030
fax: 617/353-4143