The Institute for Economic Development

Research Review

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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.

Memorial
John Harris

With deep regret we announce the passing away of Professor John Harris, who spent most of his distinguished career at Boston University, and was the longest serving member of the Institute for Economic Development. He was a leader in the field of development economics; his 1970 paper laying out a new framework for understanding rural-urban migration in the developing world was highly influential, appearing in development economics curricula worldwide. He will be greatly missed by colleagues, family, friends and students.

John Harris received his PhD in economics from Northwestern University in 1967. He joined the economics department faculty at MIT in 1966 as an Assistant Professor, moved to the MIT Economics and Urban Studies department as an Associate Professor in 1971 and then to the Economics department at Boston University in 1975 as Professor.

During 1968-69 he visited the Institute for Development Studies in Nairobi. His paper with Michael Todaro in the 1970 American Economic Review (AER) on a two sector model of migration and development subsequently became a classic in the field, the only paper in development economics which appeared in the Top Ten list of most cited AER papers in the 20th century. Growing out of his experience of problems of urban unemployment in Nairobi, the paper reversed the standard formulation of rural-urban migration in developing countries by Arthur Lewis from the 1950s. In the Lewis theory, the problem of economic development is a misallocation of labor between rural and urban areas owing to institutional rigidities in agriculture which prevent workers from migrating to urban areas where they are more productive. The Harris-Todaro turned the logic of the Lewis theory on its head, where institutional rigidities appeared in the form of labor market frictions in the urban sector instead of the rural sector. These resulted in excessive migration and urban unemployment. The theory generated a paradoxical result whereby urban unemployment is aggravated by efforts to generate more employment in urban areas, owing to induced effects on migration. The paper had a profound impact on both policy and research on migration and development, becoming the standard workhorse model of rural urban migration in development economics to this day.

From the early 1980s, Harris became involved in research and policy projects in Indonesia and Africa. He served as an advisor to the National Planning Agency and Central Bureau of Statistics of Indonesia, and was a member of the Advisory Group of Macroeconomic Research Network for Eastern and Southern Africa (precursor to the African Economic Research Consortium). At Boston University he was Director of the multidisciplinary African Studies Center between 1975 and 1987. During the 1990s, his research switched to studying effects of financial liberalization on capital structures of firms in developing countries. In the past decade he became involved in a multidisciplinary project with the Pardee Center at Boston University on effects of remittances by migrant workers in the rehabilitation of post-conflict African countries.

Subsidising The Private Sector For Development: Lessons From Mechanism Design

By: Paddy Carter, Francesco Decarolis and Nathaniel Young

Discussion Paper 295

The use of aid to stimulate financial flows through development finance institutions (DFIs) is a dominant theme in donors' development finance strategies. The role of DFIs is not to replace private finance, but instead achieve 'additionality' - making something happen that would not happen otherwise. In other words, DFIs promote private sector development by financing projects that would not be viable without the public sector.

In the absence of transaction costs, DFIs should be able to select deserving entrepreneurs. However, the issues of adverse selection and moral hazard are common in these contexts. For example, DFIs may not know the likelihood of success of a project, or be able to trust that the entrepreneur receiving an investment works hard to ensure the project is a success. Contract theory seeks to analyze which types of trades are possible when these situations arise, and mechanism design helps to understand how the DFIs can best achieve their goals of additionality despite asymmetric information. The authors of this paper discuss these problems, the key principles of contract theory and mechanism design, and their relevance in this context to provide insights that can be of use to DFIs.

To present some of these insights more formally, the authors first present a simple stylized model which begins with one principal (investor) and one or more agents (project sponsors) for whom effort can be more or less costly depending on his or her type. In the unrealistic situation where the type of the agent is observed, the principal can simply pay the agent the minimum amount required to participate, the required effort level dependent on the agent's type. When the state is observed only by the agent, the previous contract is impossible, as the types for whom effort is less costly (high types) would claim that they were the types for whom effort is more costly (low types) to incur a lower cost of effort. To identify the optimal contract in this context, one can restrict attention to mechanisms in which the agents are willing to reveal their type. In order to do this, the optimal contract must entail the agent earning a rent, which is subtracted from principal's value. Thus, the total profitability of the project is lower than in the first case as a result of the information asymmetry.

The authors then explain a case in which there are multiple agents competing for financing, and briefly discuss different notions of equilibrium (ex-ante, interim, and ex-post). As in the previous case, the revelation principle applies in that these notions of equilibrium can be achieved using mechanisms in which revealing his/her type is optimal for the agent conditional on knowing the actions of other agents and regardless of the other agents' actions in an ex-post equilibrium. If there are instead multiple principals that want to select agents to perform a project, then the efficient outcome is not guaranteed. In this context, only scenarios where the two types accept different contracts are generally compatible due to the competition between principles.

After developing these theoretical considerations, the authors present several related examples. In the first example, a DFI decides whether or not to subsidize a project, and if so by how much. The objectives of the DFI are to fund projects that would not be completely funded by the private sector (additionality) and not subsidize more than necessary so as to not crowd out private lending. When there are multiple firms competing for the project, the model predicted that the optimal mechanism was one in which the firms revealed their true costs, such as an auction which the authors explain has been put in practice by the World Bank. The authors also explain that competition among firms can be leveraged in the same way when there is heterogeneity in contractor performance, or when the firms come from different sectors.

In another example, the DFI attempts to contract the entrepreneurs' effort levels to maximize the project's social value, where only the entrepreneurs know their private cost given effort levels. The illustrative model showed that the optimal contract with this information asymmetry must induce borrowers to reveal their type, which requires paying rents to the entrepreneurs and thus reducing the project's profitability/social value. These, along with other relevant examples presented in the paper, demonstrate the issues that can arise in the activities of DFIs. They also show the opportunities DFIs are presented to increase the impact of their funds by reducing the inefficiencies that are the result of asymmetric information.

Breaking The Cycle? Education And The Intergenerational Transmission Of Violence

By: Bilge Erten and Pinar Keskin

Discussion Paper 296

Physical abuse against children is an issue in both developing and developed countries. Evidence provided by psychology literature suggests that adults who experienced abuse as children are more likely to perpetrate such abuse (Merrill et al., 1996; Narang and Contreras, 2000; Craig and Sprang, 2007; Crouch et al., 2001). Studies have shown that parental education has positive effects on child health outcomes (Chen and Li, 2009; Chou et al., 2010; Grépin and Bharadwaj, 2015; Glewwe, 1999 ; Agüero and Bharadwaj, 2014; Grépin and Bharadwaj 2015; Gunes 2016) and thus could potentially have an effect on child abuse specifically. The authors of this paper combine these two strands of research by investigating the effect of parental education on both child abuse and the intergenerational transmission of violence documented by the psychology literature. To do this, the authors exploit a policy in Turkey which extended the grade level of compulsory schooling.

In 1997, the parliament of Turkey passed a law which extended compulsory schooling from five to eight years. The combination of the school starting age law and the timing of this new law implied children born before January 1987 could drop out after the fifth grade, while those born after January 1987 were required to continue schooling through the eighth grade. The authors exploit this birthdate cutoff by using a Regression Discontinuity (RD) design. Using a nationally representative survey of women that provided information regarding the use of violence against children, exposure to violence during childhood, and other health and socioeconomic indicators; the authors first estimate the effect of the policy on educational outcomes. They find that the reform increased schooling by 0.7 years and increased the probability of completing junior high school by 19%. The authors then explore whether the law had heterogeneous effects by region. They find that for women raised in rural areas the law increased education by 1.1 years.

After estimating the significant and positive impact of the 1997 law on educational outcomes, the authors are able to justify using a Fuzzy RD design which uses the birthdate cutoff as an instrument for educational attainment. This identification strategy allows the authors to estimate the effect of education on child abuse. They found no evidence of a significant effect of education on ever abusing or frequently abusing children for women in both the overall sample and the sample limited to women from rural regions. The authors then explore whether education has a differential impact on mothers that experienced abuse as a child. The authors document the intergenerational transmission of violence in this context by finding that women who were exposed to violence as children are more likely to exert physical violence against their children. However, for women who were exposed to violence as children from rural regions, educational attainment has a negative impact on physical child abuse. Thus, though women in rural regions that were exposed to violence are more likely to abuse their children, a higher level of education for these mothers reduces this probability of abuse. The authors then explore several potential mechanisms underlying this effect. They find that the reform did not have a differential effect on attitudes towards violence, labor market outcomes, partner characteristics, spousal violence or fertility decisions for this high-risk group. Moreover, the reform had a positive effect on mental health outcomes for mothers with a history of childhood abuse. This evidence suggests that education can break, or at the very least, limit the cycle of intergenerational violence against children by improving the mental health of future mothers.

Robots And Jobs: Evidence From US Labor Markets

By: Daron Acemoglu and Pascual Restrepo

Discussion Paper 297

Throughout history there have been predictions that technology would ultimately replace labor and cause unemployment (Keynes, 1930; Leontief, 1952). With the current growth of automation technologies and their effect on wage inequality and employment polarization (Autor, Levy, and Murnane, 2003; Goos and Manning, 2007; Michaels, Natraj and Van Reenen, 2014), these same warnings are being heard once again. Despite evidence which shows that large portions of jobs will be automated, it is not obvious what these advances' ultimate effect will be on the labor market due to adjustments in other sectors and occupations and the costs of substituting labor with the new technologies. The authors of this paper seek to estimate the equilibrium impact of industrial robots specifically on US labor markets.

To do this, the authors first extend the frameworks of Acemoglu and Autor (2011) and Acemoglu and Restrepo (2016) so that the share of tasks performed by robots varies across industries and there is trade between labor markets specializing in different industries. This extended framework provides an equation which highlights three different forces shaping labor demand: the displacement effect, the price-productivity effect, and the scale-productivity effect. The displacement effect is what those who warned of 'technological unemployment' likely had in mind and constitutes the negative effect of robots on employment. The other two effects work in the opposite direction, partially offsetting the negative displacement effect. Automation lowers the cost of production in an industry and thus can increase labor demand in that industry (price-productivity effect), particularly in the framework where there is trade between labor markets. Because industries are complementary, this reduction in costs in industries experiencing automation increases output and thus increases employment in other industries (scale-productivity effect). The model predicts that the magnitude of the productivity effect of robots on a zone's wages and employment depends on the cost savings from the substitution of robots for human labor and the zone's level of exposure to robots. This level of exposure is computed by a weighted average of the increase in the use of robots in each US industry divided by that industry's baseline employment. Each industry is weighted by the zone's share of employment in that industry.

Using these expressions for the equilibrium effect of robots on a zone's wages and employment, the authors are able to estimate the parameters of the model. As the US exposure to robots is potentially endogenous, the authors use the adoption of robots in nine other European economies from 1993 to 2007 as an instrument for US exposure. They also control for differences in demographics, baseline shares of employment by industry, and labor market shocks (imports from China and Mexico, disappearance of routine jobs, and offshoring). The IV estimates imply that as a result of the US increase in robots adoption, a commuting zone with a value of exposure to robots equal to the average for the US experienced 0.37 percentage points lower employment to population ratio and a 0.73 percent lower wage growth compared to a commuting zone with no exposure to shocks. In the model without trade between commuting zones, the aggregate effect of robots is identical to these local estimates. In the extended framework which incorporates trade between commuting zones, the aggregate implications depend on parameters which can be backed out using the estimates of the effect of exposure to robotics on local wages and employment. The authors estimate that one more robot reduces aggregate employment by 5.6 workers (10 percent lower than the local effect) and one more robot per thousand workers reduces wages in the aggregate by about 0.5 percent. These results suggest that robots had a negative effect on employment and wages but that trade between different labor markets partially offset the displacement effect. This analysis is useful in beginning to understand how robots have affected and will continue to affect the labor market equilibrium.

Artificial Intelligence, Automation And Work

By: Daron Acemoglu and Pascual Restrepo

Discussion Paper 298

Advances in automation and AI have sparked debate regarding the potential labor market consequences. Some worry that these technological advancements will drastically decrease labor demand and thus decrease real wages and employment. Others claim that the increases in productivity will lead to increased labor demand. In this paper, the authors provide a conceptual framework to understand how automation can displace workers, but also how the development of automation and AI technologies can have countervailing effects which can potentially offset the negative effect on labor demand, and thus wages and employment.

In their task-based framework, automated tasks can be completed by machines or labor and nonautomated tasks can only be produced by labor. Labor productivity differs over the set of tasks and thus has varying degrees of comparative advantage in the nonautomated tasks. The authors use the equilibrium wage condition to analyze the consequences of several technological advances. The first result shows that an increase in automation at the extensive margin causes a displacement effect which reduces labor demand along with a countervailing productivity effect which increases labor demand. The increased productivity caused by automation reduces the cost of production which allows firms to expand employment in other tasks. It also reduces prices which causes households to have greater purchasing power and thus leads to greater demand for all goods and services, thereby increasing the demand for labor in other industries. The displacement effect dominates the productivity effect when the new technologies are only marginally better than labor at the newly-automated tasks. This implies that it is not productive automation technologies that threaten labor but rather the mediocre ones that displace workers but do bring significant gains in productivity. Both increases in the supply of machines in newly automated tasks (i.e. capital accumulation) and the deepening of automation (i.e. automation at the intensive margin) also cause wages to increase. Like the productivity effect, the deepening of automation, and capital accumulation; the development of new tasks in which labor has a comparative advantage increases labor demand. Unlike these other countervailing effects, the development of new tasks also increases the share of labor in national income. The authors also argue that this force has kept the share of labor in national income from declining steadily with the continued developments in automation. The model and its results help to clarify the debate on automation technologies' effects on labor by showing that these advancements will not necessarily bring the end of human work nor will they always increase labor demand.

The authors recognize that the adjustment to new tasks may be slow due to the new skills that are required. To better understand the consequences of the adjustment process, they present a simple framework with two types of workers (skilled and unskilled) along with a set of tasks where low-skill workers can only perform tasks below a certain threshold. The equilibrium wage conditions for the two types of workers predict that automation at the extensive margin increases the skill premium. The increase in inequality due to automation is larger and the productivity gains are smaller when the set of tasks that can be performed by low-skill workers is smaller. The model also predicts that the smaller this set of tasks, the smaller the productivity gains from the development of new tasks will be as they will require high-skill workers who will be more scarce and expensive. Thus, to limit increasing inequality and boost productivity, society must increase the supply of necessary skills. Productivity can also be slowed by "excessive automation" which the authors show can be caused by biases in the US tax code and labor market imperfections and frictions. The authors argue that these policy implications regarding the education and training of the workforce and providing optimal incentives for research effort in both automation and the development of new tasks is vital for economic growth and shared prosperity.

Demographics And Automation

By: Daron Acemoglu and Pascual Restrepo

Discussion Paper 299

Many countries are experiencing significant demographic change, particularly the aging of their populations. Though some have warned that this type of demographic change could have serious negative macroeconomic consequences (e.g., Gordon, 2016) , there is no evidence of a negative relationship between a country's growth and the aging of its population. There are, however, differences in the adoption and production of robots between countries experiencing different levels of demographic change. In the US and UK, the adoption rates of robots lags behind those of Germany, Japan, and Korea while at the same time the US and UK's populations have aged slower than these countries. This fact leads the authors to hypothesize that countries with aging populations offset the negative consequence of a decrease in the relative share of productive middle-age workers with the adoption and development of automation technology.

To understand how this type of demographic change affects the adoption and development of automation technology, the authors first provide a framework where there is exogenous technology and endogenous technology adoption. They assume that middle-aged workers focus on production tasks, where automation technology is a substitute, while older workers focus on service tasks. The model predicts that as middle-aged workers become more scarce and thus more expensive, the adoption of existing automation technologies increases. If the wage of middle-aged workers is higher than that of older workers, aging will have a negative effect on aggregate productivity. They then modify the model by incorporating endogenous technology development. A result shows that an increase in the wage of middle-aged workers incentivizes the development of additional automation technology. The model predicts that aging has an unambiguous effect on both development and adoption as machines and middle-aged workers compete due to their substitutability. Also, this effect should have a larger impact in industries that rely more heavily on middle-aged workers and those that present greater technological opportunities for automation. This increases these industries' productivity relative to others. Thus, the effect of aging on aggregate productivity is ambiguous: the share of older workers to productive middle-aged workers increases but this negative effect is offset with the development and adoption of automation technologies.

The authors test these predictions using cross-country data on demographic change and the adoption and development of robots. They find that aging is associated with an increase in the adoption of robots as measured by the change in the stock of robots per thousand workers. To test the effect of aging on technology development, the authors use a similar specification but instead use measures of a country's exports of automation technologies and patents related to robotics, as these are both signs of innovation in this area. Consistent with the theory which predicts that aging leads to further development of robotics, they find that aging is associated with greater exports of industrial robots and more robotics-related patents. Analyses at the US commuting zone and industry level provide empirical evidence consistent with the prediction that both adoption and development is higher in industries that rely more on middle-aged workers and have greater opportunities for automation. Lastly, the authors investigate how demographic change affects productivity. In industries with greater opportunities for automation, an increase in aging is associated with relative productivity gains. Overall, the empirical results are largely consistent with the authors' model and suggest that countries with aging populations have increased the adoption and development of robots, limiting the negative economic consequences of this demographic change.

Come Together: Firm Boundaries And Delegation

By: Laura Alfaro, Nick Bloom, Paola Conconi, Harald Fadinger, Patrick Legros, Andrew F. Newman, Raffaella Sadun, and John Van Reenen

Discussion Paper 300

Little is known theoretically, and even less empirically, about the relationship between the determination of a firm's boundaries and the allocation of decision rights within them. This paper presents a model of organizational design in which firms choose which suppliers to integrate, and whether to delegate decisions to integrated suppliers. It then offers tests of the model's predictions using a novel dataset, which combines measures of vertical integration and delegation for a large set of firms from many countries and industries.

Though decentralizing decision-making within firm boundaries via delegation, and decentralizing them across boundaries via non-integration, are superficially similar in that they both relate to the distance of decision rights from the "center" of the organization, they are conceptually, as well as legally, distinct. Delegation is informal, revocable by managerial fiat, while non-integration is formal, mediated by purchase and sale of productive assets. A nonintegrated supplier is outside the firm boundaries and thus has complete control over the residual decisions involving production of its input. An integrated supplier only has as much control over these decisions as its owner chooses to confer, something that is often decided "on the fly," in response to information that arrives during the course of production. The question for this paper is how these distinct elements of orgranizational design interact.

Consider a final good producer ("HQ") who assembles inputs from suppliers whose capabilities at solving production problems are uncertain at the time of contracting. HQ first decides whether or not to integrate (buy the assets of) the supplier of a required input and then chooses the level of control over the decision-making (i.e., degree of delegation) given to the supplier. If the HQ does integrate the supplier, then once the production process begins, the supplier's capability is revealed, and HQ will find it optimal to centralize (retain control) over actions for which the supplier's capability is low enough, and delegate those for which the capability is high, even though delegation does entail some loss due to the imperfect alignment of incentives between and HQ and the supplier.

Integration thus offers a form of "supply assurance," wherein the rights to retain or cede control ensure HQ at least a modicum of input. If the HQ decides not to integrate the supplier, then the there is no question of reallocating control in response to information (it is always retained by the supplier), and the input's contribution to the value of ouput will is entirely dependent on the vagaries of supplier capability. Integration thus acts as a kind of real option, since among the rights acquired when one buys the supplier's assets is the option to cede control back to supplier.

It does come at a cost, though, because when HQ retains control, she imposes decisions on the supplier that maximize her own payoff rather than his, and these are likely to be very costly for him; to agree to sell his assets to HQ in the first place, he must be compensated for these anticipated costs. Nonintegration imposes no such costs, since he makes the decisions that maximize his own payoff.

The model makes several predictions based on how HQ's with different productivities, entrepreneurial abilities, or enterprise values would differentially choose to integrate and delegate. Because integration is more producitive on average than nonintegration, but also costly, more valuable enterprises are more likely to integrate. However, more valuable enterprises also benefit from better incentive alignment between HQ and supplier (profit weighs more heavily comared to costs for more valuble enterprises), and are threfore more likely to delgate once they have intgrated. Thus (1) integration and decentralization are expected to covary positively. A simlar logic suggests that (2) more important inputs (ones that contribute more to firm value) are more likely to be integrated and delegated then less important ones. Finally, the basic mathematics of option theory then come into play, implying that (3) the more uncertainty about supplier capability there is, the higher the option value, and therefore the more likely HQ will wish to integrate.

The model's predictions are then tested in the paper using the novel dataset, a matched sample of about 3,000 firms in 20 countries comprising vertical integration measures, based on Dun & Bradstreet's WorldBase dataset and the Bureau of Economic Analysis Benchmark Input-Output (IO) Tables, and delegation measures taken from the World Management Survey. Vertical integration is measured based on whether a firm produces inputs that are required for its primary activity. Decentralization is measured in terms of how much autonomy plant managers report having over a standardized set of production decisions.

In the data, more vertically integrated firms delegate more decisions to their plant managers, consistent with the model's first prediction. Inputs with larger IO coefficients (a measure of the importance of the input to firm value) are more likely to be integrated, and among inputs that are integrated, those with larger IO coefficients report more autonomy, in line with its second prediction. Finally, the input sector's coefficient of variation in productivity (proxying for uncertainty about supplier capability) is positively associated with the likelihood of integration, as the third rediction suggests.

These empirical results provide evidence that the authors' model is a useful framework for understanding how firm boundaries and delegation are related as well as some of the factors that influence these elements of organizational design.

Distributional Preferences In Larger Groups: Keeping Up With The Joneses And Keeping Track Of The Tails

By: Raymond Fisman, Ilyana Kuziemko and Silvia Vannutelli

Discussion Paper 301

Models of distributional preferences help inform our understanding of support for redistributive policies, political preferences, and the provision of public goods. Much of the emphasis in existing literature has been on testing various models of inequality aversion. Many of these models assume functional forms in which the incomes of others matter only in aggregate, or which add the possibility that individuals try to help the worst-off person. These models have performed well in experimental tests in which the decision-maker divides earnings between herself and a single recipient or pair of recipients. But relatively little work has explored their predictions in larger groups that may have more direct analogs in the real world.

To this end, we devise a simple experiment that allows subjects to express, via revealed preference, their concern for inequality at different points in the income distribution relative to their own. As a result, we can distinguish the extent to which subjects place equal weight on the income gaps between themselves and all other individuals above them (as in the most literal interpretation of Fehr and Schmidt (1999)) or if the incomes of people in certain positions (e.g., the very top) in the income distribution appear to place higher weight on their own utility. Similarly, we can test whether all advantageous income gaps between oneself and those below carry equal weight.

Specifically, we conduct a set of experiments via Mechanical Turk (MTurk) in which each subject is confronted with a choice between two hypothetical societies A and B, each with a different income distribution. In most versions of the experiment, each distribution is comprised of seven individuals, including the subject herself. The two societies have different income distributions, generated by taking independent draws from the same underlying process. The data generating processes are designed to be reflective of the rough level of prosperity in the United States.

Our first set of results focuses on whether certain positions (most obviously the highest- and lowest ranked ones) play a particularly prominent role in subjects' choices. We find a very robust emphasis on reducing extreme inequality. Consistent with Rawlsian preferences, subjects are significantly more likely to select the distribution that raises the bottom individual's income. This effect is very large: a subject is about 30 percentage points more likely to select the distribution in which the least well-off individual's income is higher. More novel, we also find a robust and quantitatively important emphasis on lowering the income of the individual in the highest position in the distribution: subjects are more than ten percentage points more likely to select the distribution with a lower income in the top position, all else equal. Apart from the top and bottom incomes, no other absolute position has any impact on subjects' decisions.

In our second set of results, we define others' positions in a relative sense: one position above the subject, one below the subject, and so forth. We observe a large and significant desire to reduce the income of the individual in the position directly above the subject's own income. In fact, this effect is comparable in magnitude to subjects' preference for lowering the income of the individual at the highest position in the distribution. By contrast, the income two positions above her has no impact on the choice of distribution, and we can reject at high levels of precision that these two effects are of equal magnitude. Such a result is inconsistent with a general desire to reduce inequality.

Our findings help reconcile some attitudes toward inequality that are harder to explain with standard models. For example, consideration of local versus topmost competitiveness is consistent with the popular outrage over the high incomes of the top one percent. It can similarly explain why people care about ``keeping up with the Jones" while at the same time ignoring the somewhat more prosperous Johnsons.

Frontier Culture: The Roots And Persistence Of "Rugged Individualism" In The United States

By: Samuel Bazzi, Martin Fiszbein, and Mesay Gebresilasse

Discussion Paper 302

Rapid westward expansion marked the early history of the United States. According to the influential historian Frederick Jackson Turner, the presence of "a continually advancing frontier line" at the "edge of free land" strongly influenced American culture. The frontier fostered the development of distinctive cultural traits, including individualism and opposition to government intervention. The combination of these two traits characterizes "rugged individualism," a term popularized by Herbert Hoover in his 1928 presidential campaign.

This paper shows that the American frontier shaped a culture of rugged individualism that persisted throughout time. To understand the contemporaneous and long-run effects of the frontier, we revisit the classic Frontier Thesis through the lens of modern political economy and social psychology. In our conceptual framework, the significance of the frontier can be explained by three factors. First, frontier locations attracted individualists able to thrive in harsh conditions. Second, frontier conditions—isolation and low population density—further cultivated self-reliance, and they offered favorable prospects for upward mobility through effort, nurturing hostility to redistribution. Finally, frontier conditions shaped local culture at a critical juncture, thus generating persistent effects.

We empirically examine the Frontier Thesis and identify its long-run implications for culture and politics. First, using Census data from the 18th and 19th century, we establish the higher male-to-female ratios and other distinctive demographics that historically characterized frontier locations, as well as their higher levels of individualism. Then, using modern survey and Census data, we show that locations historically exposed to the frontier for a longer period exhibit higher contemporary levels of individualism, lower desired and actual levels of redistribution, and stronger opposition to government regulation. To do this, we track the frontier throughout the 1790–1890 period and construct a novel, county-level measure of total frontier experience (TFE). Finally, using linked Census records, we document empirical patterns that point to the origins of frontier culture. Frontier individualism is partly but not entirely explained by selective migration. Frontier conditions favored individualism through higher socioeconomic returns, and they created expectations of high income growth through effort, which fueled opposition to government intervention.

The patterns that we identify cut across known divides in the U.S., including urban–rural and north–south. Overall, our findings shed new light on the frontier's persistent legacy of rugged individualism.

What Are The Consequences Of Global Banking For The International Transmission Of Shocks? A Quantitative Analysis

By: José L. Fillat, Stefania Garetto, and Arthur V. Smith

Discussion Paper 303

This paper studies the consequences of the organization of foreign banks in the United States for the transmission of financial shocks across countries. Multinational banks are very large players in the US economy: their size and involvement with the real economy makes them important vehicles for the global transmission of shocks.

The authors establish a set of stylized facts about global banks in the US. First, there is selection by size, related to banks' organization mode: foreign subsidiaries of global banks and their parents are systematically larger than foreign branches and their parents. Second, the mode of foreign operations affects the response of global banks to shocks. In particular, in the wake of the European sovereign debt crisis, US branches of exposed European banks experienced a flight in their uninsured deposits, while all subsidiaries' deposits grew. The shortage of funding that branches experienced was only partially compensated by intrafirm transfers of funds from their parents. At the same time, branches' assets in the US decreased, while subsidiaries' assets increased.

To rationalize these facts, the authors develop a structural model of global banking whose assumptions mimic the institutional details of the US regulatory framework. The model distinguishes foreign banks by their mode of entry, which is endogenous and responds to differences in regulation and management efficiency. Once calibrated, the model is able to replicate the features of the cross-section of foreign banks in the US and the differential response to shocks of branches and subsidiaries. The model is then used to perform counterfactual exercises that shed light on the implications of the current regulation for shock transmission. The results suggest that increased capital requirements, the elimination of branching, or an ad-hoc monetary policy intervention would have mitigated the negative effects of the crisis on US aggregate lending. Conversely, the elimination of subsidiarization would have caused an even more severe decline in banking activity in the US. The model has also interesting implications about the possible response of foreign banks to "large" shocks to their parents. More precisely, the lack of an internal capital markets between parent and subsidiaries implies that, following a "large" shock, a parent bank may decide to repatriate funds by shutting down its subsidiaries overseas. As an external validation of this mechanism, the authors show that subsidiaries are more likely to exit than branches, and that exits are more common in periods of declining parent equity positions.

Finally, the model highlights the ability to mitigate the transmission of financial shocks across countries that different organizational forms present. Subsidiarization isolates banks' balance sheets by location, hence minimizes contagion. However, it does not provide an effective instrument to dampen the global effect of shocks, resulting in possible reorganizations and exits. Conversely, parent-branch conglomerates can take advantage of their internal capital market, smooth the effect of shocks across countries, and reduce their global impact.

Peer Effects In Legislative Voting

By: Nikolaj Harmon, Raymond Fisman, and Emir Kamenica

Discussion Paper 304

Political scientists and economists have long been interested in how legislation gains support. Lawmakers may be swayed by earmarks or other benefits to themselves or their electorate. Or they may be cajoled, convinced, or subjected to social pressure by their peers. How big a role peer influence plays is an empirical matter, but one that is notoriously difficult to resolve. In this paper, we exploit alphabetical seating in the European Parliament to study peer effects among its members. Using flexible controls for name similarity, we instrument for whether two Members of the European Parliament (MEPs) sit next to each other based on their alphabetical adjacency within the party.

Our IV estimates indicate that sitting next to each other reduces the probability that two MEPs from the same party differ in their vote by 0.6 percentage points. This represents a 7 percent decline relative to the 8.55 percent average rate of within-party disagreement and is about one-tenth of the size of the impact of being from the same country.

To buttress our identification approach, we use placebo tests that exploit the fact that party leaders and members of four small parties do not sit alphabetically. Reassuringly, alphabetical adjacency has no impact on voting congruence among these MEPs. As an additional check, we also verify that once we condition on contemporaneous and past seating, future seat adjacency does not predict current voting outcomes.

We also explore the mechanisms behind the observed peer effects by examining the influence of present versus past adjacency, and by looking at heterogeneity in the magnitude of peer effects across MEP-pair attributes and the importance of the proposal under consideration. In our first set of analyses, we distinguish 'contemporaneous' peer effects — that operate while the pair is seated together — from 'persistent' peer effects that remain even when the peer is not present.

The European Parliament convenes in two separate venues, in Brussels and Strasbourg, each with a distinct seating chart. Differences across venues in the seating layout makes it possible for a pair of alphabetically adjacent MEPs to sit together in one venue but not in the other. We find that having sat together in Strasbourg during the previous session affects current session voting in Brussels, even after accounting for (current) seating proximity in Brussels. These findings show that peer effects contain a persistent component.

Turning to heterogeneity in peer effects, we find that peer effects are much stronger when the two MEPs are from the same home country or are both women. For these groups, we estimate that seat adjacency reduces disagreement by about 1.3 percentage points, corresponding to percentage declines in disagreement between 17 and 40 percent. These findings suggest that peer exposure serves as a complement to having other shared attributes, such as country of origin or gender — that facilitate social pressure or communication. Looking at subsamples of proposals that passed by narrow margins, we find that peer effects are also stronger in close, highstakes votes. For example, in votes decided by a margin of 1 percent or less, seat adjacency reduces disagreement by nearly 2 percentage points.

Labor Market Engagement And The Health Of Working Adults: Evidence From India

By: Archana Dang, Pushkar Maitra and Nidhiya Menon

Discussion Paper 305

There has been a widespread increase in rates of overweight and obesity in many developing countries. This paper examines the effect of occupational engagement and work intensity on the weight of urban working women and men in India. While energy intake and expenditure can both have a significant effect on weight, we focus on the latter. Specifically, using nationally representative data from India, we examine the effect of occupational activity on the body mass index (BMI) of urban working Indians. Occupational activity is measured by sector of work and intensity of work. Our focus will be on urban residents where the phenomenon of overweight and obesity is more pronounced.

Tailoring measures of physical intensity of work (metabolic equivalents) to the structure of occupations in India, this study provides new evidence on the relationship between labor market work and weight in a country where the number of over-nourished people is increasing dramatically. Conditional on observed covariates, controls for location and time and conditioning for the effect of unobservables, we find that being employed in a low activity occupation results in higher BMI. In particular, women employed in white collar work are approximately 1.01 kilograms/meter2 (kg/m2) heavier than women in blue collar work (a difference of 4.12%). The corresponding relative difference for working men is 1.18 kg/m2, a difference of 4.81%. We find comparable results when work is measured in terms of its intensity of work (that uses metabolic equivalent values). Our results are robust to a variety of specification tests.

We build on the (limited) existing literature in two important ways. First, by demonstrating that occupational activity levels are important health predictors, we offer an explanation for the puzzling situation in India where increases in weight coexist with overall declines in intake levels. Although intake thresholds may have declined, the aggregate occupational structure of the economy appears to have transitioned to a more sedentary profile that accompanies general structural development over time. In consequence, average BMI continues to rise. Second, by creating a mapping of occupations and metabolic equivalent values, we provide a more complete measure of the intensity of work in India than has been done before.

FACULTY PROFILES

Kehinde Ajayi focuses on 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. She left Boston University at the end of the academic year to take up a new position at the World Bank.

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 is a development economist whose research spans labor and political economy. His published research examines the role of labor mobility in the process of economic development, the effect of commodity price shocks on civil war, and best practice in identifying the causes of economic growth. In ongoing projects, Bazzi investigates why ethnic diversity causes conflict, the role of diversity and migration in nation building, how information on recruitment agency quality affects migration choices and outcomes, and the long-run effects of the American frontier on political culture in the United States. Other ongoing research explores firm dynamics and drivers of productivity 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. He recently left Boston University to take up a fulltime position at Universita Bocconi in Milan.

Randall Ellis' recent research focuses on how health care payment systems affect consumers, health care providers and health plans. He is actively using big data to address policy issues, consumer demand, 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, and Germany. He is currently collaborating with researchers in the US, Australia, and Brazil, and as well as with BU graduate students on US and developing country topics.

James Feigenbaum is an economic historian and a labor economist whose research explores the roots of economic inequality and intergenerational mobility. Recent projects include studies of the negative effects of the Great Depression on economic mobility, the short- and long-run effects of wartime capital destruction during the US Civil War, and estimating the effect of lead exposure and violent crime in the early 20th century.

Raymond Fisman works in two main areas of political economy --- the causes and consequences of inequality, and corruption. His recently work on the consequences of social ties in Indian banking was recently published in the American Economic Review, and his research on social ties and favoritism in Chinese science is forthcoming in the Journal of Political Economy. His book on corruption, with political scientist Miriam Golden, was published in April of 2017.

Martin Fiszbein works in the fields of economic growth, development, history, and urban economics. In particular, his research seeks to understand the dynamics of structural change, human capital formation and economic growth. In a series of current projects, he studies the effects of the production structure 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 a trade economist with a prevailing interest in the study of foreign direct investment and the activities of multinational corporations, both from a real and from a financial perspective. Stefania's current research merges empirical analysis and structural dynamic modeling to understand the creation of multinational firms via mergers and acquisitions, and their expansion in space over time.

Tarek Alexander Hassan's research focuses on international finance and social factors in economic growth and macro-finance. His work in international finance focuses on large and persistent differences in interest rates across countries and the effect of exchange rate manipulation on the allocation of capital across countries. Another set of papers studies the effect of social structure on economic growth and the effect of historical migration and ethnic diversity on foreign direct investment.

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.

Mahesh Karra is an Assistant Professor of Global Development Policy at the Frederick S. Pardee School of Global Studies at Boston University. His academic and research interests are broadly in development economics, health economics, quantitative methods, and applied demography. His research utilizes experimental and non-experimental methods to investigate the relationships between population, health, and economic development in low- and middle-income countries. He has conducted field work in Sub-Saharan Africa, South Asia, and Latin America, and his current research uses randomized controlled trials to evaluate the health and economic effects of improving access to family planning and maternal and child health services in Malawi, India, Nepal, Sri Lanka and Tanzania.

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.

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.

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).

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's presidential address to the Economic History Association, entitled "Obama, Katrina, and the Persistence of Racial Inequality," was published in the June 2016 issue of the Journal of Economic History. He authored a chapter entitled "Labor and Labor Markets in the United States: An Historical Perspective" in the Handbook of Cliometrics, also published in 2016.

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 works on a combination of theoretical and empirical topics related to development economics. Current empirical projects include agriculture and environment, political economy, financial development, entrepreneurship and marketing supply chains in Asia; theoretical topics include inequality, globalization and organization design. He is a member of the State, Bureaucracy and Justice RA4 Program of the Economic Development and Institutions (EDI) network based at University of Namur and Paris School of Economics. He is a fellow of BREAD, CEPR and the NBER Development group.

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.

Pascual Restrepo's research interests span labor and macroeconomics. His current research examines the impact of technology, and in particular of automation, on labor markets, employment, wages, inequality, the distribution of income, and growth. Recent empirical projects include a study of the impact of industrial robots on US labor markets, a study of how the decline of routine jobs interacted with the great recession, and a study on how aging and shortages of labor induce firms to automate their production process. His theoretical work centers on developing micro-founded models of technology choice to think about the short and long-run implications of different technologies and whether the resulting growth process is balanced.

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, and Paul P. Streeten.

IED Research Visitors

Nidhiya Menon, Associate Professor of Economics at Brandeis University, visited the IED from September 2017 to December 2017. Her research interests include the behavior of individuals, households and firms in developing countries and has contributed to topics that include labor and occupational choice, gender-differentiated impacts of labor market policies, child health consequences of environmental (water) pollution, land rights and their impacts on economic welfare and children's human capital, conflict and its repercussions on occupational choice, the impact of historical institutions on child health and technology use, adult health in developing countries, and program evaluation. While at the IED, she worked closed with IED faculty and communicated with students while working on two projects on health related topics situated in a developing country.

Nishith Prakash a professor of economics at University of Connecticut began his visit at the IED in January 2018 will remain a visitor until January 2019. His primary research interests include development, labor, public policy, and health economics. While visitng the IED, Professor Prakash plans to work on joint projects related to education with IED Affiliate Raymond Fisman.

Student Activity

This year, eighteen graduating BU Ph.D. students accepted job offers. They received support from IED with regard to their preparation for the job market. Eight of them will be starting in academic positions, two are in the government and international organizations, and eight are in private companies. Congratulations to our Ph.D. graduates!

Andy Busey, consultant, NERA; Daeha Cho, lecturer (assistant professor), University of Melbourne; Kevin Cooke, associate, Analysis Group; Mario Alberto Cruz Gonzalez, post-doc, Harvard Medical School, Mass General Hospital; Buqu Gao, assistant professor, School of Finance at Nankai University; Matthew Gudgeon, assistant professor, U.S. Military Academy at West Point; Samarth Gupta, associate fellow, NCAER, Jon Lecznar, quantitative finance analyst, Bank of America; Maria D. Palacios, associate, Analysis Group; Shree Ravi, consultant, TWS Partners; Nick Saponara, senior consultant, Deloitte; Lee Tucker, economist, U.S. Census Bureau; Christoph Walsh, assistant professor, Tilburg University; Han Ye, junior professor, University of Mannheim; Mingzi Yi, associate, Bank of America Merrill Lynch; Yi Zhang, assistant professor, Jinan University; Haoyu Zhou, assistant professor, East China Normal University.

Funding Opportunities for Research

Dilip Mookherjee was awarded $58,646.90 from the EDI (Economic and Development Institutions) to begin his research "Discertion versus Rule-Based Budgeting and Bureaucratic Assignment in Indian Governments". He was also awarded $73,356 from the EDI to begin his research "Community Networks and Industrial Entrepreneurship in India and China".

Distinguished Visitors 2017/18

Ariel Burstein (University of California, Los Angeles) visited from September 11 - 15, 2017. He gave one seminar and two lectures on Macroeconomics.

Frederico Finan (University of California, Berkeley) visited from September 18 - 22, 2017. He gave one seminar and two lectures on Development.

Matthew Jackson (Stanford University) visted from October 2 - 6, 2017. He gave one seminar and two lectures on Theory.

Pinelopi Goldberg (Yale) visited from December 4 - 8, 2017. She gave one seminar and two lectures on IO/Health/Trade Economics.

Leah Boustan (Princeton University) visited from March 19 - 21, 2018. She gave one seminar and two lectures on Empirical Microeconomics.

Benjamin Moll (Princeton University) visted from April 2 - 6, 2018. He gave one seminar and two lectures on Macroeconomics.

Patrick Bayer (Duke University) visited from April 23 - 28, 2018. He gave one seminar and two lectures **on Empirical Microeconomics.**

Hashem Pesaran (University of Southern California) visited from April 30 – May 4, 2018. He gave one seminar and two lectures on Econometrics.

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.

The 2018 recipient of the Distinguished Alumni Award is Richard G. Frank. Richard G. Frank is the Margaret T. Morris Professor of Health Economics in the Department of Health Care Policy at Harvard Medical School. Professor Frank received his Ph.D. in Economics from Boston University in January 1982. His dissertation, "Pricing and Location of Physician Services in Mental Health" was Accepted with Distinction by the BU Department of Economics. In 1986 Professor Frank received a New Investigator Research Award, from the National Institute of Mental Health. From 2009 to 2011, he served as the deputy assistant secretary for planning and evaluation at DHHS directing the office of Disability, Aging and Long-Term Care Policy. From 2013 to 2014, he served as a Special Advisor to the Office of the Secretary at the Department of Health and Human Services, and from 2014 to 2016 he served as Assistant Secretary for Planning and Evaluation in the Department of Health and Human Services. His research is focused on the economics of mental health and substance abuse care, long term care financing policy, health care competition, implementation of health reform and disability policy. Prof. Frank served as an editor for the Journal of Health Economics from 2005 to 2014. He was awarded the Georgescu-Roegen Prize from the Southern Economic Association, the Carl A. Taube Award from the American Public Health Association, and the Emily Mumford Medal from Columbia University's Department of Psychiatry. In 2011, he received the Distinguished Service Award from the Mental Health Association of Maryland. Prof. Frank also received the John Eisenberg Mentorship Award from the National Research Service Awards. He was elected to the Institute of Medicine (National Academy of Medicine) in 1997. He is co-author with Sherry Glied of the book Better but Not Well (Johns Hopkins Press).

2018 Rosenstein-Rodan Prize

This year's winner of the Rosenstein-Rodan Prize for the best original research on development economics or a related discipline among PhD students in Boston University is Yeonha Jung (Economics), for his paper " The Legacy of King Cotton: Agricultural Patterns and the Quality of Structural Change."

Using a variety of empirical methods and data sources, this paper studies how agricultural patterns could have a diverse impact on long-run economic development. In the context of the US south, this paper examines the legacy of cotton on economic development focusing on a novel channel of structural change. Exploiting variation in cotton production along with agro-climatic conditions, it shows that the legacy of cotton has impeded economic development exclusively as of the mid-twentieth century. The structural break is found to be a consequence of cotton mechanization. Evidence from exogenous variation in the boll weevil infestation shows that cotton farming was strongly dependent on tenant farmers with little human capital. I then find that, following cotton mechanization, the cotton tenants were largely displaced and absorbed from the manufacturing sector. Examining manufacturing data over time, this paper provides evidence that the inflow of cotton tenants replaced existing unskilled labor and reduced manufacturing productivity. Besides the composition effects, the inter-sectoral impact has persisted in the long-run through demand-side. Employing an index of state-level policy environment, this study exploits within-state variation to show that the legacy of cotton has induced unskill-biased technical change in the manufacturing sector.

Staff News

At the conclusion of this academic year, our Administrative Manager, Eleanor Langdon, announced her retirement after spending the last 12 years with BU's IED. Eleanor played a vital part in running the day-to-day operations of the Institute, and took pride in dedicating her time at BU to helping facilitate students' success. Eleanor will be greatly missed, and we wish her the all the best in her retirement. At the time of publication, her successor has yet to be announced.

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 2017-18 year:

Fall 2017

9/11/17
Attila Ambrus (Duke/visiting BU)
"Information risk sharing with local information" (joint with Wayne Gao and Pau Milan)

9/18/17
Frederico Finan (Berkeley) – Distinguished Visitor
"Money and Politics: The Effects of Campaign Spending Limits on Political Competition and Incumbency Advantage"

9/25/17
James Rauc (UCSD, visiting NYU)
"History Dependence in Networks of Close Relationships: Theory, and application to job referrals"

10/02/17
Matthew Jackson (Stanford) – Distinghuished Visitor
"Centrality, Power, and Position in Networks"

10/16/17
Hoyt Bleakley (Michigan)
"Longevity, Education, and Income: How Large is the Triangle"

10/23/17
Ajay Shenoy (UCSC, visiting Brown)
"Estimating the Production Function when Firms are Constrained"

10/30/17
Alberto Alesina (Harvard)
Organized Crime, Violence and Politics"

11/06/17
Daron Acemoglu (MIT)
"Endogenous Production Networks"

11/13/17
Alex White (Calgary)
"Patenting and Performance in the Global Economy"

11/27/17
Sebastian Sotelo (Michigan)
"Trade-Induced Structural Change and the Skill Premium" (joint with J. Cravino)

12/04/17
Pinelopi Goldberg (Yale) – Distinguished Visitor
"Competition, Markups, and Cost Pass-through: A Production-Side Approach with an Application to the Indian Trade Liberalization"

Spring 2018

3/12/18
Camilo Garcia Jimeno (UPenn)
"Women, Rails, and Telegraphs: An empirical study of information diffusion and collective action"

3/19/18 **Leah Boustan** (Princeton)
"The Intergenerational Effects of a Large Wealth Shock: White Southerners after the Civil War" (joint with Philipp Ager and Katherine Eriksson)

3/26/18
Raul Sanchez de la Sierra (Berkeley, visiting Harvard)
"Corrupt Hierarchies"

4/02/18
Francois Velde (Chicago Fed)
"Lottery Loans in the Eighteenth Century"

4/09/18
Ruben Durante (UPF and Sciences Po)
"One Team, One Nation: Football, ethnic Diversity, and Conflict in Africa"

4/23/18
Micaela Sviatschi (Princeton)
"Making a Narco: Childhood exposure to Illegal Labor Markets and Criminal Life Paths"

4/30/18
Isaac Mbiti UVA)
"The Short-Run Returns to Apprenticeship Training: Experimental Evidence from Ghana's National Apprenticeship Program"

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