
RESEARCH REVIEW

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

CREDIT CRUNCH CAUSED BY BANK FAILURES AND SELF-SELECTION BEHAVIOR IN LENDING MARKETS

By Naoaki Minamihashi
Discussion Paper 209

How do bank failures affect the economy? When commercial banks go bankrupt, depositors lose their deposits, stock and debt holders of the bank lose their wealth, client firms lose their relationships with the banks, and finally the banks fall into financially troubled conditions. As a result, business activities of stakeholders stagnate, which in turn affects non-stakeholders of failed banks on many levels. Bank failures can thus ultimately affect the real economy. To avoid these worst-case scenarios, governments and central banks have continuously attempted to prevent bank failures by using substantial amounts of taxpayer money to rescue troubled banks. On the other hand, some economists deny the negative effects of bank failures. They believe that the deposit insurance will protect the depositors, even though the amount is limited and the restoration process takes time. They also argue that other banks and financial means will provide enough funds to the failed banks' clients in lending markets. However, there is little empirical evidence on how bank failures truly impact the economy.

This paper has two key contributions. First, it investigates how bank failures affect the real economy from the lenders' perspective. The author exploits unique bank failures and loan quantity data in Japan in the late 1990s to examine the impact of bank failures on investment behavior of firms that lost their banks. Second, this paper sheds light on the selection problem of the relationship between borrowers and lenders. Most current empirical banking studies do not take into account self-selection behavior: lenders choose their borrowers and borrowers choose their lenders. Failing to take into account self-selection may understate the actual impact of bank failures. This study reevaluates the relationships between firms and banks, and gauges the true impact of shock by using similar firms as controls.

The author presents three main findings. First, bank failures reduce the investments of their client firms by nearly 30%. In a recession, economic activity of clients firms is restricted because they cannot borrow from the failed banks and the firms cannot find alternative

funding in the depressed economy. This helps explain how bank failures amplify a recession from the lenders' perspective. In other words, large bank failures may affect the economy as strongly as previous theoretical literature suggested, because the banks' many client firms stagnate their activities under the serious credit crunch. Second, high-investment firms tend to deal with unhealthy banks. This generates a self-selection bias and estimates of the impact are 30–80% greater than those when self-selection is not taken into account. Hence, the bank-failure shock is magnified by the self-selection behavior because failing banks typically lend to high-investment firms. Third, there is no solid evidence that the firms' accessibility to other financial sources mitigates the bank-failure shock under recession. This suggests the bank lending relationship is crucial and the client firms cannot find alternative banks in a recession, when the credit risk is higher.

A THEORY OF STRATEGIC VOTING IN RUNOFF ELECTIONS

By Laurent Bouton
Discussion Paper 210

This paper analyzes the properties of runoff electoral systems when voters are strategic. The runoff electoral system is the single most used electoral system in the world for presidential elections. Runoff elections work as follows: a candidate wins outright in the first round if she receives more than a pre-determined fraction of the votes. If no candidate passes this threshold for first-round victory, then a second round opposes the two candidates with the largest number of first-round votes.

The author finds two surprising results. First, runoff elections are not necessarily more conducive to preferences and information revelation than plurality elections.

Even with a threshold equal or above 50%, first-round decisiveness may be too high for voters to reveal their preferences. In particular, runoff elections produce equilibria in which only two candidates receive votes in the first round. The author refers to these equilibria as Duverger's Law equilibria. Second, the author demonstrates that lowering the threshold for first-round victory need not reduce voters' revelation of preferences and information, which he terms the Ortega effect. When the threshold is below 50%, majority voters may disperse their votes excessively in the sense that they would all be better off by uniting behind one of the majority candidate.

Together, these results form a twofold contradiction of the common wisdom about runoff systems. First, it is commonly believed that runoff systems allow voters to reveal their preferences more than the plurality system. The rationale is that voters' incentives to abandon their most preferred candidate to instead rally a serious candidate are more powerful in plurality than in runoff elections. The existence of Duverger's Law equilibria in runoff elections contradicts this belief. Second, the choice of a threshold level has traditionally been based on a perceived trade-off between voters' preference revelation and first round decisiveness. The idea is that a lower threshold should increase the probability that a candidate wins outright and therefore increase the voters' incentive to rally a serious candidate in the first round, even if this candidate is not their most preferred one. By contrast, a higher threshold should decrease the probability that the first round directly selects a winner. Voters are thus less afraid of wasting their first-round ballot on a hopeless candidate. The Ortega effect that the author identifies for runoff elections with a threshold below 50% shows that this perceived trade-off may not in fact exist. The results of this paper also help to shed light on a number of puzzling outcomes from runoff elections in recent years.

CREDIT RISK AND BUSINESS CYCLES

By Jianjun Miao and Pengfei Wang
Discussion Paper 211

The recent financial crisis indicates that credit risk impacts the economy in a significant way. Recent studies have also documented the relationship between credit spreads and economic activities. However, most extant business cycle models do not incorporate defaultable corporate bonds and credit risk. According to real business cycle (RBC) theory, the driving force of business cycles is the shock to aggregate productivity.

This paper attempts to develop a model which incorporates long-term defaultable corporate bonds and credit risk in a dynamic stochastic general equilibrium business cycle model. The model builds on the basic model of Jermann (1998), which features habit formation preferences and capital adjustment costs. Both elements are useful to explain asset pricing puzzles in a production economy. The authors depart from Jermann (1998) in three dimensions. First, they allow firms to issue defaultable corporate bonds to finance investment. The choice between debt and equity reflects the tradeoff between the tax advantage of debt and the associated bankruptcy and agency costs. Second, they introduce firm heterogeneity. Firms are *ex-ante* identical, but differ *ex-post* because they may experience idiosyncratic liquidity shocks. A bad liquidity shock to firm profits reduces cash flows and may trigger firms to default on debt. Third, they introduce endogenous leisure, which is necessary for a business cycle analysis.

The authors' calibrated model performs well in matching both key business cycle moments and financial moments, such as the mean equity premium and the mean risk-free rate observed in the data. Traditional production-based dynamic general equilibrium models have difficulties in performing well in these two dimensions simultaneously, especially when leisure is endogenous. The authors also use their model to show that default rates and credit spreads are countercyclical and debt issuance is procyclical. In addition, credit spreads forecast future growth of output, employment, investment, consumption as well as future stock returns. In particular, widening of credit spreads signals a future recession. The key intuition is that credit spreads are linked to corporate bond prices which are forward looking variables and affect firm investment through

Tobin's Q. A negative financial shock to the recovery rate of bonds reduces both hours and output on impact, while a negative technology shock leads to a decline in output but an increase in hours.

may issue public bonds backed by lump-sum taxes, which both households and firms can trade. The bonds serve as a store of value to households and firms, and also as collateral to firms. Thus, public assets can relax collateral constraints and play the same role as bubbles do. They deliver dividends to firms, but not to households directly. No arbitrage forces these dividends to zero, making Tobin's marginal Q equal to one. This leads to the efficient capital stock. To support the efficient allocation in equilibrium, the government constantly retires public bonds at the interest rate to maintain a constant total bond value and pays the interest payments of these bonds by levying lump-sum taxes.

BUBBLES AND CREDIT CONSTRAINTS

By Jianjun Miao and Pengfei Wang
Discussion Paper 212

There is some evidence that the large economic fluctuations experienced by many countries may be attributed to asset price bubbles. On the other hand, a number of researchers argue that credit market frictions are important for economic fluctuations. In particular, they may amplify and propagate exogenous shocks to the economy. In this paper, the authors argue that credit market frictions in the form of endogenous credit constraints may create rational bubbles on reproducible assets and the collapse of bubbles leads to a recession.

To formalize this idea, the authors offer an infinite-horizon model of a production economy with bubbles, in which firms meet stochastic investment opportunities and face credit constraints. Capital is not only an input for production, but also serves as collateral. The authors show that bubbles on this reproducible asset (or capital in their model) may arise, which relax collateral constraints and improve investment efficiency. The collapse of bubbles leads to a recession and a stock market crash, even though there is no exogenous shock to the fundamental of the economy.

The authors demonstrate that there is a credit policy that can eliminate bubbles on firm assets and achieve the efficient allocation. The inefficiency in their model comes from the firms' credit constraints. The collapse of bubbles tightens these constraints and impairs investment efficiency. To overcome this inefficiency, the government

RACE AND HOME OWNERSHIP FROM THE END OF THE CIVIL WAR TO THE PRESENT

By William J. Collins and Robert A. Margo
Discussion Paper 213

This paper examines long-run differences in trends in home ownership for African-American and white adult male-headed households in the United States from 1870 to 2007. Long-run patterns of racial differences and trends in home ownership provide a window on wealth accumulation and standards of living; the nature and implications of discrimination; and the influence of long-term economic trends, specific economic events, and government policy on housing market outcomes.

From 1870 to 2007, African-American households increased their home ownership rate by 46 percentage points, while the home ownership rate for white households increased by 20 percentage points. Thus, over the entire period, the racial gap in home ownership declined by 26 percentage points. However, 25 of the 26 percentage points of decrease occurred between 1870 and 1910. Since then,

both white and black households have increased their rates of homeownership, but the long run growth in percentage points has been similar for the two groups.

The authors attribute the large decline in the home ownership gap between 1870 and 1910 to whites moving away from owner operated family farms and into urban areas where rental multifamily housing was more common and mortgage markets were ill-developed. During the same time period, many blacks made the transition from agricultural wage laborers to farm owner-operators. Increased literacy among the black population also led to increased earnings and property ownership. After 1910, black and white home ownership fell during the Great Depression then grew as whites moved to the suburbs where land prices made single-family housing more affordable and increases in income and education levels made home ownership possible for high-income and high-education blacks.

characterized by low sunk costs and high variable costs, due to the necessity of shipping goods every period, while the foreign direct investment (FDI) undertaken by multinationals entails high sunk costs of setting up a plant and starting production abroad, but low variable costs, since there is no physical separation between production and sales. For simplicity, domestic production only involves variable costs, so firms always produce and sell in their home markets.

Firms choose whether and how to sell abroad based on their productivity and on prospects of growth of foreign demand. When prospects of growth in foreign demand make entry into the foreign market profitable, a firm may decide to pay the sunk cost and enter. If, after entry, there is a reversal of growth prospects, the firm will be reluctant to exit immediately because of the sunk cost it paid to enter, and may prefer to bear losses for a while, hoping for better times to come again. Since sunk costs of establishing a foreign affiliate are larger than the sunk costs of starting to export, the exposure to demand fluctuations and possible negative profits will be higher for multinational firms than for exporters and multinationals will command a higher return in equilibrium.

Sunk costs of exports and FDI can be interpreted as the premia paid to exercise the option of entering the foreign market. The value of this option is an important component of the valuation of the firm. Hence profit flow and firm value are not proportional due to this extra component: the option value of entering/exiting the market, which differs across firms. Furthermore, exogenous firm heterogeneity and the endogenous choice of international status generate heterogeneity in the covariance of profit flows with the persistent aggregate demand shocks, which affects the returns received by risk-averse stockholders.

The model is parameterized to match qualitative and quantitative features of the data on trade and FDI. The calibrated model generates the rankings of returns and earnings yields according to international status that are observed in the data.

RISK, RETURNS, AND MULTINATIONAL PRODUCTION

By José Fillat and Stefania Garetto
Discussion Paper 214

Multinational firms tend to exhibit higher stock market returns and earnings yields than non-multinational firms. Among non-multinationals, exporters tend to exhibit higher returns and earnings yields than firms selling only in the domestic market. The fact that exporters and multinational firms generate higher yields and returns than domestic firms does not constitute an anomaly per se. It simply indicates that these firms are riskier than firms that do not serve foreign markets: if this were not the case, rational investors would not be willing to hold shares of domestic firms.

Differences in international status are modeled through differences in cost structure. Exports in the model are

A THEORY OF OCCUPATIONAL CHOICE WITH ENDOGENOUS FERTILITY

By Dilip Mookherjee, Silvia Prina and Debraj Ray

Discussion Paper 215

Existing economic studies of fertility choice have struggled to convincingly explain the fact that fertility tends to fall with rising parental wages. A wage increase has two conflicting effects on fertility choice. First, households will want to substitute time away from childbearing activities and towards labor force participation in order to take advantage of the higher wages, implying a decline in fertility. Second, a wage increase makes households wealthier, which means they can support more children. The dominant argument in the literature assumes that the substitution effect is stronger than the income effect, leading to an overall decline in fertility as wages increase. However, the assumptions about parental preferences necessary to make this claim conflict with estimates of preferences elsewhere in the literature and cannot explain observed cases where fertility increases with parental wages.

The authors of this paper take a new approach to the problem and embed the fertility decision in a model of occupational choice. Parents in the model make two decisions simultaneously: how many children to have and how much to educate each child. The education decision is binary and determines the child's occupation. Children are either educated and join the high-skill occupation or they are not, in which case they join the low-skill occupation. Parents face credit constraints and cannot borrow to finance their children's education, an indivisible expense.

The result of this setup is a threshold wage above which parents choose to educate all of their children and below which parents do not educate any of their children. Caring for a child is costly irrespective of the cost of education, which turns out to imply that parents with wages just above the threshold must have fewer children than parents with wages just below the threshold. Therefore, the model allows for the income effect to dominate the substitution effect on either side of the wage cutoff while fertility must drop at the cutoff. This raises the question which effect will dominate.

In general equilibrium, the relative wages of high-skill and low-skill workers are endogenously determined, along with education and fertility choices. If there is to be a negative relationship between wages and fertility, fertility must be higher in the unskilled occupation and the proportion of skilled individuals in the economy will tend to drift downwards over time. Therefore, a steady state in which per capita skill in the economy is constant over time requires upward mobility: a fraction of unskilled households must decide to educate their children to prepare them for entry into the skilled occupation. The authors find that these are the only kinds of steady states that can arise for a broad class of parameter values: if wealth effects are either weak or strong or, in the intermediate case, when there are no fixed costs to child-rearing.

Moreover, the model allows for local comparative static analysis of steady states with respect to key parameters, which incorporate long-run effects on fertility and education. The authors show that a rise in fixed childcare costs, a fall in education costs, and stronger child labor regulations increase investments in education, which raises per-capita income in the economy and lowers wage inequality across the skilled and unskilled occupations. Cash transfers conditioned on school enrollment of children tend to produce the same effects, while unconditional transfers to the unskilled produce the opposite outcome: less investment in education and greater inequality.

***POLITICAL CLIENTELISM AND CAPTURE:
THEORY AND EVIDENCE FROM
WEST BENGAL***

By Pranab Bardhan and Dilip Mookherjee

Discussion Paper 216

The literature on government accountability in developing countries has focused on distortions in the political mechanism that may impede the choice of pro-development and pro-poor policies by elected governments, such as inequalities between different socioeconomic classes with regard to political rights, awareness, political participation, and ability to lobby and contribute to election campaigns. These inequalities translate into higher valuation of the interests of wealthier and more powerful classes in policy making and implementation, a phenomenon commonly referred to as elite capture.

Another important and far less-studied political distortion is clientelism, which refers to strategic transfers made by political parties and governments to poor and disadvantaged groups as a means of securing their votes. Such transfers by their very nature can provide an appearance of successful pro-poor targeting of public services. But they often come at the expense of long-term development, since they usually take the form of private consumption goods with short-term payoffs rather than public goods or private benefits of a long-run nature such as education or health.

This paper lays out a theoretical model of the sources, determinants, and consequences of political clientelism and the relationship between clientelism and elite capture. In the model, a voter chooses to support a political party based on the party's policy platform, including public goods provision and private transfers to different groups of voters, and by the probability of the party's withholding private transfers if it discovers that the voter supported the opposing party. The result is that parties deliver more transfers to groups whose voting behavior they can monitor more easily and who benefit more from transfers of private goods. Clientelism therefore tends to target the poor, who perceive a greater benefit from the transfer of cheap private goods. Introducing elite capture into the model, the authors show that the extent of clientelism tends to be negatively correlated with the degree of elite capture in government provision of private goods.

The authors test the model's empirical predictions using survey data from the Indian state of West Bengal. There is significant evidence of clientelism as support for the politically dominant Left Front party is associated with recurring transfers to voters (such as employment, housing, and toilets) but not with one-time transfers. Parties can withhold recurring transfers if they discover a voter supported the opposition, but cannot with one-time transfers.

Investigation of local government council chairperson reservations for women and low caste groups reveals evidence of the interaction between clientelism and capture. Reservations for women had an adverse effect on targeting benefits to female-headed households and low-caste groups, while reservations for low-caste groups had a positive effect. The authors note that women in West Bengal had relatively little political experience prior to the establishment of reservations while reservations for low-caste groups had been in effect for many decades. Therefore, the differences in outcomes can be seen as resulting from women's inexperience in operating clientelistic systems that help parties discern voters' choices. On the other hand, low-caste leaders' prior experience with clientelism meant they were able to use their increased political power to more effectively monitor voters.

***EVOLUTION OF LAND DISTRIBUTION
IN WEST BENGAL 1967-2004:
ROLE OF LAND REFORM***

**By Pranab Bardhan, Michael Luca,
Dilip Mookherjee, Francisco Pino**
Discussion Paper 217

Land is the pre-eminent asset in rural sectors of developing countries, the primary determinant of livelihoods of the poor. Inequality of landownership and tenancy arrangements are key determinants of wealth and income inequality within the rural sector, with important implications for agricultural productivity, poverty, local governance, and social capital. Consequently, many have argued in favor of land reforms as an instrument for reducing land inequality and poverty, raising productivity, improving governance, and easing social and political tensions in the developing world.

This paper investigates trends in the distribution of landownership over a period of almost forty years, from 1967 to 2004, in the Indian state of West Bengal. West Bengal has witnessed implementation of land reforms on a much larger scale than the average Indian state, distributing 6.7% of agricultural land in the form of land titles to the poor and registering tenancy agreements for over 1.5 million sharecroppers. The authors investigate the effects of land reforms in the context of long-run trends in the distribution of landownership in the state. They use a unique data set that allows them to describe and decompose annual changes in the distribution of land in a sample of 89 villages in West Bengal. Approximately 25 households were sampled in each village and asked to report complete histories of land ownership over the period. The authors check the histories for consistency and report results robust to using both the full sample and a restricted sample (73% of households) where reported histories of landholdings and household size are fully internally consistent up to a small margin of error.

The authors find significant declines in mean household and per capita landholdings, along with rising landlessness and inequality. The most important factor underlying changes in the land distribution was division of households, which includes household splitting and exit of individual members. Much of the increased inequality was associated

with rising landlessness, induced primarily by high rates of division of small and marginal landowning households and, to a lesser degree, by an influx of immigrants from other parts of the country. These immigrants were more likely to be landless than natives. Division of large landowning households tended to reduce inequality, but these effects were dominated by division of smaller landowning households.

The land reforms had a relatively small direct effect on inequality. However, they exercised a statistically significant negative indirect effect on inequality through their impact on household division patterns. Tenancy registration lowered inequality by decreasing division rates of small landowning households while raising division rates of large landowning households; the land titling program lowered the incidence of landlessness. Land markets, which were highly active over the period, also tended to reduce inequality slightly. Nevertheless, high rates of division of small landowning households and rising immigration outweighed the equalizing effects of the land reforms and land markets overall.

LAND ACQUISITION FOR INDUSTRIALIZATION AND COMPENSATION OF DISPLACED FARMERS

By Maitreesh Ghatak and Dilip Mookherjee

Discussion Paper 218

A major problem of contemporary development policy concerns compensation paid to land users whose traditional livelihoods are uprooted by modern industrial projects. In the absence of a well-defined compensation policy, those who fear displacement due to the process of industrial development will tend to underinvest in assets such as land which will affect the productivity of these assets in their existing use as well as the willingness of the owners to convert them to alternative uses. This paper represents the first theoretical analysis of the impact of compensation arrangements on the incentives of both tenants and landlords to engage in productivity-enhancing investments or actions.

The authors consider the example of a set of plots of agricultural land owned by a landlord, which are leased to tenant farmers. The landlord and tenants make specific non-contractible investments in their respective plots. Agricultural yields are uncertain and the law stipulates the share of the agricultural produce that must be given to tenants, as well as lump-sum compensations tenants are entitled to if they were to be evicted as a result of sale of the land. Opportunities for sale to an external industrialist arise at random and the landlord decides whether to sell the land after the investments have been made. Tenants are assumed to have limited liability and limited wealth.

Given limited liability and legally-specified crop share, tenants may earn a surplus from leasing with the landlord that exceeds their outside option. When deciding whether to sell the land, the landlord will neglect the effect of the sale on the loss of this surplus to the tenants and will at times sell the land when the costs to all agents exceed the benefits. Moreover, if the tenants' compensation in the event of a sale is such that the sale makes them worse or equally well off, both the landlord and the tenants underinvest in land improvements.

Raising the level of compensation for tenants allows for efficiency improvements. It curbs the landlord's socially

excessive inclination to sell the land. This raises the probability that the land will remain in agricultural use, which will in turn increase the investments made by the landlord and tenants. Hence efficiency considerations via investment incentives as well as conversion decisions dictate that tenants be "over-compensated" in the sense that they are made better off by the sale of the land. The result holds under fairly general conditions of the agricultural technology and agent preferences, provided the landlord can appropriate all the surplus resulting from conversion of the property to industrial use. The result need not hold as generally if landlords cannot appropriate all surplus, but will hold as long as landlord's own role in investing in land improvement is negligible compared to the tenant's role. To these arguments one could add considerations of equity and political stability, which would further increase the case for adequate compensation of displaced tenants.

DEBT POLICY UNDER CONSTRAINTS BETWEEN PHILIP II, THE CORTES AND GENOESE BANKERS

By **Carlos Álvarez-Nogal and Christophe ChamleyLu**
Discussion Paper 219

During the second half of the 16th century, a domestic public debt of large proportions (even by modern standards) was created in Castile. The debt to GDP ratio exceeded fifty percent, and the ratio between interest service and tax revenues at the end of the century was about fifty percent, as in England or France two centuries later. These impressive numbers were achieved without the centralized administration and capital markets that supported the fiscal policies of other countries in later centuries. This paper presents a new view of how this performance was achieved under the rule of King Philip II of Spain.

Philip II, as head of the first modern super-power, managed a budget of a scale that had not been seen since the height of the Roman Empire. The variability in expenses was met by large public borrowings. The adjustments to short-term shocks on the budget were first met by short-term loans. Financial transactions and debt issuances were managed mainly by Genoese bankers, who were in the unique position to handle triangular transactions between Castile, Italy and Flanders. An accumulation of the short-term shocks would imply a permanent shock that was met by issuing long-term debt. The Crown converted any significant accumulation of the short-term debt into long-term domestic debt.

The authors present two arguments in this paper. The main one follows a sequence: the short-term debt could not be credible (and therefore exist) without the possibility of its conversion into long-term debt; the credibility of the long-term debt required funding through credible tax revenues, which in turn required the alignment between the debt holders and the people in charge of establishing the taxes that would service that debt. This argument implies that the long-term borrowing capability of the Crown was enhanced by its lack of control of the taxes.

The second argument highlights the difference between interest reduction and debt reduction. The domestic debt was in perpetual annuities redeemable at par: the Crown

could repay the principal of an annuity at any time. In Castile, the interest reductions of the 15th and 16th century were not conducted in a centralized capital market and without the agreement of a parliament. Instead, debt instruments were heterogeneous because financing was through heterogeneous cities. However, each interest reduction was not forced and included the escape clause that the debt holder could take the cash payment of the face value of the principal instead of the interest reduction. The existing literature ignores the interest reductions that are explicitly stated in the settlements and assume that any lower interest payment is a default. In other words, the payment stops of Philip II were not caused by liquidity problems but were part of the overall efficiency of the system.

NEW IED INITIATIVES

IED organized a Washington DC Alumni Event for the first time. John Harris, Hsueh-Ling Hyunh, Robert Lucas, Dilip Mookherjee and Program Coordinator Courtney Sullivan attended the event giving alumni in the DC area the opportunity to reunite with former classmates and faculty. Pictures were posted on our website which has been enhanced to include alumni pages to encourage alumni participation in future events and additional volunteers to the Alumni Leadership Council.

IED has maintained a close relationship with the Alumni Leadership Council this past academic year, increasing the number of council members to 10, including two alumni in New York and two in Washington DC. These dedicated alumni have continued their support by giving current students much appreciated mentoring. They organized a class in spreadsheet formatting specific to job related work and a mock interview workshop. A tour of Boston was organized with Council Members and the IED Director for new master's students. The tour ended with Dim Sum in Chinatown. Members of the Leadership Council have continued building participation of the networking sites LinkedIn and Facebook.

IED just added the Vault's Career Insider to our collection of resources available to both master and PhD students. Vault is the world's leading source of Career Intelligence. Students can research employers, industries, and career subjects infinitely more easily and efficiently. Students can now use these career tools offered: download career titles on different industries, companies, and general career topics; research top employers; explore industries and professions; gain career advice to get ahead; share and discuss their interests and experiences with other users. Another notable advance with regard to career placement efforts was appearance on campus of employers of some of our former students, who were interested in recruiting new students.

STUDENTS AND ALUMNI ACTIVITY

PhD Students Completed Dissertations and Placement

The Economics Department had another strong and diverse group of PhD students on the job market this year. We congratulate the following students on their new positions: **Gabriele Gratton** (University of New South Wales); **Sean Horan** (Uniersite de Quebec a Montreal); **Dara Lee** (University of Missouri); **Jee-Yeon Lehmann** (University of Houston); **Michael Luca** (Harvard Business School); **Yin Hing (Henry)Mak** (Max Weber fellowship at European University Institute, Florence); **Ana Nuevo** (Universitat de Barcelona); **Caixia Shen** (Shanghai University of Finance and Economics); **Shinsuke Tanaka** (Fletcher School of Diplomacy, Tufts University); and **Martino Tasso** (Bank of Italy)

The following students obtained starting professional research consultant/young economist positions: **Naoaki Minamihashi** (Bank of Canada) and **Jonathan Smith** (College Board).

2011 ROSENSTEIN-RODAN PRIZE

The Rosenstein-Rodan prize is awarded annually for the best paper in a development-related area written by a PhD economics student. This year the prize was shared by two students for the following papers:

KARIM NAGIB

The Effects of Social Interaction on Female Genital Mutilation in Egypt, which provides evidence concerning the importance of peer effects and of medicalization.

JORDI VIDAL-ROBERT

War and Inquisition: Social Control in the Spanish Empire, which uses a panel data set assembled concerning Inquisition activities in the principal regions of Spain over four successive centuries, to argue that the principal motive of the Inquisition was social control (limiting the possibility of rebellion) during times of war rather than economic extraction motives.

MA student **Sayon Deb** won first place in the 2011 ICPSR (Inter-University Consortium for Political and Social Research) Paper Competition for Master's Students, for his paper titled "The Long Term Effects of Colonial Land Tenure: Micro Evidence from India." The analysis, which in part relies on household survey data from India archived at ICPSR, examines the impact of historic land tenure institutions on economic and social outcomes for households today.

Faculty Profiles

The following paragraphs summarize the projects and development-related research being conducted by Institute affiliates from the Department of Economics at Boston University

Marianne Baxter in the past year worked on projects in a wide range of fields. In research that is 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 new 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.

Peter Doeringer stepped down as Associate Dean for Faculty and has spent the year working on his book on economic structure and organization in the apparel industry, based on enterprise surveys in the United States, France, Italy, and the UK. Articles on the United States and French industries have already appeared in the *Socioeconomic Review* and the preliminary results of his work on the New York City garment district were recently presented at the 2011 Industry Studies Conference in Pittsburgh. Professor Doeringer was the featured speaker at the 43rd Decent Work Forum organized by the International Labour Office (ILO) in Geneva where he presented “Racing Towards the Bottom: Why Apparel Sweatshops Are Re-Emerging in the U. S. and Lessons From Europe About What Can Be Done” and he spoke at American University on “Can Small Scale Industries Be Rescued From Decline?”. He was appointed as the Coordinator of the Regional Economic Development/Adjustment Policy Research Network for the Labor and Employment Research Association and served as an arbitrator in several public and private sector labor disputes.

Randall Ellis’ recent research focuses on how payment systems affect health care providers and health plans. Since June 2010 he has been serving as President of the American Society of Health Economists (ASHEcon). His research on risk adjustment and predictive modeling resulted in payment models that are being used in the US since 2000 and Germany since the beginning of 2009, and similar models are being evaluated in numerous other countries. During the past year Ellis has given talks in the US, Australia, and Spain. He is

currently collaborating with researchers in Australia and Canada, and as well as with multiple graduate students on US and developing country topics.

Stefania Garetto’s current research links firm’s international activity with their performance in the stock market. In a series of related papers, she analyzes the relationship between export/FDI status and financial indicators. Empirically, she finds that exporters and multinational corporations tend to exhibit higher yields and returns than firms selling only domestically. Moreover, entry and exit into and out of foreign markets are associated with significant changes in the performance of a firm in the stock market. Theoretically, her work develops a structural framework merging new trade theory and theoretical asset pricing models. This new integrated framework is used to analyze, both qualitatively and quantitatively, the economic drivers of her empirical findings.

Simon Gilchrist is conducting research on economy-wide and firm-level determinants of investment, and the influence of credit markets on real activity. In one recent project (joint with Mark Gertler and Fabio Natalucci), he examines the ability of dynamic stochastic general equilibrium models to explain the macroeconomic outcomes experienced during the 1997 Korean financial crisis. In other work (joint with Jae Sim); he explores the link between foreign-denominated debt, balance sheet conditions and firm-level investment spending. Again focusing on the Korean episode, this paper uses a structural model to identify the effect that devaluations may have on investment spending during a financial crisis.

John Harris’ paper on Migration and Unemployment in the *American Economic Review* 1970 was recognized as one of the twenty most influential papers published in the AER in the 20th century.

Robert King continues to focus 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 continues to focus his research on education and on labor markets. With Erez Siniver, he recently published an article on the “Returns to English in a Non-English Speaking Country.” He and Deepti Goel are studying the role of social networks in the assimilation of immigrants to Canada. His book, *Poverty and Discrimination*, was published by Princeton University Press in 2007.

Robert Lucas’s current work encompasses two main fields: international migration and inter-generational mobility. Lucas is working on a series of papers in collaboration with Sari Pekkala Kerr, a former IED visitor, on inter-generational mobility in Finland. He is also preparing a chapter on African migration to appear in the North-Holland Handbook series. In addition, Lucas has been acting as a member of the advisory committee on remittances to the G8.

Jianjun Miao continues to work on two lines of research. The first line is to explore macroeconomic implications of financial frictions. He and Pengfei Wang have worked on a project on credit risk and business cycles and another project on bubbles and credit constraints. Now, they are working on a new project on the impact of bubbles on economic growth. The second line of my research is to develop new models of ambiguity sensitive preferences and to apply these models to macroeconomics and finance. He is working on a project with Jiang Wang on ambiguity in heterogeneous agent economies and another project with Hui Chen and Nengjiu Ju on a project about fragile beliefs and stock market crashes.

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 also been contributing to the economic theory of matching markets and applying that to affirmative action policies. And he is exploring how the processes by which people learn about their economic environment can lead to organizational dysfunction and change. Newman was elected Fellow of BREAD (Bureau of Economic Analysis of Development) in April 2011.

Robert Margo is Chair of the Department of Economics. Whenever he can he continues to work on three projects. The first project examines long run trends in the United States in racial differences in homeownership. A second project uses microeconomic census data from the mid-to-late 19th century to study the growth of manufacturing in the United States. The final project, with Jeremy Atack (Vanderbilt) uses GIS techniques to chart the evolution of the transportation revolution in 19th century America.

Dilip Mookherjee is serving as President of BREAD (Bureau of Economic Analysis of Development) and Lead Academic of the India Central program of the International Growth Centre located at the London School of Economics, since July 2010. He has been working on a combination of theoretical and empirical topics related to development economics. Currently ongoing projects include inequality, mobility and welfare (with Marcello d’Amato and Stefan Napel), fertility and development (with Debraj Ray and Silvia Prina), effects of bankruptcy law in India and the US (with Ulf Lilienfeld and Sujata Visaria), middlemen margins and globalization (with Pranab Bardhan and Masatoshi Tsumagari), land reform and local governance (with Pranab Bardhan and Maitreesh Ghatak), and effects of information provision and microcredit policies on potato marketing in India (with Pushkar Maitra, Sandip Mitra, Maximo Torero and Sujata Visaria).

Wesley Yin continues to work on a number of projects related to health and economic development. In ongoing work, Wes is studying mechanisms that tie economic growth to the development of well-functioning health care markets. In the context of India he is studying effects of entry of high-quality pharmacies on incumbent mom and pop pharmacies, their provision of drug quality and ultimately on antibiotic quality and community health. In Nigeria he is studying how anti-counterfeit drug technologies impact the market for anti-malarials. He and his colleagues are conducting survey data on drug prices, quality and demand, as well as health before and after the roll-out of the anti-counterfeit technology, in order to assess the market implications of quality authentication.

SEMINARS

*IED organizes a weekly seminar year-round where visiting speakers present their research.
The following is the list of seminars the past year.*

FALL 2010

September 27

Christophe Chamley,
“*Self-fulfilling Traps with Money as a Medium of Exchange*”

October 4

Ginger Jin (University of Maryland)
“*Does Health Insurance Coverage Lead to Better Health and Educational Outcomes?*”

October 12

Arnaud Costinot (MIT)
“*Intermediated Trade*” (joint with Pol Antras).

October 18

Raymond Fisman (Columbia)
“*Lender-Borrower Cultural Proximity and Loan Outcomes: Evidence from an Indian Bank*”

October 25

Leena Rudanko
“*Customer Capital*”

November 1

Bishnupriya Gupta (Warwick, Visiting Columbia)
“*Wages, Unions and Labour Productivity: Evidence from Indian Cotton Mills*”

November 8

Rocco Macchiavello (Warwick, Visiting Kennedy School)
“*The Value of Relational Contracts: Evidence from a Supply Shock to Kenya Flower Exports*”

November 15

Paul Karner “*The role of nonresident family in an economic crisis: Evidence from the educational attainment of Indonesian children*”

November 22

Atif Mian (Haas, U C Berkeley)
“*Foreclosures, House Prices, and the Real Economy*”

November 29

Shinsuke Tanaka
“*Environmental Regulations in China and Their Impact on Air Pollution and Infant Mortality*”

December 6

Dean Yang (University of Michigan)
“*Remittances and the Problem of Control: A Field Experiment Among Migrants from El Salvador*”

SPRING 2011

March 21

Jim Rauch, UC San Diego
“*Mobilizing Social Capital Through Employee Spinoffs: Evidence from Brazil*”

March 28

Isaac Mbiti, SMU, visiting MIT
“*Elite Secondary Schools and Student Achievement: Regression Discontinuity Evidence from Kenya*”

March 30

Fernando Vega Redondo,
“*EUI Social networks, institutions, and the process of globalization, joint with Georg Duernecker*”

April 4

Debraj Ray, NYU
“*Self Control and the Poverty Trap*”

April 11

Rachel Kranton, Duke
“*Strategic Interaction and Networks*”

April 21

Christophe Chamley,
“*Credit market freeze, September, 1575: the billiard game of Philip II between cities and bankers*”

April 25

Jenny Aker, Tufts
“*Can Technology Improve Learning? Evidence from a Field Experiment in Niger*”

May 2

Andres Rodriguez-Clare, Penn State
“*Firms and Global Production*”, joint with Costas Arkolakis, Natalia Ramondo and Stephen Yeaple

IED RESEARCH VISITORS

Francois Libois, PhD student at the University of Namur, Belgium visited the IED from October through December 2010, to further his research on environment and common property resources in developing countries. During his visit at the Institute, he focused on his research collaboration with Dilip Mookherjee on a project on deforestation in Nepal, and participated in weekly workshops and seminars. Francois also presented his paper entitled “Why are some communities able to manage their natural resources when others fail to achieve it?” at the Development Reading Group.

Jakob Jeanrond, a 5th year PhD student from the Economics Program at the European University Institute in Florence, Italy visited the IED from September through December 2010. During his visit he participated in weekly workshops and seminars and participated in the departmental research environment. His research interests were focused on microeconomic analysis of stability of financial systems.

Ramon Caminal, Professor of Economics at the Institut d’Anàlisi Econòmica, CSIC and a Research Fellow, at the Center for Economic Policy Research (CEPR) is currently visiting IED since March. Professor Caminal is currently working on issues concerning multilateral bargaining and performance of markets when consumer preferences are subject to transitory saturation. He is interacting with Professors Manove and Ellis as well as attending seminars and lectures.

DISTINGUISHED VISITORS 2010/2011

Professor Tracy Lewis, Professor at Duke University, visited November 1st through the 7th. He gave one seminar and two lectures on industrial organization.

Alessandro Lizzeri, Professor at New York University, visited March 7th through the 11th. He gave one seminar and two lectures on microeconomic theory.

Debraj Ray, Professor at New York University, visited April 4th through the 8th. He gave one seminar and two lectures on development economics.

Jushan Bai, Professor at Columbia University, visited April 19th through the 22nd. He gave one seminar and two lectures on econometrics.

Liran Einav, Professor at Stanford University, visited April 20th through the 26th. He gave one seminar and two lectures on industrial and health economics.

Dean Corbae, Professor at University of Texas, visited May 2nd through the 6th. He gave one seminar and two lectures on macroeconomics.

Philip Oreopoulos, Visiting Professor in Economics and Canadian Studies at Harvard University and Associate Professor of Economics at the University of Toronto. He gave one seminar and two lectures in labor/public economics.

Gianluca Violante, Associate Professor at New York University, visited May 9th through the 13th. He gave one seminar and two lectures on macroeconomics.

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