THE INSTITUTE FOR ECONOMIC DEVELOPMENT

RESEARCH REVIEW

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Spring 2004

Recent Discussion Papers

BOSTON UNIVERSITY

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.

Ownership Form and Contractual Inefficiency: Comparing Performance of Cooperatives and Private Factories in the Indian Sugar Industry

Sanghamitra Das and Dilip Mookherjee
Discussion Paper 139, April 2004

The sugar industry is based on a technology in which the factory's proximity to sugarcane growers is crucial to avoid undesired leakages. Therefore, although factories are competitive as suppliers, they behave as monopsonists with respect to their neighboring cultivators. Such market power tends to be used to reduce input prices, which in turn depresses the supply of sugarcane and final output of sugar. This coordination failure can be reduced by either of two means: vertically integrating production processes into cooperatives (as in West Maharashtra); or by regulating the cane price (as in Uttar Pradesh).

Political processes mediate both organizational forms. Regulators are subject to political influence from separate interest groups representing factory owners and cultivators, respectively. Cooperatives are usually managed by politically ambitious large or medium-sized growers, whose interest is aligned with the small growers, owing to the need to secure the latters' votes in order to manage the factory. In this context, an increase in the proportion of low-size cultivators initially favors the factory owners and reduces sugarcane prices, since the low outside-options of small growers makes the overall input supply to the factory more inelastic. However, as land fragmentation continues to increase, the political demands of small growers becomes more important, which subsequently tends to raise sugarcane prices.

The authors empirically identify a U-shaped input-price curve as a function of land fragmentation. More importantly, they find that the "turning-point" of the curve is situated at different levels of land-fragmentation in Maharashtra and Uttar Pradesh. In the cooperatives of Maharashtra, the same level of fragmentation is associated with higher political representation of small growers relative to Uttar Pradesh. For this reason, additional fragmentation is beneficial for input prices and output growth in Maharashtra, whereas it is detrimental in Uttar Pradesh. Therefore, sectoral evolutions seem to hinge on historical fate: today's well-being depends on how Maharashtra and Uttar Pradesh dealt historically with the social turmoil linked to labor-intensive sugarcane plantations. That is, coordination failure/success is an outcome of the inherited land distribution. The same current process of land-fragmentation may be worsening/solving today's inefficiencies, depending on what ancestors did in each region a long time ago. Another crucial feature is the prevalence of institutions as determinants of growth: the simple choice between private firms or cooperatives outperforms technical progress as an explanation of regional competitive advantage.

Pro-Poor Targeting and Accountability of Local Governments in West Bengal

Pranab Bardhan and Dilip Mookherjee
Discussion Paper 138, December 2003

The objective of this paper is to evaluate targeting success of poverty-alleviation programs implemented by local governments in the Indian state of West Bengal. The general strategy is to link the electoral process with resulting allocations to different landowning classes; and from these patterns to identify determinants of implicit welfare weights assigned by political parties to different classes. These weights measure the extent of accountability and pro-poor protection provided by the programs. Such inference of welfare weights is especially difficult when the allocation process passes through different hierarchical layers of local governments, and incorporate productivity and efficiency criteria which may run counter to redistributive goals. Owing to these factors, low targeting levels are not necessarily evidence of lack of accountability to the poor. To overcome these problems, the authors employ a model of political competition in which the welfare weight assigned by any party to any class is a compound of Downsian competitive pressures and interest group preferences. In this context higher poverty and inequality are associated with greater 'capture' by interest groups, and lower accountability to the poor. The same happens when electoral competition becomes more lop-sided. Therefore, accountability to the poor depends on their demographic weight, productivities, and shares in key assets such as land and education relative to other classes, apart from the intensity of electoral competition.

The empirical exercise aims to identify the nature of this relationship. An important assumption that aids such identification is that demographic changes do not affect relative productivity of different classes. Under this assumption, negative co-movements of targeting shares of the poor with their demographic weight provides evidence for anti-poor biases arising from political factors. In addition, the authors control for productivity differences between small and large landowners, and examine pure poverty alleviation programs and fiscal policy, in which productivity considerations do not justify leakages to non-poor.

Intervillage allocations reveal striking forms of anti-poor bias. For instance, per capita IRDP credit allotments to a village were negatively related to the demographic weight of the poor, and positively to the weight of middle and large landowners. In contrast, intravillage allocations revealed the absence of such biases, indicating that accountability was much higher within villages than in the process of allocation across villages by higher level governments. Similar patterns were exhibited for distribution of fiscal resources and of agricultural minikits wherever there was sufficient scope for discretionary intervillage allotments. These biases were noticeably absent in more formula bound programs such as employment generation schemes. The results, therefore, indicate that the problem emphasized by much contemporary literature on decentralization, *viz.* elite capture of local governments, seem less serious than allocations at higher levels of the system. Targeting performance could therefore improve with greater adoption of formula bound transfers across villages.

Tax Administration Reform and Taxpayer Compliance in India

Arindam Das-Gupta, Shanto Ghosh and Dilip Mookherjee

Discussion Paper 137, November 2003

In this paper, the authors explore possible avenues of administration reform with the objective of raising tax revenues in developing countries. Unlike attempts to control administrative corruption, improving the design of assessment units to correct dysfunctional taxpayer incentives seems relatively costless. The authors' theoretical work builds on a relatively scarce literature, bridging compliance-incentives and enforcement, and tries to understand an (apparently) paradoxical empirical finding of the Indian administration: a negative marginal-revenue productivity of support staff in *wards* (assessment units earmarked for low-income taxpayers).

The current Indian tax-administration is based on a separation between *wards* and *circles*. The inspection of "big-fish" taxpayers, i.e., those disclosing an income above a certain levels, is reserved for *circles* wherein the officials are more experienced and have a smaller workload. The authors model an equilibrium where taxpayers self-select into *wards* and *circles*, under the assumption that the probability of detection and penalty increases with the extent of concealment. In this setting, increasing staff-support for assessing officers in *wards* would induce some taxpayers to switch from *wards* to *circles*, generating higher workload in the latter, lowering the probability of penalizing concealment, thus reducing equilibrium disclosure of rich taxpayers. This spillover effect reflects a negative impact on aggregate revenue, despite the fact that the additional staff increases enforcement intensity in *wards*.

Das-Gupta, Ghosh and Mookherjee empirically identify significant spillover-effects across assessment units, once they amend initial misspecifications – those arising in models without inter-unit switches of taxpayers. The evidence reveals a higher marginal gain from raising enforcement levels in *circles*. Collection would probably grow even more if the taxpayer faced a randomized assignment instead of self-selecting into wards or circles by choosing their own disclosures. Finally, penalty and prosecution efforts also appear to have positive effects on compliance. These administrative reforms are likely to be more acceptable to the officials of the tax administration than direct attempts to detect or penalize corruption.

Risk, Uncertainty, and Option Exercise

Jianjun Miao and Neng Wang
Discussion Paper 136, January 2004

In this paper, Miao and Wang explore the way in which many economic decisions based on binary choices are made by agents when they are unsure about the likelihood of future events These agents have to decide when to exercise a real option: like a firm deciding on when to exit a market or an indebted consumer planning when to default on a loan. The standard real-option approach is especially unable to fit empirical evidence because it rules out the case where agents are unsure about the priors of the problem. For this reason, Miao and Wang use the Knightian difference between *risk* (existence of either a known, predetermined prior, or a subjective probability measure that is updated) and *uncertainty* (existence of a *set* of possible priors) to characterize the behavior of agents who are uncertainty-averse.

The option-exercise decision is described as an optimal-stopping problem, where the agent's utility depends on the *worst* possible scenario under the set of all possible priors. "Maximization of a minimum" is the way the authors introduce uncertainty aversion. Miao and Wang then conduct comparative static exercises with respect to the set of priors, in an attempt to observe how the value of the option and the moment when it is exercised depend on the degree of uncertainty aversion. They apply their results to several examples, including real investment, job search, firm exit, firm default and youth suicide.

The general conclusion reveals that when the agent is more uncertainty-averse or faces a higher level of Knightian uncertainty, the option value is lower and the agent exercises the option earlier. When this finding is applied, for instance, to the firm-exit problem, Miao and Wang's results outperform the traditional real-option theory with respect to replication of stylized facts. In times of special turbulence the standard theory suggests that firms should stay longer than is commonly observed because they do not absorb all the downside risk. This theory, however, predicts more exit during recessions because firms are also more insecure about the likelihood of recovery, which widens the set of admissible priors. The case of youth suicide has also very interesting implications: offering counseling services to college students lowers their perceived level of Knightian uncertainty; and as a result, causes them to value their lives less pessimistically.

Distribution of Ability and Earnings in a Hierarchical Job Assignment Model

Robert M. Costrell and Glenn C. Loury
Discussion Paper 135, December 2003

In this paper, Costrell and Loury examine the mapping of the distribution of ability onto earnings in a hierarchical job assignment model. It is commonplace among labor economists to think of job ladders, where workers move up and down the hierarchy to fill needed slots. This paper draws out the wage implications of such a job structure, including the productivity gains/losses from the job reassignments that are indirectly attributable to adding workers elsewhere in the hierarchy. The model is used to analyze the implications of a job assignment perspective for the comparative static effects of changes in technology and the distribution of abilities on the distribution of wages.

The importance of job assignment can be understood from a simple non-distributional question: When does better information about individual ability raise aggregate output? In a one-job model, the answer is never; better information affects the distribution of income, but not the total. If better information does raise output, it is because there are productivity gains to be had from improving the match between workers and jobs, a phenomenon that can only be analyzed in an assignment model. Specifically, when the sensitivity of output to ability varies across jobs, then improved information can raise output by allowing better sorting of high-ability individuals into more ability-sensitive jobs. Likewise, the job assignment perspective can also shed light on distributional questions. Changes in other people's ability may affect our earnings by changing what job we are assigned to, as well as by altering the rewards attached to each job.

In the model developed here, workers are assigned to a continuum of jobs in fixed proportions, ordered by sensitivity to ability. The model implies a novel marginal productivity interpretation of wages. Comparative statics are derived for changes in technology and in the distribution of ability. Conditions are found under which a more unequal distribution of ability maps onto a more/less unequal distribution of earnings. An assignment model is also analyzed with variable proportions and reveals that in the Cobb-Douglas case, a rise in ability inequality always narrows the range of earnings.

In conclusion, the authors reflect on what the analysis might contribute to the discussion of recent decades' trends in the distribution of income. Technical change, of course, is widely understood to have driven much of the last two decades' distributional trends. This model offers some potential insights into the mechanism by which this might have occurred.

Consumption and Saving under Knightian Uncertainty

Jianjun Miao

Discussion Paper 134, December 2003

In this paper, Miao extends his exploration of Knightian uncertainty to the determination of optimal consumption and savings when the likelihood of future events is uncertain for the consumer. Some of the traditional results of consumption theory, like the random-walk path under linear-quadratic utility, are questioned by this model because the consumer is uncertainty-averse, and maximizes the "worst expected utility" under the worst prior from a set of plausible probability distributions about the future.

Uncertainty-aversion is presented in a similar framework as Miao and Wang's 2003 model, which introduces multiple priors for a representative agent who maximizes utility in a two-period setting. The effects of income uncertainty and capital uncertainty on optimal savings are analyzed using closed form solutions.

The paper's results establish a division between (low-income) wage and salary earners, for whom accumulated savings provide a buffer against future uncertainty; and (high-income) self-employed people, for whom uncertainty usually comes from capital gains and losses. In the latter case, the more one saves, the more one stands to lose in the worst possible case. Because of these different motives, uncertainty has a very different impact on savings behavior. Studying common CRRA utility functions, the author shows that an uncertainty-averse agent saves less than an expected utility maximizer. Moreover, under a high elasticity of substitution, this agent will save less, the higher the uncertainty-aversion or the higher the degree of Knightian uncertainty. The reason is that, under a high elasticity of substitution, the misery of the worst future circumstances can be made up for with today's consumption. The opposite conclusion holds if the intertemporal substitution parameter is small (lower than one).

The Developed World's Demographic Transition - The Rules of Capital Flows, Immigration, and Policy

Hans Fehr, Sabine Jokisch and Larry Kotlikoff

Discussion Paper 133, October 2003

In this paper, the authors address the alarming reality of both the developed world's aging process, and the falling share of the population able to finance our pay-as-you-go pension systems. The authors try to shed some light on the sustainability of those systems, the possible relief introduced by migratory waves or capital-accumulation responses, and the best alternatives available to reform our fiscal systems. They quantify the long-run gains from such reforms and the generational distributions of those gains. The particular reforms explored include those inducing a doubling of immigration from the rest of the world, and privatization of government pension systems. In the latter option, the payoff of accrued liabilities from the current system is financed by a special consumption tax.

The authors approach the problem by specifying and simulating a large, open economy, OLG model which consists of the US, the EU and Japan. The model differentiates the specific institutions of every area by means of calibration. This is the first work to integrate capital adjustment costs, immigration, age-specific fertility rates, life span extension, life span uncertainty, bequests arising from such uncertainty (not from altruism) and intra-cohort heterogeneity. The inclusion of capital adjustment costs is important in terms of predictions: despite perfect capital mobility, that rigidity drives temporary wedges between regional returns to capital. These wedges are often related to the specific aging processes and policy responses of each region.

Fehr, Jokisch and Kotlikoff find that capital-accumulation responses are not a relief at all. Although an aged population may, in principle, increase capital stocks, the burden of higher taxes on the young generates a net crowding-out effect. Immigration has some beneficial macroeconomic effects, but they are extremely small, on the assumption of identical pay-as-you-go pensions for natives and immigrants from the same income class. Privatization-tax reforms, on the other hand, generate a substantial long-run welfare improvement for future generations. However, they will impose modest welfare losses on the initially elderly and middle-aged, since their consumption will be taxed during the transition and they will not benefit from the current system.

Categorical Redistribution in Winner-Take-All Markets

Roland G. Fryer, Jr. and Glenn C. Loury

Discussion Paper 132, October 2003

Winner-take-all markets are pervasive in our society. Selection decisions about hiring, promotion, admission, and contracting are all determined in a tournament-like (winner-take-all) structure. Such markets tend to emerge when there is quality variation, but little price flexibility. As a result, prizes tend to be awarded on the basis of relative, not absolute, performance. Because of their structure, these markets have the feature that small differences in quality can be associated with large differences in rewards, which makes it quite surprising that there has been no theoretical analysis of redistribution in these environments.

This paper constructs a simple model of pair-wise tournament competition to investigate categorical redistribution in winner-take-all markets. There are many employers and many more individuals seeking employment. Nature moves first and assigns a marginal cost of investment to each individual. Individuals observe their cost and choose a level of effort to exert in the contest. Nature, then, randomly assigns individuals to firms, where they are randomly matched to compete in pair-wise contests. Absent any redistribution goal, the individual in each match with the higher level of effort wins an exogenously determined prize.

Two forms of redistribution are considered: category-sighted, where employers are allowed to use categorical information in pursuit of their redistributive goals; and category-blind, where they are not. Three results are established: (i) A heterogeneous tournament model is explicitly solved. In the unique equilibrium, an individual's strategy makes his effort a function of the distribution of individuals with cost above his. This leads naturally to highly unequal outcomes between social groups endowed with different cost distributions and, hence, a demand for categorical (i.e., inter-group) redistribution. (ii) It is shown that the unique equilibrium under category-sighted redistribution involves a constant handicap for agents in the disadvantaged category. (iii) Handicapping changes drastically when the category-blind constraint is imposed. Under this formulation, a non-trivial measure of contestants pool on a common low effort level and the prize is randomly distributed to members of the pool whenever they are matched against one another. In conclusion, the authors discuss the problem of optimal, centrally planned categorical redistribution, which draws on the impressive theory of optimal auction design.

Color-Blind Affirmative Action

Roland G. Fryer, Glenn C. Loury and Tolga Yuret

Discussion Paper 131, October 2003

The legal and political climate has shifted dramatically over the last decade on the issue of racial affirmative action. Accordingly, a number of institutions have begun to reformulate their policies — particularly in higher education. The states of Texas and Florida now guarantee admission to their public university systems for all in-state high school students graduating in the top ten and twenty percent, respectively, of their senior classes. A number of scholars and policy analysts have urged elite universities to rely more on non-racial, non-academic characteristics of prospective students, such as their socioeconomic backgrounds, when assessing applications. Some private institutions have even decided to forego requiring their applicants to submit standardized test scores.

A primary factor accounting for these policy changes would seem to be the desire to attain racial diversity among admitted students without using explicit racial preference in the admissions process. The key point is that insistence on "color-blindness" does not preclude policies favoring a particular group. Although color-blindness prohibits giving explicit preference to applicants because of their race, selectors can still favor a targeted group by exploiting their knowledge of such differences as may exist between the race-conditioned distributions of non-racial traits in the applicant population. They can do this by using a race-independent selection rule that over-emphasizes non-racial productivity correlates that are relatively more likely to be found among members of a targeted group.

Accordingly, the authors call policies of this kind "color-blind affirmative action." These policies are studied by developing an analytical apparatus through which percentage plans, voluntary test score submission, increased relative weight on non-test score criteria, preferential admission based on socioeconomic status, and conventional affirmative action policies may be viewed within a unified framework. Given the pool of applicants, it is imagined that a college chooses an "admissions policy function" which associates a probability of admission with each applicant's profile. A policy is "color-blind" if an applicant's race is not an argument of the admissions policy function. The specific variables used in the policy function, and the weights given to them, are chosen by the college or university in order to meet its admissions objectives, possibly including some desired level of racial diversity.

Fryer, Loury and Yuret develop a theoretical model of applicant competition with endogenous effort to show that, in comparison to color-conscious affirmative action, these color-blind alternatives can significantly lower the efficiency of the student selection process in equilibrium. Data on students is examined at several selective colleges and universities to estimate the magnitudes involved. The authors conclude that the short-run efficiency losses of implementing color-blind affirmative action are four to five times as great as the losses associated with color-conscious affirmative action.

POLICY PAPERS

Moffett' 29 Lectures, University Center for Human Values, Princeton University, November 2003
Glenn C. Loury

Relations before transactions: Toward a New Paradigm for Discrimination Theory Lecture 1:

In this lecture Glenn Loury discusses his ongoing theoretical work on the problem of racial inequality in the US, focusing on the case of African Americans. (See Glenn C. Loury, ***The Anatomy of Racial Inequality***, Harvard University Press, 2002). This work has three broad aims: to outline a theory of "race" applicable to the social and historical circumstances of the United States; to sketch a speculative account of why racial inequality in our society is so stubbornly persistent; and, to offer a conceptual framework for thinking about the problem of social justice as it relates to matters of race. The present lecture concentrates on the second of these themes, and the subsequent lecture takes up the third.

Fundamental to this approach is the distinction between *racial discrimination* and *racial stigma*. Racial discrimination has to do with how blacks are treated, while racial stigma is concerned with how black people are perceived. The analysis begins from the premise that what is called *reward bias* is now a less significant barrier than is *development bias* to the full participation of African-Americans in US society. *Reward bias* refers to the unfair treatment of persons based on race in formal economic and bureaucratic transactions, limiting the rewards they can receive for the skills and talents they present to the market. *Development bias* refers to blocked access for persons in a subordinate racial group to resources that are essential for the development of human skills and the refinement of talents, due to the fact that resources of this kind often become available to persons as a byproduct of informal, non-market-mediated but race-influenced social relations.

These two kinds of bias are not claimed to be mutually exclusive: the acquisition of skills can be blocked by market discrimination; and the maintenance of a regime of discrimination against the pressures of market competition may require the use of various instruments of informal social control. Still, this distinction is useful. Whereas the reward bias emerging from market discrimination presents a straightforward moral problem and calls forth the rather obvious and nearly universally embraced remedy of the anti-discrimination laws, development bias is a subtler, more insidious moral problem, Loury argues, that may be difficult to remedy in any manner likely to garner a majority's support.

This difficulty has both a cognitive and an ethical dimension. From a cognitive point of view, many observers may find it difficult to distinguish between blocked developmental opportunities and limited innate capacities when seeking an explanation for a group's poor social performance. From an ethical point of view, many citizens who find overt racial discrimination associated with reward bias to be noxious may be less offended by the covert social discrimination that underlies development bias. The lecture draws out some positive and normative implications of this conceptual viewpoint.

What Price Diversity? The Economics and the Ethics of Categorical Redistribution Schemes Lecture 2:

Seven generations after the end of slavery, and a half-century past the dawn of the civil rights movement, social life in the United States is still characterized by a significant degree of racial stratification and inequality. Although there has been noteworthy progress in reversing historical patterns of racial subordination, there is today no scientific basis upon which to rest the prediction that a rough parity of socioeconomic status between blacks and whites in the US will obtain in the foreseeable future. The question taken up in this lecture is whether or not this circumstance constitutes a problem of social justice, and if so, what should be done about it.

Some analysts deny that a justice issue arises from racial inequality alone. As long as the individuals in a disadvantaged racial group are not being discriminated against, they ask, why should citizens care about racial inequality *per se*? In their view, absent group-based discrimination, only individuals and never groups can be the subjects of a discourse on social justice. Loury believes this position is mistaken. As such, he undertakes here to criticize the manner in which this "color-blind" version of liberal political theory deals with the ethical problems raised by the pronounced and durable social-economic disadvantage of African Americans. Defenders of individual liberty (rightly) worry that the freedom, dignity, integrity, autonomy, and/or rights of persons may be trod underfoot in a mad rush to obtain justice for fictitious "races." While acknowledging that "racial justice" talk courts these dangers, Loury nevertheless holds that such talk is necessary for an intellectually rigorous and historically relevant social criticism in the US. Moreover, he thinks it possible to conceive of social justice in regard to matters of race in such a way that these pitfalls are avoided.

To fix ideas, consider the *Anonymity Axiom* from modern social choice theory. This postulate requires indifference for purposes of social choice between two states of affairs, A and B, that differ only in the identities of the people located in various positions of the social order. It is an immediate corollary of this requirement that the diminution of racial inequality for its own sake would not be a legitimate social goal. He argues here against this implication of the Anonymity Axiom (and, perforce, against the axiom itself.) More generally, he calls into question the adequacy of "color-blind" liberalism as a normative theory, in view of the historical facts of racial subordination and the continuing reality of racial inequality. There seem to be questions of social justice arising under these conditions, in societies such as the United States that are sharply stratified along racial lines, to which this normative theory can give no good answers.

Economic and Political Weekly,
February 28, 2004
Pranab Bardhan and Dilip Mookherjee

POVERTY ALLEVIATION EFFORTS OF PANCHAYATS IN WEST BENGAL

This paper summarizes Bardhan and Mookherjee's research on the role of political accountability in the pro-poor targeting of recent development programmes. Their main finding is that increased illiteracy, landlessness and higher demographic weight of low caste groups were associated with poorer targeting of development resources. This suggests that the variations reflect lower government accountability to the poor owing to a decline in their political weight when they become more vulnerable. The authors try to disentangle this effect from productivity considerations that may influence the allocation of resources through these programmes. They also make an effort to rule out any possible channel of reverse causality that may bias their estimates. Most of those channels seem implausible, owing to the small scale of the programmes relative to the extent of poverty prevailing in these villages.

Their main procedures to isolate the political-accountability component are threefold: (a) controlling for differences in farm yields, in an attempt to absorb productivity considerations for those who discretionally allocate resources; (b) estimating the impact on targeting of shifts in demographic weights, usually uncorrelated with productivity; and (c) examining leakages in programmes earmarked exclusively for the poor, such as the IRDP program. The estimates that result from these procedures are used to present the results as impacts of a (hypothetical, *ceteris paribus*) change in land distribution, literacy or political concentration. They explore separately the targeting achievements of both intervillage and intravillage allocations.

One of the sharpest results is related to the increase in the demographic weights of landless and small landowners, which should have improved targeting on normative grounds, but actually had the opposite effect. Higher levels of illiteracy, landlessness and low caste frequency reduced the proportion of households receiving land through the land reform programme. Increases in the vote share of the dominant Left Front was associated with a drop in land area covered by land distribution, probably because of slackening in efforts of elected government officials as pressures of political competition weakened. Finally, the political biases were more significant in the allocation of resources across villages, rather than within villages. The reduced number of formula bound transfers across jurisdictions were more effective in targeting relative to discretionary practices.

IED Research in Progress

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

Maristella Botticini has been awarded an Alfred Sloan Research Fellowship for the academic years 2002-2004. Her recent publications include: with Aloysius Siow "Why Dowries?" *American Economic Review* (September 2003). She is currently working on the manuscript ***The Price of Love: Marriage Markets and Intergenerational Transfers in Comparative Perspective*** to be published by Princeton University Press. The book will offer a comparative analysis of marriage markets and intergenerational transfers by merging original research on medieval and Renaissance Florence with secondary literature on dowries, bride prices, marriage markets, and bequests in past and contemporary societies. With Zvi Eckstein, she is also working on a project on Jewish economic history in the first millennium with the aim of studying the role of social norms and religion on occupational selection.

Peter Doeringer's "What Attracts High Performance Factories? Management Culture and Regional Advantage" (with Christine Evans-Klock and David Terkla) is forthcoming in *Regional Science and Urban Economics*. He is currently writing a book on fashion innovation, market power, and hierarchies and networks in the apparel industry, based on enterprise surveys in the United States, France, Italy, and the UK.

Randall Ellis' recent research focuses on how payment systems affect the health delivery system, with a particular focus on risk adjustment. Risk adjustment is a strategy for reducing adverse selection incentives by paying health insurance companies premiums that more closely reflect their expected costs. His research on risk adjustment has already had an important impact on health care policy in the United States, changing the formula currently being used to pay for health care of 6 million Medicare managed care enrollees. While on sabbatical during the past academic year, he has given presentations on health economics in Australia, Chile, Germany, and New Zealand. Currently Ellis is collaborating with researchers in Canada, Chile, Kenya, Netherlands, and Germany.

Robert Lucas is currently working on two main projects. The first, in collaboration with former IED visitor, Sari Pekkala, is on intergenerational economic mobility in Finland. He is also nearing completion of a monograph on the effects of international migration upon the economic development of the sending countries, which should be published later this year. A summary of this work was recently presented to the World Bank Annual Conference on Development Economics in Brussels and will appear in the Proceedings of the conference.

Jianjun Miao's current research focuses on micro-level investment decisions. In the paper "A Dynamic Principal-Agent Model of Real Investment", he investigates a firm manager's real investment decisions when he has the cash flow information that owners do not have. Under this information asymmetry, the manager may have incentives to misreport cash flows to the owner leading to a moral hazard problem. He studies the optimal compensation contract and the impact of moral hazard on the optimal timing of investment.

In the paper "Consumption, Hedging, and Real Investment", Miao examines a risk averse entrepreneur's investment timing decision problem when he can save or invest in a risky asset to hedge against the investment cash flow risk. Jianjun Miao investigates the impact of risk aversion and financial market incompleteness on investment timing and the relation between the value maximizing and utility maximizing investment policies.

Dilip Mookherjee is currently engaged in the following development related projects: (i) political economy of land reforms and local governance in West Bengal since the late 1970s; (ii) relation between poverty, household energy use and reliance on forests in the Himalayan regions of Nepal and India; (iii) comparing performance of farmer cooperatives with privately owned sugar firms in India; and (iv) theoretical analysis of the dynamics of poverty and inequality with Debraj Ray and Stefan Napel.

2004 Rosenstein-Rodan Prize Winners Announced

The Rosenstein-Rodan prize is awarded annually for the best paper in a development-related area written by economics graduate students.

This year the prize has been awarded to Catherine Rodriguez and Edgar Villa for their paper "Migration and Violence: Evidence from Colombia". This paper studies the relationship between the crime victimization probabililty a household may face, measured as the likelihood of a member being kidnapped, with its migration decision, using micro level data for the four major cities of Colombia. They find that while the victimization probability a household faced had a positive statistically significant effect on its international migratory decision, it had no effect on domestic migration. Evidence on positive selection of migrants was also found, providing evidence that violence led to loss of human capital for Colombia.

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