THE INSTITUTE FOR ECONOMIC DEVELOPMENT

RESEARCH REVIEW

Contents

Spring 2005

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.

Beauty is a Beast, Frog is a Prince: Assortative Matching with Nontransferabilities

Patrick Legros and Andrew F. Newman
Discussion Paper 149, November 2004

For the economist analyzing household behavior, firm formation, or the labor market, the characteristics of matched partners are paramount. The educational background of men and women who are married, the financial positions of firms that are merging, or the productivities of agents who are working together, all matter for understanding their respective markets. Matching patterns serve as direct evidence for theory, figure in the econometrics of selection effects, facilitate theoretical analysis, and are even treated as policy variables.

In the special case of transferable utility (TU), a full characterization of the mathematical conditions for "monotone" (positive- and negative- assortative) matching has been known for several decades. But in many areas of economic analysis the utility among individuals is not fully transferable: partners can be risk averse with limited insurance possibilities; incentive or enforcement problems can restrict the way in which the joint output can be divided; or policymakers can impose rules about how output is shared within relationships.

This paper studies such "partially transferable utility" situations, and is the first to provide a mathematical characterization of the conditions leading to assortative matching in those environments. The class of models it considers is two-person assignment games in which the utility possibility frontier for any pair of agents is a strictly decreasing function. It presents sufficient and necessary conditions for assortative matching that are simple to express, intuitive to understand, and tractable to apply. It also presents sufficient differential conditions for monotone matching. The differential conditions offer additional insight into the forces governing matching.

In particular, they highlight the role not only of the complementarity in partners' types that figures in the TU case, but also of a complementarity between an agent's type and his partner's payoff that is the new feature in the partially transferable case. This second complementarity entails that the degree of transferability be monotone in type. Even if the output satisfies increasing differences in types, failure of the type-payoff complementarity may overturn the predictions of the TU model and lead instead to negative assortative matching or some more complex and/or distribution-dependent pattern.

The paper also provides a number of computational techniques that can be used to apply the theory, and it illustrates their use through simple examples inspired by recent work in development economics.

Competing for Ownership

Patrick Legros and Andrew F. Newman
Discussion Paper 148, May 2004

The neoclassical theory of the firm provides a mechanism whereby shocks to a few firms propagate to the rest of the economy through the price mechanism. The neoclassical firm remains the backbone of applied economics partly because it provides such a tractable basis for the analysis of this kind of interaction.

The modern theory of the firm on the other hand emphasizes contractual incompleteness, agency problems and the resulting importance of organizational design elements such as task allocation, compensation schemes, asset ownership and assignment of authority and control. Rather little has been done to investigate the influence of the price mechanism on internal organizational decisions and how those decisions feed back to the market and to other firms.

This paper is a step in that direction. It studies how the internal organization of firms is determined in a competitive market. Specifically it looks at how scarcity of assets, skills or liquidity in the market translates into ownership and control allocations within organizations. The model identifies a price-like mechanism whereby local liquidity or productivity shocks propagate and lead to widespread organizational restructuring.

It begins by constructing a simple "building block" model of an organization that incorporates familiar elements from the recent theories of incentives and of the firm. Contracts determining organizational design comprise both a profit sharing rule and a control structure. Because decision makers are liquidity constrained, the distribution of surplus within the organization will generally require that these organizational choices be distorted away from their most efficient form. Small distortions will typically be accomplished by adjustments in the sharing rule (refinance); larger ones will also entail adjusting the control structure (reorganization).

This building block is then embedded in a competitive matching economy wherein partnerships are formed and organizational designs chosen. The simple setup is amenable to a Marshallian style supply-and-demand analysis that allows tractable computation of the comparative statics of relative scarcities of the two sides of the matching market, of liquidity distributions and of productivity shocks. Broadly speaking, the conclusion is that power within the organization, in the sense of having the preponderance of control rights, stems from market power (scarcity).

Specifically, across organizations, those with greater liquidity or higher productivity will tend to be more efficient, with less centralization and a more egalitarian sharing rule.

When the short side of the matching market becomes scarcer, its members will receive greater surplus shares, which tend toward reduced efficiency, greater centralization and more unequal shares. And when an individual organization changes its liquidity position or productivity level, a new effect emerges: if the affected firm is marginal in the matching market, the shock will generate an external effect by changing the terms of trade in the matching market, thereby necessitating that all other firms refinance and/or reorganize. They show that this external effect is more powerful when it originates in productivity shocks than in liquidity shocks.

"Dysfunctional Identities" Can be Rational *and* *Toward an Economic Theory of Dysfunctional Identity*

Hanming Fang and Glenn C. Loury
Discussion Papers 146 and 147, November 2004 and January 2005

In these two papers the authors argue that an understanding of the nature and sources of human identity is important in the study of a variety of social problems. There are two aspects of human identity - personal and social. Social identity deals with how an individual is perceived and categorized by others. Personal identity, on the other hand, deals with a person's answer to the question "Who am I?" These two papers - one a longer and more detailed version of the other - present a choice-theoretic model of identity and use it to explain how personal identity can be dysfunctional. The proposed model of personal identity posits that, in order to answer the question posed above, an agent must provide a "narrative" about her personal history. An agent's self-identity is conceived as a mechanism that can convert complex personal history into a more simplified account of her life. The papers formalize the problem of selective self-representation, and use the resulting framework to study the efficiency implications of the "identity" choices people make.

The authors analyze a two-stage game in which identity is chosen in the first stage and agents engage in an infinitely repeated income-risk-sharing game in the second stage. Agents play non-cooperatively, and their first stage identity choices are common knowledge when they enter the second stage. The outcome of the game depends on how agents interpret their personal experiences to one another. It is infeasible for agents to fully describe all aspects of their experience, so at the first stage they communicate a coarse description of their endowments, which subsequently conditions the pattern of risk-sharing at the second stage.

Under a wide range of conditions, the strategic forces of this game favor the agents adopting a common, collective identity in equilibrium. When the density of their interactions and their potential gains from trade are sufficiently great, the equilibrium of this implied identity game has a "tragedy of the commons" character: there exist superior ways for agents to interpret their experiences to one another which cannot be realized. So, under these conditions their collective identity can be said to be dysfunctional.

Racial Discrimination in Labor Markets with Posted Wage Offers

Kevin Lang, Michael Manove and William T. Dickens

Discussion Paper 145, April 2005

Economic theory suggests that wage discrimination against groups of workers is unlikely to persist in a competitive economy because, in the presence of such discrimination, hiring members of the discriminated-against groups can increase profits. Consequently, in trying to account for differences in the treatment of worker groups, economists have tended to rely either on real productivity differences or else on market imperfections that tend to block the antidiscrimination market response. This paper offers a model of racial discrimination in the labor market in which market imperfections transform weak discriminatory preferences or small productivity differences into large wage differentials. It analyzes labor markets characterized by wage posting, wherein employers attach wage offers to announced job openings. Posted wage offers are assumed binding on the employer and cannot be conditioned on the identity or race of the worker to be hired. It is shown that wage posting lends itself to persistent discrimination.

In the baseline model, employers find black workers to be slightly less desirable employees than white workers. Although perceived differences are small, they are sufficient to ensure that employers choose a white worker in preference to a black worker if both apply for the same job. Consequently, black workers want to avoid the cost of applying to firms that are likely to receive applications from whites. Blacks can accomplish this by applying to firms with wage offers that are low enough to discourage white applicants. In equilibrium, blacks and whites are employed by different firms (segregation), blacks receive lower wages with the wage differential far exceeding the taste or productivity differential (wage discrimination), and firms retain higher profits. The labor-market structure depicted can amplify even modest racist tendencies or small productivity differences to yield highly visible economic outcomes with significant social consequences.

The principal, and interesting, conclusion of the paper is that in an economic environment with posted wage offers, segregation and wage discrimination against black workers can arise even when all information is symmetric, information about posted wage offers and about employers' discriminatory behavior is perfect and employers and workers lack substantial racist motives. This discrimination creates economic inefficiency, reduces total output, decreases wages for both black and white workers and increases profits.

A Search Model of Centralized and Decentralized Trade

Jianjun Miao
Discussion Paper 144, January 2005

In the modern economy, some commodities and assets are traded in both centralized and decentralized markets. In centralized markets, trades are intermediated by market makers at publicly posted bid-ask prices. In decentralized markets, traders search counterparties. Prices are negotiated and transactions are conducted in private meetings among traders. This paper presents a search model of centralized and decentralized trade.

The model is based on Rubinstein and Wolinsky (1985) and Gale (1987). At each date, there are potential inflows of new buyers and sellers. Buyers differ in their valuation of an asset, while sellers do not. Buyers and sellers can choose to trade in the centralized market or in the decentralized market. Once a trader makes a transaction, he leaves the economy. Trading in the decentralized market is costly since search incurs time and contact costs. Trading in the centralized market is costly since there are transaction costs for market making.

The main results of the paper can be summarized as follows. First, a positive bid-ask spread exists if the centralized and decentralized markets coexist in equilibrium. Moreover, the average negotiated price in the decentralized market is inside the bid-ask spread. Second, under monopolistic market-making, the bid-ask spread is positively related to the transaction cost, search frictions, and average negotiated price. Third, liquidity in the centralized market measured by trading volume is negatively related to the bid-ask spread and positively related to search frictions. Fourth, several limiting results and convergence to the Walrasian equilibrium are established. Finally, perhaps the most important and surprising result is about the welfare implications. Specifically, it is shown that the fragmentation of a centralized market improves social welfare if the bid-ask spread after the fragmentation is small enough. However, the opening of a centralized market in a decentralized market economy may not improve social welfare. More interestingly, compared to the competitive market-making, monopolistic market-making may improve social welfare because it partially internalizes the externalities of bid-ask prices on the decentralized market.

Intergenerational Mobility and Macroeconomic History Dependence

Dilip Mookherjee and Stefan Napel
Discussion Paper 143, April 2005

A large literature on 'endogenous inequality' argues that historical inequality can affect long run macroeconomic performance. These models typically assume there are two occupations (skilled and unskilled) that are imperfect substitutes in the production sector and differ in training cost; agents are alike in all respects except their wealth; and capital market imperfections prevent parents from borrowing from their children's future earnings to pay for their education. There are an infinite number of long run equilibria (steady states) varying continuously in per capita income and human capital, with historical endowments determining which steady state the economy converges to in the long run. Even temporary policies or shocks with a small effect on human capital investment incentives in a single generation have permanent macro-effects. Moreover, there is no occupational mobility in any steady state: children acquire their parents' occupation, so there is persistent inter-family inequality in income and consumption associated with occupational differences. This is clearly at odds with reality: even the most unequal societies are typically characterized by some mobility. This paper explores the implications of augmenting the standard model to explain the presence of occupational mobility in the long run, by introducing heterogeneity across agents with regard to ability or by introducing income risk.

The paper shows that the implications of introducing even a small extent of such heterogeneity or risk causes a dramatic shrinkage in the set of long run equilibria. In general there are a finite number of locally isolated steady state levels of per capita income and human capital, implying that small temporary shocks to any steady state cannot have permanent macroeconomic effects. Hence even with an arbitrarily "small" extent of heterogeneity or risk, long run macroeconomic outcomes become substantially less history dependent. However, if the steady state is locally but not globally unique there is still scope for some history dependence. The paper further shows that for a set of steady state skill ratios above a certain threshold, the steady states are globally unique and involve positive mobility. Mobile steady states are generically non-unique in the presence of a "poverty-trap" where education costs are bounded away from zero and earnings of the unskilled are insufficient to cover this minimum cost. If there are multiple steady states, those with higher per capita income and human capital are also more mobile, thus providing an explanation why more developed societies tend to be more mobile as well.

Occupational Diversity and Endogenous Inequality

Dilip Mookherjee and Debraj Ray
Discussion Paper 142, November 2004

A fundamental question in the theory of income distribution is whether market forces (combined with parental bequest behavior) tend to aggravate or mitigate differences in wealth across (otherwise identical) families over successive generations. Existing theories provide different answers to these questions; the authors classify the theories into three broad groups. First, there are "exogenous inequality" models of intergenerational transmission of earnings and wealth, which predict that market forces induce families' fortunes to converge. In this view, long run inequality results from random shocks to abilities and opportunities, forces that are exogenous to the market. At the other extreme are recent models of "endogenous inequality" that argue that even if there are no random shocks, families' fortunes diverge and such divergence is preserved across generations. In between these two approaches is a third collection of models that may be described as "neutral", which are compatible with both convergence and divergence, where the actual outcome is determined by historical circumstances. This paper creates a more general theory which embeds all three as special cases, thus allowing key differences in assumptions underlying the different approaches to be identified.

The paper shows that the key difference concerns assumptions regarding the set of investment opportunities available to market agents, and the manner in which the returns to such investments are determined. In the "exogenous inequality" models all occupations are perfectly substitutable in production, so that no single occupation is essential. On the other hand, in the "endogenous inequality" models every single occupation is essential and factor prices are determined endogenously, which in turn leads to inequality even if the economy starts out equal. The authors argue that the essential assumption in the endogenous inequality models is that parents can transfer wealth to their children only through investment in their education. If financial bequests could supplement educational expenditures, they could be used to offset the inequality induced by differences in educational investments. The need to ensure occupational diversity would then no longer necessitate inequality.

In order to accommodate both theories in a common framework, the paper augments the model of Mookherjee-Ray (*Review of Economic Studies*, 2003) where every occupation is essential, to incorporate financial bequests. The existence of an equal steady state requires the 'occupation span' (defined as the difference between the training costs of the most- and the least-skilled occupations) to be small relative to the strength of the bequest motive (defined as both the desire and ability to leave large bequests). Moreover, the authors show that (conditional on the interest rate) the steady state is unique if the occupational structure is "rich" (in the sense of permitting co-existence of occupations with continuously varying training costs). This implies that when the "narrow span" condition is met and the occupational structure is rich then the exogenous inequality theory is valid: all steady states entail equality. But if the narrow span condition is violated then the results of the endogenous inequality literature apply. Finally, when the occupational structure is not rich, and there are significant indivisibilities in training costs associated with different occupations, both equal and unequal steady states can co-exist, and history becomes important. In this respect the "neutral" theories apply. In the precise nature of history-dependence, however, they may not apply: even if a society starts perfectly equal it may converge to an unequal steady state if it starts sufficiently poor, analogous to the predictions of the endogenous inequality models.

On the Importance of Finnishing School: Half a Century of Inter-Generational Economic Mobility in Finland

Sari Pekkala and Robert E.B. Lucas
Discussion Paper 141, December 2004

There is a large literature that explores the link between parent's and children's economic status and how it evolves over time. Empirical analysis of this relationship has generally been hampered by samples that are quite restricted in size. Most of the existing evidence refers to the US case. This paper uses a fresh data set compiled on Finland that surmounts some of the limitations of prior US samples.

Finland went from resembling a middle income developing country to a high-tech economy within the last half of the twentieth century. Structural transformation came relatively late to Finland, but then happened very fast. Rapid educational expansion occurred, the structure of the economy underwent major shifts and inter-generational mobility increased during this half-century. This paper explores the connections between structural transformation and mobility by providing a decomposition of the changes in inter-generational transmission across cohorts. It extends the methodology of Levine and Mazumder (2002) by decomposing the inter-generational transmission elasticity into a direct effect and an effect that operates through investments in a child's human capital formation both via schooling and rural-urban migration.

The results show that the inter-generational transmission of economic outcomes from parents to children declined significantly from those born in the early 1930s through to generations born at the end of the 1960s. In the decomposition results, the estimate of the migration component is small and declining over time. The schooling component, though larger than the former, also declined with successive cohorts. This last result is due to the decline in the returns to schooling and the lessening impact of family income on educational attainment. A striking result is that the estimated "direct" component persisted throughout and even increased slightly over time among sons, though not among daughters.

The Demand for Outpatient Medical Care in Rural Kenya

Randall P. Ellis and Germano M Mwabu
Discussion Paper 140, May 2004

In this paper the authors study the demand for outpatient medical care in rural Kenya. They argue that there are "out-of-pocket" costs involved in health care that affect consumers' choice between different health care providers, and the existing literature has not dealt with the full complexity of this process.

Ellis and Mwabu specify a four-level nested logit model, involving the choice of whether or not to report illness, having reported illness whether to seek treatment or not, which provider to go to and the mode of transport to the health facility. All these choices are modeled to depend upon individual and household characteristics. The last stage of this process which has not been emphasized in previous literature, helps model the complete decision process and helps to obtain more accurate estimates of willingness to pay for health services in settings where most of these facilities are free.

The authors use household level data from a survey conducted in October 1989 in the South Nyanza district of Kenya. Since Kenya has a diverse network of facilities providing health care services, it provides an ideal setting to model demand for health services. They find that the probability of reporting illness is independent of expected utility from seeking treatment, and is significantly associated with gender and education. Higher probabilities are associated with smaller family sizes and lower household income. A striking result is that none of the demographic variables explain the treatment choice and that most of the variables affect treatment decision in the opposite way of the reporting decision. Choice of facility is increasing in quality and decreasing in cost and treatment time. Higher income people value their time more and thus are more likely to take the bus. Consumers, although relatively price inelastic, respond significantly to quality. Using their estimates they impute the value of time and find it to be as high as 64.3 KShs. Using two simulation exercises they find that as treatment and transportation costs increase, people switch from government clinics to private and missionary facilities and total visits to formal providers remain almost the same.

This study stands out in being able to distinguish between the effect of different variables on the decision to report and to seek treatment. For policy making it is important to know what matters more - illness patterns or demographics - and this paper provides that information.

POLICY PAPERS

Affirmative Action and Its Mythology

Roland G. Fryer Jr. and Glenn C. Loury
IED Policy Paper 5

Despite widespread public controversy concerning affirmative action, public polls reveal that most Americans do not hold extreme beliefs about affirmative action. Fryer and Loury argue that the American public embraces no coherent conception of what "affirmative action" actually entails. They cite surveys which found that Americans held wide-ranging and conflicting views about what is meant by "affirmative action." Investigators concluded that this lack of coherence fostered an atmosphere of confusion about what these policies aimed to achieve and how they were implemented

The goal of this paper is to show the clarifying power of economic reasoning, in combination with useful facts and 'a healthy dose of common sense', to dispel some myths and misconceptions in the racial affirmative action debates. Fryer and Loury discuss seven commonly held but mistaken views one often encounters in the folklore about affirmative action: 1) Affirmative action may involve goals and timelines, but definitely not quotas. 2) Color-blind policies offer an efficient substitute for color-sighted affirmative action. 3) Affirmative action creates opportunities but does not undercut incentives. 4) Passing equal opportunity laws is enough to ensure racial equality. 5) The earlier affirmative action is used in education or career development, the better. 6) Many whites are directly affected by affirmative action policies designed to increase representation of minorities. 7) Affirmative action always helps its intended beneficiaries.

The authors discuss each of these beliefs in turn and provide economic arguments that reveal them to be more myth than fact. Some of these represent bland oversimplifications of complex and nuanced relationships, such as the incentive effects of affirmative action, or its effects on intended beneficiaries. Economic reasoning suggests that these effects depend on a host of context-specific factors, knowledge of which can help the evaluation and design of affirmative action policies.

Some of the other myths greatly exaggerate the true effects. Consider, for instance, myth no. 6 above: affirmative action in college admissions leads many whites to believe that they suffer significantly. Surveys indicate 40 percent of whites over the age of 18 believe it likely that they or someone they know were rejected from a college due to an unqualified black applicant being admitted. Yet Kane (1998) has shown that racial preferences in admissions are given only at the most elite 20 percent of colleges and universities. Using these numbers, the authors estimate that at most 3 percent of all selective college admissions in a given year would be the result of affirmative action. Very few of the 80 percent of those rejected by selective colleges could possibly fit into the 3 percent of admissions affected by affirmative action. And even if affirmative action were responsible for a white candidate's rejection, the work of Dale and Krueger (2002) has shown that the choice of university makes little difference to the lifetime income of an advantaged student. Therefore the perceived disadvantage to whites resulting from affirmative action is far greater than the actual disadvantage they experience.

Racial Stigma: Toward a New Paradigm for Discrimination Theory

Glenn C. Loury
IED Policy Paper 4

In this essay the author emphasizes the distinction between *racial discrimination* and *racial stigma*. Racial discrimination, he asserts, has to do with how blacks are treated, while racial stigma is concerned with how black people are perceived. The author's view is that *reward bias* (unfair treatment of persons in formal economic transactions based on racial identity) is now a less significant barrier to the full participation by African-Americans in US society than *development bias* (blocked access to resources critical for personal development but available only via non-market-mediated social transactions).

Loury proposes that "race" should be thought as a social phenomenon resulting from the combination of two processes – *categorization* and *signification*. Categorization involves the sorting of persons into a cognitively manageable number of subgroups, based on bodily marks, for the purpose of differentiating one's dealings with such persons. Signification involves the mental activity of associating certain connotations or "meanings" with these categories.

His argument is that, at bottom, "race" is all about "embodied social signification." Racial distinctions may emerge and persist in a society even though there may exist no significant distinctions in a biological sense. If people on one side of a transaction are inclined to make racial generalizations when forming their beliefs, if they act on those beliefs and if they start out believing differently about people who have different racial traits, then the actions they take can indirectly produce evidence that confirms them in their views. Being oblivious to such an endogenous source of racial disparity, they may mistakenly attribute the inequality to exogenous sources. A mistaken causal attribution of this kind could be of great political consequence: if one attributes an endogenous difference to an exogenous cause, then one is unlikely to see any need for systemic reform.

The author discusses various problems afflicting urban poor blacks today, ranging from the widening racial gap in the acquisition of cognitive skills, extent of law-abidingness, the stability of family relations, and attachments to the workforce. Nevertheless, he believes reparations for historical unjust behavior do not represent the right avenue of reform. The central issue concerns not merely historical fact, but how people interpret facts. What is required for racial justice, he asserts, is a commitment on the part of the public to take responsibility for the plight of the urban black poor, and to understand this troubling circumstance as having emerged in a general way out of an ethically indefensible past. Such a commitment should be open-ended and not contingent on demonstrating any specific lines of causality.

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 promoted to Associate Professor with tenure. With Zvi Eckstein, she is 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, conversions, and migration. One of their papers "Jewish Occupational Selection: Education, Restrictions, or Minorities?" is forthcoming in the *Journal of Economic History*. The other paper "From Farmers to Merchants, Conversions, and Diaspora: A Human Capital Interpretation of Jewish Economic History" is in the working paper series of CEPR.

She is also finishing 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.

Peter Doeringer's "What Attracts High Performance Factories? Management Culture and Regional Advantage" (with Christine Evans-Klock and David Terkla) appeared 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. During the past year he has presented this research at the Society for the Advancement of Socio-Economics, the Federal Reserve Bank of Boston, University of Cambridge, and the European Monitoring Center of Change. His research on older workers was featured at a State House Forum in Boston.

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. Risk adjustment is being considered for adoption in numerous countries around the world, including Australia, Chile, Taiwan, China, and Germany. During the past year, Ellis has given talks in Australia and Germany. Currently he is collaborating with researchers in Australia, Canada, Kenya, Netherlands, Spain, and Germany.

Kevin Lang continues to focus his research on education and on labor markets. His major current project related to development, joint with Erez Siniver, examines the effect of English knowledge on the earnings of immigrants to a country where English is not the main language of the country. He is also working on models of wage discrimination with Michael Manove and with William Dickens.

Jianjun Miao is currently working on two projects related to investment, growth and asset prices. In the first project, joint with Simon Gilchrist, he analyzes the implications of tax evasion for investment and growth. He builds a model in which a firm's manager may hide taxes from the government and may steal profits from shareholders. He then analyzes the effects of tax reforms on investment and growth.

In the second project, he builds an endogenous growth model in which a social planner may adopt a new technology. He analyzes the relation between volatility and growth and the implications of new technology for stock prices and returns.

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) theoretical analysis of the dynamics of poverty and inequality; (iv) analysis of rules concerning bankruptcy and bonded labor on inequality and productive incentives. He has also been involved in co-editing two forthcoming books, **Understanding Poverty** (Oxford University Press) and **Decentralization and Local Governance in Developing Countries: A Comparative Perspective** (MIT press)

Andrew Newman is currently engaged in several mainly theoretical research projects pertaining to development and globalization. 1) "Globalization and Insecurity" investigates the effects of liberalized markets on informal or implicit insurance institutions, with a focus on the consequences for inequality, economic insecurity, and job turnover. 2) "Managerial Firms, Organizational Choice, and Consumer Welfare" studies in a perfectly competitive framework the impact of trade-induced corporate reorganization on consumer welfare and possible policy remedies. 3) "Credit, Growth, and Trade Policy" is concerned with the effects of inefficient credit markets on developing countries' responses to trade liberalization, in particular in terms of trade patterns, inequality and the effects of policies such as tariffs or export promotion. 4) "Smithian Growth through Creative Organization" studies the effects of inequality on organizational choices such as the division of labor and its feedback to rates of innovation and growth.

2005 Rosenstein-Rodan Prize Winner Announced

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

"What are the effects of human capital and fertility on long run inequality?"

Silvia Prina

This paper introduces a model of endogenous fertility (where higher wages of parents induce lower fertility) into a dynamic model of human capital investment with credit constraints. This has a dramatic effect on the set of steady states: which shrink from a continuum to a finite set (generically), thus implying that the dynamics are subject to substantially less history-dependence. The reason is that skilled households have fewer children than unskilled households, inducing a downward demographic drift to the skill ratio in the economy, which acts as a selection mechanism across the set of steady states that obtains with fixed fertility. Moreover, steady states must be characterized by upward mobility (among the unskilled) to counteract this demographic drift. So the paper generates a novel theory of long run mobility not driven by any stochastic shocks or heterogeneity in abilities or tastes, but instead by endogenous fertility, suggesting an (empirically testable) connection between mobility and fertility patterns in the long run.

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