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.

"THREATS AND CONCESSIONS IN TARIFF SETTINGS"

Taiji Furusawa IED Discussion Paper 123, October 2001

It has become a relatively common practice nowadays for nations to try to influence the direction of another country's (economic) policies through the threat of sanctions. A prominent example of this practice is Section 301 of the US Trade Act of 1974, which legitimizes the US government's unilateral sanctions aimed at eliminating unfair trade practices. The results of trade disputes vary, of course, on a case-to-case basis: in some cases, the mere presence of a threat (of sanction) suffices to induce cooperative behavior, whereas in others, sanctions actually have to be imposed in order to achieve compliance. Furusawa's paper is motivated by the observation that such threats are effective as a means to achieving compliance owing to the promise to reciprocate cooperative behavior. In this paper, he emphasizes the dual role of sanctions and promises as a carrotstick arrangement that may help countries in ultimately achieving cooperative trade policies. While threats can be used to induce the trading partner to lower tariffs if they create sufficiently adverse circumstances, much of their effectiveness draws on the promise of withdrawal of sanctions provided compliance is achieved.

Furusawa investigates the interaction of threats and promises in a dynamic tariff setting game between two trading partners. He analyzes whether the mere threat of sanctions is sufficient to enforce compliance with a country's demand or whether it must actually carry out its threat? While there are equilibria where the threat suffices, there are others where the country must carry out (costly) sanctions in order to eventually guarantee compliance. This latter result is particularly interesting since it does not arise from any uncertainty regarding the ability of the country to impose sanctions. Rather, it is the outcome of the bargaining process implied by the equilibrium. The equilibria where the costly threats are carried out all share the property that in the long run, target levels of compliance are met, thereby rationalizing the cost of imposing sanctions earlier.

Furusawa's results have interesting implications for the impact of unilateral trade liberalization. He points out that such a policy induces trading partners to reciprocate. In turn, this may precisely be the motivating factor that a country may unilaterally lower tariffs, foreseeing that the implicit threat to raise trade barriers again may force the other country to follow suit.

"Transport Costs, Geography, and Regional Inequalities"

Pierre-Philippe Combes and Miren Lafourcade IED Discussion Paper 122, April 2002

The interaction of economic growth and geography and its impact upon the inequality of incomes and opportunities across regions has fascinated and perplexed economists for a long time. No consensus has emerged theoretically or otherwise on whether a fall in transport costs tends to exacerbate or dampen preexisting regional inequalities. On the one hand, increasing returns imply the shift of more productive resources away from peripheral and towards core regions. The latter thereby benefit disproportionately from the higher diversity of goods and larger market sizes. On the other hand, increasing competition in factor markets may reverse this trend, implying eventual convergence. However, a simple time series analysis of employment data across regions (in France for example) seems to lay low such a simple story. Empirical work in this area has, in turn, been plagued by corresponding difficulties. These include data constraints on transaction costs that have prevented a satisfactory exploration of network effects in interregional trade, and ad hoc assumptions regarding the nature and magnitude of transport costs. This perhaps explains the disparate results flowing from this literature.

In this paper, Combes and Lafourcade argue that the

two central problems that need to be overcome are data precision and the correspondence between the theoretical model and its empirical specification. Since transport costs, intermediate inputs, and real geography are all critical in the distribution of activities in France, they utilize a new data set on transport costs between the entire 341 French Employment Areas (EA) to derive a detailed measure of transport costs between the EA's. In order to address the second issue, they develop a tractable and fully-specified economic geography model. This model enables the derivation of a key relationship between sectoral local employment levels and transport costs, regional incomes and the number of firms. A structural estimation demonstrates that for most sectors, the theoretical model is not rejected and that the estimated coefficients are consistent with plausible values for structural parameters.

Combes and Lafourcade use the estimated model to provide simulations on local sectoral employment and production conditions. A strong core-periphery profit structure seems to imply the existence of large concentration incentives in the French economy. Moreover, whereas strong agglomeration effects seem to strengthen specialization at the local level in many French regions with declining transport costs, it appears that at the national level, dispersive forces are becoming prevalent. These observations coincide fairly closely to the time series estimates of relative employment growth in Paris, Lyon, and Marseille between 1978 and 1993.

"Is Equality Stable?"

Dilip Mookherjee and Debraj Ray IED Discussion Paper 121, February 2002

In recent times, economists have begun paying increasing attention to the study of the dynamics of inequality in societies by looking closely at the impact of a variety of market imperfections which may hinder equal access to opportunities to accumulate capital. Under this view, initial disparities in stocks of human or physical capital between agents may be reinforced due to these imperfections. In this paper, Mookherjee and Ray study the evolution of inequality and extend insights of a recent literature. They investigate conditions under which the market mechanism has an inherent tendency to create inequality. This is in contrast to the traditional neoclassical view (associated with Becker and Tomes (1979) or Loury (1981)) that the fortunes of different families tend to converge in the long run, even if they start with vastly different endowments. In particular, they investigate the polar opposite view that inequality emerges and persists in the long run, even if all agents are identical to begin with, and there is no uncertainty or technological non-convexity.

The inevitability of inequality arises from the fact that life in modern societies relies on specialization, necessitating a substantial diversity of professions with varying training costs. In contrast to the aggregative neoclassical model, the diversity of occupations implies that the returns to training depend on endogenously determined wage patterns, rather than technology alone. This introduces pecuniary externalities in the training decisions of different individuals, which may create endogenous nonconvexities in the returns to training. An earlier paper by Mookherjee and Ray (titled 'Persistent Inequality') had shown that if parents invested in their children only by funding their human capital acquisition, inequality is inevitable in the long run, irrespective of initial conditions or technology. For instance, even if all households were to begin with perfectly equal endowments, they must divide endowments between current consumption and bequests to heirs in different ways. So a family which allocates more to current consumption and less to bequests will earn less in the next generation. Once such inequality sets in, it may well magnify. This owes to capital market imperfections, which imply that richer offspring will find it easier to invest in better paying professions for their own children.

In this paper Mookherjee and Ray investigate conditions under which this previous result is robust when

parents can supplement human capital investments in their children with financial bequests. They identify a necessary and sufficient condition for the existence of steady states with perfect equality, where parents of unskilled children compensate exactly with larger financial bequests. This condition requires a high degree of intergenerational altruism, relative to the diversity of occupational structure and level of wages. Hence the previous result concerning the inevitability of long run inequality continues to hold in economies with a diverse occupational structure, a low level of wages, or a high rate of growth. And in such economies, the presence of financial bequests can exacerbate the tendency for inequality to grow over time. They show this in the context of an example of an economy which starts with perfect equality, where inequality gradually emerges and then grows over time. Once individuals in low-skilled occupations become less wealthy than more high-skilled individuals, they make smaller financial bequests to their heirs, thus amplifying wealth differences in the next generation.

"DIASPORA AND DEVELOPMENT: HIGHLY SKILLED MIGRANTS FROM EAST ASIA"

Robert E. B. Lucas
IED Discussion Paper 120, November 2001

This paper distinguishes three major streams of international migration from East Asia: the first stream, to the Pacific rim OECD countries, is made up largely of highly qualified and well educated individuals; the second stream to the Middle East has included both unskilled and professional workers; and the third stream reflects a migration transition among the higher income economies of East Asia, some of which have become significant importers of low skill, temporary workers. In absolute terms, the out-migration of qualified individuals to North America and Australia is

very large. By the year 2000, for example, there were an estimated 840 thousand college educated adults from the Philippines in the USA. Further, a large proportion of these individuals entered the US in the 1990s: between 1994 and 2000, there were an estimated 200 thousand college graduates who entered the USA from East Asia and up to 61 percent of East Asian adults in the USA in 2000 had attended college or graduate school. Lucas notes that for countries like the Philippines and Korea, these numbers constitute a significant proportion of their total stock of tertiary educated population.

Since studying abroad is the major vehicle of entry into the OECD countries, Lucas looks at attempts made by some countries to create an educational infrastructure that can keep skilled graduates at home. He notes that China, Korea, and India have consciously expanded graduate technical training during the 1990s as reflected in the fact these countries had more engineering doctorates in 1997 than the total earned by Asians in the US. Correspondingly, incentive schemes have been launched to encourage the return of the highly skilled diaspora. China, for example, has used a carrot-stick method to both encourage reentry and discourage permanent outflows.

Contrary to the traditional view, however, Lucas points out that a careful examination of data reveals increasing evidence that a highly skilled diaspora may play several important roles in promoting development in the home country. In some contexts, these benefits arise largely in the form of remittances. But Lucas argues that skilled emigrants are particularly well placed to enhance information flows, to lower reputation barriers, and to enforce contracts, with a result that highly skilled migrants may stimulate trade, investment and technology flows to their country of origin. Lucas concludes by highlighting the evidence with respect to these factors that appear to mitigate the brain drain effect - a high return rate of students to Japan and Korea, large remittances to the Philippines, brain circulation and technology transfer to Taiwan and Korea, and direct investments to China.

"DYNAMIC SPECULATIVE ATTACKS"

Christophe Chamley
IED Discussion Paper 119, March 2002

Fixed exchange parities are well known to be vulnerable to coordinated speculative attacks. From the speculators' perspective, participation in a speculative attack is akin to making choices in a coordination game: if a sufficient number attack, a devaluation ensues and profits accrue to the attackers. If not, then the exchange parity stays and the attackers lose money. Most of the literature on coordinated speculative attacks has focused on the role of self-fulfilling expectations in determining which of the two equilibrium outcomes (crisis or stability) will be realized. Surprisingly, this literature has failed to produce a theory of expectations formation and change that may reveal in a more satisfying manner, the role of fundamental factors such as market capital, the rate of information transmission, and central bank policy variables in altering the probability of speculative attacks.

Chamley's paper presents a tractable model of speculation in an exchange rate band regime that explicitly models the process of expectations-formation in such markets. In this dynamic model, speculators are free to choose the time at which they wish to change their currency portfolio. By delaying any portfolio adjustment, therefore, speculators can learn whether there is sufficient capital in the market for a successful attack. They do this through an observation of the fluctuation of the exchange rate within the band. The paper, therefore, models expectation formation and change in a very natural manner by incorporating the trade-off that exists at the individual level, between attacking early and earning a premium (when the price of foreign currency is lower), and delaying for more information. The availability of an option to wait, observe, and learn is exploited by the speculators in a very intuitive manner. Chamley shows that as the time horizon of the market increases, the amount of speculation increases in any period for any set of initial conditions. Thus the probability of a successful attack increases as the opportunity for learning increases.

Chamley goes on to analyze the impact of alternate

defense policies that a central bank may adopt in such a market. By widening the band of fluctuation, the bank lowers the ex-ante probability that the speculative capital in the market can induce a devaluation. This makes speculators more cautious by increasing the option value of delay, thereby slowing down the learning process. This policy can therefore be one way of trying to prevent a speculative attack. Indeed some of the European central banks, notably France, did just this in 1993 and managed to stop the attack. Chamley also demonstrates that an anticipated exchange rate stabilization policy makes an exchange rate more vulnerable to an attack. Interestingly, however, by trading in a non-predictable manner, the central bank can prevent speculators from coordinating an attack.

"RACIAL JUSTICE: THE SUPERFICIAL MORALITY OF COLOUR-BLINDNESS IN THE UNITED STATES"

Glenn C. Loury
IED Discussion Paper 118, December 2001

Nearly a century and a half after the dismantling of slavery as a legal institution, and a half-century after the civil rights movement began, racial stratification continues to be a significant element in American social life. Numerous indices of well-being such as wages, wealth, unemployment rates, or crime statistics all reveal substantial racial disparities. Moreover, available evidence points to the persistence of this feature of American life for some time to come. This essay by Loury seeks to examine the issue of racial justice at two levels. First it evaluates the public morality of alternative policy responses. Second, it seeks to to clarify the role of several subtle processes that create and sustain racial inequality in a society.

Loury argues that the ideals of Western liberalism prove an inadequate guide to achieving moral public action in the face of large and persistent differences in the opportunity sets of different racial groups in America. A particularly important implication of this argument is that the current policy of *colour blindness*, or inattention to racial identity of citizens, is rather inadequate as a response to the history of racism and oppression in America or elsewhere.

Loury also emphasizes the crucial distinction between the two concepts of racial discrimination and racial stigma and its practical importance in understanding the racial status quo in a society. This distinction helps to identify the appropriate responses to the problem of social exclusion and economic disadvantage among African-Americans. He argues that reward bias, or the unfair treatment in economic transactions based on racial identity, is a less significant barrier to the full participation of African Americans in society than development bias, or blocked access to resources critical to personal development and available principally through non-market means of exchange. In this context, Loury points to the importance of self-sustaining processes in which the failure of African-Americans to make progress has justified for dominant groups the very prejudicial attitudes that earlier served to preclude African-American advances.

In conclusion, Loury suggests that a proper study of contemporary racial inequality necessitates an identification of such self-perpetuating processes, as this will aid in laying bare deeper, structural causes of African-American disadvantage.

"Combating the Crisis in Government Accountability: A Review of Recent International Experience"

Dilip Mookherjee
IED Discussion Paper 117, December 2001

Many developing countries and transition economies are currently occupied with (or contemplating) reforms in the organization of public service delivery. Most of these reforms have been targeted at problems of resource diversion and inappropriate project selection that seem to characterize traditional development programs administered by centralized bureaucracies. These problems are commonly thought to arise from the absence of accountability pressures on government employees appointed by a distant central government, and accentuated by poor information available to policy makers concerning citizens' needs and priorities. Dilip Mookherjee's paper provides a perspective on the types of reforms recently initiated and their effects in a number of developing countries.

Mookherjee distinguishes between different categories of reforms aimed at enhancing accountability. The most traditional of these consists of reforms within the centralized bureaucracy, whereas the more recent ones substitute bureaucratic implementation with decentralized mechanisms. The former category of reforms were designed to implement superior incentive schemes for bureaucrats, involving salary reforms combined with increased effort at monitoring bureaucrat performance. Examples are tax administration reforms in some Latin American and African countries following the fiscal crises of the 1980s. In many cases, however, these types of reforms typically ran into design and implementation problems. Most important among these were lack of political will to reform bureaucracies from within, combined with a tendency of high level superiors to stall and prevent high level crackdowns.

Mookherjee argues that the frustrating experiences with attempting to reform bureaucracies directly have led an increasing number of countries to experiment with the alternative approaches involving decentralization of delivery systems. The common element has been a reallocation of authority over the delivery system away from centralized bureaucracies to citizens or to their locally elected representatives. Two forms of local empowerment are distinguished in the paper. The first involves *political* decentralization, or delegation of authority over service procurement and delivery to locally elected governments. The second alternative involves *civic* decentralization, direct empowerment of citizens or their non-governmental rep-

resentatives. Detailed examples of political decentralization from various countries such as Brazil, Bolivia, Uganda and Philippines are discussed, followed by schooling reforms in Mexico, Uganda, El Salvador, Nicaragua, Pakistan and Colombia which directly empowered local communities and parent associations.

While data and endogeneity problems make an exhaustive evaluation of these reforms difficult at this point, it seems that decentralization is capable of significant impact if properly implemented. This requires clear demarcation of roles of local institutions via constitutional amendments, complementary financing arrangements, and expansion in citizens' access to information and legal resources. Mookherjee ends by discussing lessons for policy makers in India, and directions for future research.

"Effects of Ownership Composition on Performance: Evidence from Czech Republic"

Andrew Weiss and Georgiy Nikitin
IED Discussion Paper 116, December 2001

In light of ongoing privatization programs in many transition economies and the simultaneous globalization of the ownership structure of firms, there has been considerable debate about the impact of foreign control on the performance of domestic enterprises. More generally, one may ask whether ownership structure impinges upon firm performance and if so, in what way?

After the fall of the communist regimes in Eastern Europe and the Soviet Republics, the new governments were faced with a difficult choice with respect to the transition of the ownership structure of firms. The state could retain them, albeit risking the well-known inefficiencies of state provision and public censure. Or it could transfer ownership either to private bidders (foreign or domestic), or to

workers and managers of the firm itself. Each of these has its own advantages and drawbacks. Inevitably, each country has followed its own distinctive brand of privatization, with mixed results. In this context, the paper of Weiss and Nikitin performs a valuable comparative analysis of alternate ownership structures in one such economy. While their results may certainly reflect characteristics unique to the Czech economy, they provide a set of important empirical findings to guide future privatization programs.

Weiss and Nikitin's inquiry focuses on the effects of foreign portfolio investment rather than direct investment. They find that whereas majority shareholding by foreigners seems to significantly increase profitability and investment rates, the same cannot be said about other types of shareholders. In particular, by taking the principal shareholder as having control, they find that control in the hands of a foreign firm relative to an investment fund results in an increase in operating profits, in investment, and in the capital-labor ratio. Moreover, foreign owned companies also tend to pay higher wages on average. These findings are robust to a variety of estimation techniques and choice of measures of performance.

Weiss and Nikitin note that an important causal factor for this difference in relative performance may lie in the fact that domestic investment in the Czech Republic is carried out mainly through closed-end investment funds, which typically perform poorly relative to open-end funds in terms of provision of managerial incentives to conform to shareholder interests. This observation provides an important general lesson about running privatization programs. It is not enough to change the name of owners from the state to private individuals: managers must be provided with the right incentives to increase the value of the firm and mechanisms must be in place to ensure that the managers of operating companies are both competent and honest.

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.

Eli Berman's current research touches on development from a number of unconventional angles. He is investigating to what extent the tendency of new technologies to complement educated workers ("skill-biased" technological change) can explain why income in poorer countries has failed to catch up with that in the developed world. Another project explores the economics of radical Islamic militias, asking if the destructive behavior of the Hamas and Taliban is consistent with rational choice models. Other work includes an investigation (with Zaur Rzakhanov) of whether immigrants move for the sake of their children, and what effect the resulting self-selection has on fertility. In collaboration with Kevin Lang and Erez Siniver he is also studying the complementarity of skills and language in the labor productivity of immigrants.

Maristella Botticini has been awarded an Alfred Sloan Research Fellowship for the academic years 2002-2004. Her recent publications include: with Daniel A. Ackerberg "Endogenous Matching and the Empirical Determinants of Contract Form," Journal of Political Economy (June 2002). 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, such as ancient Greece, the Roman empire, the Byzantine empire, China, India, and African societies.

In "A Human Capital Interpretation of the Transition of Jews from Farmers to Merchants" with Zvi Eckstein (Tel Aviv University) she addresses the extent to which a human capital model of occupational choice can explain the trends in Jewish population and the transition of Jews from agriculture to crafts and trade in the first millennium. They argue that migrations, expulsions, and taxation are not sufficient to explain these changes and emphasize instead the role of religion and human capital accumulation. In additional research, she uses tax records and census data to reconstruct wealth distribution and inequality in Florence from 1250 to 1450 in order to study the effect of demographic shocks (plagues) on wealth distribution and growth. Together with Dan Ackerberg (UCLA) and Aldo Rustichini (University of Minnesota), she is studying the determinants of biased sex ratios in medieval Florence.

Peter Doeringer's book on organizational strategies and economic performance of "new economy" manufacturing plants, Startup Factories: High Performance Management, Job Quality, and Regional Advantage (with David Terkla and Christine Evans-Klock) will be published this year by Oxford University Press. A chapter based on his research on older workers, "Older Workers and Active Labour Market Policy in a Full Employment Economy" (with Andrew Sum and David G. Terkla), appeared in Hedva Sarfati and Giuliano Bonoli (Eds.), Labour Market and Social Protection Reforms in International Perspective: Parallel or Converging Tracks? and he is finishing a comparative study of the transferability of efficiency practices among Japanese multinationals. He is currently writing a book on the economics of garment industry supply chains, fashion cycles, and regional industry networks, based on enterprise surveys in the United States, France, Italy, and the UK.

Randall Ellis' recent research focuses on how payments systems affect the health delivery system, with a particular focus on risk adjustment. Risk adjustment is a strategy for paying health insurance companies so that revenues reflect expected costs in order to reduce adverse selection incentives. His research on risk adjustment has already had an important impact on health care policy in the United States. In 2000 the US Medicare program started phasing in a new payment formula for health plans based on a model that he helped develop, and in March 2002 the Medicare program announced that it would use a more refined model for payment starting in 2004. Australia, Canada, Chile, Colombia, France, Israel, New Zealand, and Spain are also considering similar risk adjustment payment formulas. During the past year Professor Ellis made presentations on hospital cost reform in France, and on diagnosis-based risk adjustment in England, Hong Kong and Taiwan. He is currently collaborating with researchers in Germany and Taiwan on risk adjustment.

Robert Lucas contributed to five main areas during the year. A paper on union wage differentials in South Africa, that Lucas wrote jointly with former IED visitor Julian Hofmeyr, appeared in Labour. Continuing his work in migration, Lucas published an article on the interaction between geographic poverty traps and gravity migration models in the Journal of Economic Geography. A report on migration of highly skilled workers between East Asia and the OECD countries, written for the World Bank, is planned for publication in a World Bank volume. On the environment front a paper on industrial pollution by plant size in Brazil and Mexico (co-authored with Susmita Dasgupta and David Wheeler of The

World Bank) appeared in *Environment and Development Economics*, and a further paper on the impact of the East Asia and Tequila financial crises on labor markets and household incomes (coauthored with Peter Fallon of The World Bank) appeared in the *World Bank Research Observer*. Lucas is also working with Sari Pekkala, another former visitor to the IED, on a long term project analyzing intergenerational transmission of inequality in Finland, using a large panel data set covering half a century, during which Finland was transformed from a predominantly agrarian society to a high-tech industrial economy.

Dilip Mookherjee is conducting research with Pranab Bardhan on the measurement, causes and effects of land reforms and decentralization of farm input delivery to local governments in West Bengal since the late 1970s. Mookherjee won a Guggenheim fellowship to work on the West Bengal project, and has been on sabbatical in Spring 2002. In collaboration with Jean-Marie Baland, Pranab Bardhan, Sanghamitra Das, and Rinki Sarkar, he is also engaged in a project (funded by the National Science Foundation and the MacArthur Foundation) to study determinants of firewood collection by rural households in the Himalayan regions of Nepal and India (Himachal Pradesh and Uttaranchal). The aim of this project is to identify the respective roles of poverty, population pressure, commercialization, property rights, forest management and collective action in local communities on the extent to which households rely on firewood collection for their energy needs. Mookherjee is also collaborating with Sanghamitra Das on a project identifying sources of productivity differences between farmer cooperatives and privately owned sugar firms in India, and theoretical analysis of the dynamics of inequality with Debraj Ray.

Northeast Universities Development Consortium Conference Keynote Address Kenneth L. Sokoloff

"Inequality, Institutions, and Differential Paths of Growth Among New World Economies"

Stanley L. Engerman and Kenneth L. Sokoloff

Since Great Britain was a late entrant in the quest for colonies, one typically finds that her territories in the New World were, at the time of their acquisition, neither as resource rich, nor comparable in terms of income per capita with those owned by Spain. Over the next few centuries, however, we have seen how the North American colonies first caught up with the latter group, and then after independence, progressively pulled ahead economically, a trend that continues till today. In a similar vein, the colonies in the North, Latin, and South Americas began with roughly the same legal and cultural background, drew immigrants from similar places and economic classes, yet have evolved very distinct societies and set of institutions that mediate socioeconomic exchange. The one consensus that has emerged among analysts looking at the comparative economic history of the Americas is that institutions have played a fundamental role in determining the process of economic change. This, however, begs the question of the extent of endogeneity of the institutions being studied. In what manner are they themselves shaped by economic growth, and how have they evolved in response to the changing needs of the economy?

For example, European settlers drew initially upon both, their backgrounds in Europe as well as on adaptations made previously by Native Americans. In this context, Engerman and Sokoloff stress that given the wide range of environments, geographic variations in native population densities, and forms of social organization involved in the settlement of colonies, it should be possible to learn the extent and manner in which these different institutional backgrounds interacted.

Engerman and Sokoloff distinguish three types of institutional forms that have had a significant impact on the process of development. They first identify some key political and legal arrangements that form the basis for socioeconomic exchange within the society. These reflect the political power relationships among the elite and vary over time with changes in the balance of power within society. Second, they analyze the economic choices that individuals make within this legal and political framework which influence both, the organization of exchange and resource allocation. These determine, (and in their turn, evolve in response to) the progress of knowledge and technology and shifts in market power. Third, cultural and religious values often influence economic behavior, not only through their effect on the nature of goods and services desired, but also by their impact upon saving, and consequently upon capital accumulation. Finally, they highlight the significance of variation in the speed and flexibility of institutional adjustment to the changing needs of these societies.

Engerman and Sokoloff claim that the advantage of a hemispheric perspective on European colonies in the New World lies in the identification of factor endowments or initial conditions as perhaps the most critical factor in the evolution of economic institutions, the structure of colonial economies, and ultimately on their long-run paths of institutional and economic development also. Whereas most colonies began with an abundance of land and other resources relative to labor, factor endowments varied extensively in other respects. Engerman and Sokoloff argue that the extreme differences in the distributions of wealth, human capital, and power can be traced back to these initial differences.

Factor endowments, broadly conceived to encompass wide-ranging variation in the size of the Native American population as well as in geography and climate, seem to have been crucial in generating radical differences in the extent of initial inequality across the European colonies in the Americas. For example, the Caribbean colonies and Brazil were well suited by climate and soils to cash crops like sugar (the most important commodity in world trade over the 17th and 18th centuries) for which the most efficient method of production was on large slave plantations. Such colonies imported vast numbers of slaves to produce sugar, and their populations came to be dominated numerically by that highly disadvantaged group. In Spanish America, Native Americans accounted for the dominant share of the population, because the Spanish had focused on the exploitation of the known mineral resources and native labor – which not coincidentally tended to be concentrated in the same places, such as Mexico and Peru. With the large Native American labor force available, there was less need (or desire) for European immigrants, and the Spanish Crown soon — at the behest of those of European descent who had already established themselves — imposed stringent restrictions on who could immigrate. In both cases (the sugar-growing areas and Spanish America), factor endowments were a major factor behind the populations coming to have a relatively small share of individuals of European descent (who were favored in terms of legal standing, human capital, and wealth) and a dominant share of the population who

had markedly lower legal standing, human capital, and wealth – or extreme inequality. In stark contrast, on the northern part of the northern mainland, there were relatively few Native Americans and the soils and climate did not support significant sugar cultivation. Small size family farms were the rule, with a practice of mixed farming concentrating on both grain and livestock, and characterized by limited scale economies. This encouraged the formation of relatively homogeneous populations, and of more equal distributions of wealth, more democratic political institutions, extensive domestic markets, and broader access to economic opportunities. This is evident upon their examination of evidence concerning the evolution of laws governing franchise, the extent of voting, or literacy rates both across the American colonies as well as in comparison to European countries.

Engerman and Sokoloff conclude by emphasizing that there may be general reasons for expecting regions with more equal circumstances and rights to be more likely to realize sustained economic growth than regions with extreme inequality. The authors contend that this may be due to the tendency of government policies toward maintaining the same degree of inequality along their respective economy's path of development. The relative historical experience of erstwhile colonies in the Americas seems to provide significant evidence in favor of this view.

Northeast Universities Development Consortium Conference

September 28-30, 2001

The Northeast Universities Development Consortium Conference continues to be a major forum for the discussion of development issues. The Institute served as host to the Fall 2001 Conference on September 28-30 at Boston University. One hundred and thirty-two papers were presented during this three day event covering topics including Formal and Informal Credit, Labor, Social Networks, Inequality, Microcredit, Health, Credit and Inequality, Governance and Corruption, Social Capital, Risk and Sharing, Agriculture, Intrahousehold Allocations, Finance and Development, Poverty, Industrial Organization, Education, Financial Institutions and Development, Political Economy, Development Macroeconomics, Trade Liberalization, Growth and Capital, Transfers and Welfare, International Issues, Child Labor, Environmental Economics, Child Labor and Demography.

Participants from the five core members of the consortium, Harvard, Yale, Williams, BU, and Cornell were joined by economists from both academic and research organizations around the world. Representatives from the World Bank, IMF, universities across the US and Canada as well as from Sweden, England, Hong Kong and other countries, participated both as presenters and discussants.

2002 ROSENSTEIN-RODAN PRIZE WINNER ANNOUNCED

The Institute for Economic Development awarded the 2002 Rosenstein-Rodan Prize to Haldun Evrenk for his paper Are Honest Citizens to Blame for Corruption? An Exercise in Political Economy of Tax Evasion.

The prize, in memory of Professor Paul Rosenstein-Rodan, is awarded annually to graduate students in economics submitting the best research paper in the field of development economics. The abstract for this paper follows:

This paper is about public support for anti-corruption reforms. The form of corruption we consider is tax evasion, in a country where taxes are commonly evaded. We analyze the relation between the fraction of evaders and the support for anti-corruption reform. We find that in societies where all citizens have the opportunity and willingness to evade, anti-corruption reforms always win public support. However, reforms may not receive enough support in societies where a majority of citizens do not or cannot evade and a minority do evade.

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

Editors: Margaret Chapman, Admin-istrative Assistant; Dilip Mookherjee, Director; Jay Surti.

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