

ABSTRACTS OF WORKING PAPERS IN ECONOMICS

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Ackerberg, Daniel A.

PD January 1999. **TI** Endogenous Matching and the Empirical Determinants of Contract Form. **AU** Ackerberg, Daniel A.; Botticini, Maristella. **AA** Boston University. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 96; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. **PG** 39. **PR** no charge. **JE** C35, J41, J43, L23, N53. **KW** Contract Choice. Principal-Agent Matching. Risk Aversion. Agrarian Contracts. **AB** Theoretical work on contracts often identifies an "optimal" contract as a function of the characteristics of the principal and agent who are contracting. Correspondingly, empirical work on contracts often regresses contract form on observed (by the econometrician) characteristics of the principal and agent. This paper examines the economic implications when some of the theoretically relevant characteristics are partially observed or unobserved. We show that if there are incentives whereby particular types of agents end up contracting (i.e., matching) with particular types of principals, one may end up with estimated coefficients on the observed characteristics that are misleading. The problem is that this matching generates correlation between observable characteristics of one party and proxy errors of the other party, causing biases in many or all coefficients of interest. We then suggest a number of solutions to a historical dataset on agricultural contracts between landlords and tenants in 15th Century Tuscany.

Adam, C. S.

PD April 2000. **TI** Exchange Rate Regimes and Revenue Performance in Sub-Saharan Africa. **AU** Adam, C. S.; Bevan, D. L.; Chambas, G. **AA** Adam and Bevan: University of Oxford. Chambas: Universite d' Auvergne. **SR** Oxford Department of Economics Discussion Paper: 09; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. **PG** 30. **PR** no charge. **JE** O11, O23. **KW** Revenue Productivity. Exchange Rate Regimes. Africa. Panel Data. **AB** It has been argued that the institutions of the CFA Franc zone may have reduced inflation but that they also induced misalignment of the real exchange rate and that this is the explanation of their dismal revenue performance. This paper uses a panel of 22 countries in sub-Saharan Africa to estimate revenue performance over the period from 1980 to 1996. It finds that the poor cumulative relative revenue performance of the franc zone countries is mainly attributable to differences in environmental and structural factors, and that different responses to changes in the equilibrium real exchange rate, but

that the misalignment of the real exchange rate also played a part.

Adam, Christopher

TI Testing Nash Bargaining Household Models with Time Series Data: Divorce Law Reform and Female Suicide in Canada. **AU** Hodinott, John; Adam, Christopher.

Adda, Jerome

PD May 1997. **TI** Balladurette and Juppette: A Discrete Analysis of Scrapping Subsidies. **AU** Adda, Jerome; Cooper, Russell. **AA** Adda: INRE, CREST-INSEE and CEPREMAP. Cooper: Boston University. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 76; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. **PG** 42. **PR** no charge. **JE** D11, D12. **KW** Subsidies. Durable Goods.

AB This paper studies the effects of subsidies on durable goods markets. In particular, we study a recent policy in France in which the governments of Balladur and Juppe subsidized the replacement of old cars with new ones. To study this policy, we construct a dynamic stochastic discrete choice model of car ownership at the household level. The resulting decision rules and equilibrium conditions are used to estimate, using aggregate data, the underlying parameters of the model. These policy functions are used to evaluate the short and long run effects of the French policies. We find that these policies do stimulate the automobile sector in the short run but, through the induced changes in the cross sectional distribution of car ages, create the basis for subsequent low activity. Further, while these policies increase government revenues in the short run, revenues in the long run are lower relative to a baseline without intervention.

Adelman, Irma

PD May 1999. **TI** The Korean Financial Crisis of 1997-98. **AU** Adelman, Irma; Nak, Song Byung. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 874; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 21. **PR** \$5.25 Domestic; \$10.50 International Surface Rate. **JE** E44, F36, F41, O10, O23. **KW** Economic Growth. Financial Crises. Korea.

AB The origins of the present Korean financial crisis are complex. Several elements have combined to generate it: vulnerabilities to external shocks, both inherent and strategy-

induced; institutional inadequacies, both domestic and global; domestic policy mistakes; and exogenous shocks originating in the external environment. Individually, none of these would have been sufficient to generate the financial meltdown experienced by Korea between October 1997 and mid-March 1998. In the absence of substantial capital market liberalization, the policy mistakes and domestic institutional inadequacies in Korea would merely have resulted in a recession. In the absence of exogenous shocks stemming from prolonged recession in Japan and Europe and contagion from financial crises in other East Asian countries the mistaken real appreciation of the won and consequent slowdown in exports and economic growth would not have taken place. And, if the financial crisis had not been as severe, once it got going, Korea would not have had to submit to the overly stringent and partially mistakenly conceived IMF conditionality. This paper proceeds with an analysis of each of the ingredients of the Korean financial crisis, in turn.

PD May 1999. **TI** Fallacies in Development Theory and Their Implications for Policy. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 887; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 30. **PR** \$7.50 Domestic; \$15.00 International Surface Rate. **JE** O10, O20. **KW** Economic Development. Economic Policy.

AB In the present paper, the author will be concerned primarily with the impact that the culture of economics as a science has had on development economics. The author will argue that the discipline of economics has enshrined the Keep It Simple Stupid (KISS) principle into an overarching tenet, imbibed in graduate school, that can only be violated at the violators own peril. This principle demands simple explanations and universally valid propositions. It has led to three major fallacies, with significant deleterious consequences for both theory and policy. The author is not arguing for complexity for its own sake; rather the author is arguing for theories rich enough to portray the changing reality that is relevant for correct policy prescriptions. In what follows, the author shall consider three major fallacies arising from the KISS principle: (1) single-cause theories of underdevelopment; (2) single-figure-of-merit criterion of development; and (3) log-linear process of development.

PD May 1999. **TI** The End of the Developmental State? A General Equilibrium Investigation on the Sources of the Asian Crisis within a Multi-Region, Inter-temporal CGE Model. **AU** Adelman, Irma; Yeldan, Erinc A. **AA** Adelman: University of California, Berkeley. Yeldan: Bilkent University, Ankara. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 888; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 21. **PR** \$5.25 Domestic; \$10.50 International Surface Rate. **JE** D50, F31, F32, O14, O19. **KW** Economic Development. Capital Flows. General Equilibrium. CGE Models.

AB The Asian financial crisis had a profound impact on the global economy. Growth is expected to be slower; risks are higher; and the international flows of capital have been

dislocated. Above all, it has set out forces of new conditionality surrounding the development state, constraining its ability in designing an independent strategy of industrialization and foreign trade. With the aid of an inter-temporal, multi-region CGE model, we regard the crisis to be the result of a fundamental incompatibility between an independent financial policy with unregulated capital markets. We model the increased financial fragility surrounding the unregulated, short-term speculative capital flows as a sudden and unexpected rise in the domestic risk premium. Employing the CGE apparatus, we further document how global financial markets preclude governments from having independent exchange and interest policies to promote industrialization; and demonstrate the serious threats that the international capital flows pose to economic stability and development.

PD May 1999. **TI** Editorial: Financial Crises-Causes, Consequences and Remedies. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 889; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 2. **PR** \$5.00 Domestic; \$10.00 International Surface Rate. **JE** F31, F32, F41, O23. **KW** Financial Crises. Exchange Rates. Capital Flows.

AB Why are financial crises frequent now while absent before 1973? Largely because, in 1973, when the supply of dollars became woefully inadequate for world trade, the global financial system was changed drastically. Flexible exchange rates replaced fixed ones; and, under US and IMF pressure, open capital markets replaced closed short-term capital markets and regulated foreign investments flows. These changes provided the environment enabling financial crises by robbing countries of their economic autonomy. The resulting loss of economic autonomy afflicts both developed and developing nations, but has more severe consequences for developing ones: for, if their capital markets are open and unregulated, their governments cannot stimulate further development. All countries are left with responsibilities without instruments. It is therefore hardly surprising that periodically governments ignore the international constraints on their economic freedom and trigger a financial crisis. So far, the United States has enjoyed both economic autonomy and immunity from crisis because dollars are the sole global asset. But, it is about to lose that immunity once the Euro joins the dollar.

PD May 1999. **TI** The Role of Government in Economic Development. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 890; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 28. **PR** \$7.00 Domestic; \$14.00 International Surface Rate. **JE** F30, O10, O20. **KW** Economic Development. Role of Government. Capital Flows.

AB Developing countries wishing to become developed cannot renounce their policy autonomy. The author shows in this paper that government-led economic growth has been essential to the initiation of development both during the Industrial Revolution era and during the twentieth century. And the author also shows that the nature of the government-civil

society role must change dynamically through development history. But the author also discusses that the current global international financial architecture puts severe constraints upon government economic autonomy in pursuing developmental goals. So what are developing-country governments to do in the Post Bretton Woods era? They have several classes of alternatives. One, they can limit themselves to the instruments they retain. Second, developing countries can work to convince the international community that the current global financial system requires reform. Third, developing countries could unilaterally delink from international capital markets to preserve their economic independence and stability.

Aebi, Robert

PD February 1999. **TI** Evaluating Theories of the Income Dynamics: A Probabilistic Approach. **AU** Aebi, Robert; Neusser, Klaus; Steiner, Peter. **AA** University of Berne. **SR** Institute for Advanced Studies (IHS) Economics Series Working Paper: 61; Institute for Advanced Studies, Stumpergasse 56, A-1060 Vienna, Austria. Website: www.ihs.ac.at/Library/libhome.html. **PG** 20. **PR** ATS 80.00 Individuals; ATS 250.00 Institutions. **JE** C61, J31. **KW** Transition Matrices. Large Deviation. Relative Entropy. Income Dynamics.

AB The paper proposes an approach to evaluate hypotheses about transition dynamics when only the distributions at two points in time are observed. Using the principle of statistical mechanics, we show how to adjust in the "most probable" way a hypothesis so that it becomes compatible with the observed distributions. This adjustment procedure also allows to test hypotheses in a statistical sense. The test is based on the relative entropy and is equivalent to a likelihood ratio test. We apply our approach to compare the dynamics of the income distribution between men and women in the U.S. using PSID data.

Aglietta, Michel

PD September 1998. **TI** Competitivite et regime de change en Europe centrale. **AU** Aglietta, Michel; Baulant, Camille; Coudert, Virginie. **AA** Aglietta: Universite de Paris X Nanterre. Baulant: Universite d'Angers. Coudert: Banque de France. **SR** CEPII Working Paper: 98/10; Centre d'Etudes Prospectives et d'Informations Internationales (CEPII), 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 61. **PR** no charge. **JE** F31, F15, F43. **KW** Openness. International Trade. Competitiveness. Transition. Exchange Rate Policy.

AB This paper analyzes the medium-term performance of Hungary, the Czech Republic and Poland, within the perspective of the enlargement of the European Union, in assessing the relationships between growth, opening to foreign trade and competitiveness. The ratio of foreign trade to GDP is the synthetic indicator of modernization, the real exchange rate is the measure of competitiveness. A model links both variables to growth and to the trade balance in percent of GDP; the comparisons of the performance of the three economies is done with the estimates of these structural relations and the simulation of the impact of real exchange rate changes on internal and external disequilibrium. The results show a dilemma between disinflation and competitiveness, familiar to emerging countries; inflation is under control but above the standard of EMU countries. The paper discusses the policy recommendations according to the macro-economic conditions

in these East-European countries. This paper is written in French.

Ahluwalia, Pavan

PD February 2000. **TI** Discriminating Contagion: An Alternative Explanation of Contagious Currency Crises in Emerging Markets. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/14; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 17. **PR** not available. **JE** F31, F32. **KW** Contagion. Currency Crisis. Balance-of-Payments. Exchange Rate. Speculative Attack.

AB This paper shows that a country's vulnerability to contagious crises depends on the visible similarities between that country and other countries that are experiencing crises. A country is vulnerable to shifts in investor sentiment if it exhibits weaknesses in the same economic variables as other countries affected by a contagious crisis (particularly the country that started the contagious wave), or if it is located in the same region. The paper uses a sample of 19 emerging markets, and data from the Mexican, Asian, and Russian crises to provide evidence of this discriminating contagion, after controlling for alternative channels of contagion such as trade spillovers and financial linkages.

Aksin, O. Zeynep

PD February 1998. **TI** Staffing an Inbound Call Center. **AU** Aksin, O. Zeynep; Harker, Patrick T. **AA** Aksin: INSEAD. Harker: University of Pennsylvania. **SR** INSEAD Working Paper: 98/79/TM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 34. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M12, M21. **KW** Multichannel. Reneging. Queues. Optimization. Staffing. Inbound Call Centers. Financial Institutions. Retail Banking.

AB This paper studies a staffing problem for inbound call centers with multiple call types and service agents that specialize in these different call types. The staffing problem seeks to allocate servers in a call center where performance is determined by its server allocation as well as its telecommunication and information technology resources; profit maximization is the goal of this problem. For the pure loss case, which does not allow for renege calls, it is shown that a greedy allocation procedure yields the optimal server allocation. Similarly, for the more general case with only one type of call class, a simple search procedure is shown to result in the optimal number of servers. Heuristics are proposed for the general multi-class form of the staffing problem, whose performances are evaluated through numerical examples at the end of the paper.

PD February 1998. **TI** Modeling a Phone Center: Analysis of a Multi-Channel Multi-Resource Processor Shared Loss System. **AU** Aksin, O. Zeynep; Harker, Patrick T. **AA** Aksin: INSEAD. Harker: University of Pennsylvania. **SR** INSEAD Working Paper: 98/80/TM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 28. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M11, M12. **KW** Call Center. Multi-Class Processor.

AB This paper presents a model for the study of operations at

an inbound call center. The call center is modeled as a multi-class processor shared loss system, where the interacting effects of human, telecommunication and information technology resources are explicitly incorporated. Product form solutions for this type of systems are provided along with expressions for performance measures like blocking and reneging. Some structural properties of system throughout are analyzed in an effort to pave the way for future optimization studies dealing the design and management of phone centers.

PD September 1998. **TI** Computing Performance Measures in a Multi-Class Multi-Resource Processor-Shared Loss System. **AU** Aksin, O. Zeynep; Harker, Patrick T. **AA** Aksin: INSEAD. Harker: University of Pennsylvania. **SR** INSEAD Working Paper: 98/81/TM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. **Website:** www.insead.fr/research. **PG** 27. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** C61, C63, M12, M21. **KW** Queueing. Loss System. Processor Sharing. Computational Analysis. Approximation.

AB This paper develops methods to compute performance measures in a specific type of loss system with multiple classes of customers sharing the same processor. Such systems arise in the modeling of a call center, where the performance measures of interest are the blocking probability of a call and the reneging probability of customers that are put on hold. Expressions for these performance measures have been derived in previous work by the authors. Given the difficulty of computing these performance measures for realistic systems, this paper proposes two different approaches to simplify this computation. The first method introduces the idea of multi-dimensional convolutions, and uses this approach to compute exact blocking and approximate reneging probabilities along with bounds on the latter probabilities. The second method establishes an adaptation of the Monte Carlo summation technique in order to obtain good estimates of blocking and reneging probabilities in large systems along with their associated confidence intervals.

Al-Atrash, Hassan

PD January 2000. **TI** Intra-Arab Trade: Is It Too Little? **AU** Al-Atrash, Hassan; Yousef, Tarik. **AA** Al-Atrash: International Monetary Fund. Yousef: Georgetown University. **SR** International Monetary Fund Working Paper: WP/00/10; International Monetary Fund, 700 19th Street, Washington, DC 20431. **Website:** www.imf.org. **PG** 18. **PR** not available. **JE** C13, F17, O53. **KW** Arab Countries. Gravity Model. Trade.

AB This paper estimates a gravity model to address the issue of whether intra-Arab trade is too little. Although gravity models have been extensively used to measure bilateral trade among countries, they have, to the best of our knowledge, never been used to measure intra-Arab trade. Our results suggest that intra-Arab trade and Arab trade with the rest of the world are lower than what would be predicted by the gravity equation, suggesting considerable scope for regional-as well as multilateral-integration. The results also suggest that intra-GCC and intra-Maghreb trade are relatively low while the Mashreq countries exhibit a higher level of intragroup, trade.

Alavi, Maryam

PD June 1999. **TI** Knowledge Management and

Knowledge Management Systems: Conceptual Foundations and Research Issues. **AU** Alavi, Maryam; Leidner, Dorothy E. **AA** Alavi: University of Maryland. Leidner: INSEAD. **SR** INSEAD Working Paper: 99/34/TM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. **Website:** www.insead.fr/research. **PG** 67. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M12, M21. **KW** Knowledge Management. Organizational Knowledge.

AB Consistent with the growing interest in organizational knowledge and knowledge management (KM), IS researchers have been promoting a class of information systems, referred to as knowledge management systems (KMS). The objective of KMS is to support construction, sharing and application of knowledge in organizations. We believe that to be credible, KMS research and development should preserve and build upon the significant literature that exists in different but related fields. We have promoted this view in this paper by providing a review and interpretation of knowledge management literatures in different fields with an eye towards identifying the important areas for future research. Next, we have presented a detailed process-view of organizational knowledge management with a focus on the potential role of IT in this process. The paper concludes with a discussion of major research questions that emerge from the review of literature as well as the process-view of KM.

Alberini, Anna

PD February 1998. **TI** Strict Liability as a Deterrent in Toxic Waste Management: Empirical Evidence from Accident and Spill Data. **AU** Alberini, Anna; Austin, David H. **AA** Alberini: University of Colorado. Austin: Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/16; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. **Website:** www.rff.org. **PG** 24. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D21, K32, L51. **KW** Strict Liability. Hazardous Substances. Accident Risk.

AB This paper explores the issue of whether strict liability imposed on polluters has served to reduce uncontrolled releases of toxins into the environment. We are interested to see whether imposing strict liability for the cost of remediation at hazardous waste sites has encouraged firms to handle toxic materials more carefully and has uniformly reduced the incidence of toxic spills, or whether the effect is dependent on firm size and other factors. To answer these questions, we use data on accidents and spills involving hazardous substances coming from a comprehensive database of events reported to the US EPA under their Emergency Response Notification System (ERNS), and fit regressions relating the frequency of spills of selected chemicals used in manufacturing to the type of liability in force in a state. Results vary with the chemical being analyzed. It appears that under strict liability small firms are responsible for a disproportionate number of spills. Since strict liability states tend to have more manufacturing firms, and more small manufacturing firms, these factors serve to increase the number of spills of these chemicals in strict liability states.

PD March 1998. **TI** Fleet Turnover and Old Car Scrap Policies. **AU** Alberini, Anna; Harrington, Winston; McConnell, Virginia. **AA** Alberini: University of Colorado. Harrington: Resources for the Future. McConnell: University of Maryland and Resources for the Future. **SR** Resources for

the Future Discussion Paper: 98/23; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. PG 31. PR Foreign: \$15.00 Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. JE O33, Q25. KW Mobile Source. Inspection and Maintenance. Scrappage. Emission Fees.

AB This paper incorporates owners' decisions to keep, repair or scrap their old vehicles into a simulation model of fleet emissions. This decision depends critically on the owner's perceived value of the vehicle. We examine the factors affecting owners' valuations of their old vehicles using a unique longitudinal dataset. Willingness to accept the vehicle is well predicted by mileage and condition of the car, and declines systematically with its age. Our estimated model of vehicle value, the estimated distributions of emissions, and two equations that link emissions reductions to the cost of repairs are used as inputs in a simulation model of California's fleet. The simulation model is used to examine the role of scrap policies alone and combined with other policies for reducing emissions, such as current Inspection and Maintenance (I/M) programs and proposed emissions fees, and the welfare implications of combining such programs. We find that old car scrap programs may increase net welfare under a regulatory program like I/M in practice today, but that a stand alone scrap program is unlikely to provide very much in the way of emission reductions.

TI Overcoming Public Aversion to Congestion Pricing. **AU** Harrington, Winston; Krupnick, Alan J.; Alberini, Anna.

Alberola, Enrique

PD December 1999. **TI** Global Equilibrium Exchange Rates: Euro, Dollar, "Ins," "Outs," and Other Major Currencies in a Panel Cointegration Framework. **AU** Alberola, Enrique; Cervero, Susana G.; Lopez, Humberto; Ubide, Angel. **AA** Alberola: Bank of Spain. Cervero: Deutsche Bank. Lopez: The World Bank. Ubide: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/175; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 30. PR not available. JE C23, F31, F41. KW Exchange Rates. Panel Cointegration.

AB This paper presents a methodology for calculating bilateral equilibrium exchange rates for a panel of currencies in a way that guarantees global consistency. The methodology has three parts: a theoretical model that encompasses the balance of payments and the Balassa-Samuelson approaches to real exchange rate determination; an unobserved components decomposition in a cointegration framework that identifies a time-varying equilibrium real exchange rate; and an algebraic transformation that extracts bilateral equilibrium nominal rates. The results uncover that, by the start of Stage III of the European Economic and Monetary Union (EMLJ), the euro was significantly undervalued against the dollar and the pound, but overvalued against the yen. The paper also shows that the four major EMU currencies locked their parities with the euro at a rate close to equilibrium.

Alesina, Alberto

PD December 1999. **TI** Redistribution Through Public Employment: The Case of Italy. **AU** Alesina, Alberto; Danninger, Stephan; Rostagno, Massimo. **AA** Alesina: Columbia University. Danninger and Rostagno: International Monetary Fund. **SR** International Monetary Fund Working

Paper: WP/99/177; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 42. PR not available. JE H31, H32, H42. KW Public Employment. Income Redistribution. Public Policy. Economic Behavior. Agents.

AB This paper examines the regional distribution of public employment in Italy and documents two sets of facts. The first is the use of public employment as a subsidy from the North to the less wealthy South. We calculate that about half of the wage bill in the South of Italy can be identified as a subsidy, with both the size of public employment and wage levels used as a redistributive device. The second set of facts concerns the negative effects of subsidized public employment on individuals' attitudes toward job search, education, and "risk-taking" activities. We conclude that heavy reliance on public employment distorts incentives and discourages the development of market activities in the South.

Alexander, Corinne

PD May 1999. **TI** Do Incentives Matter? Product Quality and Contract Incentives in Processing Tomatoes. **AU** Alexander, Corinne; Goodhue, Rachael E.; Rausser, Gordon C. **AA** Alexander and Goodhue: University of California, Davis. Rausser: University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 882; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. PG 15. PR \$5.00 Domestic; \$10.00 International Surface Rate. JE L14, L15, Q11. KW Product Quality. Contract Incentives. Processing Tomatoes. Agriculture.

AB This paper moves beyond the observationally equivalent design of the contract and focuses on whether or not the authors can reject the hypothesis that moral hazard is important by asking the following question: Do growers respond to contractually-specified marginal quality incentives? If growers do not respond to these incentives, it is unlikely that the quality incentives are designed to deal with a moral hazard problem. On the other hand, if growers do respond to these incentives then further tests are necessary to determine the applicability of contract theory. This paper undertakes a first step toward determining whether contracts are influenced by asymmetric information considerations or not. The authors utilize a natural experiment regarding growers' responses to price incentives for processing tomato quality. In their data set, growers deliver processing tomatoes under a standard contract with price incentives, and for a fixed price per ton. The authors compare the quality of the tomatoes delivered under the two arrangements. The results suggest that growers indeed do respond to price incentives by improving tomato quality.

Allen, Robert C.

PD June 1999. **TI** The Extinction of the Eastern Arctic Bowhead. **AU** Allen, Robert C.; Keay, Ian. **AA** Allen: University of British Columbia. Keay: McGill University. **SR** University of British Columbia Department of Economics Discussion Paper: 99/18; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. PG 35. PR JE L79, N53, Q22. KW Renewable Resources.

Economic History. Europe-Pre 1913. Industry Studies.

AB In this paper we argue that the expansion of the British whaling industry at the end of the eighteenth century and beginning of the nineteenth century led to the collapse of the Dutch industry and the permanent depletion of the eastern arctic Bowhead stocks. A set of endogenous variables have been simulated, using a system of equations which explicitly model the links between economic and biological variables characterizing the Dutch pelagic whaling industry in both Davis Strait and off the east coast of Greenland, to facilitate counterfactual experimentation in support of our claim.

Alvarez, Fernando

PD February 1999. **TI** Quantitative Asset Pricing Implications of Endogenous Solvency Constraints. **AU** Alvarez, Fernando; Jermann, Urban J. **AA** Alvarez: University of Chicago. Jermann: University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6953; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 63. **PR** \$5.00. **JE** G12, G14. **KW** Asset Pricing. Equity Premia. Risk Premia.

AB We study the asset pricing implications of an economy where solvency constraints are determined to efficiently deter agents from defaulting. We present a simple example for which efficient allocations and all equilibrium elements are characterized analytically. The main model produces large equity premia and risk premia for long term bonds with low risk aversion and a plausibly calibrated income process. We characterize the deviations from independence of aggregate and individual income uncertainty that produce equity and term premia.

PD April 1999. **TI** Money and Interest Rates with Endogenously Segmented Markets. **AU** Alvarez, Fernando; Atkeson, Andrew; Kehoe, Patrick J. **AA** Alvarez: University of Chicago, Universidad Torcuato Di Tella and NBER. Atkeson: University of Minnesota, Federal Reserve Bank of Minneapolis and NBER. Kehoe: University of Pennsylvania, Federal Reserve Bank of Minneapolis and NBER. **SR** Federal Reserve Bank of Minneapolis Staff Report: 260; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 554880-0291. Website: <http://woodrow.mpls.frb.fed.us>. **PG** 32. **PR** no charge. **JE** E43, E51, E52. **KW** Liquidity Effects. Yield Curve. Term Structure. Interest Rates.

AB This paper analyses the effects of open market operations on interest rates in a model in which agents must pay a fixed cost to exchange assets and cash. Asset markets are endogenously segmented in that some agents choose to pay the fixed cost and some do not. When the fixed cost is zero, the model reduces to the standard one in which persistent money injections increase nominal interest rates, flatten the yield curve, and lead to a downward-sloping yield curve on average. In contrast, if markets are sufficiently segmented, then persistent money injections decrease interest rates, steepen or even twist the yield curve, and lead to an upward sloping yield curve on average.

Anand, Bharat N.

PD July 2000. **TI** Brands, Information, and Loyalty. **AU** Anand, Bharat N.; Shachar, Ron. **AA** Anand: Harvard Business School. Shachar: Tel-Aviv University. **SR** Tel Aviv

Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/16; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 40. **PR** no charge. **JE** D12, D81, L82, M31. **KW** Incomplete Information. Brands. State Dependence. Unobserved Heterogeneity. Television Networks.

AB The new decade has been called "the age of information." We show that, although information has become more accessible, the increase in the variety of products has made consumers' choices complex and uncertain. Faced with uncertainty about products' attributes offered by "umbrella brands," consumers rely on cues, such as the overall "image" of the brands. Using data on television viewing choices, we show that the effect of these "brand images" on product choices is stronger than the effect of the products' attributes. Furthermore, we demonstrate that the lack of information contributes to observed brand loyalty more than the oft-discussed "emotional attachment" to brands.

Anderson, Erin

TI Vilification: Dysfunctional Dynamics in Interorganizational Collaborations. **AU** Jap, Sandy D.; Anderson, Erin.

TI Inter-Channel Competition and New Product Diffusion. **AU** Gatignon, Hubert; Anderson, Erin.

Anderson, James M.

PD December 1998. **TI** Measuring Inter-Judge Sentencing Disparity Before and After the Federal Sentencing Guidelines. **AU** Anderson, James M.; Kling, Jeffrey R.; Stith, Kate. **AA** Anderson: Defender Association of Philadelphia. Kling: Princeton University and NBER. Stith: Yale Law School. **SR** Princeton University Discussion Papers in Economics, Woodrow Wilson School of Public and International Affairs: 207; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. Website: www.princeton.edu/other/workingpapers.html. **PG** 31. **PR** no charge. **JE** C51, K42. **KW** Sentencing Disparity. Federal Sentencing. Negative Binomial. Random Effects Model.

AB This paper evaluates the impact of the Federal Sentencing Guidelines on inter-judge sentencing disparity, which is defined as the differences in average nominal prison sentence lengths for comparable caseloads assigned to different judges. This disparity is measured as the dispersion of a random effect in a zero-inflated negative binomial model. The results show that the expected difference between two typical judges in the average sentence length was about 17 percent (or 4.9 months) in 1986-87 prior to the Guidelines, and fell to about 11 percent (or 3.9 months) from 1988-93 during the early years of the Guidelines. We have not sought to measure the effect of parole in the pre-Guidelines period, other sources of disparity such as prosecutorial discretion, or the proportionality of punishment under the Guidelines as compared with the pre-Guidelines era.

Anderson, Patricia M.

PD March 1999. **TI** Child Care and Mothers' Employment Decisions. **AU** Anderson, Patricia M.; Levine, Phillip B. **AA** Anderson: Dartmouth College and National Bureau of Economic Research. Levine: Wellesley College and

National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7058; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 36. **PR** \$5.00. **JE** J13, J22, J32. **KW** Child-Care Costs. Female Labor Supply. Skill-Level.

AB Rising female labor force participation and recent changes to the welfare system have increased the importance of child care for all women and, particularly, the less-skilled. This paper focuses on the child care decisions of women who differ by their skill level and the role that costs play in their work decision. After reviewing government child-care programs targeted at less-skilled women, we present a descriptive analysis of current utilization and child care costs. We emphasize differences across skill groups, showing that the least-skilled women both use less costly paid care and are more likely to use unpaid care. We then survey the existing evidence regarding the responsiveness of female labor supply to child care costs, reviewing both econometric studies and demonstration projects that include child care components. To investigate variation in the response to child care cost across skill levels, we implement models similar to this past literature. We conclude that while the overall elasticity of labor force participation with respect to the market price of child care is between -0.05 and -0.35, this elasticity is larger for the least skilled women and declines with skill. Throughout the paper, we reflect upon the implications of our analysis for welfare reform.

Ando, Amy W.

PD February 1998. **TI** Do Interest Groups Compete? **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/14; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 27. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** C25, C72, D72, Q28. **KW** Interest Groups. Strategic Competition. Empirical Game Theory. Endangered Species.

AB This paper conducts a test of the hypothesis that interest groups compete strategically for influence with a policy-making agency. It adapts econometric methodology from the empirical industrial organization literature that was designed to work with discrete game-theoretic models, and uses data on whether or not supporting and opposing interest groups submitted comments to the Fish and Wildlife Service about each of 173 proposals to add new species to the endangered species list. The results imply that groups do respond to variations in the expected costs and benefits of a listing when deciding whether to pressure the agency. There is no support, however, for the hypothesis that the levels of pressure exerted by the groups emerge from the Nash equilibrium of games with simultaneous moves and perfect information.

PD March 1998. **TI** Getting on the Map: The Political Economy of State-Level Electricity Restructuring. **AU** Ando, Amy W.; Palmer, Karen L. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/19; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 33. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D78, L51, L94. **KW** Electricity Restructuring. Deregulation. Political Economy.

AB Retail competition in electricity markets is expected to lead to more efficient electricity supply, lower electricity prices,

more innovation by suppliers and a greater variety of electric power service packages. However, only a handful of states have currently gone so far as to pass legislation and/or make regulatory decisions to establish retail wheeling. This paper analyzes a variety of factors that may influence the rate at which legislators and regulators move towards establishing retail competition. In general, we find that where one interest group dominates others in the struggle for influence over the decision makers, the net effect seems to push a state forward more quickly when there are large efficiency gains to be had as a result of retail wheeling. In particular, we find that legislatures in states with high average prices, high stranded cost burdens and large price differentials with neighboring states are more likely to have considered retail wheeling. Large intrastate price variations join stranded costs and interstate price differences in pushing state PUCs to consider retail competition.

PD March 1998. **TI** Estimating Full IM240 Emissions from Partial Test Results: Evidence from Arizona. **AU** Ando, Amy W.; Harrington, Winston; McConnell, Virginia. **AA** Ando and Harrington: Resources for the Future. McConnell: University of Maryland and Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/24; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 21. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** Q25. **KW** Inspection and Maintenance. Mobile Source. Fast Pass.

AB The expense and inconvenience of enhanced vehicle emissions testing using the full 240-second dynamometer test has led states to search for ways to shorten the test process. While shorter tests save states millions of dollars, there is a loss in information since test results are no longer comparable across vehicles. This paper presents a methodology for estimating full 240 second results from partial-test results for three pollutants: HC, CO and NOx. Using random sample of vehicles in Arizona which received full 240 second tests, we use regression analysis to estimate the relationship between emissions at second 240 and emissions at earlier seconds in the test. We examine the influence of other variables such as age, model-year group, and the pollution level itself on this relationship. Using a probit analysis, we find that the probability that a failing vehicle will pass the test on the first retest is greater the longer the test has progressed. Second, we test the accuracy of our estimates for forecasting fleet emissions from partial test emissions results in Arizona. We find that forecast fleet average emissions are very close to the actual fleet averages.

Ang, Andrew

PD March 1999. **TI** International Asset Allocation with Time-Varying Correlations. **AU** Ang, Andrew; Bekaert, Geert. **AA** Ang: Stanford University. Bekaert: Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7056; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** C12, C13, C32, E32, F30, G11. **KW** Time-varying volatilities. State-dependence. Diversification.

AB It is widely believed that correlations between international equity markets tend to increase in highly volatile bear markets. This has led some to doubt the benefits of

international diversification. This article solves the dynamic portfolio choice problem of a US investor faced with a time-varying investment opportunity set which may be characterized by correlations and volatilities that increase in bad times. We model the state dependence of US, UK, and German equity returns using a regime-switching model and find evidence for the existence of a high volatility regime, in which returns are more highly correlated and have lower means. Solving the dynamic asset allocation problem for a CRRA investor, we show international diversification is still valuable with regime changes. Currency hedging imparts further benefit. The costs of ignoring the regimes are small for moderate levels of risk aversion, and the intertemporal hedging demands induced by time-varying correlations are negligible.

Angelmar, Reinhard

TI The Reciprocal Effects of Top Management Team Cognitive Diversity and Firm Performance: Opening the Black Box. **AU** Kilduff, Martin; Angelmar, Reinhard; Mehra, Ajay.

TI Top Management Team Diversity and Firm Performance: Examining the Role of Cognitions. **AU** Kilduff, Martin; Angelmar, Reinhard; Mehra, Ajay.

Angrist, Joshua D.

PD May 1999. **TI** When to Control for Covariates? Panel-Asymptotic Results for Estimates of Treatment Effects. **AU** Angrist, Joshua D.; Hahn, Jinyong. **AA** Angrist: Massachusetts Institute of Technology and National Bureau of Economic Research. Hahn: University of Pennsylvania. **SR** National Bureau of Economic Research Technical Paper: 241; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** C14, C23, J31. **KW** Propensity Score. Covariate Matching.

AB The problem of how to control for covariates is endemic in evaluation research. Covariate-matching provides an appealing control strategy, but with continuous or high-dimensional covariate vectors, exact matching may be impossible or involve small cells. Matching observations that have the same propensity score produces unbiased estimates of causal effects whenever covariate-matching does, and also has an attractive dimension-reducing property. On the other hand, conventional asymptotic arguments show that covariate-matching is (asymptotically) more efficient than propensity score-matching. We approximate the large sample behavior of difference matching estimators using a panel-style asymptotic sequence with fixed cell sizes and the number of cells increasing to infinity. Exact calculations in simple examples and Monte Carlo evidence suggests this generates a substantially improved approximation to actual finite-sample distributions. Under this sequence, propensity-score-matching is most likely to dominate exact matching when cell sizes are small, the explanatory power of the covariates conditional on the propensity score is low, and/or the probability of treatment is close to zero or one. Finally, we introduce a random-effects type combination estimator that provides finite-sample efficiency gains over both covariate-matching and propensity-score-matching.

Arino, Africa

PD July 1999. **TI** Rescuing Troubled Alliances,...Before It's Too Late. **AU** Arino, Africa; Doz, Yves L. **AA** Arino: University of Navarra. Doz: INSEAD. **SR** INSEAD

Working Paper: 99/53/SM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau-Cedex, France. Website: www.insead.fr/research. **PG** 23. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M14, M21. **KW** Alliance Dynamics. Alliance Failure. Relational Quality. **AB** Based on case study research, the authors show how alliance failure often follows the opening of a gap between expectations and intermediate outcomes. Failure to detect and attribute the cause of a shortfall, followed by misunderstandings among the partners paves the way to failure. They provide some suggestions on how to rescue alliances in crisis.

Ash, Arlene S.

PD January 2000. **TI** Using Diagnoses to Describe Populations and Predict Costs. **AU** Ash, Arlene S.; Ellis, Randall P.; Pope, Gregory; Ayanian, John; Bates, David; Burstin, Helen; Iezzoni, Lisa; McKay, Elizabeth; Yu, Wei. **AA** Ash and Wei: Boston Medical Center. Ellis: Boston University. Pope: Health Economics Research. Ayanian, Bates and Burstin: Brigham and Women's Hospital and Harvard Medical School. Iezzoni: Harvard School of Medicine and Beth Israel Deaconess Medical Center. McKay: University of Calgary. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 99; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. **PG** 49. **PR** no charge. **JE** I11, I12. **KW** Analysis of Health Care Markets.

AB The Diagnostic Cost Group Hierarchical Condition Category (DCG/HCC) payment models summarize the health care problems and predict the future health care costs of populations. These models use the diagnoses generated during patient encounters with the medical delivery system to infer which medical problems are present. Patient demographics and diagnostic profiles are, in turn, used to predict costs. We describe the logic, structure, coefficients and performance of DCG/HCC models, as developed and validated on three important databases (privately insured, Medicaid and Medicare) with more than 1 million people each.

TI Using the Diagnostic Cost Group (DGC) Model to Measure Risk Selection in the Massachusetts State Employee Health Insurance Program. **AU** Yu, Wei; Ellis, Randall P.; Ash, Arlene S.

Ashenfelter, Orley

PD July 2000. **TI** How Did the Elimination of Mandatory Retirement Affect Faculty Retirement. **AU** Ashenfelter, Orley; Card, David. **AA** Ashenfelter: Princeton University and NBER. Card: UC Berkeley and NBER. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 25; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. **PG** 29. **PR** no charge. **JE** J26, I21. **KW** Mandatory Retirement. Faculty Retirement.

AB We use information on retirement flows over the 1986-96 period for older faculty at a large sample of four year colleges and universities to measure the effect of the elimination of mandatory retirement. Comparisons of retirement rates before and after 1994, when most institutions were forced to stop

mandatory retirement, suggest that the abolition of compulsory retirement led to a dramatic drop in retirement rates at age 70 and 71. Comparisons of retirement rates in the early 1990s between schools that were still enforcing mandatory retirement, and those that were forced to stop by state laws, lead to the same conclusion. In the era of mandatory retirement, fewer than 10 percent of 70-year old faculty were still teaching two years later. After the elimination of mandatory retirement this fraction has risen to 50 percent. Our findings suggest that most U.S. colleges and universities will experience a significant rise in the fraction of older faculty in the coming years.

Atkeson, Andrew

PD September 2000. **TI** Paths of Development for Early- and Late-Bloomers in a Dynamic Heckscher-Ohlin Model. **AU** Atkeson, Andrew; Kehoe, Patrick J. **AA** University of Minnesota and Federal Reserve Bank of Minneapolis. **SR** Federal Reserve Bank of Minneapolis Staff Report: 256; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 554880-0291. Website: <http://woodrow.mpls.frb.fed.us>. **PG** 16. **PR** no charge. **JE** F11, O41. **KW** Heckscher-Ohlin. Development Timing. Late Bloomer. Early Bloomer.

AB We show that in a dynamic Heckscher-Ohlin model the timing of a country's development relative to the rest of the world affects the path of the country's development. A country that begins the development process later than most of the rest of the world -- a late-bloomer -- ends up with a permanently lower level of income than the early-blooming countries that developed earlier. This is true even though the late-bloomer has the same preferences, technology, and initial capital stock that the early-bloomers had when they started the process of development. This result stands in stark contrast to that of the standard one-sector growth model in which identical countries converge to a unique steady state, regardless of when they start to develop.

TI Money and Interest Rates with Endogenously Segmented Markets. **AU** Alvarez, Fernando; Atkeson, Andrew; Kehoe, Patrick J.

Auerbach, Alan J.

PD March 1999. **TI** A New Measure of Horizontal Equity. **AU** Auerbach, Alan J.; Hassett, Kevin A. **AA** Auerbach: University of California, Berkeley and National Bureau of Economic Research. Hassett: AEI. **SR** National Bureau of Economic Research Working Paper: 7035; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** \$5.00. **JE** D63, H22. **KW** Horizontal Equity. Social Welfare. Inequality Measurement.

AB In this paper, we propose a new measure of horizontal equity that overcomes many of the shortcomings of previous proposed measures. Our starting point is the observation that a well-behaved social welfare function need not evaluate "global" (vertical equity) differences in after-tax income using the same weights it applies to "local" (horizontal equity) differences, even though this constraint has been applied in the past. Following work on the structure of individual preferences, we show that a social welfare function can imply different preferences toward horizontal and vertical equity. Adopting the general approach to the measurement of inequality developed by Atkinson (1970), we use such a social welfare function to

derive measures of inequality that are decomposable into components naturally interpreted as indices of horizontal and vertical equity. In particular, the former index measures deviations from the fundamental principle that equals be treated equally. Finally, we apply our new measure to two tax-return data sets, evaluating the degree to which the horizontal equity of the US personal income tax has changed over time, and how horizontal would be altered by one version proposals to do away with the so-called "marriage penalty."

PD March 1999. **TI** Uncertainty and the Design of Long-Run Fiscal Policy. **AU** Auerbach, Alan J.; Hassett, Kevin A. **AA** Auerbach: University of California, Berkeley and National Bureau of Economic Research. Hassett: AEI. **SR** National Bureau of Economic Research Working Paper: 7036; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** E62, H62. **KW** Fiscal Policy. Uncertainty. Policy Stickiness.

AB This paper explores optimal fiscal policy in an overlapping-generations general-equilibrium model under uncertainty, and the impact on optimal policy of the introduction of a type of policy stickiness intended to account for the stylized fact that major reforms happen infrequently. In general, our analysis suggests not only that action should not be delayed, but further that action should actually be accelerated. The added realism of restrictions on the frequency of policy changes alters this result in two ways. The prospect of being unable to set policy in the future occasions even more precautionary saving today, if the government acts. However, the government may also choose not to set policy, and its inaction range is very asymmetric. Because the impact of its policies on the current elderly cannot be reversed in the future, the government is much more likely to choose inaction when fiscal tightening is called for. Thus, the optimal policy response over time might best be characterized by great caution in general, but punctuated by occasional periods of apparent irresponsibility.

PD March 1999. **TI** Generational Accounting and Immigration in the United States. **AU** Auerbach, Alan J.; Oreopoulos, Philip. **AA** University of California, Berkeley. **SR** National Bureau of Economic Research Working Paper: 7041; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** \$5.00. **JE** H69, J11. **KW** Immigration. Generational Accounting. Fiscal Imbalance.

AB This paper reconsiders the fiscal impact of immigrants over time, using the technique of generational accounting. We may summarize our results with three findings: 1. Because new immigrants represent a larger fraction of future generations than of present ones, shifting the burden onto future generations also shifts it, relatively, onto new immigrants. Thus, if the entire fiscal imbalance currently estimated for the United States is placed on future generations, then the presence of new immigrants reduces the burden borne by natives. 2. When a policy of "fiscal responsibility" is followed, whether there is a fiscal gain from immigration depends on the extent to which government purchases rise with the immigrant population. 3. The impact of immigration on fiscal balance is extremely small relative to the size of the overall imbalance itself. Thus, immigration should be viewed neither as a major source of the existing imbalance, nor as a potential solution to it.

Auernheimer, Leonardo

PD February 2000. TI Bad Dreams Under Alternative Anchors: Are the Consequences Different? AU Auernheimer, Leonardo; George, Susan M. AA Auernheimer: Texas A&M University. George: International Monetary Fund. SR International Monetary Fund Working Paper: WP/00/20; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 14. PR not available. JE F31, F41. KW Anchors. Credibility. Devaluation. Rules.

AB Using a simple model, this paper shows how a strict monetary rule exhibits characteristics similar to those of an exchange rate anchor, in terms of a lack of robustness in the presence of adverse expectations ("bad dreams"). More specifically, as an anticipated devaluation under an exchange rate rule leads to well-known contractionary effects, an anticipated increase in the money stock under a monetary rule, though initially expansionary, becomes contractionary when these expectations are not validated. This suggests that much of the criticism of an exchange rate anchor implicitly considers not another rule but rather, discretion as the alternative.

Austin, David H.

TI Strict Liability as a Deterrent in Toxic Waste Management: Empirical Evidence from Accident and Spill Data. AU Alberini, Anna; Austin, David H.

Ayanian, John

TI Using Diagnoses to Describe Populations and Predict Costs. AU Ash, Arlene S.; Ellis, Randall P.; Pope, Gregory; Ayanian, John; Bates, David; Burstin, Helen; Iezzoni, Lisa; McKay, Elizabeth; Yu, Wei.

TI Using Diagnoses to Describe Populations and Predict Costs. AU Ash, Arlene S.; Ellis, Randall P.; Pope, Gregory; Ayanian, John; Bates, David; Burstin, Helen; Iezzoni, Lisa; McKay, Elizabeth; Yu, Wei.

Ayres, Robert U.

PD April 1999. TI On Growth in Disequilibrium. AA INSEAD. SR INSEAD Working Paper: 99/20/EPS; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. PG 12. PR no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. JE O41, O49. KW Disequilibrium. Growth.

AB This paper argues that models based on the assumption of growth along an optimal path in static equilibrium are inherently self-contradictory, since the mechanisms that drive economic growth are fundamentally dependent on disequilibrium. Moreover, there is compelling anecdotal evidence that the economy is not in equilibrium now. The new feature of the present analysis is that it is possible to formulate 'endogenous growth' models for an economy with the usual constant returns to scale but without the equilibrium assumption that marginal productivities of capital, labor and resource inputs must be equal to factor shares in the national accounts. The reformulated model utilizes a more general production function with variable elasticities of output with respect to factors. Such a production function is consistent with many observed phenomena, including the prevalence of 'double dividends'.

PD June 1999. TI The Minimum Complexity of

Endogenous Growth Models: The Role of Physical Resource Flows and Technology. AA INSEAD. SR INSEAD Working Paper: 99/37/EPS; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. PG 19. PR no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. JE O41, Q43. KW Growth Engine. Energy. Growth. Intermediate Goods.

AB A 'growth engine' is a positive feedback loop involving declining costs and increasing demand. The most important growth engines of the first industrial revolution were dependent on declining fossil fuel and mechanical power costs, and their relationship with scale on the one hand and demand, on the other. In this picture energy consumption is as much a driver of growth as a consequence thereof. On the basis of both qualitative and quantitative evidence, physical resource flows have been, and still remain, a major factor of production. This paper shows that the apparent inconsistency between (small) factor payments and high correlation between physical resource (energy) inputs and outputs can be traced to an often forgotten simplification in the traditional theory, namely that the economy produces final products directly from labor and capital, without allowing any role for consumable intermediates. Correcting for the omission of intermediates by introducing a two-sector or multi-sector production process, can multiply the impact of resource inputs and account for the apparent inconsistency.

PD July 1999. TI Minimizing Waste Emissions from the Built Environment: Towards the Zero Emissions House. AA INSEAD. SR INSEAD Working Paper: 99/40/EPS; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. PG 14. PR no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. JE Q24, Q25, Q28. KW Waste. Energy Emissions. Housing.

AB The paper reviews the material inputs to the construction industry (i.e. those materials that are ultimately embodied in structures), and the wastes associated with materials processing. It also reviews the emissions associated with energy use for purposes of heating, air-conditioning, lighting, cooking and other energy services normally provided within structures. Of the two categories, the latter is more significant in terms of environmental damage. As regards abatement, the most promising strategy for reducing the damages associated with mining and processing the structural materials themselves is increased recycling, especially of metals. Two primary strategies suggest themselves with regard to reducing the environmental impact of energy services. The first is increased end-use efficiency e.g. by improved design, better thermal insulation and more efficient equipment, such as refrigerators and compact fluorescent lights). The second primary strategy is to shift as quickly as possible from dependence on fossil fuels for heating and cooking to electricity, especially by utilizing photovoltaic (PV) rooftop units together with heat pumps and microwave cookers. Government intervention may accelerate this shift in various ways, but policy issues are not discussed in the paper.

PD July 1999. TI On Green Technology: A Framework for Evaluation. AA INSEAD. SR INSEAD Working Paper: 99/41/EPS; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. PG 10. PR no charge

up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** O14, O40, Q32. **KW** Growth. Environmental Risk. Environmental Protection.

AB There is a complex interrelationship between technological change, economic growth and environmental risk/protection. Since the 1950s, at least, it has been clear that factors other than capital and labor must be responsible for most economic growth. Historical and anecdotal evidence suggests that the substitution of machines powered by fossil energy for human and animal labor must play a significant role in driving growth. On the other hand, consumption of fossil fuels and other extractive resources certainly constitutes one of the major sources of environmental pollution and damage. An influential school of thought, promoted especially by the World Bank, argues that economic growth is actually a prerequisite for environmental protection, both because the latter is a "superior" good -- i.e. a luxury -- desired mainly by the rich, and because advanced technology and wealth are needed for purposes of both prevention and abatement of environmental damage. On closer scrutiny it is clear that technologies vary widely in both growth-creation potential and environmental risk. The question then arises: to what extent can these different aspects be anticipated and evaluated *ex ante*? This paper proposes a simple framework for such an evaluation methodology.

Baks, Klaas

PD December 1999. **TI** Global Liquidity and Asset Prices: Measurement, Implications, and Spillovers. **AU** Baks, Klaas; Kramer, Charles. **AA** Baks: Brown University. Kramer: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/168; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 15. **PR** not available. **JE** E44, E59, F36, G15. **KW** Liquidity. Money Growth. Asset Prices. International Spillovers.

AB Much recent commentary suggests that global liquidity has influenced financial conditions in the major international markets to an important degree, and that excess liquidity in one financial center can influence financial conditions elsewhere. Little formal research has addressed these issues, however. In this paper, we use three indexes of liquidity (money growth) in the Group of Seven industrial countries to explore the international dimension of the relationship between liquidity and asset returns. Evidence suggests that an increase in G-7 liquidity is consistent with a decline in G-7 real interest rates and an increase in G-7 real stock returns. There is also evidence of liquidity spillovers across countries.

Balasubramanian, Sridhar

PD June 1999. **TI** A Theory of Pricing for Information-Intensive Offerings. **AU** Balasubramanian, Sridhar; Bhattacharya, Shantanu H.; Krishnan, Vish. **AA** Balasubramanian and Krishnan: University of Texas at Austin. Bhattacharya: INSEAD. **SR** INSEAD Working Paper: 99/36/TM/CIMSO8; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 29. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** F11, M21. **KW** Pricing. Rent or Sell. Pricing. Two-Part Tariff.

AB In this paper, we propose a theory of pricing for information-intensive offerings (IIOs) that addresses the

following issues: How are optimal prices and rents for IIOs set in a variety of heterogeneous markets? How can selling and renting be used in combination? How does competition occur between sellers and renters of IIOs? How does consumer aversion to risk impact selling and renting policies? Is there a role for a two-part tariff mechanism in the context of selling and renting? Our base model offers a simple, but flexible, structure that captures the key insight that selling requires an upfront payment that is disengaged from the realized usage patterns, whereas renting tightly links payments to usage. Consumers are differentiated in terms of their usage probability and usage utility. For any consumer, this specific decomposition of utility moderates the relative attractiveness of the selling and renting options. The model also incorporates a transaction cost parameter that reflects technology inefficiencies that may be latent in the renting option. Some unexpected results emerge in the study of competition between renters and sellers.

Balazs, Katharina

TI Creating the "Authentizotic" Organization: Corporate Transformation and its Vicissitudes -- A Rejoinder. **AU** Kets de Vries, Manfred F. R.; Balazs, Katharina.

Baldwin, Richard E.

PD February 1999. **TI** The Core-Periphery Model with Forward-Looking Expectations. **AA** Graduate Institute of International Studies and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6921; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 17. **PR** \$5.00. **JE** F01, F02, R01. **KW** Static Expectations. Forward-Looking Behavior. Core-Periphery. Migration.

AB The "core-periphery model" is vitiated by its assumption to static expectations. That is, migration (inter-regional or intersectoral) is the key to agglomeration, but migrants base their decision on current wage differences alone-- even through migration predictably alters wages and workers are (implicitly) infinitely lived. The assumption was necessary for analytic tractability. The model can have multiple stable equilibria, so allowing forward-looking expectations would have forced consideration of the very difficult -- perhaps even intractable -- issues of global stability in non-linear dynamic systems. This paper's main contribution is to present a set of solution techniques -- partly analytic and partly numerical -- that allow us to consider forward-looking expectations. These techniques reveal a startling result. If quadratic migration costs are sufficiently high, allowing forward-looking behavior has no impact on the main results, so static expectations are truly an assumption of convenience. If migration costs are lower, however, forward-looking behavior creates history-vs-expectations considerations. In this case, agglomeration can be a self-fulfilling prophecy.

Bannister, Geoffrey

TI Trade Policy in Financial Services. **AU** Tamirisa, Natalia; Sorsa, Piritta; Bannister, Geoffrey; McDonald, Bradley; Wieczorek, Jaroslaw.

TI Trade Policy in Financial Services. **AU** Tamirisa, Natalia; Sorsa, Piritta; Bannister, Geoffrey; McDonald, Bradley; Wieczorek, Jaroslaw.

Bannister, Geoffrey J.

TI Pollution Control in the Informal Sector: The Ciudad Juarez Brickmakers' Project. **AU** Blackman, Allen; Bannister, Geoffrey J.

Bar-Gill, Oren

PD June 2000. **TI** Crime Rates and Expected Sanctions: The Economics of Deterrence Revisited. **AU** Bar-Gill, Oren; Harel, Alon. **AA** Bar-Gill: Tel-Aviv University. Harel: Hebrew University of Jerusalem. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/14; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 29. **PR** no charge. **JE** K42. **KW** Deterrence. Law Enforcement. Multiple Equilibria.

AB A higher expected sanction lowers the crime rate. This intuitive cornerstone of deterrence theory has drawn extensive theoretical and empirical research. The present study focuses on the opposite effects - the effects of the crime rate on the expected sanction. It turns out that these effects are versatile and rich, both in the direction and the magnitude of their influence on the expected sanction. After analyzing these counter effects of the crime rate on the expected sanction, we present a new model of deterrence, which explicitly incorporates the crime rate as one of the determinants of the expected sanction. The adjusted model is then used to study the effects of the crime rate on deterrence and on optimal law enforcement policy.

PD June 2000. **TI** The Success and Survival of Cautious Optimism: An Evolutionary Analysis of Pre-Trial Settlement Negotiations. **AA** Tel-Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/15; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 29. **PR** no charge. **JE** D83, K41. **KW** Litigation. Pre-Trial Settlement. Negotiation. Optimism. Endogenous Preferences.

AB Plaintiffs and defendants are unrealistically optimistic with regard to the probability of prevailing at trial. This systematic bias is well documented, and has been often invoked to explain breakdowns in pre-trial settlement negotiations. How can a systematic bias towards optimism prevail in a competitive world, which usually punishes inaccurate assessments of reality? The systematic optimism of lawyers is even more of a puzzle. The present analysis challenges these conventional allegations. Using evolutionary game theory, we demonstrate that "market pressure", or an alternative imitation process, favor cautiously optimistic litigants. The pre-trial environment, inspired by the legal system, fosters optimism through the mechanism of settlement negotiations. We study a dynamic model, which allows us to derive the evolutionary stable level of optimism, under different legal regimes. Our analysis emphasizes the major role of the prevailing legal rule in determining the equilibrium level of optimism. By doing so we hope to shed new light on the ongoing debate regarding the effects of legal rules on the probability of settlement. Specifically, the evolutionary analysis qualifies the classical argument, that the American rule is superior to the British fee-shifting rule in fostering settlements.

Barro, Robert J.

PD March 1999. **TI** Inequality, Growth, and Investment.

AA Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7038; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** \$5.00. **JE** I32, O47. **KW** Income Inequality. Economic Growth. Investment.

AB Evidence from a broad panel of countries shows little overall relation between income inequality and rates of growth and investment. However, for growth, higher inequality tends to retard growth in poor countries and encourage growth in richer places. The Kuznets curve- whereby inequality first increases and later decreases during the process of economic development-emerges as a clear empirical regularity. However, this relation does not explain the bulk of variations in inequality across countries or over time.

Bartel, Ann P.

PD March 1999. **TI** Ownership versus Environment: Why Are Public Sector Firms Inefficient? **AU** Bartel, Ann P.; Harrison, Ann E. **AA** Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7043; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 35. **PR** \$5.00. **JE** D24, L33. **KW** Public Sector. Soft-Budget Constraint. Monitoring.

AB In this paper we disentangle the sources of public sector inefficiency using 1982-1995 panel data on manufacturing firms in Indonesia. We consider two leading hypotheses: (1) public sector enterprises are inefficient due to monitoring problems and (2) public sector enterprises are inefficient because of the environment in which they operate, as measured by the soft budget constraint. The two models are nested in a production function framework and the empirical results provide support for the second hypothesis. Public sector enterprises are inefficient because of their access to soft loans; public sector ownership has no independent impact on productivity growth. The finding that ownership per se does not matter, but environment does, holds when we control for fixed effects and when we allow for the endogeneity of government loans. Interestingly, private sector firms with access to government loans did not perform more poorly than other private sector enterprises. Another dimension of the environment, i.e. import penetration, also matters; public sector enterprises that have been shielded from import competition are inferior performers.

Basurto, Gabriela

PD February 2000. **TI** The Interest Rate-Exchange Rate Nexus in the Asian Crisis Countries. **AU** Basurto, Gabriela; Ghosh, Atish. **AA** Basurto: Inter-American Development Bank. Ghosh: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/19; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 24. **PR** not available. **JE** E43, E44, F31, G15. **KW** Asia Currency Crisis. Exchange Rates. Interest Rates.

AB Sharp exchange rate depreciations in the East Asian crisis countries (Indonesia, Korea, and Thailand) raised doubts about the efficacy of increasing interest rates to defend the currency. Using a standard monetary model of exchange rate determination, this paper shows that tighter monetary policy was in fact associated with an appreciation of the exchange rate. Moreover, there is little evidence of higher real interest

rates contributing to a widening of the risk premium.

Baulant, Camille

TI *Competitivite et regime de change en Europe centrale.*
AU Aglietta, Michel; Baulant, Camille; Coudert, Virginie.

Baxter, Marianne

PD March 1999. **TI** Household Production and the Excess Sensitivity of Consumption to Current Income. **AU** Baxter, Marianne; Jermann, Urban J. **AA** Baxter: University of Virginia and National Bureau of Economic Research. Jermann: University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7046; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 40. **PR** \$5.00. **JE** D13, E17, E21. **KW** Excess Sensitivity. Permanent Income.

AB Empirical research on the permanent income hypothesis (PIH) has found that consumption growth is excessively sensitive to predictable changes in income. This finding is interpreted as strong evidence against the PIH. We propose an explanation for apparent excess sensitivity that is based on a quantitative equilibrium version of Becker's (1965) model of household production in which permanent income consumers respond to shifts in sectoral wages and prices by substituting work effort and consumption across home and market sectors. Although the PIH is true, this mechanism generates apparent excess sensitivity because market consumption responds to predictable income growth.

Baye, Michael R.

PD August 1998. **TI** *Information Gatekeepers and the Competitiveness of Homogeneous Product Markets.* **AU** Baye, Michael R.; Morgan, John. **AA** Baye: Indiana University. Morgan: Princeton University. **SR** Princeton University Discussion Papers in Economics, Woodrow Wilson School of Public and International Affairs: 195; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. Website: www.princeton.edu/other/workingpapers.html. **PG** 16. **PR** no charge. **JE** D41, D43, L13, M37. **KW** Price Dispersion. Advertising.

AB This paper represents a first attempt to examine the equilibrium interaction between markets for information and the product markets they serve. We consider a market for information controlled by a profit-maximizing gatekeeper, and a related product market comprised of homogenous product firms. The gatekeeper charges fees to firms in the product market who wish to advertise their prices and to consumers who wish to obtain access to the menu of advertised prices. Our main finding is that with optimizing firms and consumers, the gatekeeper's profits are maximized in an equilibrium where (a) advertising rates exceed subscription fees; (b) advertised prices are lower than unadvertised prices; and (c) the product market exhibits price dispersion despite the fact that consumers are fully informed and always purchase from the firm offering the best price.

Beaumont, Craig

TI *Exchange Rate Regimes in Selected Advanced Transition Economies -- Coping with Transition, Capital Inflows, and EU Accession.* **AU** Corker, Robert; Beaumont, Craig; van Elkan,

Rachel; Iakova, Dora.

Bebchuk, Lucian Arye

PD February 1999. **TI** *Managerial Value Diversion and Shareholder Wealth.* **AU** Bebchuk, Lucian Arye; Jolls, Christine. **AA** Harvard Law School and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6919; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** G34, G38, K22. **KW** Shareholder Wealth. Value Diversion.

AB The agents to whom shareholders delegate the management of corporate affairs may transfer value from shareholders to themselves through a variety of mechanisms, such as self-dealing, insider trading, and taking of corporate opportunities. A common view in the law and economics literature is that such value diversion does not ultimately produce a reduction in shareholder wealth, since value diversion simply substitutes for alternative forms of compensation that would otherwise be paid to managers. We question this view within its own analytical framework by studying, in a principal-agent model, the effects of allowing value diversion on managerial compensation and effort. Many common modes of compensation can provide managers with incentives to enhance shareholder value; replacing such compensation would reduce these incentives. As a result, even if the consequences of a rule permitting value diversion can be fully taken into account in settling managerial compensation, such a rule might still produce a reduction in shareholder wealth -- and would not do so only if value diversion would have some countervailing positive effects (a possibility which our model considers) that are sufficiently significant in size.

PD February 1999. **TI** *The "Lemons Effect" in Corporate Freeze-Outs.* **AU** Bebchuk, Lucian Arye; Kahan, Marcel. **AA** Bebchuk: Harvard Law School and National Bureau of Economic Research. Kahan: New York University School of Law. **SR** National Bureau of Economic Research Working Paper: 6938; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 18. **PR** \$5.00. **JE** G34, G35. **KW** Corporate Freeze-Out. Lemons Effect.

AB In a corporate freeze-out, the controller is required to compensate minority shareholders for the no-freezeout value of their shares that are taken from them. This paper seeks to highlight the difficulties involved in determining this no-freezeout value when, as is often the case, the controller has private information. In particular, the analysis shows that the pre-freezeout market price of minority shares cannot be used as a proxy for the no-freezeout value that these shares would have in the absence of a freeze-out. It is shown that, under a regime in which frozen out minority shareholders receive a compensation equal to the pre-freezeout market price, the pre-freezeout market price will be set at a level below the expected no-freezeout value of minority shares. The reason for this is a "lemons effect" that arises when a controller uses her private information in deciding whether to affect a freeze-out. By showing how controllers are able to use their private information to affect freeze-outs at terms favorable to them, this paper demonstrates that freeze-outs can become a significant source for private benefits of control.

PD February 1999. **TI** *Stock Pyramids, Cross-Ownership, and the Dual Class Equity: The Creation and Agency Costs of*

Separating Control From Cash Flow Rights. **AU** Bebchuk, Lucian Arye; Kraakman, Reinier; Triantis, George. **AA** Bebchuk: Harvard Law School and National Bureau of Economic Research. Kraakman: Harvard Law School. Triantis: University of Virginia Law School. **SIR** National Bureau of Economic Research Working Paper: 6951; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 32. **PR** \$5.00. **JE** G34. **KW** Corporate Control. Cash-Flow Rights. Agency Costs.

AB This paper examines common arrangements for separating control from cash flow rights: stock pyramids, cross-ownership structures, and dual class equity structures. We describe the ways in which such arrangements enable a controlling shareholder or group to maintain a complete lock on the control of a company while holding less than a majority of the cash flow rights associated with its equity. Next, we analyze the consequences and agency costs of these arrangements. In particular, we show that they have the potential to create very large agency costs - costs that are an order of magnitude larger than those associated with controlling shareholders who hold a majority of the cash flow rights in their companies. The agency costs of these structures, we suggest, are also likely to exceed the agency costs of attending highly leveraged capital structures. Finally, we put forward an agenda for research concerning structures separating control from cash flow rights.

Bekaert, Geert

TI International Asset Allocation with Time-Varying Correlations. **AU** Ang, Andrew; Bekaert, Geert.

Ben-David, Dan

PD February 2000. **TI** Teach Your Children Well: Planting the Seeds of Education and Harvesting the Benefits of Trade. **AA** Tel-Aviv University, NBER and CEPR. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/05; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 37. **PR** no charge. **JE** F41, F43, O11, O15. **KW** Growth. Trade. Education. Knowledge Spillovers.

AB The dynamic multi-country model developed in this paper focuses on the interaction between education, international trade and economic growth. The model distinguishes between two forms of human capital: knowledge and education. Both are required in production. Knowledge is accumulated in each country, with trade acting as a conduit for its dissemination. Education is embodied in the individuals and regulates the amount of domestic knowledge that they may create, and the amount of foreign knowledge that they may be able to absorb and assimilate. Individuals choose how much time to spend in production and how much in the attainment of education. Education is financed through income taxes and tariffs levied on imports. The objective is to examine how commercial and education policies may affect the extent of knowledge spillovers across countries, and the extent that a given country captures these spillovers. Earlier studies by this author have highlighted a number of empirical regularities of the growth process. The goal here is to develop a theoretical framework that can account for this empirical evidence while providing an indication of how policy changes might affect the future growth paths of nations.

Ben-Porath, Elchanan

PD February 2000. **TI** Cheap Talk in Games with Incomplete Information. **AA** Tel-Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/08; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 45. **PR** no charge. **JE** C72, D82. **KW** Cheaptalk. Bayesian Games.

AB The paper studies Bayesian Games which are extended by adding pre-play communication. Let T be a Bayesian game with three or more players. The main result is that if players can send private messages to each other and make public announcements then every communication equilibrium outcome, q , that is rational (i.e., involves probabilities which are rational numbers), can be implemented in a sequential equilibrium of a cheap talk extension of T , provided that the following condition is satisfied: There exists a Bayesian Nash equilibrium s in T , such that for each type, t_i , of each player i , the expected payoff of t_i in q is larger than the expected payoff of t_i in s .

Benassy-Quere, Agnes

PD April 1999. **TI** Models of Exchange Rate Expectations: Heterogeneous Evidence from Panel Data. **AU** Benassy-Quere, Agnes; Larribeau, Sophie; MacDonald, Ronald. **AA** Benassy-Quere: CEPII. Larribeau: University of Cergy-Pontoise. MacDonald: University of Strathclyde. **SR** CEPII Working Paper: 99/03; Centre d'Etudes Prospectives et d'Informations Internationales (CEPII), 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 40. **PR** no charge. **JE** F31. **KW** Foreign Exchange. Expectations. Expectations Formation.

AB The purpose of this paper is to determine the nature of the processes governing agent's expectations formation and the degree of heterogeneity of such expectations. We use a unique disaggregated expectations database to model the expectations formation of around forty leading foreign exchange forecasters/dealers. Panel estimators are used to increase the power of the tests. Four expectation structures are examined: an extrapolative, an adaptive, a regressive and a mixed model. Our results show that exchange rate expectations stabilizing at both three and twelve month horizons which is something of an antidote to the view that foreign exchange markets are dominated by forms of non-stabilizing expectations. The models used and the coefficient estimates can differ across individuals. This heterogeneous expectation processes across individuals justifies the building of models of exchange rate determination based on various types of agents. The paper concludes with results that differ across currencies and horizons.

Berck, Peter

PD May 1999. **TI** Managerial Reputation and the "Endgame". **AU** Berck, Peter; Lipow, Jonathan. **AA** Berck: University of California, Berkeley. Lipow: Hebrew University of Jerusalem. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 884; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website:

agecon.lib.umn.edu/ucb.html. **PG** 33. **PR** \$8.25 Domestic; \$16.50 International Surface Rate. **JE** D50, D82, J44. **KW** Equilibrium. Decision-Making. Management. Principal Agent.

AB This paper presents a model in which managers of varying abilities choose strategies for their companies while companies only decide whether or not to retain a manager. A strategy determines the mean and variance of the company's performance. Better managers have more strategies to choose from than do less capable managers. One possible Bayes-perfect equilibrium is that the less capable managers deliberately choose high-variance strategies. The authors present a model that induces equilibrium manager behavior similar to that seen in basketball's endgame. The authors believe that the conditions required to induce such equilibria are often observed in the real world. Managers who are candidates for endgame-type behavior are likely to work for firms where direct observation of managers is costly leading owners to infer both manager abilities and decisions based on observation of easily identified benchmarks, such as earning, sales, or free cash flow. Such conditions are common in firms where (1) ownership is sufficiently dispersed that the costs of monitoring manager decision making is prohibitive for any single or small group of shareholders or (2) the firm is sufficiently small that it has not attracted any objective analytical following.

PD October 1999. **TI** Poverty Program Participation and Employment in Timber-Dependent Counties. **AU** Berck, Peter; Costello, Christopher; Hoffman, Sandra; Fortmann, Louise. **AA** Berck, Costello and Fortmann: University of California, Berkeley. Hoffman: University of Wisconsin-Madison. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 898; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 39. **PR** \$9.75 Domestic; \$19.50 International Surface Rate. **JE** C22, I38, J23, Q23. **KW** AFDC. Employment. Poverty. Forestry. Time Series.

AB This paper uses cointegrated time-series methods to evaluate the effect of timber employment on participation in a major poverty program -- Aid to Families with Dependent Children-Unemployed Parent (AFDC-UP). The study is conducted for major timber-producing counties in California. It is shown that a two-sector structural model can be solved to produce an error-correction model. An error-correction model is estimated with time series on state and county AFDC-UP caseload, state employment, county non-timber employment, and county timber employment. Utilizing tests on the cointegrating space, it is shown that there is no long-run relationship between poverty and timber employment in 10 of the 11 counties studied.

Berg, Andrew

PD February 2000. **TI** The Choice of Exchange Rate Regime and Monetary Target in Highly Dollarized Economies. **AU** Berg, Andrew; Borensztein, Eduardo. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/29; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 24. **PR** not available. **JE** E51, E52, E58, F31, F36, F41. **KW** Dollarization.

Currency Substitution. Exchange Rates. Financial Programming. Money Demand.

AB We examine the implications of high degrees of dollarization for the choice of exchange rate regime and the information content of various monetary aggregates in developing countries. We conclude that a high degree of currency substitution argues for a more fixed exchange rate regime, while asset substitution may imply that either more rigid or more flexible regimes may be appropriate. We also ask whether the most informative monetary aggregates include dollar assets. Based on an analysis of five countries, we conclude inter alia that broader aggregates that include dollar assets perform better than those that do not.

Berk, Jonathan B.

PD September 1998. **TI** Sorting Out Sorts. **AA** University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 235; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** C12, C22, G12. **KW** Asset Pricing. Data Sorting.

AB In this paper we analyze the theoretical implications of sorting data into groups and then running asset prices tests within each group. We show that the way this procedure is implemented introduces a severe bias in favor of rejecting the model under consideration. By simply picking enough groups to sort into, even the true asset pricing model can be shown to have no explanatory power within each group.

Berman, Eli

PD October 1997. **TI** Environmental Regulation and Labor Demand: Evidence From the South Coast Air Basin. **AU** Berman, Eli; Bui, Linda T. M. **AA** Berman: Boston University and National Bureau of Economic Research. Bui: Boston University. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 82; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. **PG** 29. **PR** no charge. **JE** Q25, Q28. **KW** Air Quality Regulation. Los Angeles. Pollution Abatement.

AB The devolved nature of environmental regulation provides an excellent opportunity for estimating the effects of regulation on employment, by generating rich variation in regulation across regions and over time. We exploit this variation using direct measures of regulation and plant data. We estimate the employment effects of an unprecedented increase in air quality regulation in the Los Angeles region, using unregulated plants in other regions, industries and years for comparison. While environmental regulation is generally thought to reduce employment, economic theory is ambiguous on this point, since pollution abatement technologies may be labor using. We find that air quality regulation induced very expensive investments in abatement capital for individual plants, especially for oil refineries. Despite these high costs we find no evidence that environmental regulation decreased labor demand, even when allowing for induced plant exit and dissuaded plant entry. If anything, air quality regulation probably increased employment slightly.

PD September 1998. **TI** Environmental Regulation and Productivity: Evidence From Oil Refineries. **AU** Berman, Eli; Bui, Linda T. M. **AA** Berman: Boston University and National Bureau of Economic Research. Bui: Boston

University. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 91; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. **PG** 35. **PR** no charge. **JE** D21, H23, K23, L51, L69, Q25. **KW** Abatement. Air Quality. Regulation. Productivity. Los Angeles.

AB We examine the effect of air quality regulation on the productivity of some of the most heavily regulated U.S. manufacturing plants, oil refineries in the Los Angeles Air Basin. We use direct measures of local air pollution regulation to estimate their effects on abatement investment. Refineries not subject to these local regulations are our comparison group. We estimate that between 1979 and 1992 each regulation cost \$3M per plant on compliance dates and a further \$5M per plant on dates of increased stringency. We measure total factor productivity using data that allow us to observe physical quantities of inputs and outputs. Despite the high costs associated with local regulations, productivity in the Los Angeles refineries rose sharply during the 1987-92 period, a period of decreased refinery productivity in other regions. Productivity gains due to regulation imply that commonly used measures of abatement costs significantly overstate their net economic costs.

Bernanke, Ben S.

PD March 1999. **TI** Deflation and Monetary Contraction in the Great Depression: An Analysis by Simple Ratios. **AU** Bernanke, Ben S.; Mihov, Ilian. **AA** Bernanke: Princeton University. Mihov: INSEAD. **SR** INSEAD Working Paper: 99/45/EPS; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 45. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** E31, E32, E41. **KW** Great Depression. Money Demand. Consumer Prices. Wholesale Prices.

AB This paper provides quantitative evidence on both the timing and relative importance of deflationary factors that gripped the world economy during the Depression era. The analysis leads to the following conclusions: (1) Wholesale prices fell much more sharply than consumer prices in the early stages of the Depression, reflecting the worldwide plunge in the prices of internationally traded commodities. The behavior of consumer prices, seems reasonably well explained by the behavior of national money stocks, combined with normal changes in real money demand. (2) Contraction or slow growth of nominal money stocks was an important source of deflation in the earlier phase of the Depression, as well as after 1931. "Maldistribution" of gold among the major economies also had a contractionary influence during this period. (3) Our method also sheds some light on the experiences of individual countries, the policies that were adopted by their central banks, and the effects of those policies on the world as a whole.

Bertrand, Marianne

PD October 1998. **TI** Networks Effects and Welfare Cultures. **AU** Bertrand, Marianne; Luttmer, Erzo F. P.; Mullainathan, Sendhil. **AA** Bertrand: Princeton University and NBER. Luttmer: University of Chicago. Mullainathan: MIT and NBER. **SR** Princeton University Discussion Papers in Economics, Woodrow Wilson School of Public and International Affairs: 201; Woodrow Wilson School of Public

and International Affairs, Princeton University, Princeton, NJ 08544-1013.

Website: www.princeton.edu/other/workingpapers.html. **PG** 33. **PR** no charge. **JE** D83, H53, I38. **KW** Welfare. Social Networks. Language.

AB This paper empirically examines the role of social networks in welfare participation. Empirical work has found it difficult to distinguish the effect of networks from unobservable characteristics of individuals and areas. We use data on language spoken to better infer an individual's network within an area. Moreover, the network influence will depend on their welfare knowledge. We focus on the differential effect of increased contact availability: does being surrounded by others who speak the same language increase welfare use more for individuals from high welfare using language groups? The results strongly confirm the importance of networks in welfare participation. We deal with omitted variable bias in several ways. First, our methodology allows us to include local area and language group fixed effects and to control for the direct effect of contact availability; these controls eliminate many of the problems in previous studies. Second, we instrument for contact availability in the neighborhood with the number of one's language group in the entire metropolitan area. Finally, we investigate the effect of removing education controls. Both instrumentation and removal of education controls have little impact on the estimates.

PD October 1998. **TI** Executive Compensation and Incentives: The Impact of Takeover Legislation. **AU** Bertrand, Marianne; Mullainathan, Sendhil. **AA** Princeton University and NBER. Mullainathan: MIT and NBER. **SR** Princeton University Discussion Papers in Economics, Woodrow Wilson School of Public and International Affairs: 202; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013.

Website: www.princeton.edu/other/workingpapers.html. **PG** 28. **PR** no charge. **JE** G34, J33. **KW** Executive Compensation. Takeover. Incentives.

AB We investigate the impact of changes in states' anti-takeover legislation on executive compensation. We find that both pay for performance sensitivities and mean pay increase for the firms affected by the legislation (relative to a control group). These findings are partially consistent with an optimal contracting model of CEO pay as well as with a skimming model in which reduced takeover fears allow CEOs to skim more. We compute lower bounds on the relative risk aversion coefficients implied by our findings. These lower bounds are relatively high, indicating that the increase in mean pay may have been more than needed to maintain CEOs' individual rationality constraints. Under both models however, our evidence shows that the increased pay for the performance offsets some of the incentive reduction caused by lower takeover threats.

PD October 1998. **TI** Is There Discretion in Wage Setting? A Test Using Takeover Legislation. **AU** Bertrand, Marianne; Mullainathan, Sendhil. **AA** Bertrand: Princeton University and NBER. Mullainathan: MIT and NBER. **SR** Princeton University Discussion Papers in Economics, Woodrow Wilson School of Public and International Affairs: 203; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. Website: www.princeton.edu/other/workingpapers.html. **PG** 27. **PR** no charge. **JE** G34, J32, M12. **KW** Wage

Setting. Discretion. Takeover Laws.

AB Anecdotal evidence suggests that uncontrolled managers let wages rise above competitive levels. Testing this popular perception has proven difficult, however, because independent variation in the extent of managerial discretion is needed. In this paper, we use states' passage of anti-takeover legislation as a source of such independent variation. Passed in the 1980s, these laws seriously limited takeovers of firms incorporated in legislating states. Since many view hostile takeovers as an important disciplining device, these laws potentially raised managerial discretion in affected firms. If uncontrolled managers pay higher wages, we expect wages to rise following these laws. Using firm-level data, we find that relative to a control group, annual wages for firms incorporated in states passing laws did indeed rise by 1 to 2% or about \$500 per year. The findings are robust to a battery of specification checks and do not appear to be contaminated by the political economy of the laws or other sources of bias. Our results suggest that discretion significantly affects wages. They challenge standard theories of wage determination which ignore the role of managerial preferences.

Betts, Caroline

PD March 1999. **TI** International Monetary Policy Coordination and Competitive Depreciation A Re-Evaluation.

AU Betts, Caroline; Devereux, Michael B. **AA** Betts: University of Southern California. Devereux: University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 99/07; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 32. **PR** JE F03, F04. **KW** Pricing-to-Market. Exchange Rates. International Coordination. Monetary Policy.

AB Is there a need for international coordination of monetary policies within the current system of floating exchange rates? In a recent paper, Obstfeld and Rogo (1995) argue that in an environment of sticky prices, and floating exchange rates, monetary policy shocks will generate positive welfare spillovers across countries. This leads to the conclusion that international monetary policy coordination is unnecessary, and may in fact be undesirable, since it nurtures a bias towards high inflation. The present paper shows that these conclusions are dependent on the manner in which prices are set. When firms engage in 'pricing-to-market' (PTM), setting prices in the currency of the buyer, monetary policy tends to have negative welfare spillovers. This gives an incentive to engage in "competitive depreciation." In a noncooperative equilibrium, world inflation will be higher, the greater the importance of PTM. With a high degree of PTM, the case for international monetary policy coordination is restored. If PTM is at an intermediate range, however, international monetary coordination may have no consequences at all.

PD March 1999. **TI** The International Effects of Monetary and Fiscal Policy in a Two-Country Model. **AU** Betts, Caroline; Devereux, Michael B. **AA** Betts: University of Southern California. Devereux: University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 99/10; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 51. **PR** JE F32, F40, F41. **KW** International Transmission.

Macroeconomic Policy. Monetary Policy. Fiscal Policy. Pricing-to-Market.

AB This paper develops a two-country dynamic general equilibrium model with slowly adjusting prices to re-examine the well-known analysis by Mundell (1968 Chapter 18) on the international transmission effects of monetary and fiscal policy. We show that the critical factor governing the effects of monetary policy is the currency of export price invoicing, while the critical factor for the effects of fiscal policy is the structure of international assets markets. By contrast, the currency of invoicing is essentially irrelevant for the effects of fiscal policy, while the structure of international assets markets is quantitatively unimportant for the international effects of monetary policy. We present VAR evidence of a positive output comovement and real exchange rate depreciation between the US and the other G7 economies in response to US monetary shocks. This is shown to accord well with the model where export prices are invoiced in foreign currency.

Bevan, D. L.

TI Exchange Rate Regimes and Revenue Performance in Sub-Saharan Africa. **AU** Adam, C. S.; Bevan, D. L.; Chambas, G.

Beyer, Andreas

PD April 2000. **TI** Constructing Historical Euro-Zone Data. **AU** Beyer, Andreas; Doornik, Jurgen A.; Hendry, David F. **AA** Beyer: European University Institute. Doornik and Hendry: University of Oxford. **SR** Oxford Department of Economics Discussion Paper: 04; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. **PG** 24. **PR** no charge. **JE** C43, C82. **KW** European Monetary Union. Data Aggregation. Divisia Approach.

AB Existing methods of reconstructing historical Euro-zone data by aggregation of the individual countries' data raises numerous difficulties due to past exchange rate changes. The approach proposed here is designed to avoid such distortions, and aggregate exactly when exchange rates are fixed. In a simple 'Divisia-style' approach, we first compute growth rates within states, aggregate these, then cumulate this Euro-zone growth rate to obtain the aggregated levels variables. The aggregate of the implicit-deflator price index coincides with the implicit deflator of our aggregate nominal and real data. We investigate the properties of this growth-rate method for aggregation, and construct Euro-zone measures for M3, GDP and prices over the previous two decades.

Bhattacharya, Shantanu H.

PD October 1998. **TI** Capturing the Effect of Technology Improvements on Product Positioning and Introduction Sequence Decision-Making. **AU** Bhattacharya, Shantanu H.; Krishnan, Vish; Mahajan, Vijay. **AA** Bhattacharya: INSEAD. Krishnan and Mahajan: University of Texas at Austin. **SR** INSEAD Working Paper: 99/16/TM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 33. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M11, M31. **KW** Core Technology. Launch Sequence. Cannibalization.

AB Firms in hyper-competitive environments increasingly

plan and design their products concurrently with the independent development and validation of underlying technologies. The simultaneous evolution of a core technology has important implications for the product positioning and launch-sequence decisions a firm must make. Prior research has shown that to minimize cannibalization, a firm should not launch low-end products before high-end products. Offering the consumer an option to upgrade from the low-end to the high-end product, with important implications for product positioning and introduction sequence, can further reduce cannibalization. Based on our study in the high technology industry, we model the product positioning and introduction sequence decisions under the simultaneous evolution of technology. Our analysis indicates that it may be optimal in a variety of circumstances for a firm to launch products in an increasing order of performance, even in the absence of network externalities. Besides presenting analytical results for product positioning and profit from different introduction sequences, the paper also makes a contribution to managerial practice by providing insights in the form of a conceptual framework.

TI The Role of Design Flexibility in Defining Products Under Technology Uncertainty. **AU** Krishnan, Vish; Bhattacharya, Shantanu H.

TI Channel Choice and Coordination in a Remanufacturing Environment. **AU** Savaskan, Rezzan Canan; Bhattacharya, Shantanu H.; Van Wassenhove, Luk N.

TI Channel Choice and Coordination in a Remanufacturing Environment. **AU** Savaskan, Rezzan Canan; Bhattacharya, Shantanu H.; Van Wassenhove, Luk N.

TI A Theory of Pricing for Information-Intensive Offerings. **AU** Balasubramanian, Sridhar; Bhattacharya, Shantanu H.; Krishnan, Vish.

Biglaiser, Gary

PD May 2000. **TI** Price and Quality Competition Under Adverse Selection: Market Organization and Efficiency. **AU** Biglaiser, Gary; Ma, Ching-to Albert. **AA** Biglaiser: University of North Carolina. Ma: Boston University. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 102; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. **PG** 29. **PR** no charge. **JE** D41, D43, D82, I02, I11, L15, L51. **KW** Price Competition. Quality Competition. Integration. Separation. Screening. Adverse Selection. Correlation.

AB We analyze a model where firms compete with prices and qualities in markets consisting of consumers with heterogeneous cost characteristics. Consumers demand two goods, which can be supplied jointly or separately by firms. We consider two sets of strategies for firm: uniform price-quality pairs, and screening price-quality menus. For each strategy regime, we compare the equilibria under integration (when each firm supplies both goods) and separation (when each firm supplies only one good). Separating markets always enhances quality efficiencies under uniform price-quality competition, but may improve or lower quality efficiencies when firms can use menus of price-quality pairs to screen consumers. The theory is used to model a variety of phenomena such as payers of health care contracting specialty managed-care firms to administer separately mental health and substance abuse coverage and

cream-skimming for the lowest-cost students in locales where school choices are possible.

Bird, Richard M.

PD December 1999. **TI** Rethinking Subnational Taxes: A New Look at Tax Assignment. **AA** University of Toronto. **SR** International Monetary Fund Working Paper: WP/99/165; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 37. **PR** not available. **JE** H71, H77. **KW** Tax Assignment. Subnational Taxes. Local Business Taxes. Regional Governments.

AB The assignment of revenues in most developing and transitional countries to the central government has arguably facilitated irresponsible behavior by some subnational governments. One way to relieve this problem is to strengthen subnational tax regimes. The paper proposes two approaches to accomplish such strengthening in developing countries. The first-most applicable to large countries with important regional governments-is to establish subnational value-added taxes (VATs); the second is to replace the various unsatisfactory state and local taxes imposed on business by a low-rate value-added tax levied on the basis of income (production, origin) rather than consumption (destination).

Bjornland, Hilde C.

PD January 2000. **TI** Identifying Domestic and Imported Core Inflation. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/04; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 21. **PR** not available. **JE** C32, E31, E61. **KW** Domestic and Imported Core Inflation. Inflation Target. Oil Price Shocks. Structural VAR. **AB** This paper estimates core inflation in Norway, identified as that component of inflation that has no long-run effect on GDP. The model distinguishes explicitly between domestic and imported core inflation. The results show that (domestic) core inflation is the main component of CPI inflation. CPI inflation, however, misrepresents core inflation in some periods. The differences are well explained by the other shocks identified in the model, in particular the oil price shocks of the 1970s when Norway imported inflation, and the negative non-core (supply) shocks of the late 1980s, which pushed inflation up temporarily relative to core inflation.

Blackman, Allen

PD February 1998. **TI** Pollution Control in the Informal Sector: The Ciudad Juarez Brickmakers' Project. **AU** Blackman, Allen; Bannister, Geoffrey J. **AA** Blackman: Resources for the Future. Bannister: University of New Mexico. **SR** Resources for the Future Discussion Paper: 98/15; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 23. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** L61, O17, O22, O33, O54, Q25. **KW** Informal Sector. Air Pollution. Mexico. Brickmaking. Community Pressure.

AB Low-technology, unlicensed micro-enterprises known as "informal" firms are a significant source of pollution in developing countries that are virtually impossible to regulate in the conventional manner. This paper describes an example of an innovative and promising approach to the problem: the Ciudad Juarez Brickmakers' Project, a private-sector-led

initiative aimed at abating highly polluting emissions from Ciudad Juarez, Mexico's approximately 300 informal brick kilns. We draw four lessons from the Project's history. First, private-sector-led initiatives can work -- indeed they may be more effective than public sector initiatives -- but they require strong public sector support. Second, necessary conditions for effective environmental management in the informal sector include enlisting the cooperation of local organizations, relying upon peer monitoring, and offsetting compliance costs. Ineffective strategies include promoting too-advanced technologies and intervening in informal markets. Third, pollution control strategies that provide the greatest environmental benefits may be less appropriate than low-cost intermediate strategies. Finally, in volatile developing economies, market-based environmental initiatives in the informal sector are bound to be fragile.

PD March 1998. **TI** Using Alternative Regulatory Instruments. **AU** Blackman, Allen; Harrington, Winston. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/21; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 28. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** O13, Q25, Q28. **KW** Market Based Instruments. Economic Incentives. Informal Regulation. Developing Country. Industrial Air Pollution.

AB Should developing countries eschew conventional command and control regulatory instruments that are increasingly seen as inefficient and rely instead on "alternative" instruments based on economic incentives and community pressure? This paper addresses this question as it pertains to fixed point air pollution. The paper discusses the theoretical advantages and disadvantages of alternative instruments, reviews both industrialized country and developing country experiences with them, and proposes a number of policy guidelines. We argue that regulators in developing countries typically operate under severe financial and institutional constraints. Given these constraints, pure economic incentive instruments are generally not practical since they involve relatively high administrative and political costs. Suitably modified however, emissions fee policies probably are appropriate. Such policies can provide a foundation for a transition to an effective high-fee system, and can raise much needed revenue for environmental projects and programs. In addition, "indirect" instruments like taxes on dirty inputs may be a second-best approach to pollution abatement. Finally, a variety of relatively low-cost policies are available to strengthen pressures placed on polluters by private-sector agents. At very least, these policies can complement formal regulation.

Blackorby, Charles

PD March 1999. **TI** Rationalizable Variable-Population Choice Functions. **AU** Blackorby, Charles; Bossert, Walter; Donaldson, David. **AA** Blackorby and Donaldson: University of British Columbia. Bossert: University of Nottingham. **SR** University of British Columbia Department of Economics Discussion Paper: 99/03; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 21. **PR** **JE** C78, D63. **KW** Population Ethics. Rational Choice. Bargaining.

AB We analyze the rationalizability of variable-population social-choice functions in a welfarist framework. It is shown that fixed-population rationalizability and a weakening of congruence together are necessary and sufficient for rational choice, given a plausible dominance property that prevents the choice of alternatives involving low utility levels. In addition, a class of critical-level generalized-utilitarian choice functions is characterized. This result, which extends an earlier axiomatization of a related class of bargaining solutions to a variable-population setting, is the first axiomatization of critical-level generalized utilitarianism in a general choice-theoretic model.

PD March 1999. **TI** Functional Equations and Population Ethics. **AU** Blackorby, Charles; Bossert, Walter; Donaldson, David. **AA** Blackorby and Donaldson: University of British Columbia. Bossert: University of Nottingham. **SR** University of British Columbia Department of Economics Discussion Paper: 99/04; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 10. **PR** **JE** D63, D71. **KW** Social Choice. Equations for Real Functions.

AB This paper illustrates the application of functional-equations results in population ethics. In an intertemporal framework, we provide characterizations of several classes of variable-population social orderings that may depend on individual lengths of life in addition to lifetime utilities. The generalized associativity equation turns out to play a major role in proving the results of this paper and in mathematical approaches to population ethics in general.

PD July 1999. **TI** Tax Harmonization and Pareto-Efficiency. **AU** Blackorby, Charles; Brett, Craig. **AA** Blackorby: University of British Columbia and GREQAM. Brett: University of Essex. **SR** University of British Columbia Department of Economics Discussion Paper: 99/26; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 21. **PR** **JE** H21, H87. **KW** Tax Harmonization. Tax Reform. Shadow Prices.

AB We consider the problem of tax harmonization among independent nations that have separate government budget constraints. The case for harmonization in this environment is shown to be weak, unless the nations do not trade with each other even when there is but one consumer in each country. We then contrast our findings to a related situation in which countries are not required to meet a balance of payments condition. Here, when each country has but a single consumer, a case for tax harmonization emerges.

PD August 1999. **TI** Utilitarianism and the Theory of Justice. **AU** Blackorby, Charles; Bossert, Walter; Donaldson, David. **AA** Blackorby: University of British Columbia and GREQAM. Bossert: University of Nottingham. Donaldson: University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 99/20; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 50. **PR** **JE** D63, D71. **KW** Social Choice. Utilitarianism. Welfarism.

AB This paper, which is to be published as a chapter in the

Handbook of Social Choice and Welfare, provides a survey of Utilitarianism as a theory of justice. We review and discuss axiomatizations of Utilitarian and Generalized-Utilitarian social-evaluation functionals in a welfarist framework. In addition, we analyze extensions of Utilitarian principles to variable-population environments and to situations in which the alternatives resulting from choices among feasible actions are not known with certainty.

PD October 1999. **TI** The Pareto-Optima of Finite-Horizon OLG Models. **AU** Blackorby, Charles; Brett, Craig. **AA** Blackorby: University of British Columbia and GREQAM. Brett: University of Essex. **SR** University of British Columbia Department of Economics Discussion Paper: 99/27; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. **Website:** web.arts.ubc.ca/econ/dpintro.htm. **PG** 38. **PR** **JE** D05, D06, D91, H02. **KW** Overlapping Generations. Commodity Taxes. Tax-Reform.

AB In a simple overlapping-generations model where the government has the power to levy commodity taxes and to implement generation-specific transfers, we show that not all the second-best optima are first-best, that is, commodity taxes and subsidies are required for a non negligible set of the efficient solutions.

Blanchard, Olivier Jean

PD February 1999. **TI** Wage Dynamics: Reconciling Theory and Evidence. **AU** Blanchard, Olivier Jean; Katz, Lawrence. **AA** Blanchard: Massachusetts Institute of Technology and National Bureau of Economic Research. Katz: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6924; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **Website:** www.nber.org. **PG** 9. **PR** \$5.00. **JE** E31, J64. **KW** Wage Determination. Error-Correction Model. Unemployment. Wages.

AB U.S. macroeconomic evidence shows a negative relation between the rate of change of wages and unemployment. In contrast, most theories of wage determination imply a negative relation between the level of wages and unemployment. In this paper, we ask whether one can reconcile the empirical evidence with theoretical wage relations. We reach three main conclusions. First, we derive the condition under which the two can indeed be reconciled. We show the constraints that such a condition imposes on the determinants of workers' reservation wages as well as the relative importance of workers' outside options as opposed to match specific productivity in wage determination. Second, in the light of this condition, we reinterpret the presence of an "error correction" term in macroeconomic wage relations for most European economies but not in the United States. Third, we show that whether this condition holds or not has important implications for the effects of a number of variables -- from real interest rates to oil prices to payroll taxes -- on the natural rise of unemployment.

Blonigen, Bruce A.

PD March 1999. **TI** Foreign-Affiliate Activity and U.S. Skill Upgrading. **AU** Blonigen, Bruce A.; Slaughter, Matthew J. **AA** Blonigen: University of Oregon. Slaughter: Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research

Working Paper: 7040; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **Website:** www.nber.org. **PG** 20. **PR** \$5.00. **JE** F21, F23, J31. **KW** Wage Inequality. Foreign Direct Investment.

AB There has been little analysis of the impact of inward foreign direct investment (FDI) on U.S. wage inequality, even though the presence of foreign-owned affiliates in the United States has arguably grown more rapidly in significance for the U.S. economy than trade flows. Using data across U.S. manufacturing from 1977 to 1994, this paper tests whether inward flows of FDI contributed to within-industry shifts in U.S. relative labor demand toward more-skilled labor. We generally find that inward FDI has not contributed to U.S. within-industry skill upgrading; in fact, the wave of Japanese Greenfield investments in the 1980s was significantly correlated with lower, not higher, relative demand for skilled labor. This finding is consistent with recent models of multinational enterprises in which foreign affiliates focus on activities less skilled-labor intensive than the activities of their parent firms. It also suggests that if inward FDI brought new technologies into the United States, the induced technological change was not biased towards skilled labor.

Blundell, Richard

PD March 1999. **TI** Interpreting Movements in Aggregate Wages: The Role of Labor Market Participation. **AU** Blundell, Richard; Reed, Howard; Stoker, Thomas. **AA** Blundell: UC Berkeley, IFS and UCL. Reed: IFS and UCL. Stoker: MIT. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 11; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. **Website:** violet.berkeley.edu/~ir/cle/index.html. **PG** 55. **PR** no charge. **JE** J21, J31. **KW** Real Earnings. Participation. Wage Distribution.

AB This paper analyzes the role of labor market participation in the relationship between aggregate wages and individual wages. A new and easily implementable framework for the empirical analysis of aggregation biases in this context is developed. Aggregate real wages are shown to contain three important bias terms: one associated with the dispersion of individual wages, a second reflecting the distribution of working hours, and a third deriving from compositional changes in the (selected) sample of workers. Noting the importance of these issues for recent experience in Britain, data on real wages and participation for British male workers over the period 1978-1995 are studied. A close correspondence between the estimated biases and the patterns of differences shown by aggregate wages is established. This is shown to have important implications for the interpretation of real wage growth over this period.

Bode-Greuel, Kerstin

TI Expansion Options: Strategic Opportunities Created By Research Projects at BestPharma. **AU** Loch, Christoph H.; Bode-Greuel, Kerstin; Smuck, Steven.

Bodnar, Gordon M.

PD August 1999. **TI** Pass-Through and Exposure. **AU** Bodnar, Gordon M.; Dumas, Bernard; Marston, Richard C. **AA** Bodnar: John Hopkins University. Dumas: INSEAD. Marston: University of Pennsylvania. **SR** INSEAD Working

Paper: 99/55/FIN; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. PG 28. PR no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. JE F36, L11. KW Pass-Through. Exchange Rate. Exposure. Industrial Structure.

AB Firms differ in the extent to which they "pass-through" changes in exchange rates in the prices they charge in foreign markets. They also differ in their "exposure" to exchange rates -- the responsiveness of their profits to changes in exchange rates. Because pricing directly affects profitability, the exposure of a firm's profits to exchange rates should be governed by many of the same firm and industry characteristics that determine the firm's pricing behavior. This paper will develop models of firm and industry behavior, which will be used to study these closely related phenomena together. We consider an imperfectly competitive environment where a local exporting firm competes against a foreign import-competing firm in the export market. From this specification, we derive the optimal pass-through decisions and from these determine the exchange rate exposure that would result. The models are estimated on Japanese export industry data which combines both the price data used in pass-through studies and the financial data used in exposure studies.

Bontout, Olivier

PD November 1998. TI Wages and Unemployment: Trade-Off Under Different Labour Market Paradigms. AU Bontout, Olivier; Jean, Sebastien. AA CEPII. SR CEPII Working Paper: 98/13; Centre d'Etudes Prospectives et d'Informations Internationales (CEPII), 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. PG 46. PR no charge. JE D58, F12, J05. KW Labor Market. International Trade. Skill-Bias. Technical Change. General Equilibrium Model.

AB The aim of this study is to assess and compare the impact of trade and technology shocks under different labor market paradigms. We use a computable general equilibrium model, compatible with the new trade theories, and we assume alternatively that wages are flexible, that relative wages are rigid, and that wages are bargained (WS-PS model). We find that the more rigid the wage structure is, the less favorable the effect on welfare is and the less important the evolution of income inequalities are. For unskilled labor, the labor market functioning boils down to a trade-off between real wages and employment. We also find that the less substitutable the production factors are, the lower the employment-cost of a given correction in relative wages is, and the less costly a decrease in inequalities through a different labor market setting is in terms of welfare.

Bordo, Michael

PD October 1999. TI Canada's Monetary System in Historical Perspective Two Faces of the Exchange Rate Regime. AU Bordo, Michael; Redish, Angela; Shearer, Ronald A. AA Bordo: Rutgers University. Redish and Shearer: University of British Columbia. SR University of British Columbia Department of Economics Discussion Paper: 99/24; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. PG 34. PR JE E42, F33, N11, N12. KW Currency Union. Canada. Monetary

History. Exchange Rate Regime.

AB This paper chronicles the evolution of Canada's exchange rate regimes, from the (particularly rigid) gold standard of the early 19th century to today's floating rates, emphasizing the factors that influenced the choice and characteristics of those regimes. We argue that Canada's historical experience can provide a laboratory for analyzing exchange rate policy proposals: those advocating that Canada join a common currency area must address the difficulties that Canada experienced with fixed exchange rates in the past; those in favor of a floating rate must explain how the system can achieve the stability associated with the floating rate of the 1950s rather than the policy problems of the 1980s.

Borensztein, Eduardo

PD February 2000. TI Financial Crisis and Credit Crunch in Korea: Evidence from Firm-Level Data. AU Borensztein, Eduardo; Lee, Jong-Wha. AA Borensztein: International Monetary Fund. Lee: Harvard University. SR International Monetary Fund Working Paper: WP/00/25; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 25. PR not available. JE E52, O16, O53. KW Korea. Credit Crunch. Financial Crisis.

AB This paper analyzes the credit crunch following the recent financial crisis in Korea. Using enterprise-level data, we find that there were big differences in the magnitude of the credit contraction across different types of firms. In particular, chaebol (conglomerate)-affiliated firms appeared to have lost the preferential access to credit they enjoyed in the pre-crisis period, and credit appears to have been reallocated in favor of more efficient firms. This suggests that the credit crunch suffered by certain sectors can be attributed to the adjustment by banks and enterprises to the restructuring of the financial sector, rather than to tight monetary policy or an external credit constraint.

TI The Choice of Exchange Rate Regime and Monetary Target in Highly Dollarized Economies. AU Berg, Andrew; Borensztein, Eduardo.

Borodkin, Leonid

PD July 2000. TI The Rural Urban Wage Gap in the Industrialization of Russia, 1885- 1913. AU Borodkin, Leonid; Leonard, Carol Scott. AA Borodkin: Lomonossov State University, Russia. Leonard: Oxford University. SR Oxford Department of Economics Discussion Paper: 14; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. PG 25. PR no charge. JE N13, N33, O14. KW Russia. Economic History. Rural-Urban Wages. Labor History. Industrialization.

AB This study provides statistical evidence that Russian rural/urban wages diverged substantially during the industrialization of Russia in the late nineteenth century. However, over the time both the variation declined and integration somewhat increased as rural labor responded to new opportunities. The patterns were moderately clear for nominal wages. This study supports Paul Gregory's conclusion that relative advances in the productivity of land in agriculture were accompanied by far greater mobility of labor than is commonly thought in view of the constraints of Russia's rural institutions.

Bossert, Walter

TI Rationalizable Variable-Population Choice Functions.
AU Blackorby, Charles; Bossert, Walter; Donaldson, David.

TI Functional Equations and Population Ethics.
AU Blackorby, Charles; Bossert, Walter; Donaldson, David.

TI Utilitarianism and the Theory of Justice.
AU Blackorby, Charles; Bossert, Walter; Donaldson, David.

Botticini, Maristella

TI Endogenous Matching and the Empirical Determinants of Contract Form. **AU** Akerberg, Daniel A.; Botticini, Maristella.

Boulding, William

PD May 1999. **TI** Sustainable Pioneering Advantage: At What Cost? **AU** Boulding, William; Christen, Markus.
AA Boulding: Duke University. Christen: INSEAD.
SR INSEAD Working Paper: 99/31/MKT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 34. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** L11, O33. **KW** Pioneering. Profitability. Average-Cost.

AB In this research we investigate the impact of pioneering on profit, as well as on the underlying components of profit, that is, price and average cost. Consistent with previous theoretical and empirical research we hypothesize that pioneers have a sustainable demand (price or market share) advantage. Also we hypothesize that on average, both higher costs and no sustainable long-term profit advantage for pioneering firms. We first test these hypotheses in the setting of consumer goods. We then examine the robustness of these findings across industry settings. Finally, we examine conditions where we hypothesize the possibility of a positive pioneering-profitability relationship. Our findings indicate that, on average, pioneers have no long-term profit advantage. In particular, pioneering provides a price advantage, but this advantage is more than offset by higher average costs. However, we do find some conditions where we show a positive relationship between pioneering and profitability. Our results also indicate that entry timing is endogenously determined and that failure to account for the endogeneity of the entry timing decision of whether to pioneer or follow leads to significantly biased results.

Boyd, James

PD January 1998. **TI** Intel's XL Permit: A Framework for Evaluation. **AU** Boyd, James; Krupnick, Alan J.; Mazurek, Janice. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/11; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 50. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** K32, L51, L63, Q38. **KW** Project XL. Tailored Regulation. Environmental Regulation. Cost-Benefit Analysis. **AB** The paper develops a framework to evaluate permits granted to firms under the Environmental Protection Agency's Project XL -- with emphasis on the novel air permit granted to the Intel Corporation. We describe the permit, the process that created it, and the types of costs and benefits likely to arise from this type of "facility-specific" regulatory arrangement. Among other things, the paper describes the permit's impact on

environmental quality, production costs, transaction costs, and Intel's strategic market position. The paper also considers how an estimate of the costs and benefits -- both to Intel and society -- might be estimated. While facility-specific regulation typically conjures images of production cost savings as processes are re-engineered and low-cost abatement strategies pursued, the Intel case highlights perhaps a more important source of benefit: flexibility in the form of streamlined permitting. Flexibility in this form allows for accelerated product introductions, with potentially significant benefits to the firm and possibly to society.

PD May 1998. **TI** Searching for the Profit in Pollution Prevention: Case Studies in the Corporate Evaluation of Environmental Opportunities. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/30; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 45. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** L65, O33, Q02. **KW** Pollution Prevention. Financial Evaluation. Environmental Accounting. **AB** The concept of pollution prevention, or "P2," signifies a new, proactive environmental mindset that targets the causes, rather than the consequences, of polluting activity. While anecdotal evidence suggests that P2 opportunities exist and that many have been pursued, there is also the perception that the pace of P2 is far too slow. To explore that claim -- and to shed light on barriers to P2 innovation -- this paper presents case studies of industrial P2 projects that were in some way unsuccessful. While based on a very limited sample, the evidence contradicts the view that firms suffer from organizational weaknesses that make them unable to appreciate the financial benefits of P2 investments. Instead, the projects foundered because of significant unresolved technical difficulties, marketing challenges, and regulatory barriers. Based on evidence from the cases, the paper concludes with a discussion of environmental policy reforms likely to promote P2 innovation.

Bray, Jeremy W.

TI The Effects of Prices and Policies on the Demand for Marijuana: Evidence from the National Household Surveys on Drug Abuse. **AU** Farrelly, Matthew C.; Bray, Jeremy W.; Zarkin, Gary A.; Wendling, Brett W.; Pacula, Rosalie Liccardo.

Brett, Craig

TI Tax Harmonization and Pareto-Efficiency.
AU Blackorby, Charles; Brett, Craig.

TI The Pareto-Optima of Finite-Horizon OLG Models.
AU Blackorby, Charles; Brett, Craig.

Brooks, Robin

PD February 2000. **TI** What Will Happen to Financial Markets When the Baby Boomers Retire? **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/18; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 34. **PR** not available. **JE** E27, G11, G12, H55. **KW** Equity Premium. Population Aging. Pension Reform. **AB** This paper explores whether changes in the age distribution have significant effects on financial markets that are rational and forward-looking. It presents an overlapping generations model in which agents make a portfolio decision

over stocks and bonds when saving for retirement. Using the model to simulate a baby boom-baby bust demonstrates that returns to baby boomers will be substantially below returns to earlier generations, even when markets are rational and forward-looking. This result is important because the current debate over how to reform pay-as-you-go pension systems often takes historical returns on financial assets and on the equity premium, as given.

Brown, Cheryl

TI An Analysis of the Horticultural Economy in California. **AU** Templeton, Scott R.; Brown, Cheryl; Goldman, George E.; Yoo, Seung Jick; Pradhan, Vijay S.

Brown, Donald J.

PD July 1997. **TI** Uniqueness, Stability, and Comparative Statics in Rationalizable Walrasian Markets. **AU** Brown, Donald J.; Shannon, Chris. **AA** Brown: Yale University. Shannon: UC Berkeley. **SR** University of California, Berkeley, Department of Economics Working Paper: 97/256; UC Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. **PG** 12. **PR** \$3.50 U.S., \$7.00 International. **JE** C62, D51. **KW** Tatonnement Stability. Comparative Statics. Monotonicity. Monotone Demand. Refutability. Exchange Economies.

AB This paper studies the extent to which qualitative features of Walrasian equilibria are refutable given a finite data set. In particular, we consider the hypothesis that the observed data are Walrasian equilibria in which each price vector is locally stable under tatonnement. Our main result shows that a finite set of observations of prices, individual incomes and aggregate consumption vectors is rationalizable in an economy with smooth characteristics if and only if it is rationalizable in an economy in which each observed price vector is locally unique and stable under tatonnement. Moreover, the equilibrium correspondence is locally monotone in a neighborhood of each observed equilibrium in these economies. Thus the hypotheses that equilibria are locally stable under tatonnement, equilibrium prices are locally unique and equilibrium comparative statics are locally monotone are not refutable with a finite data set.

Browning, Martin

PD July 2000. **TI** Children and Demand: Direct and Non-Direct Effects. **AU** Browning, Martin; Lechene, Valerie. **AA** Browning: Institute of Economics, Copenhagen. Lechene: Wadham College, Oxford. **SR** Oxford Department of Economics Discussion Paper: 16; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. **PG** 40. **PR** no charge. **JE** D12, J13. **KW** Children. Demand. Fixed Effects. State Dependence. Intra-Household Effects.

AB It is universally accepted that children have important effects on household demand patterns. This can be decomposed into the "direct" effect of children; for example children are food intensive and the "non-direct" effects, such as fixed effects, state dependence or intra-household effects. These "non-direct" effects make the consistent estimation of direct effects problematic. We employ a French family expenditure survey to explore the source of the correlation between children and demands. In a first set of tests, we use a sample of older households (over-55's). We consider only those who do not

have children currently living at home. If there are only direct effects then the demand patterns of those who have had children should be the same as those who never had children. We find that this is not the case. For the second set of tests, we use a sample of couples aged up to 55 and test for the exogeneity of children variables using background variables as instruments for children. We find that children are not exogenous for some goods. These two findings together cast doubt on the usual practice of identifying direct children effects with the coefficients on the children variables in demand equations.

Brundin, Ingela

PD August 1998. **TI** Moral Hazard, Insurance, and Some Collusion. **AU** Brundin, Ingela; Ma, Ching-to Albert. **AA** Brundin: London School of Economics. Ma: Boston University. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 89; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. **PG** 32. **PR** no charge. **JE** B21, D81. **KW** Collusion. Moral Hazard. Honesty. Insurance.

AB A risk-averse consumer purchases an insurance policy; if she suffers a loss, she may receive services from a provider to recover some of the loss. Only the consumer and the provider know if the loss has actually occurred. The provider's behavior is uncertain. With some positive probability, the provider is honest, reporting the loss information truthfully to the insurer; with the complementary probability, the provider reports the information strategically, by writing a side-contract with the consumer to maximize the joint surplus of the provider-consumer coalition. We show that there is a loss of generality in considering only collusion-proof and non-collusion-proof contracts. When the probability of a provider acting collusively is small, the equilibrium contract is not collusion-proof but approximately first-best. When the probability of a provider acting collusively is large, the equilibrium contract is independent of this probability and identical to the equilibrium collusion-proof contract when the provider is collusive with probability-one.

Bui, Linda T. M.

TI Environmental Regulation and Labor Demand: Evidence From the South Coast Air Basin. **AU** Berman, Eli; Bui, Linda T. M.

TI Environmental Regulation and Productivity: Evidence From Oil Refineries. **AU** Berman, Eli; Bui, Linda T. M.

Buiter, Willem

PD March 2000. **TI** The Fallacy of the Fiscal Theory of the Price Level. **AA** London School of Economics and University of Cambridge. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 447; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 70. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** E31, E51, E52, E62, E63. **KW** Fiscal Theory. Price Level. Ricardian Fiscal Rules. Budget. Indeterminacy.

AB The "fiscal theory of the price level", recently redeveloped by Woodford, Cochrane, Sims, and others, is an example of a fatally flawed research program. The source of the fallacy is an economic misspecification. The proponents of the

fiscal theory of the price level do not accept the fundamental proposition that the government's intertemporal budget constraint is a constraint on the government's instruments that must be satisfied for all admissible values of the economy-wide endogenous variables. Instead they require it to be satisfied only in equilibrium. This economic misspecification has implications for the mathematical or logical properties of the equilibria supported by models purporting to demonstrate the properties of the fiscal approach. These include: overdetermined (internally inconsistent) equilibria; anomalies like the apparent ability to price things that do not exist; the need for arbitrary restrictions on the exogenous and predetermined variables in the government's budget constraint; and anomalous behavior of the "equilibrium" price sequences. Policy conclusions could be drawn from the fiscal theory of the price level that would be harmful if they influenced the actual behavior of the fiscal and monetary authorities.

Burtraw, Dallas

PD April 1998. **TI** Cost Savings, Market Performance, and Economic Benefits of the U.S. Acid Rain Program. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/28; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 18. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** H43, Q02, Q04. **KW** Acid Rain. Cost-Benefit Analysis. Air Pollution. Permit Trading. Clean Air Act.

AB This paper reports on four areas of research concerning Title IV of the 1990 Clean Air Act Amendments that regulate emissions of SO₂ from electricity generation. The first is the costs of the program over the long-run as estimated from the current perspective taking into account recent changes in fuel markets and technology. We compare projected costs with potential cost savings that can be attributable to formal trading of emission allowances. The second area is an evaluation of how well allowance trading has worked to date. The third area is the relationship between compliance costs and economic costs from a general equilibrium perspective. The fourth area is a comparison of benefits and costs for the program.

Cadot, Olivier

PD August 1998. **TI** Harmonizing External Quotas in an FTA: A Step Backward? **AU** Cadot, Olivier; De Melo, Jaime; Olarreaga, Marcelo. **AA** Cadot: INSEAD and CEPR. De Melo: University of Geneva and CEPR. Olarreaga: World Trade Organization and CEPR. **SR** INSEAD Working Paper: 98/75/EPS; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 17. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** F11, F13, F15. **KW** FTA, Quotas. Political Economy.

AB This paper explores how political-economy forces shape quantitative barriers against the rest of the world in an FTA. We show that whereas the dilution of lobbying power in a FTA typically leads to a relaxation of external quotas, this result is likely to be overturned as integration deepens. In particular, we show that cooperation among member countries on the level of their external quotas, cross-border lobbying by import-competing interests in the free-trade area, and the consolidation of national external quotas into a single one, all lead to stiffer restrictions against imports from the rest of the world. We also

show that unlike tariffs, endogenous quotas are not crucially affected by the presence of rules of origin.

Callen, Tim

PD December 1999. **TI** Assessing External Sustainability in India. **AU** Callen, Tim; Cashin, Paul. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/181; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 27. **PR** not available. **JE** F32, F41. **KW** Capital Controls. External Sustainability. India.

AB This paper examines the solvency and sustainability of India's external imbalances and analyzes the optimality of its capital flows. We use three approaches: an intertemporal model of the current account that allows for capital controls; a composite model of macroeconomic indicators that yields probabilities of future balance of payments crises; and scenarios that examine the path of the current account consistent with the stabilization of India's external liability-to-GDP ratio. The results indicate that India's intertemporal budget constraint is satisfied and that the path of its current account imbalances is sustainable, with some support for the optimality (given capital controls) of its external borrowing.

Calvo, Guillermo A.

PD February 1999. **TI** Inflation Stabilization and BOP Crises in Developing Countries. **AU** Calvo, Guillermo A.; Vegh, Carlos A. **AA** Calvo: University of Maryland. Vegh: University of California, Los Angeles and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6925; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** E63, F41. **KW** Chronic Inflation. Stabilization Plans.

AB High and persistent inflation has been one of the distinguishing macroeconomic characteristics of many developing countries since the end of World War II. Countries afflicted by chronic inflation, however, have not taken their fate lightly and have engaged in repeated stabilization attempts. More often than not, stabilization plans have failed. The end of stabilizations -- particularly those which rely on a pegged exchange rate -- has often involved dramatic balance of payment crises. As stabilization plans come and go, a large literature has developed trying to document the main empirical regularities and understand the key issues involved. This paper undertakes a critical review and evaluation of the literature related to inflation stabilization policies and balance of payment crises in developing countries.

Campa, Jose M.

PD February 1999. **TI** An Options-Based Analysis of Emerging Market Exchange Rate Expectations: Brazil's Real Plan, 1994-1997. **AU** Campa, Jose M.; Chang, P. H. Kevin; Refalo, James F. **AA** Campa: New York University and National Bureau of Economic Research. Chang: Credit Suisse First Boston. Refalo: New York University. **SR** National Bureau of Economic Research Working Paper: 6929; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** F31, F37, G13, G15. **KW** Exchange Rates. Options Data. Crawling Peg. Target Zones.

AB This paper uses currency option data from the BMF, the

Commodities and Futures exchange in Sao Paulo, Brazil, to investigate market expectations on the Brazilian Real-U.S. dollar exchange rate from October 1994 through July 1997. Using options data, we derive implied probability density functions (PDF) for expected future exchange rates and thus measures of the credibility of the "crawling peg" and target zone ("maxiband") regimes governing the exchange rate. Since we do not impose an exchange rate model, our analysis is based on either the risk-neutral PDF or arbitrage-based tests of target zones. The paper, one of the first to use options data from an emerging market, finds that target zone credibility was poor prior to February 1996, but improved afterwards. The market anticipated periodic band adjustments, but over time developed greater confidence in the Real. We also test whether devaluation intensities estimated from these option prices can be explained by standard macroeconomic factors.

Capron, Laurence

PD April 1999. **TI** The Long-Term Performance of Horizontal Acquisitions. **AA** INSEAD. **SR** INSEAD Working Paper: 99/24/SM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 31. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** L11, L22. **KW** Mergers and Acquisitions. Value Creation. Synergy. Resource-Based- View.

AB This paper examines how value is created in horizontal mergers and acquisitions. More specifically, it examines the impact of post-acquisition asset divestiture and resource redeployment on the long-term performance of horizontal acquisitions. The data come from a detailed survey of acquiring firm managers and cover 253 horizontal mergers and acquisitions that were initiated by European and U.S. firms in manufacturing industries for the period 1988-1992. This study incorporates insights from the cost efficiency and resource-based theories to propose a model of the effects of asset divestiture and resource redeployment on long-term acquisition performance. Overall, our results show that both asset divestiture and resource redeployment can contribute to acquisition performance, with, however, a significant risk of damaging acquisition performance when the divested assets and redeployed resources are those of the target.

Card, David

TI How Did the Elimination of Mandatory Retirement Affect Faculty Retirement. **AU** Ashenfelter, Orley; Card, David.

PD May 1998. **TI** The Casual Effect of Education on Earnings. **AA** UC Berkeley. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 2; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. **PG** 104. **PR** no charge. **JE** I21, J31, J32. **KW** Return to Education. Wage Structure. Causal Models.

AB This paper surveys recent literature on the causal relationship between education and earnings focusing on i) theoretical and econometric advances in modeling the causal effect of education in the presence of heterogeneous returns to schooling, ii) studies in which the institutional aspects of the education system are used to form instrumental variable

estimates of the return to schooling, iii) studies of the earnings and schooling of twins, iv) recent attempts to explicitly model sources of heterogeneity in the returns to education. The average marginal return to education is not much below the estimate that emerges from a standard human capital earnings function fit by OLS. Evidence from recent studies of identical twins suggests a small upward "ability" bias -- on the order of 10 percent. A consistent finding among studies using instrumental variables based on institutional changes in the education system is that the estimated returns to schooling are 20- 40 percent above the corresponding OLS estimates. Part of the explanation for this finding may be that marginal returns to schooling for certain subgroups -- particularly relatively disadvantaged groups with low education outcomes -- are higher than the average marginal returns to education in the population as a whole.

PD March 1999. **TI** Can Falling Supply Explain the Rising Return to College for Younger Men? A Cohort-Based Analysis. **AU** Card, David; Lemieux, Thomas. **AA** Card: UC Berkeley and NBER. Lemieux: University of Montreal, CIRANO and NBER. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 13; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. **PG** 57. **PR** no charge. **JE** J24, I21. **KW** Labor Supply. Return to Education.

AB The college-high school wage gap for younger men has more than doubled since the mid-1970s. For older male workers, however, the gap is about the same today as it was 25 years ago. We show that the rise in relative returns to college for younger workers is attributable to permanent "cohort effects" for groups that entered the labor force after 1975. We argue that these cohort effects are caused by a shifts in the relative supply of college workers, associated with a dramatic trend break in educational attainment that occurred for men born after 1950. We estimate models in which the college wage gap for a particular age group depends on the relative supply of college-educated workers in the group and on underlying trends in the relative productivity of highly-educated workers. Trends in cohort-specific supplies of college-educated workers explain the relative rise in returns to college for younger men, and a substantial fraction of the overall increase in returns to college for all age groups. Controlling for cohort-specific supply effects, we find little evidence that relative demand shifts associated with the diffusion of computer technology, or changing unionization, have had much effect on the returns to college.

PD November 1999. **TI** Measuring Wage Growth Among Former Welfare Recipients. **AU** Card, David; Michalopoulos, Charles; Robins, Philip K. **AA** Card: UC Berkeley. Michalopoulos: Manpower Demonstration Research Corporation. Robins: University of Miami. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 20; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. **PG** 56. **PR** no charge. **JE** I38, J31. **KW** Welfare Reform. Wage Determination.

AB We study the rate of wage growth among long-term welfare recipients in the Self Sufficiency Program (SSP) who were induced by the financial incentives of the program to enter the work force. We find that single parents who began working

in response to the SSP incentive are younger, less educated, have more young children, and have less positive attitudes toward work than those who would have been working regardless of SSP. They also earn relatively low wages in the first few months of work: typically within \$1 of the minimum wage. Despite these differences, their rate of wage growth is similar to other workers. After adjusting for inflation and potential effects of rising minimum wages, we estimate that people who were induced to enter work by SSP experienced real wage growth of about 1.6 to 2.6 percent per year -- a range that is consistent with the cross-sectional relationship between wages and labor market experience in the control group of the experiment, and with the existing literature on wage growth of less-skilled workers.

Cashin, Paul

PD December 1999. **TI** The Myth of Comoving Commodity Prices. **AU** Cashin, Paul; McDermott, C. John; Scott, Alasdair. **AA** Cashin: International Monetary Fund. McDermott and Scott: Reserve Bank of New Zealand. **SR** International Monetary Fund Working Paper: WP/99/169; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 13. **PR** not available. **JE** E32, O13, Q11. **KW** Commodity Prices. Concordance. Comovement.

AB There is a common perception that the prices of unrelated commodities move together. This paper re-examines this notion, using a measure of comovement of economic time series called concordance. Concordance measures the proportion of time that the prices of two commodities are concurrently in the same boom period or same slump period. Using data on the prices of several unrelated commodities, the paper finds no evidence of comovement in commodity prices. The results carry an important policy implication, as the study provides no support for earlier claims of irrational trading behavior by participants in world commodity markets.

TI Assessing External Sustainability in India. **AU** Callen, Tim; Cashin, Paul.

Cervero, Susana G.

TI Global Equilibrium Exchange Rates: Euro, Dollar, "Ins," "Outs," and Other Major Currencies in a Panel Cointegration Framework. **AU** Alberola, Enrique; Cervero, Susana G.; Lopez, Humberto; Ubide, Angel.

Chalk, Nigel

PD August 1998. **TI** What Should be Done with a Fiscal Surplus? **AU** Chalk, Nigel; Hemming, Richard. **AA** International Monetary Fund. **SR** International Monetary Fund Papers on Policy Analysis and Assessment: PPA/98/10; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. **PG** 18. **PR** not available. **JE** E62, H61. **KW** Fiscal Surplus. Optimal Portfolio Allocation.

AB This paper considers whether countries should spend or save a fiscal surplus, and whether a surplus that is saved should be used to pay off public debt or to purchase financial assets. There are circumstances when a surplus should be spent, either by lowering taxes or increasing expenditure. If a surplus is to be saved, it will often be appropriate to purchase domestic and foreign assets rather than pay off public debt. Surpluses that reflect the exploitation of resource wealth are often saved in this way, but it is also appropriate to purchase assets under

other circumstances.

Chaloupka, Frank J.

TI Price, Clean Indoor Air Laws, and Cigarette Smoking: Evidence from Longitudinal Data for Young Adults. **AU** Tauras, John A.; Chaloupka, Frank J.

PD February 1999. **TI** Do Higher Cigarette Prices Encourage Youth to Use Marijuana? **AU** Chaloupka, Frank J.; Pacula, Rosalie Liccardo; Farrelly, Matthew C.; Johnston, Lloyd D.; O'Malley, Patrick M.; Bray, Jeremy W. **AA** Chaloupka: University of Illinois and National Bureau of Economic Research. Pacula: RAND and National Bureau of Economic Research. Farrelly and Bray: Research Triangle Institute. Johnston and O'Malley: University of Michigan. **SR** National Bureau of Economic Research Working Paper: 6939; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 17. **PR** \$5.00. **JE** I12, I18. **KW** Cigarette Prices. Youth Smoking. Young Adults. Marijuana.

AB Every major national tobacco legislation proposed in the past two years has called for significant increases in the price of cigarettes as a way to discourage youths from smoking. One argument used to oppose these bills is that increases in the price of cigarettes would cause youths to substitute marijuana for cigarettes. Although it has long been believed that cigarettes are a "gateway drug," no economic research has been done to determine whether cigarettes and marijuana are economic complements or substitutes. This paper begins to fill the void in the current research by examining the contemporaneous relationship between the demands for cigarettes and marijuana among a nationally representative sample of 8th, 10th, and 12th graders from 1992-1994 Monitoring the Future Project. Two part models are used to estimate reduced form demand equations. Examination of the cross-price effects clearly shows that higher cigarette prices will not increase marijuana use among youths. In addition to reducing youth smoking, we find that higher cigarette prices significantly reduce the average level of marijuana used by current users. Cigarette prices also have a negative effect on the probability of using marijuana, but these findings are not significant at conventional levels.

TI Tobacco Advertising: Economic Theory and International Evidence. **AU** Saffer, Henry; Chaloupka, Frank J.

PD March 1999. **TI** The Economics of Smoking. **AU** Chaloupka, Frank J.; Warner, Kenneth E. **AA** Chaloupka: University of Illinois and National Bureau of Economic Research. Warner: University of Michigan. **SR** National Bureau of Economic Research Working Paper: 7047; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 48. **PR** \$5.00. **JE** I12, I18. **KW** Cigarette Taxation. Addictive Products.

AB While the tobacco industry is among the most substantial and successful economic enterprises, tobacco consumption kills more people than any other product. Economic analysis of tobacco product markets, particularly for cigarettes, has contributed considerable insight to debates about the industry's importance and appropriate public roles in grappling with health consequences of tobacco. The most significant example is the rapidly expanding and increasingly sophisticated body of research on the effects of price increases on cigarette

consumption. Because excise tax is a component of price, the resultant literature has been prominent in legislative debates about taxation as a tool to discourage smoking, and has contributed theory and empirical evidence to the growing interest in modeling demand for addictive products. This paper examines the research and several equity and efficiency concerns accompanying cigarette taxation debates. It includes economic analysis of other tobacco control policies, such as advertising restrictions, prominent in tobacco control debates. Research addressing the validity of tobacco-industry arguments that its contributions to employment, tax revenues, and trade balances are vital to economic health in states and nations is also considered, as it is the industry's principal weapon in the battle against policy measures to reduce tobacco consumption.

Chambas, G.

TI Exchange Rate Regimes and Revenue Performance in Sub-Saharan Africa. **AU** Adam, C. S.; Bevan, D. L.; Chambas, G.

Chami, Ralph

PD December 1999. **TI** Ownership of Capital in Monetary Economies and the Inflation Tax on Equity. **AU** Chami, Ralph; Cosimano, Thomas F.; Fullenkamp, Connel. **AA** Chami: International Monetary Fund. Thomas: University of Notre Dame. Fullenkamp: Duke University. **SR** International Monetary Fund Working Paper: WP/99/167; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 35. **PR** not available. **JE** G12, E52. **KW** Inflation Tax. Monetary Policy Channel. Asset Pricing.

AB Financial instruments are subject to inflation taxes on the wealth they represent and on the nominal income flows they provide. This paper explicitly introduces financial instruments into the standard stochastic growth model with money and production and shows that the value of the firm in this case is equal to the firm's capital stock divided by inflation. The resulting asset-pricing conditions indicate that the effect of inflation on asset returns differs from the effects found in other papers by the addition of a significant wealth tax.

Chan, Louis K. C.

PD March 1999. **TI** On Portfolio Optimization: Forecasting Covariances and Choosing the Risk Model. **AU** Chan, Louis K. C.; Karceski, Jason; Lakonishok, Josef. **AA** Chan: University of Illinois. Karceski: University of Florida. Lakonishok: University of Illinois and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7039; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** \$5.00. **JE** G11, G12. **KW** Portfolio Selection. Covariance Forecasting.

AB We evaluate the performance of different models for the covariance structure of stock returns, focusing on their use for optimal portfolio selection. Comparisons are based on forecasts of future covariances as well as the out-of-sample volatility of optimized portfolios from each model. A few factors capture the general covariance structure but adding more factors does not improve forecast power. Portfolio optimization helps for risk control, but the different covariance models yield similar results. Using a tracking error volatility criterion, larger differences appear, with particularly favorable results for a

heuristic approach based on matching the benchmark's attributes.

Chan, Sewin

PD February 1999. **TI** Job Loss and Retirement Behavior of Older Men. **AU** Chan, Sewin; Stevens, Ann Huff. **AA** Chan: Rutgers University. Stevens: Yale University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6920; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** J26, J64. **KW** Retirement Behavior. Employment. Older Men.

AB This paper uses data from the Health and Retirement Study to examine the employment and retirement behavior of men aged fifty and above who have experienced an involuntary job loss. Hazard models for returning to work and for exiting post-displacement employment are estimated and used to examine work patterns for ten years following a job loss. The findings show that a job loss results in large and lasting effects on future employment probabilities, and that these effects vary with the age of the worker. Displaced workers in their fifties are estimated to have a three in four chance of returning to work within two years after a job loss, whereas for a 62-year-old job loser, the probability is less than a third. Once re-employed, men 50 and above face significantly higher probabilities of exiting the workforce than do workers who have not experienced a recent job loss; however, the direction of this effect gradually reverses over time. The net outcome of these entry and exit rates is a substantial gap between the employment rates of men who have and have not lost jobs, that lasts at least seven years.

Chang, P. H. Kevin

TI An Options-Based Analysis of Emerging Market Exchange Rate Expectations: Brazil's Real Plan, 1994-1997. **AU** Campa, Jose M.; Chang, P. H. Kevin; Refalo, James F.

Chari, V. V.

PD August 2000. **TI** Can Sticky Price Models Generate Volatile and Persistent Real Exchange Rates? **AU** Chari, V. V.; Kehoe, Patrick J.; McGrattan, Ellen R. **AA** University of Minnesota and Federal Reserve Bank of Minneapolis. **SR** Federal Reserve Bank of Minneapolis Staff Report: 277; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 554880-0291. Website: http://woodrow.mpls.frb.fed.us. **PG** 37. **PR** no charge. **JE** E32, E51, F31, F41. **KW** International Cycles. Pricing to Market. Purchasing Power Parity. Law of One Price.

AB See the abstracts for Chari, V. V.; Kehoe, Patrick J.; McGrattan, Ellen R., December 1998. "Can Sticky Price Models Generate Volatile and Persistent Real Exchange Rates?" Federal Reserve Bank of Minneapolis Staff Report: 223; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 554880-0291. Website: http://woodrow.mpls.frb.fed.us.

PD December 1998. **TI** Can Sticky Price Models Generate Volatile and Persistent Real Exchange Rates? **AU** Chari, V. V.; Kehoe, Patrick J.; McGrattan, Ellen R. **AA** Chari: University of Minnesota and Federal Reserve Bank of Minneapolis. Kehoe: University of Pennsylvania, Federal Reserve Bank of Minneapolis and NBER. McGrattan: Federal Reserve Bank of Minneapolis. **SR** Federal Reserve

Bank of Minneapolis Staff Report: 223; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 554880-0291. Website: <http://woodrow.mpls.frb.fed.us>. PG 29. PR no charge. JE E31, F31, F41. KW Real Exchange Rate. Monetary Shocks. Sticky Prices.

AB The conventional wisdom is that monetary shocks interact with sticky goods prices to generate the observed volatility and persistence in real exchange rates. We investigate this conventional wisdom in a quantitative model with sticky prices. We find that with preferences as in the real business cycle literature, irrespective of the length of price stickiness, the model necessarily produces only a fraction of the volatility in exchange rates seen in the data. With preferences which are separable in leisure, the model can produce the observed volatility in exchange rates. We also show that long stickiness is necessary to generate the observed persistence. In addition, we show that making asset markets incomplete does not measurably increase either the volatility or persistence of real exchange rates.

Charlwood, Andy

TI Unions and the Sword of Justice: Unions and Pay Systems, Pay Inequality, Pay Discrimination and Low Pay. **AU** Metcalf, David; Hansen, Kirstine; Charlwood, Andy.

Charness, Gary

PD June 2000. **TI** Social Preferences: Some Simple Tests and a New Model. **AU** Charness, Gary; Rabin, Matthew. **AA** Charness: Universitat Pompeu Fabra and UC Berkeley. Rabin: UC Berkeley. **SR** University of California, Berkeley, Department of Economics Working Paper: E00/283; UC, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. PG 57. PR \$3.50 U.S., \$7.00 International. JE A12, A13, B49, C70, C91, D63. KW Difference Aversion. Fairness. Inequality Aversion. Maximin Criterion. Non-Ultimatum Games. Reciprocal Fairness. Social Preferences.

AB Departures from pure self interest in economic experiments have recently inspired models of "social preferences". We conduct experiments on simple two-person and three-person games with binary choices that test those theories more directly than the array of games conventionally considered. Our experiments show strong support for the prevalence of "quasi-maximin" preferences: People sacrifice to increase the payoffs for all recipients, but especially for the lowest-payoff recipients. People are also motivated by reciprocity: While people are reluctant to sacrifice the reciprocate good or bad behavior beyond what they would sacrifice for neutral parties, they withdraw willingness to sacrifice to achieve a fair outcome when others are themselves unwilling to sacrifice. Some participants are averse to getting different payoffs than others, but based on our experiments and reinterpretation of previous experiments we argue that behavior that has been presented as "difference aversion" in recent papers is actually a combination of reciprocal and quasi-maximin motivations. We formulate a model in which each player is willing to sacrifice to allocate the quasi-maximin allocation only to those players also believed to be pursuing the quasi-maximin allocation, and may sacrifice to punish unfair players.

Chay, Kenneth Y.

PD October 1998. **TI** Identification and Estimation of Dynamic Binary Response Panel Data Models: Empirical Evidence Using Alternative Approaches. **AU** Chay, Kenneth Y.; Hyslop, Dean. **AA** Chay: UC Berkeley. Hyslop: UCLA. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 5; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. PG 56. PR no charge. JE C23, C25, J22. KW Dynamic Binary Response. Initial Conditions. Heterogeneity. Welfare. Labor Force Participation.

AB This study compares empirical estimates from different specifications of the dynamic binary response panel data model that allows for both unobserved heterogeneity and first-order state dependence. We examine alternative "random effects" approaches, a "fixed effects" conditional logit approach and the dynamic linear probability regression model to gauge the validity of the identifying assumptions underlying the nonlinear models. The various models are used to estimate both female labor force participation and welfare participation equations using panel data from the Survey of Income and Program Participation (SIPP) and the Panel Study of Income Dynamics (PSID). As expected, assuming that the initial conditions are exogenous generates inflated estimates of the degree of state dependence. "Reasonable" assumptions on the initial conditions lead to reduced estimates of the state dependence that are relatively stable across specifications. We find that about fifty percent of the overall persistence in welfare participation is attributable to structural state dependence, while this figure is less than forty percent for female labor force participation. In addition, the less restrictive random effects estimators appear to be robust and precise, and linear probability approaches to the dynamic model, which are easier to implement, provide an attractive alternative.

PD October 1999. **TI** The Impact of Air Pollution on Infant Mortality: Evidence from Geographic Variation in Pollution Shocks Induced by a Recession. **AU** Chay, Kenneth Y.; Greenstone, Michael. **AA** UC Berkeley. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 17; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. PG 74. PR no charge. JE I12, O25, Q28. KW Infant Health. Particulates Pollution. Quasi-Experimental.

AB This study uses sharp, differential air quality changes across sites attributable to geographic variation in the effects of the 1981-82 recession to estimate the relationship between infant mortality and particulates air pollution. In the narrow period of 1980-82, there was substantial variation across counties in changes in particulates pollution. These differential pollution reductions appear to be orthogonal to changes in other factors related to infant mortality. Using the most detailed and comprehensive data available, we find that a 1 mg/M3 reduction in particulates results in about 4-8 fewer infant deaths per 100,000 live births at the county level (a 0.35-0.45 elasticity). The estimated effects are driven almost entirely by fewer deaths occurring within one month and one day of birth, suggesting that fetal exposure to pollution has adverse health consequences. The estimated effects of the pollution reductions on infant birth weight provide evidence

consistent with this potential pathophysiologic mechanism. The analysis also reveals a nonlinear relationship between pollution and infant mortality at the county level. Importantly, the estimates are remarkably stable across a variety of specifications. All of these findings are masked in "conventional" analyses based on less credible research designs.

PD October 1999. **TI** A Non-Experimental Analysis of "True" State Dependence in Monthly Welfare Participation Sequences. **AU** Chay, Kenneth Y.; Hoynes, Hilary Williamson; Hyslop, Dean. **AA** Chay and Hoynes: UC Berkeley. Hyslop: UCLA. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 19; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. **PG** 20. **PR** no charge. **JE** C14, C23, C25, I38. **KW** Binary Sequences. Panel Data. State Dependence. Unobserved Heterogeneity. Conditional Logit Models.

AB The substantial serial persistence exhibited in welfare participation over time is a well documented empirical fact. Two potential explanations for this dependence have been emphasized in the statistical literature. On one hand, persistence may be the result of "true" or "structural" state dependence in which current participation directly affects the preferences or opportunities of individuals and, therefore, an individual's propensity to participate in the future. On the other hand, persistence can also result from permanent unobserved heterogeneity across individuals. This study attempts to differentiate state dependence from spurious serial correlation in nonlinear outcomes by examining "semi-parametric" non-experimental methods in which the longitudinal structure of the data is used to control for confounding biases. Specifically, we examine rarely used dynamic "fixed effects" conditional logit models which do not require specification of the distributions of either the unobserved heterogeneity or the initial conditions. We find that past welfare participation predicts future participation given the present state and unrestricted heterogeneity, and provides evidence that duration dependence exists at the individual level and that aggregation of the monthly data to the quarterly and semi-annual levels leads to severe attenuation in the estimated path dependence.

Cheng, Wen Li

PD April 1999. **TI** An Inframarginal Analysis of the Heckscher-Ohlin Model with Transaction Costs and Technological Comparative Advantage. **AU** Cheng, Wen Li; Sachs, Jeffrey D.; Yang, Xiaokai. **AA** Cheng: Law & Economics Consulting Group. Sachs: Center for International Development at Harvard University and Harvard Institute for International Development. Yang: Center for International Development at Harvard University. **SR** Harvard Center for International Development (CID) Working Paper: 9; Center for International Development; John Gallup, Editor; 79 John F. Kennedy Street, Cambridge, MA 02138. Website: www.cid.harvard.edu/cidworkingpapers/cid_workingpapers.htm. **PG** 28. **PR** paper copies \$7.50 up to 80 pages long; \$12.00 for 80 pages long and longer. **JE** F11, F13. **KW** H-O Theorem. Factor Equalization Theorem. Stolper-Samuelson Theorem. Rybczynski Theorem.

AB In the paper we introduce technological comparative advantage and transaction costs into the Heckscher-Ohlin (HO)

model and refine the HO theorem, the Stolper-Samuelson theorem, the Rybczynski theorem, and factor equalization theorem. These refined core theorems can be used to accommodate recent empirical evidence that is at odds with the core theorems.

PD April 1999. **TI** A Ricardian Model with Endogenous Comparative Advantage and Endogenous Trade Policy Regimes. **AU** Cheng, Wen Li; Liu, Meng-chun; Yang, Xiaokai. **AA** Cheng: Law & Economics Consulting Group. Liu: Institute of Chinese Economy, Taiwan and Monash University. Yang: Center for International Development at Harvard University. **SR** Harvard Center for International Development (CID) Working Paper: 12; Center for International Development; John Gallup, Editor; 79 John F. Kennedy Street, Cambridge, MA 02138. Website: www.cid.harvard.edu/cidworkingpapers/cid_workingpapers.htm. **PG** 23. **PR** paper copies \$7.50 up to 80 pages long; \$12.00 for 80 pages long and longer. **JE** F11, F13. **KW** Inframarginal Analysis. Trade Theory. Ricardian Model. Dual Structure. Underdevelopment.

AB This paper develops a general equilibrium model with transaction costs and endogenous and exogenous comparative advantages. In the model, governments choose between tariff war, tariff negotiation, and laissez faire regimes. The model shows that the level of division of labor and the volume of trade increase as transaction conditions improve. In the process of moving to a high level of division of labor, a country may receive more gains from trade even if its terms of trade deteriorate. When a high level of division of labor occurs in general equilibrium, if both countries play a Nash tariff game, a tariff war may break out, which can dissipate all the gains from trade. Facing this risk, all governments would prefer trade negotiations to a trade war. A Nash tariff negotiation would result in zero tariff rates. If a medium level of division of labor occurs in general equilibrium, then unilateral tariff protection and unilateral laissez faire policies would coexist. The result provides a plausible story about the evolution of trade policy regimes, and highlights the importance of trade negotiations in achieving trade liberalization.

PD April 1999. **TI** An Infra-Marginal Analysis of the Ricardian Model. **AU** Cheng, Wen Li; Sachs, Jeffrey D.; Yang, Xiaokai. **AA** Cheng: Law & Economics Consulting Group. Sachs: Center for International Development at Harvard University and Harvard Institute for International Development. Yang: Center for International Development at Harvard University. **SR** Harvard Center for International Development (CID) Working Paper: 13; Center for International Development; John Gallup, Editor; 79 John F. Kennedy Street, Cambridge, MA 02138. Website: www.cid.harvard.edu/cidworkingpapers/cid_workingpapers.htm. **PG** 28. **PR** paper copies \$7.50 up to 80 pages long; \$12.00 for 80 pages long and longer. **JE** D51, F11, F13. **KW** Ricardian Model. Trade Policy. Division of Labor.

AB This paper applies the infra-marginal analysis, which is a combination of marginal and total cost-benefit analysis, to the Ricardian model. It demonstrates that the rule of marginal cost pricing does not always hold. It shows that in a 2x2 Ricardian model, there is a unique general equilibrium and that the comparative statics of the equilibrium involve discontinuous jumps -- as transaction efficiency improves, the general equilibrium structure jumps from autarky to partial division of labor and then to complete division of labor. The paper also discusses the effects of tariff in a model where trade regimes are

endogenously chosen. It finds that (1) if partial division of labor occurs in equilibrium, the country that produces both goods chooses unilateral protection tariff, and the country producing a single good chooses unilateral laissez faire policy; (2) if complete division of labor occurs in equilibrium, the governments in both countries would prefer a tariff negotiation to a tariff war. Finally, the paper shows that in a model with three countries the country which does not have a comparative advantage relative to the other two countries and/or which has low transaction efficiency may be excluded from trade.

Cheung, Yin-Wong

PD February 1999. **TI** Are Macroeconomic Forecasts Informative? Cointegration Evidence from the ASA-NBER Surveys. **AU** Cheung, Yin-Wong; Chinn, Menzie D. **AA** Cheung: University of California, Santa Cruz. Chinn: University of California, Santa Cruz and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6926; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 14. **PR** \$5.00. **JE** C42, C53, E17. **KW** Cointegration. Forecasts.

AB We examine the properties of the ASA-NBER forecasts for several US macroeconomic variables, specifically: (i) are the actual and forecast series integrated of the same order; (ii) are they cointegrated, and; (iii) is the cointegrating vector consistent with long run unitary elasticity of expectations with respect to the actual series. We also examine whether forecasts respond to error correction terms. Tests are applied to both final and preliminary versions of the data. We find that the Treasury bill rate, housing starts, industrial production, inflation and their forecasts are trend stationary. The corporate bond rate, GNP, the GNP deflator, unemployment and their forecasts are difference stationary. About half of these pairs are cointegrated, with the unitary elasticity restriction seldom rejected. Similar results are obtained when using the originally-reported data.

Chiappori, Pierre Andre

PD July 2000. **TI** An Equilibrium Analysis of Divorce. **AU** Chiappori, Pierre Andre; Weiss, Yoram. **AA** Chiappori: University of Chicago. Weiss: Tel-Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/18; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 47. **PR** no charge. **JE** J12, J13. **KW** Divorce. Remarriage. Children. Search-Equilibrium. Divorce-Transfers.

AB The paper provides a general equilibrium analysis in which individual decisions determine the aggregate divorce rate and are influenced by it. Search frictions and a meeting technology whereby remarriage is more likely if the divorce rate is higher, implying multiple equilibria, cause reinforcement. Welfare tends to be higher at equilibria with more divorce. This result may be reversed if divorce reduces investments in marriage, e.g., children. The important insight that remains is that, in search markets, a legal policy that enforces voluntary contracts need not be socially optimal, because the presence of rents allows the partners to neglect the interest of prospective spouses whom they may meet in the future.

Chin, Dan

PD April 2000. **TI** Predicting Turning Points. **AU** Chin, Dan; Geweke, John; Miller, Preston J. **AA** Chin: Kenwood Capital Management LLC. Geweke: University of Iowa. Miller: Federal Reserve Bank of Minneapolis and Congressional Budget Office. **SR** Federal Reserve Bank of Minneapolis Staff Report: 267; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 554880-0291. Website: <http://woodrow.mpls.frb.fed.us>. **PG** 20. **PR** no charge. **JE** C53, E37. **KW** Turning Points. Business Cycles. Unemployment. Prediction. Probit Models.

AB This paper presents a new method for predicting turning points. The paper formally defines a turning point; develops a probit model for estimating the probability of a turning point; and then examines both the in-sample and out-of-sample forecasting performance of the model. The model performs better than some other methods for predicting turning points.

Chinn, Menzie D.

TI Are Macroeconomic Forecasts Informative? Cointegration Evidence from the ASA-NBER Surveys. **AU** Cheung, Yin-Wong; Chinn, Menzie D.

Choudhri, Ehsan U.

PD February 2000. **TI** International Trade and Productivity Growth: Exploring the Sectoral Effects for Developing Countries. **AU** Choudhri, Ehsan U.; Hakura, Dalia S. **AA** Choudhri: Carleton University. Hakura: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/17; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 14. **PR** not available. **JE** F12, F43, O11, O41. **KW** Productivity Growth. Trade Liberalization. Technological Gap.

AB The paper estimates an empirical relation based on Krugman's "technological gap" model to explore the influence of the pattern of international trade and production on the overall productivity growth of a developing country. A key result is that increased import competition in medium-growth (but not in low- or high-growth) manufacturing sectors enhances overall productivity growth. The authors also find that a production-share weighted average of (technological leaders') sectoral productivity growth rates has a significant effect on the rate of aggregate productivity growth.

Christen, Markus

PD July 1998. **TI** Information Acquisition by Firms: The Role of Specialization, Motivation and Ability. **AA** INSEAD. **SR** INSEAD Working Paper: 98/77/MKT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 31. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** C72, D81, D83. **KW** Acquisition. Specialization. Diversification. Motivation. Ability. Game Theory.

AB In this paper, the acquisition of information for decision-making is viewed as an allocation of limited managerial resources to process data about different market aspects. The optimal allocation must then consider two possible tradeoffs: (1) between breadth and depth of information, and (2) between motivation and ability to generate information. This paper

develops a parsimonious game-theoretic model to examine these two tradeoffs in the acquisition of information. It consists of two Cournot competitors that face uncertainty about demand and cost conditions. We determine the perfect Bayesian equilibria of the two-stage game and then analyze the effects of uncertainty, degree of competition, availability of data and a firm's ability to process data on the acquisition of information. Our analysis yields the following insights about the two tradeoffs. First, the optimal tradeoff between breadth and depth of information depends on the particular environment. When uncertainty is high, firms should acquire broad information, i.e., diversify their resource allocation. The incentives to specialize and acquire more detailed information increase with competition, the availability of data and the firms' ability to generate information. Second, the optimal tradeoff between motivation and ability to generate information also depends on the environment.

TI Sustainable Pioneering Advantage: At What Cost?
AU Boulding, William; Christen, Markus.

Cifuentes, Rodrigo

PD August 1998. **TI** The Current Status of Pensions Systems in Central America: An Assessment. **AU** Cifuentes, Rodrigo; Larrain B., Felipe. **AA** Harvard University and HIID. **SR** Harvard Institute for International Development Discussion Paper: 647; Harvard Institute for International Development, 14 Story Street, Cambridge, MA 02138. Website: www.hiid.harvard.edu/pub/ddps.html. **PG** 36. **PR** \$7.50 for papers up to 80 pages long; \$12.00 for papers 80 pages and longer. **JE** E65, G23. **KW** Pension Systems. Central America.

AB This paper studies the current status and prospects of pensions systems in Central America. Common characteristics of these systems are low fraction of population covered (with the exception of Costa Rica) and low rates of contribution charged, reflecting that most of them were created relatively recently. Most systems show small cash surpluses and while they still have some reserve funds, projections for all indicate that these reserves will not last for long. This paper reports that systems in the region also suffer from a series of other problems: 1) proliferation of parallel programs, which introduces multiple sources of demands on the government and situations of inequity; 2) inadequate provision of benefits, meaning that benefits are given to people that have not fulfilled the requirements; 3) poor investment performance of the reserve fund. The authors argue that, to a large extent, these problems result from the incentives embedded in pay-as-you-go (PAYG) systems, where property rights over contributions to the system are poorly defined. Prospects for PAYG systems are poor, given the projected increase in the ratio of the number of people over 65 years of age to the number of working age people.

Clarida, Richard

PD February 1999. **TI** Recent G3 Current Account Imbalances: How Important Are Structural Factors? **AU** Clarida, Richard; Prendergast, Joe. **AA** Clarida: Columbia University and National Bureau of Economic Research. Prendergast: Credit Suisse First Boston. **SR** National Bureau of Economic Research Working Paper: 6935; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 12. **PR** \$5.00. **JE** E21, E27.

KW Current Account. G3. Macroeconomics.

AB This paper implements a novel empirical approach for estimating the importance of structural factors in explaining the recent behavior of G3 current account positions. Following the contribution of Sims (1982), we employ a tractable econometric framework that can be used to answer the following basic question: assuming that there is a stable underlying structure that links the current account with other macroeconomic variables such as economic growth, world demand, and the real exchange rate, how important are the observed departures of these variables from their long run equilibrium levels in accounting for the observed adjustments in a country's current account? Our approach interprets the departure of the actual current account from this estimated structural component of the current account path as arising from a combination of cyclical and idiosyncratic factors. The cyclical influences on the current account are assumed to be captured by the deviations of the multilateral real exchange rate, home GDP growth, and global GDP growth from their respective long run averages.

Clements, Benedict

PD December 1999. **TI** The Efficiency of Education Expenditure in Portugal. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/179; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 30. **PR** not available. **JE** C14, H52, I22. **KW** Fiscal Policy. Education. Production Frontiers. Portugal.

AB This paper assesses the efficiency of education expenditure in Portugal and delineates a possible agenda for reform. Portugal's low educational performance has coincided with the highest level of primary and secondary education expenditure to GDP in the Organization for Economic Cooperation and Development (OECD), suggesting considerable inefficiency. Empirical results from the application of a nonparametric technique for production frontier estimation (Free Disposable Hull analysis) support this view. Among the reforms that could be considered to raise educational efficiency are the adoption of a goal-oriented management and incentive system; establishment of minimum student/teacher ratios; and an easing of employment and work rules governing public school teachers.

Clements, Michael P.

PD April 2000. **TI** Forecasting with Difference-Stationary and Trend-Stationary Models. **AU** Clements, Michael P.; Hendry, David F. **AA** Clements: University of Warwick. Hendry: University of Oxford. **SR** Oxford Department of Economics Discussion Paper: 05; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. **PG** 20. **PR** no charge. **JE** C32, C53. **KW** Difference Stationary. Trend Stationary. Forecastability.

AB Although difference-stationary (DS) and trend-stationary (TS) processes have been subject to considerable analysis, there are no direct comparisons for each being the data-generation process (DGP). We examine incorrect choice between these models for forecasting for both known and estimated parameters. Three sets of Monte Carlo simulations illustrate the analysis, to evaluate the biases in conventional standard errors when each model is mis-specified, compute the relative mean-

square forecast errors of the two models for both DGPs, and investigate autocorrelated errors, so both models can better approximate the converse GDP. The outcomes are surprisingly different from established results.

Clifton, Eric V.

PD December 1999. **TI** Inflation Targeting: What Is the Meaning of the Bottom of the Band? **AA** International Monetary Fund. **SR** International Monetary Fund Policy Discussion Paper: PDP/99/08; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. **PG** 20. **PR** not available. **JE** E52. **KW** Inflation Targeting. Credibility. Monetary Policy.

AB This paper investigates the meaning of the bottom of target bands in inflation targeting regimes. It is argued that the design of lower limits on target bands, if not done with care, can lead to a lack of transparency, potentially confusing markets about how the authorities will react to a fall in inflation. After first discussing the conceptual issues, the paper then examines the experience with target bands in New Zealand, Israel and Canada and explores how the conceptual issues have played out in practice.

Cole, Harold L.

PD June 2000. **TI** Re-Examining the Contributions of Money and Banking Shocks to the U.S. Great Depression. **AU** Cole, Harold L.; Ohanian, Lee E. **AA** Cole: Federal Reserve Bank of Minneapolis. Ohanian: Federal Reserve Bank of Minneapolis and UCLA. **SR** Federal Reserve Bank of Minneapolis Staff Report: 270; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 554880-0291. Website: <http://woodrow.mpls.frb.fed.us>. **PG** 45. **PR** no charge. **JE** E31, E32, N12, N21. **KW** Great Depression. Deflation. Bank Failure.

AB This paper quantitatively evaluates the hypothesis that deflation can account for much of the Great Depression (1929-33). We examine two popular explanations of the Depression: (1) The "high wage" story, according to which deflation, combined with imperfectly flexible wages, raised real wages and reduced employment and output. (2) The "bank failure" story, according to which deflationary money shocks contributed to bank failures and to a reduction in the efficiency of financial intermediation, which in turn reduced lending and output. We evaluate these stories using general equilibrium business cycle models, and find that wage shocks and banking shocks account for a small fraction of the Great Depression. We also find that some other predictions of the theories are at variance with the data.

PD June 1999. **TI** Efficient Allocations with Hidden Income and Hidden Storage. **AU** Cole, Harold L.; Kocherlakota, Narayana R. **AA** Cole: Federal Reserve Bank of Minneapolis. Kocherlakota: Federal Reserve Bank of Minneapolis and University of Minnesota. **SR** Federal Reserve Bank of Minneapolis Staff Report: 238; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 554880-0291. Website: <http://woodrow.mpls.frb.fed.us>. **PG** 20. **PR** no charge. **JE** D51, E21. **KW** Income Shocks. Resource Storage. Hidden Income. Hidden Storage.

AB We consider an environment in which individuals receive income shocks that are unobservable to others and can privately store resources. We provide a simple characterization of the efficient allocation in cases in which the rate of return on

storage is sufficiently high or, alternatively, in which the worst possible outcome is sufficiently dire. We show that, unlike environments without unobservable storage, the symmetric efficient allocation is decentralizable through a competitive asset market in which individuals trade risk-free bonds among themselves.

Coles, Melvyn G.

PD May 1998. **TI** Strikes, Inventories, and Union Legislation. **AU** Coles, Melvyn G.; Hildreth, Andrew K. G. **AA** Coles: University of Essex and Universitat Autònoma de Barcelona. Hildreth: University of Essex and UC Berkeley. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 1; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. **PG** 35. **PR** no charge. **JE** J52, J58. **KW** Inventories. Strike Probabilities. Unions.

AB The paper develops a theory in which the probability that a strike occurs is increasing in the level of inventories held by the firm, but decreasing in the workers' cost of the strike. We use recent industrial relations legislation to identify a change in the conditions under which striking workers could successfully picket. Before the legislation, if unions have a high level of optimism in their ability to maintain a picket line and prevent the firm from selling out of inventory stock, the union calls a strike. Using a panel of firms for the 1976-84 period, where we have knowledge of the pay strikes that occurred, the firm's inventory of finished goods, an industry measure for the workers cost of strike, we find some evidence to support the theoretical predictions.

Collier, Paul

PD December 1999. **TI** Flight Capital as a Portfolio Choice. **AU** Collier, Paul; Hoeffler, Anke; Pattillo, Catherine. **AA** Collier: World Bank. Hoeffler: Oxford University. Pattillo: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/171; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 24. **PR** not available. **JE** G11, F21, F32, F34, O16. **KW** Capital Flight. Portfolio Choice.

AB This paper sets flight capital in the context of portfolio choice, focusing upon the proportion of private wealth that is held abroad. There are large regional differences in this proportion, ranging from 5 percent in South Asia to 40 percent in Africa. We explain cross-country differences in portfolio choice by variables that proxy differences in the risk-adjusted rate of return on capital. We apply the results to four policy questions: how the East Asian crisis affected domestic capital outflows; herd effects; the effect of the IMF-World Bank debt relief initiative for heavily-indebted poor countries (HIPC) on capital repatriation; and why so much of Africa's private wealth is held outside the continent.

Collins, William J.

PD February 1999. **TI** Capital Goods Prices, Global Capital Markets and Accumulation: 1870-1950. **AU** Collins, William J.; Williamson, Jeffrey G. **AA** Collins: Vanderbilt University and National Bureau of Economic Research. Williamson: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic

Research Working Paper Series on Historical Factors in Long Run Growth: 116; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR \$5.00. JE E22, F21, N21, N22. KW Financial Market Integration. Capital Goods Prices.

AB Conventional wisdom has it that global financial markets were as well integrated in the 1890s as in the 1990s, but that it took several post-war decades to regenerate the connections that existed before 1914. This view has emerged from a variety of tests for world financial capital market integration ranging from the correlation of saving and investment aggregates to the dispersion of security prices and real interest rates. Presumably, we care about global capital market integration because it can have an impact on accumulation performance and the global distribution of the capital stock. Oddly enough, however, the relative price of capital goods, an important component of the user cost of capital, has never been incorporated into studies of capital market integration and almost never in comparative studies of pre-1950 economic growth. This could be an important omission. This paper explores the issue with a panel data base 1870-1950 for eleven OECD countries. It turns out that capital goods prices have been central to accumulation, and therefore to growth and convergence. They have also been as important to the evolution of global capital markets as have been interest rates and other financial costs.

Collis, David J.

TI The Evolution of Intra-Industry Firm Heterogeneity: Insights From a Process Study. AU Noda, Tomo; Collis, David J.

Cooper, Russell

TI Balladurette and Juppette: A Discrete Analysis of Scrapping Subsidies. AU Adda, Jerome; Cooper, Russell.

Cooper, Suzanne J.

TI Testing for Structural Breaks in the Evaluation of Programs. AU Piehl, Anne Morrison; Cooper, Suzanne J.; Kennedy, David M.; Braga, Anthony A.

Corker, Robert

PD April 2000. **TI** Exchange Rate Regimes in Selected Advanced Transition Economies -- Coping with Transition, Capital Inflows, and EU Accession. AU Corker, Robert; Beaumont, Craig; van Elkan, Rachel; Iakova, Dora. AA International Monetary Fund. SR International Monetary Fund Policy Discussion Paper: PDP/00/03; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. PG 24. PR not available. JE E42, E52, E58, F33. KW Exchange Rate Regime. EU Accession. Transition.

AB Since beginning economic transition, the Czech Republic, Estonia, Hungary, Poland, and Slovenia have -- with much success -- employed diverse exchange rate regimes. As these countries approach EU accession, they will need to avoid the perils of too much or too little exchange rate variability when capital flows are likely to be large and volatile; narrow band arrangements in particular could be problematic. The exception is Estonia, where there are good arguments for retaining the currency board arrangement. Countries wishing to join the euro area at an early stage should not leave the removal

of remaining capital controls to the last minute.

Corral, Leonardo

PD April 1999. **TI** Price and Non-Price Influences on Water Conservation: An Econometric Model of Aggregate Demand Under Nonlinear Budget Constraint. AU Corral, Leonardo; Fisher, Anthony C.; Hatch, Nile W. AA Corral: United Nations Food and Agriculture Organization, Chile. Fisher: University of California, Berkeley. Hatch: University of Illinois at Urbana-Champaign. SR University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 881; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. PG 38. PR \$9.50 Domestic; \$19.00 International Surface Rate. JE C43, Q21, Q25, Q28. KW Water Conservation. Aggregation. Demand Functions. Consumption. Regulation.

AB This paper develops a model of residential water demand under a nonlinear budget constraint. The theoretical model for an individual consumer is adapted to yield an aggregate model that preserves the structure of the individual demand function, and that can be used with aggregate (water district level) data. The model is used to study the influence of pricing and non-price conservation programs on consumption and conservation behavior in three water districts in the San Francisco Bay Area, over a 10-year period that includes both drought and normal years. Empirical results show that pricing can be effective in reducing water consumption, particularly during the annual dry season, and during longer drought episodes. The effect is mitigated when non-price conservation programs are included in the analysis. Among these, use restrictions and landscaping audits appear to be particularly effective in inducing conservation.

Cosimano, Thomas F.

TI Ownership of Capital in Monetary Economies and the Inflation Tax on Equity. AU Chami, Ralph; Cosimano, Thomas F.; Fullenkamp, Connel.

Costa, Luis Almeida

PD January 1999. **TI** Bundling and Licensing. AU Costa, Luis Almeida; Dierickx, Ingemar. AA Costa: Universidade Nova de Lisboa. Dierickx: INSEAD. SR INSEAD Working Paper: 99/09/SM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. PG 24. PR no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. JE D45, O31. KW Licensing Contracts. Exclusivity. Product Innovation.

AB A common problem in licensing contracts is that contractual language does not necessarily guarantee that the license will effectively be exclusive. The practical difficulty is that the licensor may be able to invent around this restriction. We show that commodity bundling may provide a mechanism for the innovating firm to credibly commit to act less aggressively after licensing a product innovation. As a result, bundling and licensing may be complementary strategies. Even if the innovating firm does not have the incentive either to bundle or to license, it may still have the incentive to follow a bundling plus licensing strategy. We identify a second remedy for the licensor's commitment problem: a royalty. We show

that, under certain conditions, a royalty may be used as a commitment device enabling the licensor to credibly -- and costlessly -- establish exclusivity.

Costello, Christopher

TI Poverty Program Participation and Employment in Timber-Dependent Counties. AU Berck, Peter; Costello, Christopher; Hoffman, Sandra; Fortmann, Louise.

Cottarelli, Carlo

PD September 1998. TI Inflation, Credibility, and the Role of the International Monetary Fund. AU Cottarelli, Carlo; Giannini, Curzio. AA Cottarelli: International Monetary Fund. Giannini: Banca d'Italia. SR International Monetary Fund Papers on Policy Analysis and Assessment: PPAA/98/12; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. PG 21. PR not available. JE E31, F33. KW Inflation. International Monetary Fund. Credibility.

AB This paper argues that many developing countries may find it difficult to buttress disinflation programs purely through the adoption of traditional credibility-enhancing devices (such as monetary anchors and central bank independence), owing to "technical problems" (for example, high instability of money demand, increased capital mobility) and an insufficient endowment of credibility in the political institutions. In these cases, borrowing credibility from an outside agency like the International Monetary Fund may be the most effective solution. The paper discusses the different options that would allow the Fund to support programs aimed not at external adjustment--the Fund's traditional role--but at disinflation.

Coudert, Virginie

TI Competitivite et regime de change en Europe centrale. AU Aglietta, Michel; Baulant, Camille; Coudert, Virginie.

Coughlan, Anne T.

PD January 1999. TI Good Marketing to "Bad Consumers": Outlet Malls, Gray Markets, and Warehouse Sales. AU Coughlan, Anne T.; Soberman, David A. AA Coughlan: Northwestern University. Soberman: INSEAD. SR INSEAD Working Paper: 99/03/MKT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. PG 34. PR no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. JE L11, L15. KW Hybrid Channels. Multiple Channels. Outlet Malls. Service Competition.

AB We develop an analytic modeling structure to investigate whether and under what circumstances differentiated manufacturers would choose to sell through multiple retail channels. We assume the market is heterogeneous with consumers that differ on two dimensions (price sensitivity and service sensitivity). The primary retail channel is comprised of regular retail outlets, which have higher prices and better service. The alternate channel is manufacturers' outlet stores. We focus purely on the competitive impact of alternate channels, ignoring other potential motivations such as market expansion or stochastic inventory control. The primary insight of the paper is that the relationship between customer heterogeneity and the attraction of dual distribution is complex and cannot be represented by a simple measure of heterogeneity. When price sensitivity is the primary dimension

of heterogeneity, implementing outlet mall distribution will have a positive effect on the profits of both manufacturers and primary retailers. In contrast, when the primary dimension of heterogeneity is service sensitivity, implementing outlet mall distribution will reduce profits for both manufacturers and primary retailers. We also provide empirical evidence for the model's assumptions from outlet malls in the Chicago area.

PD July 1999. TI Good Marketing to "Bad Consumers": Outlet Malls, Gray Markets and Warehouse Sales. AU Coughlan, Anne T.; Soberman, David A. AA Coughlan: Northwestern University. Soberman: INSEAD. SR INSEAD Working Paper: 99/43/MKT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. PG 27. PR no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. JE L11, M31. KW Dual Distribution. Outlet Malls. Service Competition. Trade Shows. Gray Marketing. Market Segmentation.

AB See the abstract for Coughlan, Anne T.; Soberman, David A., January 1999. "Good Marketing to "Bad Consumers": Outlet Malls, Gray Markets, and Warehouse Sales." INSEAD Working Paper: 99/03/MKT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research.

Crespo Cuaresma, Jesus

PD December 1998. TI Deterministic Chaos versus Stochastic Processes. AA Institute for Advanced Studies, Vienna. SR Institute for Advanced Studies (IHS) Economics Series Working Paper: 60; Institute for Advanced Studies, Stumpergasse 56, A-1060 Vienna, Austria. Website: www.ihs.ac.at/Library/libhome.html. PG 19. PR ATS 80.00 Individuals; ATS 250.00 Institutions. JE C14, C49, F31. KW Chaos. BDS Test. Correlation Dimension. Exchange Rate.

AB The classical theory about foreign exchange rate explains its fluctuations as the result of a random walk motion. In this paper, such a theory is put into question by performing Brock, Dechert and Scheinkman's (1987) test on the Austrian Schilling-US Dollars exchange rate for the period 1971-1998, giving us strong evidence of nonlinearities in its behavior. By further analyzing, features such as the correlation dimension will be estimated in order to better understand the characteristics of the underlying process.

Croson, Rachel

TI Rent-Seeking for a Risky Rent: A Model and Experimental Investigation. AU Onculer, Ayse; Croson, Rachel.

Cukierman, Alex

PD January 2000. TI Accountability, Credibility, Transparency and Stabilization Policy in the Eurosystem. AA Tel-Aviv University, Tilburg University and CEPR. SR Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/04; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: http://econ.tau.ac.il. PG 51. PR no charge. JE E32, E44, E52, E58. KW Accountability. Transparency. Credibility. European Central Bank. Publication of Central Bank Forecasts.

AB This paper surveys and evaluates alternative views

regarding the desirable combination of accountability, credibility and transparency in the newly created ECB, including recent controversies regarding publication of minutes, Council member votes and ECB forecasts. The paper shows that premature publication of central bank forecasts reduces the ability of the bank to engage in stabilization policy while maintaining inflation reasonably close to its inflation objective. This is demonstrated for an economy in which the transmission mechanism is characterized by a conventional, expectations' augmented Phillips relation. When the transmission mechanism operates via a Keynesian real interest rate channel (of the type used in a number of econometric models, and compactly summarized in Svensson (1997a)) premature publication of forecasts does not affect expected social welfare provided only price stability and stabilization policy matter. But when (due, possibly, to detrimental effects of interest rate variability on financial stability) social welfare is also negatively related to interest rate variability, premature publication of forecasts, again, reduces expected social welfare.

PD July 2000. **TI** Central Bank Reform, Liberalization and Inflation in Transition Economies -- An International Perspective. **AU** Cukierman, Alex; Miller, Geoffrey P.; Neyapti, Bilim. **AA** Miller: New York University. Cukierman: Tel-Aviv University. Neyapti: Bilkent University. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/19; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 37. **PR** no charge. **JE** E58, P21, P24. **KW** Central Banks. Legal Independence. Transition Economies. Inflation. Reform. **AB** This paper develops extensive new data on the legal independence of new central banks in 26 former socialist economies (FSE). In spite of the large price shocks induced by the transformation from plan to market, reformers in those countries chose to create central banks with levels of legal independence that are substantially higher, on average, than those of developed economies during the eighties. Based on data from 1989 through 1998 the evidence in the paper suggests that CBI is unrelated to inflation during the early stages of liberalization. But for sufficiently high and sustained levels of liberalization, and controlling for variables like price decontrols and wages, legal CBI and inflation are significantly and negatively related. These findings are consistent with the view that legal CBI, no matter how high, cannot contain the powerful inflationary impact of wide scale liberalization of formerly controlled prices. But once the process of liberalization has gathered sufficient momentum legal independence becomes effective in slowing inflation down. The paper also presents evidence on factors that affect the level of CBI and examines the relation between inflation and CBI within a broader sample composed of the transition and of the developed economies.

PD December 1999. **TI** The Inflation Bias Result Revisited. **AA** Tel-Aviv University and Tilburg University. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 99/38; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 19. **PR** no charge. **JE** E31, E32, E52, E58. **KW** Inflation Bias. Uncertainty. Transmission Mechanism. Asymmetric Objectives. Central Bank.

AB The Kydland-Prescott, Barro-Gordon inflation bias result relies on the presumption that policymakers aim at achieving a

level of employment above the normal level. Both academics and policymakers have recently questioned this presumption on the ground of realism. This note shows that even if policymakers are content with the normal level of employment there is an inflation bias if the following two (realistic) conditions are satisfied. The central bank is uncertain about the future state of the economy and is more sensitive to policy misses leading to employment below the normal level than to policy misses leading to employment above it. The note also shows that there is reason to believe the bias today is smaller than in the past and discusses the implications of the analysis for the design of legal central bank objectives.

Currie, Janet

PD February 1999. **TI** Early Test Scores, Socioeconomic Status and Future Outcomes. **AU** Currie, Janet; Thomas, Duncan. **AA** Currie: University of California, Los Angeles and National Bureau of Economic Research. Thomas: University of California, Los Angeles. **SR** National Bureau of Economic Research Working Paper: 6943; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** I20, J24, J31. **KW** Test Scores. Wages. Education.

AB This paper examines the long-term effects of early test scores using data from the British National Child Development Survey. We show that test scores measured as early as age 7 have significant effects on future educational and labor market outcomes. For example, men and women in the lowest quartile of the reading test score distribution have wages 20% lower at age 33 than those who scored in the highest quartile. We test several hypotheses about the interactions between socioeconomic status and high or low test scores at age 7. In terms of test scores, educational attainments, and employment at age 33, low-SES children reap both larger gains from having high age 7 test scores and smaller losses from having low age 7 test scores. The opposite is true among high-SES children who suffer larger losses from low scores and smaller gains from high scores. However, we find evidence of comparable interactive effects for wages.

Danninger, Stephan

TI Redistribution Through Public Employment: The Case of Italy. **AU** Alesina, Alberto; Danninger, Stephan; Rostagno, Massimo.

David, Paul A.

PD August 1999. **TI** Is Public R&D a Complement or Substitute for Private R&D? A Review of the Econometric Evidence. **AU** David, Paul A.; Hall, Bronwyn H.; Toole, Andrew A. **AA** David: Oxford University and Stanford University. Hall: Oxford University and UC Berkeley. Toole: Stanford University. **SR** University of California, Berkeley, Department of Economics Working Paper: E99/269; UC, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/iber. **PG** 47. **PR** \$3.50 U.S., \$7.00 International. **JE** H41, H54, O31, O32, O38. **KW** R&D, Fiscal Policy. Government Subsidy. Technology Policy.

AB Is public R&D spending complementary and thus "additional" to private R&D spending, or does it substitute for and tend to "crowd out" private R&D? Conflicting answers are

given to this question. We survey the body of available econometric evidence accumulated over the past 35 years. A framework for analysis of the problem is developed to help organize and summarize the findings of econometric studies based on time series and cross-section data from various levels of aggregation (laboratory, firm, industry, country). The findings overall are ambivalent and the existing investigators envisage is not adequately specified. We conclude by offering suggestions for improving future empirical research on this issue.

Davis, Christopher

PD April 2000. **TI** The Defense Sector in the Economy of a Declining Superpower: Soviet Union and Russia, 1965-2000. **AA** University of Oxford. **SR** Oxford Department of Economics Discussion Paper: 08; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. **Website:** www.economics.ox.ac.uk/. **PG** 47. **PR** no charge. **JE** H56, H57, N44, P27, P31. **KW** Soviet Union. USSR. Russia. Military-Industrial Complex. Defense Expenditure. Arms Race. Logistic. Arms Trade. National Security. Conversion. Disarmament. Economic Systems.

AB The Soviet Union was able to develop a large military-industrial complex and become the world's second superpower despite the small size because defense was given priority status and special planning, rationing and administrative mechanism were used to ensure attainment of national security objectives. However, in the period 1976-85 the defense institutions experienced the problems typical of the shortage economic system. The attempts by the Gorbachev government to reform the defense sector during perestroika (1985-91) uniformly failed. For the most of the transition period, its low priority status, drastic cuts in defense spending, instability of the hybrid politico-economic system, and the negative growth of the economy have adversely affected the Russian military-industrial complex. The armed forces and defense industry have been reduced in size and their outputs of military services and equipment have fallen to low levels. Since mid-1999 the priority of the defense sector has been raised significantly, defense spending has increased and the new government of President Putin has adopted ambitious plans to revive Russian military power by 2010. Economic factors will be of crucial importance in determining the success of this effort.

Dawson, Jeremy

TI The Effectiveness of Top Management Groups in Manufacturing Organisations. **AU** West, Michael; Patterson, Malcolm; Dawson, Jeremy; Nickell, Stephen.

De Broeck, Mark

PD January 2000. **TI** The "Soaring Eagle": Anatomy of the Polish Take-Off in the 1990s. **AU** De Broeck, Mark; Koen, Vincent. **AA** De Broeck: International Monetary Fund. Koen: OECD. **SR** International Monetary Fund Working Paper: WP/00/06; International Monetary Fund, 700 19th Street, Washington, DC 20431. **Website:** www.imf.org. **PG** 23. **PR** not available. **JE** O47, P24. **KW** Poland. Economic Growth. Transition.

AB Poland stands out among transition economies as having experienced a relatively short and shallow contraction followed by sustained, vigorous growth. This paper examines various aspects of Poland's growth performance from 1992 through

1998 at the macroeconomic level as well as across sectors and regions. It discusses the sources of Poland's growth, showing that early in the decade, improved resource utilization was the paramount determinant, while factor accumulation, supported by rising foreign direct investment inflows, took on increasing importance in the later 1990s.

PD March 2000. **TI** The Great Contractions in Russia, the Baltics and the Other Countries of the Former Soviet Union: A View From the Supply Side. **AU** De Broeck, Mark; Koen, Vincent. **AA** De Broeck: International Monetary Fund. Koen: OECD. **SR** International Monetary Fund Working Paper: WP/00/32; International Monetary Fund, 700 19th Street, Washington, DC 20431. **Website:** www.imf.org. **PG** 22. **PR** not available. **JE** E22, E23, E24, I39, N10, O47, O57, P27, P52. **KW** Output. Transition. Growth. Productivity.

AB The output contractions during the initial transition stages in the Baltics and in Russia and the other CIS countries are examined across several dimensions, and the reliability of the available official statistics evaluated. The depth, length and breadth of the contractions are studied and set against a longer-run historical perspective. The relationship between inputs and outputs as described in a standard accounting framework shows that there is more to the contractions than collapsing investment and shrinking employment. Sharp declines in productivity, reflecting in part transition-related factors, also played a major role.

de Frutos, Maria Angeles

PD April 1997. **TI** On Some Myths About Sequenced Common-Value Auctions. **AU** de Frutos, Maria Angeles; Rosenthal, Robert W. **AA** de Frutos: Universidad Carlos III de Madrid. Rosenthal: Boston University. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 77; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. **Website:** econ.bu.edu/ISP/. **PG** 28. **PR** no charge. **JE** D44, D82. **KW** Auctions. Common Value.

AB Equilibria are constructed for classes of game models of sequenced second-price auctions having identical common-valued objects. In some of these the equilibrium price falls on average, and in others the seller loses on average by committing to announce publicly something that he knows. Both of these possibilities are surprises.

de Mello, Luiz

TI Corruption and Military Spending. **AU** Gupta, Sanjeev; de Mello, Luiz; Sharan, Raju.

PD December 1999. **TI** Fiscal Federalism and Government Size in Transition Economies: The Case of Moldova. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/176; International Monetary Fund, 700 19th Street, Washington, DC 20431. **Website:** www.imf.org. **PG** 20. **PR** not available. **JE** H50, H71, H72. **KW** Fiscal Federalism. Government Size. Moldova.

AB This paper examines the relationship between fiscal decentralization -- the assignment of revenue sources and expenditure functions across government levels -- and government size in Moldova. The empirical results -- based on data for a cross-section of Moldovan subnational governments in 1998 -- suggest that fiscal decentralization is associated with

larger subnational governments and that the country's revenue-sharing system imposes a constraint on subnational spending. Moldova is currently undergoing unprecedented reform of its system of intergovernmental fiscal relations, and consolidation of its local government. This reform package is crucial to ensure that decentralization does not increase the size of government.

De Melo, Jaime

TI Harmonizing External Quotas in an FTA: A Step Backward? **AU** Cadot, Olivier; De Melo, Jaime; Olarreaga, Marcelo.

Dehejia, Rajeev H.

PD February 1999. **TI** Program Evaluation as a Decision Problem. **AA** Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6954; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** \$5.00. **JE** C11, I38, J31. **KW** Program Evaluation. GAIN. California.

AB I argue for thinking of program evaluation as a decision problem. In the context of California's GAIN experiment (a randomized trial of a welfare-to-work alternative to AFDC), I show that GAIN first-order stochastically dominated AFDC when considering the choice between the treatment and control programs in terms of average earnings, even though the treatment effect is not statistically significant. I also argue for incorporating the post-evaluation assignment mechanism for the program under consideration into the evaluation process. I show that if policies, such as allowing a career counselor to choose which program individuals join, are included in the evaluation, then GAIN is superior to AFDC, whereas the opposite ranking emerges from the standard treatment versus control comparison which ignores potential heterogeneity in the treatment impact.

Dekel, Eddie

PD May 2000. **TI** Rationalizable Outcomes of Large Independent Private-Value First-Price Discrete Auctions. **AU** Dekel, Eddie; Wolinsky, Asher. **AA** Dekel: Tel-Aviv University and Northwestern University. Wolinsky: Northwestern University. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/13; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 10. **PR** no charge. **JE** C72, D44. **KW** Auctions. Rationalizability. Efficiency. **AB** We consider discrete versions of independent, private-value, first-price auctions. We show for any fixed finite set of possible bids, if the number of participants is large enough, then the set of rationalizable bids involves all players bidding the highest bid that is lower than their private value.

Dekker, Rommert

TI Inventory Control in Hybrid Systems with Remanufacturing. **AU** Van Der Laan, Erwin; Salomon, Marc; Dekker, Rommert; Van Wassenhove, Luk.

TI Inventory Control in Hybrid Systems with Remanufacturing. **AU** Van Der Laan, Erwin; Salomon, Marc; Dekker, Rommert; Van Wassenhove, Luk.

DeMichelis, Stefano

PD January 2000. **TI** On Knots and Dynamics in Games. **AU** DeMichelis, Stefano; Germano, Fabrizio. **AA** DeMichelis: Universita degli Studi di Pavia. Germano: Tel-Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/02; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 17. **PR** no charge. **JE** C72, D83. **KW** Nash Equilibrium. Correspondence. Learning. Mixed Strategy. Equilibrium Degree. Equilibrium Indices.

AB We extend Kohlberg and Mertens' (1986) structure theorem concerning the Nash equilibrium correspondence to show that its graph is not only homomorphic to the underlying space of games but that it is also unknotted. This is then shown to have some basic consequences for dynamics whose rest points are Nash equilibria.

Demirguc-Kunt, Asli

PD January 2000. **TI** Does Deposit Insurance Increase Banking System Stability? **AU** Demirguc-Kunt, Asli; Detragiache, Enrica. **AA** Demirguc-Kunt: World Bank. Detragiache: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/03; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 26. **PR** not available. **JE** G28, G21, E44. **KW** Deposit Insurance. Banking Stability. Interest Rate Deregulation.

AB This study analyzes panel data for 61 countries during 1980-97 and concludes that explicit deposit insurance tends to be detrimental to bank stability, the more so where bank interest rates are deregulated and the institutional environment is weak. Also, the adverse impact of deposit insurance on bank stability tends to be stronger when the coverage offered to depositors is extensive, when the scheme is funded, and when it is run by the government rather than by the private sector.

den Haan, Wouter J.

PD March 1999. **TI** Liquidity Flows and Fragility of Business Enterprises. **AU** den Haan, Wouter J.; Ramey, Garey; Watson, Joel. **AA** den Haan: University of California, San Diego and National Bureau of Economic Research. Ramey and Watson: University of California, San Diego. **SR** National Bureau of Economic Research Working Paper: 7057; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** \$5.00. **JE** E32, E44. **KW** Financial Intermediation. Matching. Long-term Relationships. Liquidity.

AB This paper considers the efficiency of financial intermediation and the propagation of business cycle shocks in a model of long-term relationships between entrepreneurs and lenders, where lenders may be constrained in their short-run access to liquidity. When liquidity is low, relationships are subject to breakups that lead to loss of joint surplus. Liquidity outflows cause damage to financial structure by breaking up relationships, and damage persists due to frictions in the formation of new relationships. Feedbacks between aggregate investment and the structure of intermediation greatly magnify the effects of shocks. For large shocks, financial collapse may become inescapable in the absence of external intervention.

Dermine, Jean

PD May 1999. **TI** The Economics of Bank Mergers in the European Union, A Review of the Public Policy Issues. **AA** INSEAD. **SR** INSEAD Working Paper: 99/35/FIN; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 35. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** F23, G21, G34. **KW** Mergers. European Union. Banking.

AB In European countries, mergers have allowed banks to increase efficiency by facilitating the coordination of the closing of branches. This raises a fear of excessive concentration in some banking markets. If scale or scope economies do prevail, mergers are the best way to achieve both efficiency and appropriate scale. This report raises some doubt as to the significance of potential sources of scale or scope economies. A legitimate question concerns the existence of economies of scale and scope in the future as both new technology and the single currency are transforming rapidly the banking industry. There is clear evidence that size and international coverage are important to operate on several segments of the capital markets (such as bond and equity underwriting, or custodian activities). On the retail markets, it is the author's opinion that European coverage will be important to diversify credit risk and that size will facilitate international expansion and brand recognition. In view of these potential gains to be achieved by mergers, policy makers have to consider the potential social cost of these mergers.

Detragiache, Enrica

TI Does Deposit Insurance Increase Banking System Stability? **AU** Demirguc-Kunt, Asli; Detragiache, Enrica.

Devereux, Michael B.

PD March 1999. **TI** Review of International Economics Real Exchange Rate Trends and Growth: A Model of East Asia. **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 99/05; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 28. **PR** **JE** F12, F31, F43. **KW** Balassa-Sameulson. Real Exchange Rates. Economic Growth.

AB In contrast to the Balassa-Samuelson hypothesis, many fast-growing Asian countries have experienced little trend real exchange rate appreciation or even depreciation. Moreover, their long-run real exchange rate trend seems to be dominated by movements in traded goods prices. A model is developed which is consistent with these observations. As in the Balassa-Samuelson model, productivity growth is concentrated in the traded goods sector. Nevertheless the real exchange rate may exhibit trend depreciation, driven by persistent deviations in the price of traded goods from those in the reference country. The key feature of the model is the presence of endogenous productivity growth in the distribution services sector.

PD March 1999. **TI** Do Fixed Exchange Rates Inhibit Macroeconomic Adjustments? **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 99/06; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada.

Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 30.

PR **JE** F33, F40, F41. **KW** Fixed Exchange Rates. Monetary Policy. Fiscal Policy.

AB The paper takes issue with the proposition that a fixed exchange rate regime reduces the ability of the economy to adjust to outside macroeconomic shocks, even in a world where prices are sticky. We construct a model where a very small economy interacts with a large world economy, and must choose an exchange rate policy to deal with macro shocks coming from the rest of the world. We show that there is in fact no trade-off between exchange rate flexibility and output volatility. In fact, in face of monetary disturbances coming from the rest of the world, output volatility is lower under fixed exchange rates than under floating exchange rates.

TI International Monetary Policy Coordination and Competitive Depreciation A Re-Evaluation. **AU** Betts, Caroline; Devereux, Michael B.

PD March 1999. **TI** How Does a Devaluation Affect the Current Account? **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 99/08; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 24. **PR** **JE** F32, F41. **KW** Devaluation. Current Account. Exchange Rates.

AB This paper explores how exchange rate devaluation affects the current account in a sticky price, inter-temporal, optimizing model. The main issue we address is how the features of international pricing impact on the response of the current account. When prices are all set in producers' currencies, devaluation improves the current account as long as the conventional Marshall-Lerner elasticity condition is satisfied, which must be the case in our model. This is fundamentally an atemporal condition. But when prices are all set in consumers' currencies (pricing-to-market), the effect of devaluation on the current account depends upon the size of the inter-temporal elasticity of substitution of consumption across time periods. The current account may rise or fall in this case. When pricing-to-market is partial, the effect of devaluation on the current account depends on the strength of the atemporal elasticity relative to the inter-temporal elasticity.

PD March 1999. **TI** Dynamic Gains from International Trade with Imperfect Competition and Market Power. **AU** Devereux, Michael B.; Lee, Khang Min. **AA** Devereux: University of British Columbia. Lee: National University of Singapore. **SR** University of British Columbia Department of Economics Discussion Paper: 99/09; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 23. **PR** **JE** F12, F15, F43. **KW** Imperfect Competition. International Trade. Gains from Trade.

AB This paper revisits the analysis of the gains from trade under imperfect competition by explicitly modeling strategic competition and entry within a dynamic general equilibrium framework. In addition to the welfare losses due to prices above marginal cost, the paper highlights another welfare cost of imperfect competition, due to inefficient entry. In the presumptive case there is over-entry of firms in market equilibrium. Through increasing competition, international trade lowers price-cost markups and reduces excessive entry.

This adds on a "competitive" channel for gains from trade to the standard "product diversity" channel familiar from previous literature. Because the model is dynamic, both channels will also increase the return to investment and raise the steady state capital stock. An alternative case is possible however, where there is inefficiently low entry in market equilibrium. In that case, international trade tends to be "anti-competitive" in the sense that it raises equilibrium price cost markups and encourages increased entry. Nevertheless, trade will still raise welfare in this case because entry is inefficiently low to begin with.

TI The International Effects of Monetary and Fiscal Policy in a Two-Country Model. **AU** Betts, Caroline; Devereux, Michael B.

PD March 1999. **TI** How will the Euro Affect the US and Europe? **AU** Devereux, Michael B.; Engel, Charles. **AA** Devereux: University of British Columbia. Engel: University of Washington. **SR** University of British Columbia Department of Economics Discussion Paper: 99/11; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 23. **PR** **JE** F31, F41. **KW** Invoicing Currency. Euro. Exchange Rates.

AB This paper explores the implications of the Euro within a simple sticky price intertemporal model. The main issue we focus on is how the Euro may alter the widespread convention of invoicing export goods prices in US dollars. We conjecture that the acceptance of the Euro will change this practice, and that in future many goods may be invoiced in Euro's. We show that this has profound consequences for both the volatility and levels of macroeconomic aggregates in both the US and Europe. While European consumption becomes more volatile, expected consumption and welfare rise, not just in Europe, but also in the US.

PD March 1999. **TI** A Tale of Two Currencies: The Asian Crisis and the Exchange Rate Regimes of Hong Kong and Singapore. **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 99/12; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 42. **PR** **JE** E65, F41. **KW** Hong Kong. Singapore. Asian Crisis. Exchange Rate Regime.

AB The economies of Hong Kong and Singapore are alike in many respects. Both are fast growing, export oriented and highly open in both goods and financial markets. But Hong Kong has maintained a pegged exchange rate since 1983, while Singapore has been on a floating regime since the early 1970's. This paper provides an interpretation of the different performance of the Hong Kong and Singapore economy that could be attributable to the differences in their exchange rate regime. A prototype two sector dynamic general equilibrium 'dependent economy' model with nominal price rigidities is developed to help to interpret both the longer run trends in inflation, land prices and real exchange rates in Hong Kong and Singapore as well as the differences in macroeconomic volatility. The model suggests that small economy should exhibit higher volatility in real GDP under a fixed exchange rate than under floating rates, and that the real exchange rate should be less counter-cyclical. These implications are borne

out in the data for Hong Kong and Singapore. In addition, the strong differences in the response of the two economies to the Asian crisis are also consistent with our model.

PD April 1999. **TI** Fixed vs. Floating Exchange Rates: How Price Setting Affects the Optimal Choice of Exchange-Rate Regime. **AU** Devereux, Michael B.; Engel, Charles. **AA** Devereux: University of British Columbia. Engel: University of Washington. **SR** University of British Columbia Department of Economics Discussion Paper: 99/13; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 54. **PR** **JE** F31, F33, F41. **KW** Fixed Exchange Rates. Floating Exchange Rates. Pricing-to-Market.

AB We investigate the welfare properties of fixed and floating exchange rate regimes in a two-country, dynamic, infinite-horizon model with agents optimizing in an environment of uncertainty created by monetary shocks. The optimal exchange rate regime may depend on whether prices are set in the currency of producers or the currency of consumers. When prices are set in consumers' currency, the variance of home consumption is not influenced by foreign monetary variance under floating exchange rates, while there is transmission of foreign disturbances under floating rates if prices are set in producers' currencies, or under fixed exchange rates. An important feature of the model is the exchange rate regime, which affects not just the variance of consumption and output, but also their average levels. When prices are set in producer's currency, as in the traditional framework, we find that there is a trade-off between floating and fixed exchange rates. Exchange rate adjustment under floating rates allows for a lower variance of consumption, but exchange rate volatility itself leads to a lower average level of consumption. When prices are set in consumer's currency, floating exchange rates always dominate fixed exchange rates.

PD April 1999. **TI** The Optimal Choice of Exchange-Rate Regimes Price-Setting Rules and Internationalized Production. **AU** Devereux, Michael B.; Engel, Charles. **AA** Devereux: University of British Columbia. Engel: University of Washington. **SR** University of British Columbia Department of Economics Discussion Paper: 99/14; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 38. **PR** **JE** F23, F31, F33, F41. **KW** Fixed Exchange Rates. Floating Exchange Rates. Foreign Direct Investment.

AB We investigate the choice of exchange-rate regime -- fixed or floating -- in a dynamic, intertemporal general equilibrium framework. Our framework extends Devereux and Engel (1998) by investigating the implications of internationalized production. We examine the role of price-setting -- whether prices are set in the currency of producers or the currency of consumers -- in determining the optimality of exchange-rate regimes in an environment of uncertainty created by monetary shocks. We find that when prices are set in producers' currencies, floating exchange rates are preferred when the country is large enough, or not too risk averse. On the other hand, floating exchange rates are always preferred when prices are set in consumers' currencies because floating exchange rates allow domestic consumption to be insulated from foreign monetary shocks. The gains from floating exchange rates are greater when there is internationalized

production in this case.

PD September 1999. **TI** A Simple Dynamic General Equilibrium Analysis of the Trade-Off Between Fixed and Floating Exchange Rates. **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 99/22; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 30. **PR** **JE** F31, F33, F41. **KW** Fixed Exchange Rates. Floating Exchange Rates. Monetary Policy.

AB This paper provides a complete analytical characterization of the positive and normative effects of alternative exchange rate regimes in a simple two-country sticky-price dynamic general equilibrium model with money, technology, and government spending shocks. A central question addressed is whether fixing the exchange rate prevents macroeconomic adjustment in relative prices from occurring, in face of shocks. In the model, the exchange rate regime has implications for both the volatility and mean of macroeconomic aggregates. But the effects of the exchange rate regime depend upon both the stance of monetary policy and the way in which the exchange rate is pegged. With a passive monetary policy, a cooperative pegged exchange rate regime has no implications for macroeconomic volatility, relative to a floating regime, but implies a higher mean level of employment, capital stock, and real GDP. When monetary policy is determined optimally however, a fixed exchange rate regime leads to higher employment volatility and a lower mean level of employment and real GDP. Therefore, whether fixing the exchange rate involves a welfare cost depends critically upon the flexibility of monetary policy in responding to macroeconomic shocks.

Di Tella, Rafael

PD July 1997. **TI** Does the Welfare State Destroy the Family? **AU** Di Tella, Rafael; MacCulloch, Robert. **AA** Di Tella: Harvard Business School. MacCulloch: University of Oxford. **SR** Oxford Applied Economics Discussion Paper: 195; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. **PG** 37. **PR** 2 pounds (US \$4.00). **JE** D23, D82, H31, H53. **KW** Non-Altruistic Preferences. Incomplete Contracts. Asymmetric Information. Optimal Generosity.

AB We analyze the relationship between the family and the Welfare State when intra-family transfers are governed by risk-sharing considerations (i.e., not by altruism). For the benchmark case, the classic neutrality is obtained: more generous unemployment benefits, provided by the State, crowd out family risk-sharing arrangements one-for-one. The model is extended to capture the idea that families have an advantage at monitoring the search activities of the unemployed, whereas the State has an advantage at enforcing risk-sharing contracts through taxation. For every case, the effect of State transfers on intra-family transfers is found to be more than one-for-one. Thus, somewhat perversely, both informal transfers and total insurance transfers to the unemployed fall as the State's generosity increases. This does not imply that the optimal Welfare State is Zero. These predictions provide a dramatic departure from those of traditional models.

Diamond, Peter

PD March 1999. **TI** Administrative Costs and

Equilibrium Charges with Individual Accounts. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7050; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** \$5.00. **JE** H42, H53. **KW** Government Organized Accounts. Low Cost Plan.

AB There are many individual account proposals. For government-organized accounts, the government arranges for both record-keeping and investment management. For privately-organized accounts, individuals directly select private firms to do these tasks. The government spreads the costs of government-organized accounts among accounts, outside sources of revenue, employers and workers. With privately-organized accounts, equilibrium prices reflect selling costs as well as administrative costs. Thus, government-organized accounts are organized on a group basis while privately-organized accounts are organized on an individual basis. In financial and insurance markets generally, the group and individual markets function very differently and yield different pricing structures. The paper describes a low cost/low services government-organized plan and estimates that it might cost \$40-50 per worker per year. The nature of equilibrium with privately-organized accounts is discussed, with the conclusion that the costs would be very high compared to the cost of government organization.

Diebold, Francis X.

PD February 1999. **TI** Unit Root Tests are Useful for Selecting Forecasting Models. **AU** Diebold, Francis X.; Kilian, Lutz. **AA** Diebold: University of Pennsylvania and National Bureau of Economic Research. Lutz: University of Michigan. **SR** National Bureau of Economic Research Working Paper: 6928; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 18. **PR** \$5.00. **JE** C01, C32, C52. **KW** Unit Root Tests. Model Selection. Pretesting. Forecasting.

AB We study the usefulness of unit root tests as diagnostics tools for selecting forecasting models. Difference stationary and trend stationary models of economic and financial time series often imply very different predictions, so deciding which model to use is tremendously important for applied forecasters. Forecasters face three choices: always difference the data, never difference, or use a unit-root pretest. We characterize the predictive loss of these strategies for the canonical AR(1) process with trend, focusing on the effects of sample size, forecast horizon, and degree of persistence. We show that pretesting routinely improves forecast accuracy relative to forecasts from models in differences, and we give conditions under which pretesting is likely to improve forecast accuracy relative to forecasts from models in levels.

Dierickx, Ingemar

TI Bundling and Licensing. **AU** Costa, Luis Almeida; Dierickx, Ingemar.

Diewert, W. Erwin

PD June 1999. **TI** Progress in Measuring the Price and Quantity of Capital. **AU** Diewert, W. Erwin; Lawrence, Denis A. **AA** Diewert: University of British Columbia. Lawrence: Tasman Asian Pacific. **SR** University of British

Columbia Department of Economics Discussion Paper: 99/17; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. PG 51. PR JE C43, C82, D24, D92, E22, G12, M04, O47, O51, Q24. KW Capital. Depreciation. Canadian Productivity. User Cost of Capital. Vintage Capital.

AB In constructing age specific user costs of capital typically index number theory was used to aggregate up over vintages. An alternative approach assumes that the vintage rental prices represent the relative efficiencies of vintage specific assets and then uses linear aggregation to aggregate up the vintage capitals into aggregate capital. Three different depreciation assumptions are considered in this paper: (1) declining balance or geometric depreciation; (2) one hoss shay and (3) straight line depreciation. In the first two models the sequence of vintage rental prices varies in strict proportion so Hicks' Aggregation Theorem applies and superlative indexes are not needed to aggregate over vintages. However, in the case of straight line depreciation, it is necessary to use a superlative index to perform the aggregation over vintages. The remainder of the paper illustrates the difference that alternative assumptions about the pattern of depreciation make to Canadian productivity numbers. Also, the effects on productivity of adding in or leaving out inventories and or land were computed. All of these sensitivity experiments did not make a great deal of difference to Canadian labor or total factor productivity.

PD June 1999. TI Should Canada's Rate of Capital Gains Taxation be Reduced? AU Diewert, W. Erwin; Lawrence, Denis A. AA Diewert: University of British Columbia. Lawrence: Tasman Asia Pacific. SR University of British Columbia Department of Economics Discussion Paper: 99/19; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. PG 20. PR JE D24, D58, D61, D92, E62, H25, M41. KW Tax Reform. Capital Gains. User Cost of Capital. Deadweight Loss. Marginal Excess Burdens.

AB The paper lays out a simple model of business income taxation that includes the taxation of asset capital gains. The concepts of tax distorted and undistorted user costs of capital are also defined. The tax distorted user cost differs from its undistorted counterpart by two distortion terms. The first distortion term is associated with the fact that the imputed interest cost of equity capital cannot be deducted from taxable income and the second distortion term is associated with the present 75% inclusion rate for capital gains. Rather than further reducing the inclusion rate, the paper argues for a more fundamental tax reform that would reduce both distortion terms to zero. A technical appendix relates the size of the distortion terms and the efficiency costs to the economy of the tax distortions.

Dixit, Avinash

PD May 1998. TI A Theory of Political Compromise. AU Dixit, Avinash; Grossman, Gene M.; Gul, Faruk. AA Princeton University. SR Princeton University Discussion Papers in Economics, Woodrow Wilson School of Public and International Affairs: 191; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. Website: www.princeton.edu/other/workingpapers.html. PG 32. PR no charge.

JE C73, D78. KW Policy Making. Compromise. Risk Sharing. Political Parties. Dynamic Games.

AB We study a political compromise founded on tacit cooperation. Two political parties must share a fixed pie in each of an infinite sequence of periods. In each period, the party has ultimate authority to divide the pie. Power evolves according to a Markov process among a set of political states corresponding to different degrees of political "strength" for the two. The political strength of each party is a state variable, and the game is dynamic, rather than repeated. Allocations in an efficient, sub-game perfect equilibrium do not follow a Markov process. Rather, a party's share reflects not only its current strength, but also how it got there in the recent history. We characterize the efficient division processes for majority rule and supermajority rule, and ask whether one regime allows greater compromise than the other.

Donaldson, David

TI Rationalizable Variable-Population Choice Functions. AU Blackorby, Charles; Bossert, Walter; Donaldson, David.

TI Functional Equations and Population Ethics. AU Blackorby, Charles; Bossert, Walter; Donaldson, David.

PD June 1999. TI Equivalent-Income Functions and Income-Dependent Equivalence Scales. AU Donaldson, David; Pendakur, Krishna. AA Donaldson: University of British Columbia. Pendakur: Simon Fraser University. SR University of British Columbia Department of Economics Discussion Paper: 99/16; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. PG 47. PR JE D11, D12. KW Equivalent-Income. Equivalence Scales.

AB This paper presents and investigates two classes of equivalent-income functions that are generalizations of those that correspond to exact (independent-of-base) absolute and relative equivalence scales. They provide less restrictive household demands, especially for children's goods, and have associated absolute and relative equivalence scales that may depend on income. We show that, under certain conditions, equivalent-income functions and the associated income-dependent equivalence scales can be uniquely estimated from demand data. We estimate them using Canadian data and find that the resulting scales are both plausible and income dependent. In addition, the estimated scales are used to measure inequality and we find that they make a significant difference to the level of and trend in measured inequality.

TI Utilitarianism and the Theory of Justice. AU Blackorby, Charles; Bossert, Walter; Donaldson, David.

Doornik, Jurgen A.

TI Constructing Historical Euro-Zone Data. AU Beyer, Andreas; Doornik, Jurgen A.; Hendry, David F.

Dougherty, Christopher

PD May 2000. TI The Impact of Work Experience and Training in the Current and Previous Occupations on Earnings: Micro Evidence from the National Longitudinal Survey of Youth. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 456; Centre for Economic Performance, London School of Economics and Political Science, Houghton

Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 15. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE J24, J31. KW Earnings. Work Experience. Training. Wages. Human Capital.

AB In the empirical literature on work experience, job tenure, training and earnings, only one previous study has made a distinction between the effects of work experience in the current occupation and work experience in previous ones, and no study has made the distinction with respect to training. Yet it is reasonable to hypothesize that the distinction is important. Using data from the US National Longitudinal Survey of Youth, it is found that the returns to work experience in the current occupation with previous employers are similar to those to work experience with the current employer, and that tenure has no independent effect. Similarly it is found that the distinction between training for current and previous occupations gives better results than a distinction between training for current and previous employers. It is found that work experience, classroom training and vocational institute training for the current occupation have highly significant effects on earnings, with work experience having by far the largest absolute impact. Apart from high school vocational institute training, which has a significantly negative effect on the earnings of those with high cognitive test scores, the previous-occupation counterparts have no significant effects.

Downes, Patrick T.

PD May 1999. TI Mapping Financial Sector Vulnerability in a Non-Crisis Country. AU Downes, Patrick T.; Marston, David; Otker, Inci. AA International Monetary Fund. SR International Monetary Fund Policy Discussion Paper: PDP/99/04; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. PG 24. PR not available. JE E44, G21, G32. KW Financial Soundness. Financial Vulnerability. Banking Crisis. Stress Tests.

AB The forward-looking framework expounded in this paper links a qualitative evaluation of system-wide vulnerability (covering macro, sectoral, institutional, and systemic liquidity issues) with a quantitative assessment of the financial condition of significant financial institutions. Based on vulnerability criteria and judgmental stress tests, twelve indicators of soundness (measuring risk exposure, solvency, liquidity, profitability, and supervisory assessment) are developed. This holistic methodology can be used not only as an early warning/crisis-avoidance system to identify potential systemic problems- and problem institutions-requiring immediate attention, but also to pinpoint needed reforms in the legal, regulatory, and institutional infrastructure that can lessen the likelihood of a future crisis.

Doz, Yves L.

PD 1999. TI Formation Process of R&D Consortia: Which Path to Take? Where Does it Lead? AU Doz, Yves L.; Olk, Paul M.; Smith Ring, Peter. AA Doz: INSEAD. Olk: University of California at Irvine. Smith Ring: Loyola Marymount University. SR INSEAD Working Paper: 99/07/SM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. PG 28. PR no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. JE M14, M21. KW Networks. Formation Process.

AB Numerous studies have investigated the formation of

network relationships but few have addressed the actual processes of creation. This paper furthers our understanding of the dynamics of formation process by analyzing the alliance literature and by drawing from survey data collected on the formation of 53 R&D consortia. We identify three important initiating points (conditions for collaboration, focal entity and shadow of the future) and investigate their impact on subsequent formation processes. We also estimate the formation processes' influence on the resulting consortium structure, learning and evolution. This study draws from these exploratory analyses to conclude with propositions intended to guide research inside the black box of the formation process of networks.

TI Rescuing Troubled Alliances,...Before It's Too Late. AU Arino, Africa; Doz, Yves L.

Drazen, Allen

PD August 1999. TI News About News: Information Arrival and Irreversible Investment. AU Drazen, Allen; Sakellaris, Plutarchos. AA Drazen: University of Maryland and National Bureau of Economic Research. Sakellaris: University of Maryland. SR National Bureau of Economic Research Technical Paper: 244; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR \$5.00. JE D83, D92, E22. KW Early Revelation. Irreversible Investment.

AB We analyze how uncertainty about when information about future returns to a project may be revealed affects investment. While "good news" about future returns boosts investment, "good news about news" (that is, news that information may arrive sooner) is shown to depress investment. We show that early revelation increases the value of an irreversible investment project to a risk-neutral investor. We relate our results on preference for early revelation to results in non-expected utility theory. Our framework allows us to study irreversible investment projects whose value has a time-variable volatility. We also consider how heterogeneity of revelation information across firms may induce a better-informed firm to share its information with competitors.

Duenwald, Christoph

TI Property Prices and Speculative Bubbles: Evidence From Hong Kong SAR. AU Kalra, Sanjay; Mihaljek, Dubravko; Duenwald, Christoph.

Dumas, Bernard

PD July 1999. TI Efficient Intertemporal Allocations with Recursive Utility. AU Dumas, Bernard; Uppal, Raman; Wang, Tan. AA Dumas: INSEAD. Uppal: University of British Columbia and Massachusetts Institute of Technology. Wang: University of British Columbia. SR INSEAD Working Paper: 99/54/FIN; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. PG 14. PR no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. JE C61, D61, D81, D91. KW Utility. Stochastic Control. Dynamic Programming. Bellman Equation.

AB In this article, our objective is to determine efficient allocations in economies with multiple agents having recursive utility functions. Our main result is to show that in a multi-agent economy, the problem of determining efficient allocations

can be characterized in terms of a single value function (that of a social planner), rather than multiple functions (one for each investor), as has been proposed thus far (Duffie, Geoffard and Skiadas, 1994). We then show how the single value function can be identified using the familiar technique of stochastic dynamic programming.

TI Pass-Through and Exposure. **AU** Bodnar, Gordon M.; Dumas, Bernard; Marston, Richard C.

Dunfee, Thomas W.

PD October 1998. **TI** Social Contracts and Marketing Ethics. **AU** Dunfee, Thomas W.; Smith, N. Craig; Ross, William T., Jr.. **AA** Dunfee: University of Pennsylvania. Smith: Georgetown University and INSEAD. Ross: Temple University. **SR** INSEAD Working Paper: 98/94/MKT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 49. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M14, M21, M31. **KW** Marketing. Social Contract. Ethical Issues.

AB This paper describes the need and the search to date for a normative moral foundation for marketing. Social contract theory appears promising because of its clear correspondence to the exchange relationships central to marketing thought and practice. It is introduced in a specific formulation known as Integrative Social Contracts Theory. ISCT provides a coherent framework for resolving ethical issues arising between different communities and is therefore particularly appropriate because marketers frequently engage in boundary-spanning relationships and cross-cultural activities. The application of ISCT to ethical decision making in marketing is explored through the use of bribery as a major illustrative example. Implications for managers and researchers are discussed.

Duranton, Gilles

PD February 2000. **TI** Nursery Cities: Urban Diversity, Process Innovation, and the Life-Cycle of Products. **AU** Duranton, Gilles; Puga, Diego. **AA** Duranton: London School of Economics; Puga: University of Toronto. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 445; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 36. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** D83, L23, O31, R13, R30. **KW** Cities. Diversity. Specialization. Innovation. Learning.

AB A simple model of process innovation is proposed, where firms learn about their ideal production process by making prototypes. We build around this a dynamic general equilibrium model, and derive conditions under which diversified and specialized cities coexist. New products are developed in diversified cities, trying processes borrowed from different activities. On finding their ideal process, firms switch to mass-production and relocate to specialized cities with lower costs. When in equilibrium, this configuration welfare-dominates those with only diversified or only specialized cities. We find strong evidence of this relocation pattern in establishment relocations across French employment areas 1993-1996.

PD August 1999. **TI** Diversity and Specialisation in Cities: Why, Where and When Does it Matter?

AU Duranton, Gilles; Puga, Diego. **AA** Duranton: London School of Economics. Puga: University of Toronto. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 433; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 28. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** R11, R30. **KW** Urban Economics. Cities. Specialization. Diversity. Economic Geography.

AB Why are some cities specialized and others diversified? What are the advantages and disadvantages of urban specialization and diversity? To what extent does the structure of cities, and the activities of firms and people in them, change over time? How does the sectoral composition of cities influence their evolution? To answer these and related questions, we first distill some key stylized facts from the empirical literature on cities and the composition of their activities. We then turn to a review of different theories looking at such issues, and study the extent to which these theories contribute to the understanding of the empirical regularities.

Dutta, Soumitra

TI An Empirical Analysis of Software Production Problems in European Software Units. **AU** Lee, Michael; Dutta, Soumitra; Van Wassenhove, Luk.

Edlin, Aaron S.

PD September 1997. **TI** The Welfare Losses from Price Matching Policies. **AU** Edlin, Aaron S.; Emch, Eric R. **AA** Edlin: UC Berkeley and NBER. Emch: UC Berkeley. **SR** University of California, Berkeley, Department of Economics Working Paper: 97/257; University of California, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/iber. **PG** 28. **PR** \$3.50 U.S., \$7.00 International. **JE** D43, D61, K21, L16, L41. **KW** Price Matching. Antitrust. Price Rigidities.

AB Several recent papers argue that price matching policies raise equilibrium prices. We add to this literature by considering potential welfare losses, which have two sources: Harberger triangles from high prices and Posner rectangles from over-entry. We compare markets with price matching and free entry to the traditional concerns of antitrust law, monopoly or cartel markets without entry. Price matching with entry leads to greater welfare losses than both monopoly and cartel in markets with a low ratio of fixed to marginal cost and low demand elasticity. We illustrate these general results using parameters from the wholesale gasoline and air travel markets, and relate our model to price matching on NASDAQ.

PD February 1999. **TI** Per-Mile Premiums for Auto Insurance. **AA** University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6934; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** D81, D82. **KW** Accident Insurance. Motor Vehicles. Accident Externalities. Insurance Pricing.

AB Americans drive 2,360,000,000 miles each year, far outstripping other nations. Insurance premiums are only weakly linked to mileage, however, and have largely lump-sum characteristics. The result is too much driving and too many

accidents. This paper begins by developing a model of the relationship between driving and accidents that formalizes Vickrey's (1968) central insights about the accident externalities of driving. We use this model to estimate the driving, accident, and congestion reductions that could be expected from switching to other insurance pricing systems. Under a competitive system of per-mile premiums, in which insurance companies quote risk-classified per-mile rates, we estimate that the reduction in insured accident costs net of lost driving benefits would be \$9.8-\$12.7 billion nationally, or \$58-\$75 per insured vehicle. When uninsured accident cost savings and congestion reductions are considered, the net benefits rise to \$25-\$29 billion, exclusive of monitoring costs. One reason that insurance companies may have not switched to per-mile premiums on their own is that most of the benefits are external and the transaction costs to the company and its customers of checking odometers could exceed the \$31 per vehicle of gains that a single company could temporarily realize on its existing base of customers.

Eissa, Nada

PD June 1998. TI The Earned Income Tax Credit and the Labor Supply of Married Couples. AU Eissa, Nada; Hoynes, Hilary Williamson. AA UC Berkeley and NBER. SR University of California, Berkeley, The Center for Labor Economics Working Paper: 4; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. PG 64. PR no charge. JE H24, H31, J22. KW Taxation. Transfer Programs. Labor Supply.

AB The Earned Income Tax Credit (EITC) transfers money to lower-income working families with children. Advocates argue that this redistribution encourages labor force participation. The credit is based on family earnings. In this paper, we consider the impact of the EITC on the labor supply decisions of married couples. We study the labor supply response of married couples to the 1986, 1990 and 1993 expansions in the earned income tax credit using CPS data from 1984-1996. We present two different approaches: First, we evaluate the expansion of the EITC using quasi-experimental methods where we compare changes in labor supply among EITC eligible and ineligible groups. Second, we estimate reduced form labor supply models that use both cross-sectional and time variation in taxes, gross wages, and income to identify wage and income effects. Our results suggest that the EITC expansions over the past decade increased the likelihood of married men's labor participation only slightly but reduced the likelihood of married women's labor force participation by up to a full percentage point. Overall, the evidence suggests that family labor supply fell after the expansion of the EITC.

PD April 1999. TI The Earned Income Tax Credit and the Labor Supply of Married Couples. AU Eissa, Nada; Hoynes, Hilary Williamson. AA UC Berkeley and NBER. SR University of California, Berkeley, Department of Economics Working Paper: E99/267; UC, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. PG 35. PR \$3.50 U.S., \$7.00 International. JE H24, H31, J22. KW Labor Supply. Welfare. Taxes.

AB Eissa, Nada; Hoynes, Hilary Williamson, June 1998. "The Earned Income Tax Credit and the Labor Supply of Married Couples". University of California, Berkeley, The

Center for Labor Economics Working Paper: 4; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html.

El-Hifnawi, M. Baher

TI Building Systems of Income Taxation in a Transition Economy: The Case of Vietnam. AU Shukla, Gangadhar P.; El-Hifnawi, M. Baher.

Ellis, Randall P.

TI Using Diagnoses to Describe Populations and Predict Costs. AU Ash, Arlene S.; Ellis, Randall P.; Pope, Gregory; Ayanian, John; Bates, David; Burstin, Helen; Iezzoni, Lisa; McKay, Elizabeth; Yu, Wei.

TI Using the Diagnostic Cost Group (DGC) Model to Measure Risk Selection in the Massachusetts State Employee Health Insurance Program. AU Yu, Wei; Ellis, Randall P.; Ash, Arlene S.

TI Cost-Minimizing Risk Adjustment. AU Shen, Yujing; Ellis, Randall P.

Ellison, Glenn

PD September 1998. TI A Simple Framework for Nonparametric Specification Testing. AU Ellison, Glenn; Ellison, Sara Fisher. AA Ellison, G. Massachusetts Institute of Technology and National Bureau of Economic Research. Ellison, S.: Massachusetts Institute of Technology. SR National Bureau of Economic Research Technical Paper: 234; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR \$5.00. JE C12, C14. KW Nonparametric Tests. Specification Tests.

AB This paper presents a simple framework for testing the specification of parametric conditional means. The test statistics are based on quadratic forms in the residuals of the null model. Under general assumptions the test statistics are asymptotically normal under the null. With an appropriate choice of the weight matrix, the tests are shown to be consistent and to have good local power. Specific implementations involving matrices of bin and kernel weights are discussed. Finite sample properties are explored in simulations and an application to some parametric models of gasoline demand is presented.

Ellison, Sara Fisher

TI A Simple Framework for Nonparametric Specification Testing. AU Ellison, Glenn; Ellison, Sara Fisher.

Emch, Eric R.

TI The Welfare Losses from Price Matching Policies. AU Edlin, Aaron S.; Emch, Eric R.

Engel, Charles

TI How will the Euro Affect the US and Europe? AU Devereux, Michael B.; Engel, Charles.

TI Fixed vs. Floating Exchange Rates: How Price Setting Affects the Optimal Choice of Exchange-Rate Regime. AU Devereux, Michael B.; Engel, Charles.

TI The Optimal Choice of Exchange-Rate Regimes Price-Setting Rules and Internationalized Production.

AU Devereux, Michael B.; Engel, Charles.

Engel, Eduardo

PD February 1999. TI Poisoned Grapes, Mad Cow, and Protectionism. AA Stanford University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6959; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 24. PR \$5.00. JE F13, F14, F15, Q17. KW Protectionist Measures.

AB This paper studies two episodes where an exporting industry saw its sales plummet after importing countries banned their products to protect their citizens' health. The first case is the poisoned grapes crisis involving Chile and the United States in 1989. The second is the mad cows dispute between the United Kingdom and the European Union in 1996. These case studies motivate a new definition of "protectionist measure" which is applied to argue the European Union's ban on British beef exports did not constitute a protectionist measure, while the US ban on Chilean fruit possibly classifies as such a measure.

PD May 1999. TI Toll Competition Among Congested Roads. AU Engel, Eduardo; Fischer, Ronald D.; Galetovic, Alexander. AA Engel: University of Chile and National Bureau of Economic Research. Fischer and Galetovic: University of Chile. SR National Bureau of Economic Research Technical Paper: 239; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR \$5.00. JE R41, R48. KW Congestion Externality. Toll-Road Competition.

AB A growing number of roads are currently financed by the private sector via Build-Operate-and-Transfer (BOT) schemes. When the franchised road has no close substitute, the government must regulate tolls. Yet when there are many ways of getting from one point to another, regulation may be avoided by allowing competition between several franchise owners. This paper studies toll competition among private roads with congestion. The paper derives two main results. First, we find sufficient conditions for the existence of an equilibrium in pure strategies with strictly positive tolls. Equilibrium congestion is less than optimal, which runs counter to what is expected from price competition. While a lower toll reduces the out-of-pocket cost paid by a user, it increases the congestion cost thereby reducing the drivers' willingness to pay for using the road. Franchise holders partially internalize congestion costs when setting tolls, which softens price competition. Second, when demand and the number of roads increase at the same rate, tolls converge to the socially optimal level -- that is, in the limit equilibrium tolls are just enough to make each driver internalize the congestion externality.

Enoch, Charles

PD March 2000. TI Interventions in Banks During Banking Crises: The Experience of Indonesia. AA International Monetary Fund. SR International Monetary Fund Policy Discussion Paper: PDP/00/02; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. PG 29. PR not available. JE G21, G33, G34, N25. KW Banks. Banking Crisis. Indonesia.

AB Interventions in banks are often an integral element of a government's program for addressing a systemic banking crisis.

Interventions may be warranted because the banks are deeply insolvent or riddled with fraud; they may be requiring substantial liquidity support. In some circumstances closures may be more effective than open bank resolution. There were four major sets of bank closures in Indonesia between November 1997 and March 1999. The initial closures were subject to criticism, but the more recent ones were viewed more positively. This paper looks at these experiences, and draws conclusions about closing banks in a systemic crisis.

Enste, Dominik

TI Shadow Economies Around the World: Size, Causes and Consequences. AU Schneider, Friedrich; Enste, Dominik.

Esquivel, Gerardo

PD August 1998. TI The External Debt Problem in Central America: Honduras, Nicaragua, and the HIPC Initiative. AU Esquivel, Gerardo; Larrain B., Felipe; Sachs, Jeffrey D. AA Esquivel: HIID. Larrain B.: Harvard University and HIID. Sachs: Harvard University, HIID, and CID. SR Harvard Institute for International Development Discussion Paper: 645; Harvard Institute for International Development, 14 Story Street, Cambridge, MA 02138. Website: www.hiid.harvard.edu/pub/ddps.html. PG 29. PR \$7.50 for papers up to 80 pages long; \$12.00 for papers 80 pages and longer. JE E66, F41, F43, H63. KW External Debt. Debt Relief. HIPC Initiative. Central America. Honduras. Nicaragua.

AB This paper reviews the foreign debt burden in Central America with special emphasis on Honduras and Nicaragua, which have a large debt overhang. Several indicators suggest that this foreign debt seriously impedes economic growth in both nations. Honduras and Nicaragua, the poorest countries of Central America, have lagged behind the rest of the region in growth, resulting in an increase in regional income inequality during the 1990s. Analysis suggests that Honduras and Nicaragua require alleviation of their foreign debt as a prerequisite to sustained growth. This paper also evaluates the prospects of these countries to qualify for the new initiative aimed at reducing the debt burden of the highly indebted poor countries (the so-called HIPC Initiative). It concludes that Honduras and Nicaragua have favorable prospects of qualifying for the HIPC Initiative. In general, both countries meet the eligibility criteria. Honduras and Nicaragua face a higher foreign debt burden than three countries that have already qualified of HIPC treatment. The main obstacle, however, is demonstrating successful macroeconomic performance under the supervision of the IMF. The paper ends with a discussion of the strategy that these countries should follow in order to achieve maximum debt relief.

TI Export Processing Zones in Central America. AU Jenkins, Mauricio; Esquivel, Gerardo; Larrain B., Felipe.

Fafchamps, Marcel

PD April 2000. TI Risk-Sharing Networks in Rural Philippines. AU Fafchamps, Marcel; Lund, Susan. AA Fafchamps: University of Oxford. Lund: McKinsey & Company. SR Oxford Department of Economics Discussion Paper: 10; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. PG 54. PR no charge. JE O12, Q12. KW Risk Sharing. Informal Credit. Insurance. Gifts. Consumption Smoothing.

AB Using detailed data on gifts, loans, and asset sales, this paper investigates how rural Filipino households deal with income and expenditure shocks. We find that shocks have a strong effect on gifts and informal loans, but little effect on sales of livestock and grain. Mutual insurance does not appear to take place at the village level; rather, households receive help primarily through networks of friends and relatives. Certain shocks are better insured than others. The evidence is consistent with models of quasi-credit where risk is shared within tightly knit networks through flexible, zero interest informal loans combined with pure transfers.

PD July 2000. **TI** Social Roles, Human Capital, and the Intrahousehold Division of Labor: Evidence from Pakistan. **AU** Fafchamps, Marcel; Quisumbing, Agnes R. **AA** Fafchamps: University of Oxford. Quisumbing: International Food Policy Research Institute. **SR** Oxford Department of Economics Discussion Paper: 11; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. **PG** 56. **PR** no charge. **JE** J22, O15. **KW** Economics of the Family. Social Norms. Labor.

AB Using detailed data from rural Pakistan, this paper investigates whether human capital, learning by doing, gender, and one's status within the family -- henceforth family status -- affect the division of labor within households. Results suggest the presence of returns to individual specialization in all farm, non-farm, and home based activities. The intrahousehold division of labor is influenced by comparative advantage based on human capital and by long-lasting returns to learning by doing, but we also find evidence of a separate effect of gender and family status. Households seem to operate as hierarchies with sexually segregated spheres of activity. The head of household and his or her spouse provide most of the labor within their respective spheres of influence; other members work less. When present in the household, daughters-in-law work systematically harder than daughters of comparable age, build, and education. Other findings of interest are that there are increasing returns to scale in most household chores, that larger households work more off farm, and that better educated individuals enjoy more leisure.

TI Insurance Market Efficiency and Crop Choices in Pakistan. **AU** Kurosaki, Takashi; Fafchamps, Marcel.

Farrell, Deirdre

PD February 1998. **TI** Learning From Experiments: An Evaluation Plan for CMAQ Projects. **AU** Farrell, Deirdre; Harrington, Winston; Krupnick, Alan J. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/18; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 28. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** Q25, R41. **KW** Project Evaluation. Transportation and Environment.

AB The purpose of this paper is to outline a strategy of analysis and data collection that will facilitate evaluation of Congestion Mitigation/Air Quality Program (CMAQ) projects. This paper argues that the lack of emphasis on project evaluation can be explained by the public goods nature of information. Because local implementing agencies bear the costs of evaluation, while the benefits are enjoyed primarily by other jurisdictions in planning their transportation and

environment projects, too little evaluation is conducted. This paper examines the kinds of data collected now in CMAQ programs in comparison with the kinds of data that would permit more effective program evaluation, particularly ex post evaluation, i.e., analysis of what actually resulted from the implementation of the individual project. In many cases, data-gathering should concentrate on observable outcomes that can clearly be attributed to the project and yet bear some relationship to air quality or congestion, either established by previous empirical study or by model results. A method is proposed for collecting the requisite data for each of several important types of CMAQ projects. The biggest change may be the need to develop measures of "success" and identify "control cases" against which to judge the success of the experiment.

Farrell, Joseph

PD June 2000. **TI** Innovation, Rent Extraction, and Integration in Systems Markets. **AU** Farrell, Joseph; Katz, Michael L. **AA** UC Berkeley. **SR** University of California, Berkeley, Department of Economics Working Paper: E00/286; UC, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. **PG** 27. **PR** \$3.50 U.S., \$7.00 International. **JE** L41, L11, L12, L13. **KW** Innovation. Systems Markets.

AB We consider innovation incentives in markets where final goods comprise two strictly complementary components, one of which monopolized. We focus on the case in which the complementary component is competitively supplied, and in which innovation is important. We explore ways in which the monopoly may have incentives to confiscate efficiency rents in the competitive sector, thus weakening or destroying incentives for independent innovation. We discuss how these problems are affected if the monopolist integrates into competitive sector.

Farrelly, Matthew C.

TI Do Higher Cigarette Prices Encourage Youth to Use Marijuana? **AU** Chaloupka, Frank J.; Pacula, Rosalie L. **AA** Farrelly, Matthew C.; Johnston, Lloyd D.; O'Malley, Patrick M.; Bray, Jeremy W.

TI Do Higher Cigarette Prices Encourage Youth to Use Marijuana? **AU** Chaloupka, Frank J.; Pacula, Rosalie L. **AA** Farrelly, Matthew C.; Johnston, Lloyd D.; O'Malley, Patrick M.; Bray, Jeremy W.

PD February 1999. **TI** The Effects of Prices and Policies on the Demand for Marijuana: Evidence from the National Household Surveys on Drug Abuse. **AU** Farrelly, Matthew C.; Bray, Jeremy W.; Zarkin, Gary A.; Wendling, Brett W.; Pacula, Rosalie L. **AA** Farrelly, Bray, Zarkin, and Wendling: Research Triangle Institute. Pacula: RAND and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6940; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 15. **PR** \$5.00. **JE** I12, I18. **KW** Marijuana. Tobacco use. Cigarettes. Young Adults.

AB Recent studies have shown that efforts to curb alcohol use by increasing the price of alcohol and limiting youth's access have succeeded, but they may have had the unintended consequence of increasing marijuana use. This possibility is troubling in light of a recent government report that shows that marijuana use among teens more than doubled between 1990

and 1997. What impact will the proposed large increase in cigarette prices have on the demand for other substances such as marijuana? To better understand how the demand for marijuana responds to changes in the policies and prices that affect its use, we explore the National Household Survey on Drug Abuse (NHSDA). Overall, we find that marijuana, alcohol, and tobacco are complements, so that increasing the price of any one will decrease the demand for marijuana. The results of this paper will help guide the creation of comprehensive policies that curb the use of marijuana in two ways: first, they quantify the effects of policies aimed at curbing the use of each substance, allowing policymakers to evaluate alternate policy options; and second, they clarify the dynamics and interactions between alcohol, tobacco, and marijuana use in response to government policies.

Fatas, Antonio

PD 1999. **TI** Government Size and Automatic Stabilizers: International and Intranational Evidence. **AU** Fatas, Antonio; Mihov, Ilian. **AA** INSEAD. **SR** INSEAD Working Paper: 99/50/EPS; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. **Website:** www.insead.fr/research. **PG** 25. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** E63, F41. **KW** Stabilization Policy. Automatic Stabilizers. Output Volatility. **AB** This paper studies the role of automatic stabilizers using a sample of OECD countries and US states. We find that there is a strong and robust negative correlation between measures of government size and the volatility of output. This correlation is robust to the inclusion of a large set of controls as well as to alternative methods of de-trending and estimation. The economic significance of this relationship is larger for the US states.

Favard, Pascal

PD August 1999. **TI** How Many Cake-Eaters? Chouette, on a du monde a diner! **AU** Favard, Pascal; Karp, Larry. **AA** Favard: LEERNA and Universite de Toulouse. Karp: University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 895; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. **Website:** agecon.lib.umn.edu/ucb.html. **PG** 31. **PR** \$7.75 Domestic; \$15.50 International Surface Rate. **JE** F22, J21, J61, Q30, R23. **KW** Migration. Nonrenewable Resources. Labor Mobility. Labor Supply. Population. **AB** We use a cake-eating model with a non-renewable resource and a backstop technology to describe the effect of migration of poor workers into a rich country with surplus labor. Migrants receive a large transfer from natives. If future migration is anticipated, natives' flow of utility increases discontinuously at the time of migration. Migration at time 0 may cause the initial flow of natives' utility to be higher. However, the present discounted value of the stream of per capita utility falls. Thus, when migration occurs, it may benefit the current generation of natives, although it harms other generations.

Feinstein, Leon

PD February 2000. **TI** The Relative Economic Importance of Academic, Psychological and Behavioural Attributes Developed in Childhood. **AA** University of Sussex and London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 443; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. **Website:** cep.lse.ac.uk. **PG** 29. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** I21, J13, J24, J31. **KW** Human Capital. Wages. Unemployment. Education. **AB** This paper makes use of the substantial information about the psychological and behavioral development of children by age ten in the 1970 Cohort to predict later, economic outcomes, namely qualifications, employment and earnings. It is found that this previously unobserved individual heterogeneity has very substantial implications for the labor market. The returns to education are not significantly reduced by this omission bias but there is evidence of substantial returns to the production of non-academic ability. The paper also finds that different age ten abilities and attributes have implications for different adult outcomes so that human capital production should not be considered by economists as a simple one-dimensional process. Age ten conduct disorder predicts male adult unemployment particularly well but it is self-esteem that predicts male earnings. For women the locus of control variable is particularly important. Finally, whereas age ten maths ability is a good predictor of subsequent educational development for children from high SES families, reading is the stronger predictor for children from low SES groups. The implications of these results for education are developed.

Felderer, Bernhard

PD April 1999. **TI** Efficiency and Economies of Scale in Academic Knowledge Production. **AU** Felderer, Bernhard; Obersteiner, Michael. **AA** Institute for Advanced Studies. **SR** Institute for Advanced Studies (IHS) Economics Series Working Paper: 63; Institute for Advanced Studies, Stumpergasse 56, A-1060 Vienna, Austria. **Website:** www.ihs.ac.at/Library/libhome.html. **PG** 20. **PR** ATS 80.00 Individuals; ATS 250.00 Institutions. **JE** A22, A23. **KW** Academic Research. Education. Knowledge Production. Efficiency. Endogenous Growth. **AB** This paper investigates the properties of knowledge production in academic research using a panel of 17 OECD countries reaching from 1989 to 1996. The production process is modelled using capital and labor as inputs and the number of published international journal articles and/or the number of graduates as outputs. First, we test for the existence of economies of scale in academic research. Our results give indication for decreasing returns to scale in the production of new academic knowledge. This empirical result might contribute to the recent controversy on the properties of the innovation technology used in endogenous growth models. Second, we determine efficiency scores for each individual country. For the estimation of efficiencies we apply parametric and non-parametric methods. Although results differ slightly with the method used, a stable efficiency ranking is found.

Feldstein, Martin

PD January 1999. **TI** Prefunding Medicare. **AA** National Bureau of Economic Research. **SR** National

Bureau of Economic Research Working Paper: 6917; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 11. PR \$5.00. JE H51, I11, I18. KW Medicare. Financing Health-Care.

AB The Medicare program of health care for the aged now costs more than \$5,000 per enrollee, a national cost of more than \$200 billion a year. The official projections that these costs will rise rapidly from 2.5% of GDP now to 5.5% of GDP in 2030 and 7% of GDP in 2070 assume that structural changes in health care will prevent the even more rapid growth of spending that would occur if past trends continue. If Medicare costs continue to be tax financed, the sharp increase in Medicare costs would cause a substantial increase in the deadweight loss of the tax system. This paper analyzes an alternative life cycle approach to paying for the cost of health care of the aged: a system of investment-based individual Retiree Health Accounts (RHAs) to which the government deposits funds during individuals' working years. At retirement the individual could use the accumulated fund to purchase a fee-for-service plan like the current Medicare package, to pay for membership in an HMO, or to establish a medical savings account with a high deductible insurance policy.

PD February 1999. **TI** Public Policies and Private Saving in Mexico. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6930; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG not available. PR \$5.00. JE H02, O16. KW Saving Rate. Mexico.

AB Increasing the rate of saving is an important priority for many emerging market countries. This paper focuses on Mexico and discusses a variety of policies through which the government of Mexico could stimulate a higher rate of saving. These ideas are building blocks rather than an overall plan. Some are mutually exclusive but most are options that could be combined to achieve a higher rate of saving. Although the emphasis is on policy options that can be helpful in raising saving, the paper also discusses proposals that would be likely to reduce the rate of saving. The primary focus of the paper is on tax reforms, but there is also a discussion of financial regulation, government debt management, and the new system of retirement saving accounts.

Feliciano, Zadia

PD February 1999. **TI** Foreign Ownership and Wages in the United States, 1987-1992. **AU** Feliciano, Zadia; Lipsey, Robert E. **AA** Feliciano: Queens College and National Bureau of Economic Research. Lipsey: National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6923; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 15. PR \$5.00. JE F23, J31. KW Foreign Ownership. Wage Differentials.

AB Foreign-owned establishments in the United States pay higher wages, on average, than domestically-owned establishments. Much of the difference is related to industry composition, but there are also differences within industries within states, 5-7 percent in manufacturing and 9-10 percent in other industries. Within manufacturing, the difference can all be related to establishment, state, and industry characteristics, but in other industries, a substantial difference in average wages in favor of foreign establishments remains even when these other

determinants of wages are taken into account. Within manufacturing, the extent of foreign ownership in an industry in a state had no impact on wages in 1987 when these other factors were taken into account, but it was associated with higher wages in 1992. Outside of manufacturing, higher foreign ownership was associated with higher wages in both years, and in 1992, even with higher-wages in domestically-owned establishments. Outside of manufacturing, larger increases in foreign ownership in an industry in a state between 1987 and 1992 were associated with larger increases in average wages. The wage effect was confined to the foreign-owned establishments themselves.

Felstead, Alan

TI Computers Are Even More Important Than You Thought: An Analysis of The Changing Skill-Intensity of Jobs. **AU** Green, Francis; Felstead, Alan; Gallie, Duncan.

Fernandes, Ana

PD March 1999. **TI** A Recursive Formulation for Repeated Agency with History Dependence. **AU** Fernandes, Ana; Phelan, Christopher. **AA** Fernandes: University of Chicago. Phelan: Federal Reserve Bank of Minneapolis and Northwestern University. **SR** Federal Reserve Bank of Minneapolis Staff Report: 259; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 55488-0291. Website: <http://woodrow.mpls.frb.fed.us>. PG 28. PR no charge. JE D31, D82. KW Incentives. Repeated Agency.

AB There is now an extensive literature regarding the efficient design of incentive mechanisms in dynamic environments. In this literature, there are no exogenous links across time periods because either privately observed shocks are assumed time independent or past private actions have no influence on the realizations of current variables. The absence of exogenous links across time periods ensures that preferences over continuation contracts are common knowledge, making the definition of incentive compatible contracts at a point in time a simple matter. In this paper, we present general recursive methods to handle environments where privately observed variables are linked over time. We show that incentive compatible contracts are implemented recursively with a threat keeping constraint in addition to the usual temporary incentive compatibility conditions.

Fernandez, Enric

PD January 2000. **TI** The Role of Human Capital in Economic Growth: The Case of Spain. **AU** Fernandez, Enric; Mauro, Paolo. **AA** Fernandez: University of Chicago. Mauro: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/08; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 20. PR not available. JE I29, O47. KW Human Capital. Economic Growth. Spain.

AB This study constructs an index of human capital for the Spanish labor force over the past two decades and projects it over the next decade on the basis of likely demographic developments. The methodology considers both educational attainments resulting from formal schooling and improvements in workers' productivity resulting from experience, or "learning by doing." Furthermore, it allows for the fact that people with higher education accumulate human capital through learning by

doing at a faster pace than less educated workers or, in other words, that the full returns to formal schooling are realized with a lag of many years. Using this index, a growth accounting exercise is conducted to estimate the impact of human capital accumulation on economic growth over the past two decades. Finally, potential output growth is projected over the next few years, taking into account the impact of human capital accumulation.

Ferrier, Gary

TI Mutual Funds and Institutional Investments: What is the Most Efficient Way to Set Up Individual Accounts in a Social Security System? **AU** James, Estelle; Ferrier, Gary; Smallhout, James; Vittas, Dimitri.

Fershtman, Chaim

PD March 2000. **TI** Discrimination in a Segmented Society: An Experimental Approach. **AU** Fershtman, Chaim; Gneezy, Uri. **AA** Fershtman: Tel-Aviv University. Gneezy: The Technion, Haifa. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/09; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 35. **PR** no charge. **JE** C72, C92, D63, J19, J71. **KW** Discrimination. Trust. Experimental Games.

AB This paper proposes an experimental approach to studying different aspects of discrimination. When strategic choices depend upon this ethnic affiliation, we gain direct evidence of ethnic discrimination. There are two major Jewish ethnic groups in Israel, Ashkenazic-Jews and Eastern Jews. We found a systematic pattern of mistrust towards men of Eastern origin in a "trust game". Discrimination in the trust game may be the result of a "taste for discrimination" or of ethnic stereotypes. Using the "Dictator Game" we concluded that the discrimination in the trust game is due to (mistaken) ethnic stereotypes. Using the "ultimatum game", the direction of the discrimination was reversed and players of Eastern origin got larger transfers than players of Ashkenazic-origin. One of the surprising results is that this ethnic discrimination is an entirely male phenomenon. Women did not discriminate between other groups and were not discriminated against in relation to their ethnic background.

PD February 1999. **TI** A Dynamic Oligopoly with Collusion and Price Wars. **AU** Fershtman, Chaim; Pakes, Ariel. **AA** Fershtman: Tel Aviv University. Pakes: Yale University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6936; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 36. **PR** \$5.00. **JE** C72, C73, D43, L04. **KW** Entry. Exit. Collusion. Price Wars.

AB This paper examines collusion and price wars in a dynamic environment (that is with investment, firm entry and exit) with heterogeneity among firms. It is a symmetric information model in which it is hard to sustain collusion when either one of the firms does not keep up with the advances of its competitors, or a "low quality" entrant enters. In either case there will be an active firm that is quite likely to exit after it deviates, but if one of the competitors is near an exit state the other incumbent(s) has an incentive to price predatorily (that is to deviate themselves). We use numerical analysis to compare an institutional structure that allows for collusion to one which

does not (perhaps because of an active antitrust authority). Price paths clearly differ in the two environments; in particular only the collusive industry generates price wars. The collusive industry offers both more and higher quality products to consumers, albeit often at a higher price. The positive effect of collusion on the variety and quality of products marketed more than compensates consumers for the negative effect of collusive prices, so that consumer surplus is larger in the collusive environment.

Filson, Darren

TI Knowledge Diffusion Through Employee Mobility. **AU** Franco, April Mitchell; Filson, Darren.

Fischer, Carolyn

PD March 1998. **TI** Once-and-for-All Costs and Exhaustible Resource Markets. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/25; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 14. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** C62, Q03. **KW** Natural Resources. Setup Costs. Shutdown Costs. Nonconvexities. Competitive Equilibrium.

AB This paper analyzes the impact on exhaustible resource markets of setup or shutdown costs, a sparsely analyzed category of nonconvex production technologies. This paper proves that, even under idealized circumstances for competition, a competitive equilibrium will fail to exist in the presence of setup costs, for any utility and cost functions such that a planner would exploit exhaustible resource pools sequentially.

Fischer, Ronald D.

PD February 1999. **TI** Contingent Protection as Better Insurance. **AU** Fischer, Ronald D.; Prusa, Thomas J. **AA** Fischer: U. de Chile. Prusa: Rutgers University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6933; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 13. **PR** \$5.00. **JE** D81, F13. **KW** Import Competition. Insurance. GATT.

AB We formalize the notion that GATT exceptions such as antidumping and escape clause actions can act as insurance for import competing sectors affected by adverse price shocks. We use a general equilibrium model with several import competing sectors and assume incomplete markets so that agents cannot contract insurance. We show that these measures are superior to uniform tariffs as insurance mechanisms. Moreover, we demonstrate that the optimal uniform policy may not involve a tariff at all, but rather might entail an export tax. We also show that a tax cum subsidy policy (i.e., taxing all sectors in order to subsidize the shocked sector) improves welfare.

TI Toll Competition Among Congested Roads. **AU** Engel, Eduardo; Fischer, Ronald D.; Galetovic, Alexander.

Fischer, Stanley

PD February 2000. **TI** The Transition Economies After Ten Years. **AU** Fischer, Stanley; Sahay, Ratna. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/30; International

Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 22. PR not available. JE P21, P27, P39. KW Transition Economies. Structural Reform. Reform Strategies. Stabilisation Policies.

AB This paper summarizes the macroeconomic performance of the transition economies. We first review the initial conditions confronting these economies, the reform strategy that was proposed, and the associated controversies that arose a decade ago. We then account for the widely different outcomes, highlighting the role of exogenous factors and the macroeconomic and structural policies adopted by the countries. We find that both stabilization policies and structural reforms, particularly privatization, contribute to growth. We also conclude that the faster is the speed of reforms, the quicker is the recovery and the higher is growth.

PD May 1998. TI Africa: Is This the Turning Point? AU Fischer, Stanley; Hernandez-Cata, Ernesto; Khan, Mohsin S. AA International Monetary Fund. SR International Monetary Fund Papers on Policy Analysis and Assessment: PPAA/98/06; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. PG 19. PR not available. JE F43, O40, O55. KW Africa. Growth. Structural Reforms.

AB There has been a distinct improvement in economic performance in Sub-Saharan Africa (SSA) in recent years, resulting mainly from improved policies in many countries in the region. The basic question now is whether these developments are temporary or whether they augur a fundamental change in the economic fortunes of SSA. This paper argues that SSA is indeed at a turning point, because the external environment has changed. To meet the challenges of globalization and sustain the recent growth momentum, the countries in SSA will need to combine policies aimed at macroeconomic stability with enduring structural reforms to encourage private investment.

Fisher, Anthony C.

TI Price and Non-Price Influences on Water Conservation: An Econometric Model of Aggregate Demand Under Nonlinear Budget Constraint. AU Corral, Leonardo; Fisher, Anthony C.; Hatch, Nile W.

Floud, Roderick

PD November 1998. TI Height, Weight and Body Mass of the British Population Since 1820. AA London Guildhall University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 108; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR \$5.00. JE O47. KW Population Height. Population Weight. Growth.

AB The average height of a population has become a familiar measure of that population's nutritional status. This paper extends the use of anthropometric data in the study of history by exploring published evidence on the weight, as well as the height, of British populations in the nineteenth and twentieth centuries and by computing the Body Mass Index of those populations. The results confirm a fall in mean height in the middle of the nineteenth century and show that this was paralleled by a fall in weight. Subsequent increases in weight and BMI lagged behind those in height. The data show no evidence of inequalities in nutritional status within families.

Earlier findings of a period of declining height in the mid-nineteenth century have been attacked because of an apparent inconsistency with real wage data. The evidence for decline is now confirmed by further anthropometric and mortality data, while recent research into real wages has confirmed that a check to growth occurred and has thus removed the apparent inconsistency.

Fortin, Ines

PD February 1999. TI Optimal Bandwidth Selection in Non-Parametric Spectral Density Estimation. AU Fortin, Ines; Kuzmics, Christoph. AA Institute for Advanced Studies. SR Institute for Advanced Studies (IHS) Economics Series Working Paper: 62; Institute for Advanced Studies, Stumpergasse 56, A-1060 Vienna, Austria. Website: www.ihs.ac.at/Library/libhome.html. PG 39. PR ATS 80.00 Individuals; ATS 250.00 Institutions. JE C14, C15, C22. KW Window Width. Bandwidth. Non-Parametric. Spectral Estimation. Simulation.

AB This paper deals with optimal window width choice in non-parametric lag or spectral window estimation of the spectral density of a stationary zero-mean process. Several approaches are reviewed: the cross-validation based methods described by Hurvich (1985), Beltrao & Bloomfield (1987) and Hurvich & Beltrao (1990), an iterative procedure due to Buehlmann (1996), and a bootstrap approach followed by Franke & Haerdle (1992). These methods are compared in terms of the mean square error, the mean square percentage error, and a third measure of distance between the true spectral density and its estimate. The comparison is based on a small simulation study. The processes that are simulated are in the class of ARMA (5,5) processes. Based on the simulation evidence, we suggest the use of a slightly modified version of Buehlmann's (1996) iterative method.

Fouquin, Michel

PD October 1998. TI Le marche du travail britannique vu de France. AU Fouquin, Michel; Jean, Sebastien; Sztulman, Aude. AA Fouquin and Jean: CEPII. Sztulman: Universite de Paris X Dauphine. SR CEPII Working Paper: 98/11; Centre d'Etudes Prospectives et d'Informations Internationales (CEPII), 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. PG 56. PR no charge. JE I32, J02, J31. KW Job Creation. Employment. Wage Inequality. Income Inequality. Labor Cost. Labor Market.

AB This study puts forward a detailed, quantitative, long-term analysis of the workings of the British labor market, using France as a point of comparison. Special attention is paid to gathering data making it possible to compare, between the two countries, the sectoral breakdown of salaried employment and the sectoral structure of labor cost. Altogether, the functioning of the British labor market appears to be very paradoxical. Radical reforms have indeed been at the origin of a certain capacity to adapt, notably in terms of overall manning levels and relative wages. But the market remains "rigid" in many respects, with wage inflation still buoyant and only little sensitive to the level of unemployment, with the persistent domination of traditional forms of employment and micro-economic labor mobility by workers still relatively weak. These characteristics result especially from the dual nature of the British labor market. This paper is written in French.

Franco, April Mitchell

PD July 2000. **TI** Knowledge Diffusion Through Employee Mobility. **AU** Franco, April Mitchell; Filson, Darren. **AA** Franco: University of Iowa and Federal Reserve Bank of Minneapolis. Filson: Claremont Graduate University. **SR** Federal Reserve Bank of Minneapolis Staff Report: 272; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 55480-0291. Website: <http://woodrow.mpls.frb.fed.us>. **PG** 45. **PR** no charge. **JE** J24, L11, L63, O31. **KW** Innovation. Diffusion. Industry Dynamics. Spinout. Technological Change. Rigid Disk Drive.

AB In high-tech industries, one important method of diffusion is through employee mobility: employees from incumbent firms using some of their former employers' technological know-how start many of the entering firms. This paper explores the effect of incorporating this mechanism in a general industry framework by allowing employees to imitate their employers' know-how. The equilibrium is Pareto optimal since the employees "pay" for the possibility of learning their employers' know-how. The model's implications are consistent with data from the rigid disk drive industry. These implications concern the effects of know-how on firm formation and survival.

Frank, Richard G.

PD March 1999. **TI** Economics and Mental Health. **AU** Frank, Richard G.; McGuire, Thomas G. **AA** Frank: Harvard Medical School and National Bureau of Economic Research. McGuire: Boston University. **SR** National Bureau of Economic Research Working Paper: 7052; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 79. **PR** \$5.00. **JE** I11, I12, I18. **KW** Mental Health. Adverse Selection. Moral Hazard.

AB This paper is concerned with the economics of mental health. We argue that mental health economics is like health economics only more so: uncertainty and variation in treatments are greater; the assumption of patient self-interested behavior is more dubious; response to financial incentives such as insurance is exacerbated; the social consequences and external costs of illness are formidable. We elaborate on these statements and consider their implications throughout the paper. "Special characteristics" of mental illness and persons with mental illness are identified and related to observations on institutions paying for and providing mental health services. We show that adverse selection and moral hazard appear to hit mental health markets with special force. We discuss the emergence of new institutions within managed care that address long-standing problems in the sector. Finally, we trace the shifting role of government in this sector of the health economy.

Frankl, Paolo

PD July 1998. **TI** Application Patterns of Life Cycle Assessment in German, Italian, Swedish and Swiss Companies. Comparative Results and Conclusions. **AU** Frankl, Paolo; Rubik, Frieder. **AA** Frankl: CMER and INSEAD. Rubik: Institut für Ökologische Wirtschaftsforschung. **SR** INSEAD Working Paper: 98/92/EPS; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 58. **PR** no charge up to five copies; after five copies 18FF per

working paper plus postage and VAT. **JE** Q20, Q32. **KW** Environmental Innovation. Life-Cycle Assessment.

AB The paper reports the results of a survey about the use of LCA in business in four selected European Countries, namely Germany, Italy, Sweden and Switzerland. 1600 questionnaires have been sent out to selected companies in the four countries. As expected, there are big differences between countries because of a different level of environmental awareness. However, there are some main common results. The first one is that the cultural approach is spreading out, but not yet the tool. LCA is by far not used yet as a routine tool for assessing environmental aspects of product innovation and it is still rather employed in a retrospective way than in a prospective one. Benefits of LCA are considered to be rather long-term ones. On the other hand, the large majority of firms are optimistic about the future use of LCA, most likely linked together with other instruments.

PD April 1999. **TI** A Success-Story of Life Cycle Assessment (LCA) Integration in Business Decision Making -- The Case of Fiat Auto. **AA** INSEAD. **SR** INSEAD Working Paper: 99/47/EPS; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 36. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** L62, M11, M21. **KW** Fiat Auto. Life Cycle Assessment.

AB The paper reports the results of a case-study about the application of Life Cycle Assessment (LCA) at Fiat Auto. The paper firstly reports the results and implications of a specific LCA-study carried out in the company, i.e. on the comparison of a conventional engine block in cast iron with a possible alternative block in aluminum. Furthermore, it describes the history of LCA introduction and use at Fiat Auto and examines its role in the decision-making context of the company. Fiat Auto certainly is the firm with the widest experience of use and application of LCA in Italy. The interest of the company in LCA is very strong. As a core tool for the wider concept of Life-Cycle Management, LCA is explicitly included in the long-term strategic framework program called "Project 21", which defines the environmental policy at Fiat Auto. Moreover, there is a clear commitment to further expand the use of and to integrate it as a routine tool into decision-making processes.

Frecaut, Olivier

PD August 1998. **TI** Systemic Banking Distress: The Need for an Enhanced Monetary Survey. **AU** Frecaut, Olivier; Sidgwick, Eric. **AA** International Monetary Fund. **SR** International Monetary Fund Papers on Policy Analysis and Assessment: PPAA/98/09; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. **PG** 20. **PR** not available. **JE** E41, E42, E51, E52. **KW** Financial Program. Monetary Survey. Distressed Banking System.

AB This paper suggests that, in cases of severe banking distress, reliance on the standard monetary survey may be misleading because the classification of monetary aggregates results in an overestimation of both credit to the economy and the availability of deposits. Therefore, whenever feasible, adjustments should be made to help overcome these shortcomings and enhance the operational value of the monetary survey. Such an enhanced monetary survey can also be used to compute standardized indicators of systemic banking distress. The analysis builds on the authors' experience with

Mongolia, and is illustrated with quarterly data for that country.

Freeman, Richard B.

PD February 1999. **TI** Why Not Africa? **AU** Freeman, Richard B.; Lindauer, David L. **AA** Freeman: National Bureau of Economic Research. Lindauer: Wellesley College. **SR** National Bureau of Economic Research Working Paper: 6942; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** \$5.00. **JE** O11, O55. **KW** Sub-Saharan Africa. Economic Decline. Growth.

AB Various arguments have been used to explain Sub-Saharan Africa's economic decline. We find that a stress on investments in education as a prerequisite for more rapid growth is misplaced; that greater openness is far sufficient to insure economic progress; that income inequality and urban bias are not so extreme as to foreclose prospects for more rapid growth and poverty alleviation; and that the constraints imposed by Sub-Saharan Africa's human and physical geography are not core explanations for the regions poor performance. If African countries can establish an institutional environment that enables individuals to gain the rewards of their investments, the alleged barriers to the region's growth should prove surmountable.

Frisbie, W. Parker

TI Intra-Ethnic Diversity in Hispanic Child Mortality, 1890-1910. **AU** Gutmann, Myron P.; Haines, Michael R.; Frisbie, W. Parker; Blanchard, K. Stephen.

TI Intra-Ethnic Diversity in Hispanic Child Mortality, 1890-1910. **AU** Gutmann, Myron P.; Haines, Michael R.; Frisbie, W. Parker; Blanchard, K. Stephen.

Fullenkamp, Connel

TI Ownership of Capital in Monetary Economies and the Inflation Tax on Equity. **AU** Chami, Ralph; Cosimano, Thomas F.; Fullenkamp, Connel.

Fullerton, Don

PD 1998. **TI** How Do Economists Really Think About the Environment. **AU** Fullerton, Don; Stavins, Robert N. **AA** Fullerton: University of Texas at Austin. Stavins: Harvard University and Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/29; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 7. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** H04, L51, Q02. **KW** Market Failure. Economic Analysis. Efficiency. Equity.

AB On a topic like the environment, communication among scholars from different disciplines in the natural and social sciences is both important and difficult, but such communication has been far from perfect. Economists themselves may have contributed to some rather fundamental misunderstandings about how economists think about the environment, perhaps through our enthusiasm for market solutions, perhaps by neglecting to make explicit all of the necessary qualifications, and perhaps simply by the use of jargon that has specific meaning only to other economists. In this brief essay, we seek to clarify some of these misunderstandings and thus to improve future interdisciplinary communication. We hope that natural scientists and other non-

economists will take economic analysis and prescriptions more seriously when they see tempered enthusiasm, explicit qualifications, and better definitions. Our method is to posit a series of prevalent "myths" regarding how economists think about the natural environment. We then explain how each myth might have originated from statements by economists that were meant to summarize a more qualified analysis. In this way, we hope to explain how economists really do think about the natural environment.

PD March 1999. **TI** Can Taxes on Cars and on Gasoline Mimic an Unavailable Tax on Emissions? **AU** Fullerton, Don; West, Sarah. **AA** Fullerton: University of Texas at Austin and National Bureau of Economic Research. West: University of Texas at Austin. **SR** National Bureau of Economic Research Working Paper: 7059; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** D62, H23, Q28. **KW** Abatement. Emissions Control. Emissions Tax Alternatives.

AB A tax on vehicle emissions can efficiently induce all of the cheapest forms of abatement. Consumers could drive less, buy a smaller car with better gas mileage, use cleaner gasoline, and repair pollution control equipment (PCE). However, the technology is not yet available to measure and tax each car's total emissions. We thus investigate alternative instruments. In a single model with identical consumers, we show conditions under which the same efficiency can be attained by the combination of a tax on gas, a tax on engine size, and a subsidy to PCE. In a model with heterogeneous consumers, the same efficiency can again be obtained, but only if each person's gasoline tax rate can be made to depend on the characteristics of the car. We solve for these first-best tax rates. Assuming that tax rates must be uniform across consumers, we then characterize second-best tax rates on gasoline and on characteristics.

Funke, Michael

PD January 2000. **TI** Product Variety and Economic Growth: Empirical Evidence for the OECD Countries. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/05; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 22. **PR** not available. **JE** C23, F41, F43. **KW** Product Variety. Economic Growth. Panel Data. OECD Countries.

AB This paper uses panel data for 19 OECD countries and finds support for the hypothesis that a greater degree of product variety relative to the United States helps to explain relative per capita GDP levels. The empirical work relies upon some direct measures of product variety calculated from 6-digit OECD export and import data. Although the issue is still far from being settled, the emerging conclusion is that the index of relative product variety across countries is significantly correlated with relative per capita income levels.

Gabel, H. Landis

PD January 1999. **TI** The Firm, Its Procedures, and Win-Win Environmental Regulations. **AU** Gabel, H. Landis; Sinclair-Desgagne, Bernard. **AA** Gabel: INSEAD. Sinclair-Desgagne: University of Montreal. **SR** INSEAD Working Paper: 99/05/EPS; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 19. **PR** no charge

up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** L22, L23, L51, M21, Q28, Q38. **KW** Environmental Regulation. Management Systems. Organizational Failure.

AB This paper considers a firm's response to environmental regulation in a context where the internal workings of the firm are explicitly modeled. In this framework the firm is "run" by agents to whom a great deal of autonomy is delegated. Their activities are imperfectly controlled and coordinated by a set of interrelated management systems and a multitude of procedures for operationalizing the principal's objectives. Modeling the firm's internal systems can explain an observation inexplicable in more traditional neoclassical economic terms: that strict environmental regulations might be "win-win", simultaneously reducing the firm's private costs and the external costs it imposes on the environment. The paper starts with an explicit acknowledgement that there are organizational failures within firms. Managers have limited attention spans, information flows imperfectly between managers and employees, and employees work according to their own objectives. These organizational failures are systematic and are in many respects similar to market failures external to firms. The paper then presents a model that elaborates the role of procedures and routines in companies and shows how their existence can explain "win-win" regulations.

Galdon Sanchez, Jose E.

PD September 1999. **TI** *Threats to Industry Survival and Labor Productivity: World Iron-Ore Markets in the 1980's*. **AU** Galdon Sanchez, Jose E.; Schmitz, James A., Jr. **AA** Galdon Sanchez: London School of Economics. Schmitz: Federal Reserve Bank of Minneapolis. **SR** Federal Reserve Bank of Minneapolis Staff Report: 263; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 55488-0291. **Website:** <http://woodrow.mpls.frb.fed.us>. **PG** 28. **PR** no charge. **JE** D24, L71. **KW** Iron Ore. Productivity. Threats to Survival.

AB In the early 1980's, the world steel market collapsed. Since the almost exclusive use of iron-ore is in steel production, many iron-ore mines had to be shut down. But where? We divide the major iron-ore producing countries into groups based on the threat of closure faced by iron-ore mines in the respective country. In countries where mines faced no threat of closure, the iron-ore industry had little or no productivity gain over the decade. In countries where mines faced a large threat of closure, the industry typically had productivity gains ranging from 50 to 100 percent, gains that were unprecedented. We then argue that these productivity increases were not driven by new technology or by selection. Hence, continuing mines, using existing technology, increasing their productivity in order to stay in operation, drove the productivity gains.

Gale, Douglas

PD March 1996. **TI** *Experimentation, Imitation, and Stochastic Stability*. **AU** Gale, Douglas; Rosenthal, Robert W. **AA** Boston University. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 65; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. **Website:** econ.bu.edu/ISP/. **PG** 36. **PR** no charge. **JE** C73, D83, E03. **KW** Cycles. Fluctuations. Bounded Rationality.

Equilibrium.

AB In complex situations, substantive rationality is a very strong assumption; so it is interesting to ask whether boundedly rational agents could learn over time to play an equilibrium strategy. In this paper we model the dynamic interaction of two types of agents, experimenters and imitators, whose behavior is characterized by simple rules of thumb. The agents repeatedly play a one-shot game in which the agents' actions are strategic substitutes. The system is stable in the large: it converges globally and with probability one to a compact neighborhood of the unique and symmetric equilibrium. On the other hand, the equilibrium is unstable in the small: the system leaves a small neighborhood of the equilibrium with probability one in finite time. However, the equilibrium is not too unstable: the probability of the system being in any given neighborhood of the equilibrium at 't' converges to one as 't' approaches infinity. The properties of stability in the large and instability in the small appear to be robust and may be factors in macroeconomic cycles.

Galetovic, Alexander

TI *Toll Competition Among Congested Roads*. **AU** Engel, Eduardo; Fischer, Ronald D.; Galetovic, Alexander.

Gallie, Duncan

TI *Computers Are Even More Important Than You Thought: An Analysis of The Changing Skill-Intensity of Jobs*. **AU** Green, Francis; Felstead, Alan; Gallie, Duncan.

Gallup, John Luke

PD March 1999. **TI** *Geography and Economic Development*. **AU** Gallup, John Luke; Sachs, Jeffrey D.; Mellinger, Andrew. **AA** Gallup and Sachs: Center for International Development at Harvard University, Harvard Institute for International Development and Harvard University. Mellinger: Center for International Development at Harvard University. **SR** Harvard Center for International Development (CID) Working Paper: 1; Center for International Development, John Gallup, Editor, 79 John F. Kennedy Street, Cambridge, MA 02138. **Website:** www.cid.harvard.edu/cidworkingpapers/cid_workingpapers.htm. **PG** 68. **PR** paper copies \$7.50 up to 80 pages long; \$12.00 80 pages long and longer. **JE** O13, O40, O57. **KW** Geography. Empirical Growth. Transportation Costs. Tropical Disease. Tropical Agriculture. Urbanization. Population.

AB This paper addresses the complex relationship between geography and macroeconomic growth. We investigate the ways in which geography may matter directly for growth, controlling for economic policies and institutions, as well as the effects of geography on policy choices and institutions. We find that location and climate have large effects on income levels and income growth, through their effects on transport costs, disease burdens, and agricultural productivity, among other channels. Furthermore, geography seems to be a factor in the choice of economic policy itself. When we identify geographical regions that are not conducive to modern economic growth, we find that many of these regions have high population density and rapid population increase. This is especially true of populations that are located far from the coast, and thus that face large transport costs for international trade, as well as populations in tropical regions of high disease burden. Furthermore, much of the population increase in the

next thirty years is likely to take place in these geographically disadvantaged regions.

Gandal, Neil

PD January 2000. **TI** The Dynamics of Competition in the Internet Search Engine Market. **AA** Tel-Aviv University and CEPR. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/01; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. **Website:** <http://econ.tau.ac.il>. **PG** 17. **PR** no charge. **JE** D43, L86. **KW** Internet. Search Engines. Entry. Empirical Study. **AB** Search engines hold the key to helping consumers access the wealth of information on the web. In this paper I examine the evolution of and competition in the internet search engine market. I find that while early entrants (Yahoo, Lycos, Excite, Infoseek, and Altavista) still have an advantage, this advantage has been declining significantly over time. The success of a wave of recent new entrants suggests that entry barriers are still quite low in the Internet search engine market.

Gargiulo, Martin

PD January 1999. **TI** Informal Networks, Social Control, and Third-Party Cooperation. **AA** INSEAD. **SR** INSEAD Working Paper: 99/04/OB; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. **Website:** www.insead.fr/research. **PG** 15. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M12, M14. **KW** Informal Networks. Team Cooperation. **AB** Network models of social control suggest that informal ties between managers can have an important role in helping these managers to catalyze cooperation in their task environment. By enhancing the managers' ability to coordinate their behavior towards third parties, networks can help them pose concerted demands on such parties, increasing the social pressure to cooperate for reluctant players and reducing behavioral uncertainty for cooperative ones. An analysis of project teams within the Italian subsidiary of a multinational high-technology firm shows that the intensity of communication among the managers coordinating a team increased the probability and the level of cooperation between managers and other team members, as well as between those team members.

Gatignon, Hubert

PD May 1999. **TI** Inter-Channel Competition and New Product Diffusion. **AU** Gatignon, Hubert; Anderson, Erin. **AA** INSEAD. **SR** INSEAD Working Paper: 99/30/MKT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. **Website:** www.insead.fr/research. **PG** 30. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M21, M31, O31. **KW** Diffusion. New Products. Distribution Channels. Retailing. **AB** The literature on the diffusion of new consumer durables tends to overlook the influence of the retailer. A new consumer durable cannot diffuse if prospective adopters cannot find a store/channel in which to purchase it. Yet, most diffusion models appear to assume that retail availability simply happens, and does so in a manner that has little impact on the pattern of diffusion. We propose a model that allows for a simultaneous relationship between a retailer's decision to carry an innovation

and a consumer's decision to adopt the innovation. We also model the effects of inter-type rivalry among retailers on the diffusion of the innovation among consumers and the coverage of the innovation offered by retailers. We estimate the model for the 32-bit video game console category with French data. We find evidence that different types of retailers vary in their influence upon consumers. We also find evidence that consumers are strongly affected by the pattern of diffusion among retailers, but that retailers are little affected by the pattern of diffusion among consumers. This suggests that retailers are properly viewed as market "makers" rather than market "takers."

TI Firm Strategy and Speed of Diffusion. **AU** Kuester, Sabine; Gatignon, Hubert; Robertson, Thomas S.

George, Susan M.

TI Bad Dreams Under Alternative Anchors: Are the Consequences Different? **AU** Auernheimer, Leonardo; George, Susan M.

Germano, Fabrizio

TI On Knots and Dynamics in Games. **AU** DeMichelis, Stefano; Germano, Fabrizio.

Geweke, John

TI Predicting Turning Points. **AU** Chin, Dan; Geweke, John; Miller, Preston J.

Ghosh, Atish

TI The Interest Rate-Exchange Rate Nexus in the Asian Crisis Countries. **AU** Basurto, Gabriela; Ghosh, Atish.

Giannini, Curzio

TI Inflation, Credibility, and the Role of the International Monetary Fund. **AU** Cottarelli, Carlo; Giannini, Curzio.

Gneezy, Uri

TI Discrimination in a Segmented Society: An Experimental Approach. **AU** Fershtman, Chaim; Gneezy, Uri.

Goettler, Ronald

PD May 2000. **TI** An Empirical Analysis of Spatial Competition. **AU** Goettler, Ronald; Shachar, Ron. **AA** Goettler: Carnegie Mellon University. Shachar: Tel-Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/12; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. **Website:** <http://econ.tau.ac.il>. **PG** 50. **PR** no charge. **JE** C51, D12, D43, L11, L13, L82. **KW** Spatial Competition. Discrete Choice. Panel Data. Latent Variables. Consumer Heterogeneity. Maximum Simulated Likelihood. Monte Carlo. Integration. Network Television.

AB We demonstrate the effective use of panel data on consumers' choices to identify (a) the attribute space over which firms compete, (b) product locations on these attributes and (c) the distribution of consumer preferences. The econometric method is applied to analyze competition for viewers in the television industry. We find four latent attributes along which the shows are continuously dispersed. Our model is shown to predict choices better than the more traditional method of categorizing shows a priori. The estimated product

locations reveal that firms use counter-programming (i.e., differentiated products in each time slot) and homogenous programming (i.e., similar products through each night). These strategies are confirmed to be optimal in an equilibrium analysis given our estimated demand. We compute a Nash equilibrium which suggests that firms can improve their weekly ratings by about 10% by increasing both counter-programming and homogeneity. Discrepancies between the actual and optimal strategies reflect the networks' use of two "rules of thumb," and possibly, some form of boundedly rational behavior given the complexity of the strategy space.

Goldman, George E.

TI An Analysis of the Horticultural Economy in California. **AU** Templeton, Scott R.; Brown, Cheryl; Goldman, George E.; Yoo, Seung Jick; Pradhan, Vijay S.

TI An Analysis of the Horticultural Economy in California. **AU** Templeton, Scott R.; Brown, Cheryl; Goldman, George E.; Yoo, Seung Jick; Pradhan, Vijay S.

Goodhue, Rachael E.

TI Do Incentives Matter? Product Quality and Contract Incentives in Processing Tomatoes. **AU** Alexander, Corinne; Goodhue, Rachael E.; Rausser, Gordon C.

Gospel, Howard

PD April 2000. **TI** The Right To Know: Disclosure of Information for Collective Bargaining and Joint Consultation. **AU** Gospel, Howard; Lockwood, Graeme; Willman, Paul. **AA** Gospel: London School of Economics and King's College London. Lockwood: King's College London. Willman: London School of Economics and London Business School. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 453; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 21. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** J53, K31. **KW** Information Disclosure. Collective Bargaining. Joint Consultation. Law.

AB The legal obligation on employers to provide information to employees has grown since the early 1970s, when the emphasis was on disclosure for collective bargaining. In the 1980s and 1990s, the emphasis shifted more to disclosure for joint consultation. Disclosure for collective bargaining is the most developed and potentially significant area of the law from an industrial relations perspective. Disclosure for joint consultation, however, has been the most dynamic area in recent years. Voluntary information provision by firms has also been a significant part of developing human resource management practice. The paper therefore provides a broad examination of the law of disclosure. The UK provisions are conceptualized as constituting an agenda-driven disclosure model; i.e. the trigger for their use lies within the bargaining agenda. By contrast, the provisions stemming from European initiatives are event-driven; i.e. they are triggered by specific employer initiated events that affect employment contracts in other ways irrespective of the representative context. In the final sections, the authors attempt a broader evaluation of the intent and impact of the legislation and assess the pros and cons of the different approaches.

Goulder, Lawrence H.

PD March 1998. **TI** The Cost-Effectiveness of Alternative Instruments for Environmental Protection in a Second-Best Setting. **AU** Goulder, Lawrence H.; Parry, Ian W. H.; Williams, Robert C., III; Burtraw, Dallas. **AA** Goulder and Williams III: Stanford University. Parry and Burtraw: Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/22; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20035. Website: www.rff.org. **PG** 44. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** D58, H21, L51. **KW** General Equilibrium Analysis. Efficiency. Environmental Instrument Choice. Second-Best Regulation.

AB This paper employs analytical and numerical general equilibrium models to examine the costs of achieving pollution reductions under a range of environmental policy instruments in a second-best setting with pre-existing factor taxes. We compare the costs and overall efficiency impacts of emissions taxes and quotas, fuels taxes, performance standards, and mandated technologies, and explore how costs change with the magnitude of pre-existing taxes and the extent of pollution abatement. We find that the presence of distortionary taxes raises the costs of pollution abatement under each instrument relative to its costs in a first-best world. This extra cost is an increasing function of the magnitude of pre-existing tax rates. The impact of pre-existing taxes is particularly large for non-auctioned emissions quotas: here the cost increase can be several hundred percent. We find that how revenues from environmentally motivated taxes are recycled (whether to return the revenues in lump-sum fashion or via cuts in marginal tax rates) can be as important to cost as the decision whether the tax takes the form of an emissions tax or fuel tax, particularly when modest emissions reductions are involved.

Gowrisankaran, Gautam

PD March 2000. **TI** Do Mergers Lead to Monopoly in the Long Run? Results From the Dominant Firm Model. **AU** Gowrisankaran, Gautam; Holmes, Thomas J. **AA** Federal Reserve Bank of Minneapolis and University of Minnesota. **SR** Federal Reserve Bank of Minneapolis Staff Report: 264; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 55488-0291. Website: <http://woodrow.mpls.frb.fed.us>. **PG** 36. **PR** no charge. **JE** L12, L41. **KW** Merger. Dominant Firm. Dynamics.

AB Will an industry with no antitrust policy converge to monopoly, competition or somewhere in between? We analyze this question using a dynamic dominant firm model with rational agents, endogenous mergers and constant returns to scale production. We find that perfect competition and monopoly are always steady states of this model and that there may be other steady states with a dominant firm and a fringe co-existing. Mergers are likely only when supply is inelastic or demand is elastic, suggesting that the ability of a dominant firm to raise price through monopolization is limited. Additionally, as the discount rate increases, it becomes harder to monopolize the industry, because the dominant firm cannot commit to not raising prices in the future.

Green, Francis

PD January 2000. **TI** Computers Are Even More Important Than You Thought: An Analysis of The Changing Skill-Intensity of Jobs. **AU** Green, Francis; Felstead, Alan;

Gallie, Duncan. AA Green: University of Kent and London School of Economics. Felstead: University of Leicester. Gallie: University of Oxford. SR London School of Economics, Centre for Economic Performance Discussion Paper: 439; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 30. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE J21, J23, J24, O33. KW Skills. Computers. Education. Training. Human Capital.

AB We investigate the impact of computer usage at work and other job features on the changing skills required of workers. We compare skills utilization in Britain at three data points: 1986, 1992 and 1997, using responses to identical questions on comparable surveys. We question the validity of investigating the facts about, and the sources of, rising skills by using just educational attainment or occupational grouping data. We re-examine empirical evidence concerning skills trend, using proxies for the level of skills actually used in jobs. We find that: i) jobs skills have increased between 1986 and 1997, faster for women than for men; these skills changes are not captured simply by changes in the occupational class structure, ii) the spread of computer usage is very strongly associated with the process of upskilling throughout the period; expanded use of quality circles is also linked to upskilling, iii) evidence for any direct role of trade in inducing skills increases is weak, iv) using the qualification held or occupation as a skills measure can lead to erroneous conclusions as to the origin of skills changes.

PD September 1999. **TI** AU Green, Francis; McIntosh, Steven; Vignoles, Anna. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 435; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 54. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE J24, J31, O33. KW Overeducation. Wage Returns. Skill-Biased Change. Human Capital.

AB There is now a burgeoning literature on the topic of "overeducation," and a growing quantity of UK empirical evidence on this issue. However, as Joop Hartog indicated in his keynote address to the Applied Econometrics Association, "a solid relation (of the overeducation/ undereducation literature) with a formal theory of the labor market is lacking" (Hartog (1997)). Furthermore, the term "overeducation," in particular, is often used interchangeably with similar but distinct concepts such as "qualification inflation." This paper attempts to define and measure "undereducation" and "overeducation" more precisely, to quantify the extent of genuine skill and educational mismatch and to link these phenomena into the existing literature on skill-biased change and wage inequality. The authors provide new empirical evidence on this issue, using data from the International Adult Literacy survey, the recent UK Skills Survey, and the National Child Development Study. Specifically, the authors find convincing evidence of skill under-utilization in the British labor market. They show that "genuine" overeducation is a significant phenomenon in Britain. The authors discuss the policy and welfare implications of their findings.

Greenstone, Michael

PD November 1998. **TI** The Wage Consequences of

Enclave Residence: Evidence from the 1990 and 1980 Censuses. AA UC Berkeley. SR University of California, Berkeley, The Center for Labor Economics Working Paper: 6; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. PG 44. PR no charge. JE J15, J23, J31, J61. KW Ethnic Enclaves. Hispanics. Compensating Differentials. Immigration.

AB This paper uses the 1980 and 1990 5% Census samples to investigate the wage consequences of enclave residence for Hispanic males. There are three principal findings. First, there are important city-wide and Hispanic-specific demand shocks that influence where Hispanics choose to settle and affect their wage rates. Any examination of Hispanics' wages should control for these factors. Second, on average Hispanics choose to live in cities with a large existing stock of Hispanics. There is heterogeneity, however, across Hispanics sub-populations; the lesser skilled (i.e., immigrants and the English deficient) aggregates are drawn to enclaves, while natives and the English proficient tend to leave high-Hispanic cities. Third across a number of specifications, I find that enclave residence reduces the relative (compared to white natives) wages of Hispanics. In the least restrictive specification, I instrument for the 1980 to 1990 change in Hispanics' city-wide share of the labor force with the 1980 share and find that a 1-percentage point increase in the share of Hispanics in a city reduce the Hispanic city-wide relative wage by approximately 1%. This result holds across broadly defined Hispanic sub-populations, although the evidence is strongest among the least skilled.

TI The Impact of Air Pollution on Infant Mortality: Evidence from Geographic Variation in Pollution Shocks Induced by a Recession. AU Chay, Kenneth Y.; Greenstone, Michael.

Greenwood, Jeremy

PD February 1999. **TI** The IT Revolution and the Stock Market. AU Greenwood, Jeremy; Jovanovic, Boyan. AA Greenwood: University of Rochester. Jovanovic: New York University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6931; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG not available. PR \$5.00. JE G01, O03. KW Stock Market. Innovation. Information Technology.

AB A new technology or product is often developed by a single entrepreneur. Whether they reach the public offering stage or are acquired by listed firms, it takes time for innovators to add value to the stock market. Indeed, the momentum may, at first, reduce the market's value because some firms -- usually large or old -- will cling to old technologies that have lost their momentum. This paper argues that (a) the market declined in the late 1960s because there was a perception that the old technologies either had lost their momentum or would give way to IT, and that (b) IT innovators boosted the stock market's value only in the 1980s. If the stock market provides a forecast of future events, then the recent dramatic upswing represents a rosy estimate about growth in future profits for the economy. This translates into a forecast of higher output and productivity growth, holding other things equal (such as capital's share of income).

Griliches, Zvi

TI Do Subsidies to Commercial R&D Reduce Market Failures? *Microeconomic Evaluation Studies*. **AU** Klette, Tor Jakob; Moen, Jarle; Griliches, Zvi.

Grossman, Gene M.

TI A Theory of Political Compromise. **AU** Dixit, Avinash; Grossman, Gene M.; Gul, Faruk.

PD August 1998. **TI** Diversity and Trade. **AU** Grossman, Gene M.; Maggi, Giovanni. **AA** Princeton University. **SR** Princeton University Discussion Papers in Economics, Woodrow Wilson School of Public and International Affairs: 192; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. **Website:** www.princeton.edu/other/workingpapers.html.

PG 28. **PR** no charge. **JE** D51, F11. **KW** Trade Pattern. Complementarities. Human Capital. Education Policy.

AB We develop a competitive model of trade between countries with similar aggregate factor endowments. The trade pattern reflects differences in the distribution of talent across the labor forces of the two countries. The country with a relatively homogeneous population exports the good produced by a technology with complementarities between tasks. The country with a more diverse work force exports the good for which individual success is more important. Imperfect observability of talent strengthens the forces of comparative advantage. Finally, we examine an aspect of education policy concerning the spread of human capital across the student population.

PD November 1998. **TI** Imperfect Labor Contracts and International Trade. **AA** Princeton University. **SR** Princeton University Discussion Papers in Economics, Woodrow Wilson School of Public and International Affairs: 205; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. **Website:** www.princeton.edu/other/workingpapers.html.

PG 25. **PR** no charge. **JE** D51, F11. **KW** Labor Contracts. Diversity. Team Production. Comparative Advantage. Income Distribution.

AB In an economy with imperfect labor contracts, differences in the distribution of human capital are an independent source of comparative advantage. I study a world economy with two sectors, one where output is produced by teams and another where individuals can work alone. When workers' abilities are private information and workers cannot verify the value of output or the level of a firm's profits, feasible labor contracts fail to generate efficient matching of workers within teams. The general equilibrium has the most talented workers opting for individualistic activities, while their less talented compatriots join teams. The team mismatches are more severe in the country with the more heterogeneous labor force, which generates a comparative disadvantage for this country in team production. Trade exacerbates the "polarization" of the more diverse society. National income could be raised, and the distribution of income improved, by a marginal expansion in the size of the team sector.

Guell-Rotllan, Maia

PD January 2000. **TI** Workers' Transitions from Temporary to Permanent Employment: The Spanish Case. **AU** Guell-Rotllan, Maia; Petrongolo, Barbara. **AA** Guell-

Rotllan: London School of Economics. Petrongolo: Universidad Carlos III, Madrid and London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 438; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. **Website:** cep.lse.ac.uk. **PG** 43. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** C14, C23, J23, J41, J63. **KW** Permanent Contracts. Temporary Contracts. Duration Models. Employment. Screening.

AB This paper studies the duration pattern of fixed-term contracts and the determinants of the transformation of these into permanent ones. To address this issue we estimate a duration model for temporary employment, with competing risks of flowing into permanent employment versus non-employment, and flexible duration dependence. We find that the shape of the baseline hazard is suggestive of two possible uses of temporary contracts by employers. Spikes at durations around one year support the idea that fixed-term contracts are used as a screening device instrument: successful workers obtain a permanent renewal much before the legal limit of their contracts. There is also evidence of a much pronounced spike at three years of duration, coinciding with the maximum duration of fixed-term contracts. This suggests that some employers only opt for permanent hiring when there is no other way to retain the worker. In other words, fixed-term contracts just provide a cheaper option for adjusting their employment level.

Gul, Faruk

TI A Theory of Political Compromise. **AU** Dixit, Avinash; Grossman, Gene M.; Gul, Faruk.

Gulde, Anne-Marie

PD January 2000. **TI** Pros and Cons of Currency Board Arrangements in the Lead-up to EU Accession and Participation in the Euro Zone. **AU** Gulde, Anne-Marie; Kahkonen, Juha; Keller, Peter. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Discussion Paper: PDP/00/01; International Monetary Fund, Washington, DC 20431. **Website:** www.imf.org. **PG** 24. **PR** not available. **JE** E42, E58, F33. **KW** Currency Boards. European Union. EU Accession. EMU. Euro.

AB Historically, countries with currency board arrangements (CBAs) have experienced lower inflation and higher growth than those with other regimes. The experiences of three candidates for EU membership with CBAs (Estonia, Lithuania, and Bulgaria) have also been generally favorable. Can CBAs serve these transition countries well all the way up to the adoption of the euro? After considering the pros and cons, this paper provides an affirmative answer, but notes that to preserve the viability of their CBAs throughout the process, these countries need to maintain strict policy discipline and be prepared to deal with large capital inflows and asymmetric shocks.

PD April 1999. **TI** The Role of the Currency Board in Bulgaria's Stabilization. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Discussion Paper: PDP/99/03; International Monetary Fund, Washington, DC 20431. **Website:** www.imf.org. **PG** 20. **PR** not available. **JE** E42, E58, F31. **KW** Currency Board. Banking Crisis. Stabilization Policy.

AB The introduction of a currency board on July 1, 1997

marked the end to a period of economic turmoil and "near hyperinflation" in Bulgaria. This paper summarizes the process leading to the choice of a currency board as a stabilization instrument, and its specific design. The use of a currency board was complicated and controversial because of serious structural problems, including a systemic banking crisis. The relative success therefore critically depended on a design of the currency board that was sufficiently "rule-based" to be credible, while allowing flexibility at the margin on account of the banking crisis. In addition, other supporting measures in the overall stabilization package, not least are those designed to ensure fiscal stability, also contributed to the viability of the system.

Gupta, Poonam

PD December 1999. **TI** Why Do Firms Pay Antidumping Duty? **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/166; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 22. **PR** not available.

JE F13, L13. **KW** Antidumping Duty. Price Negotiation. **AB** With the virtual elimination of tariffs and quotas under GATT, antidumping measures emerged as a key instrument of protection. Under antidumping actions exporters can either raise the price to eliminate the dumping margin or pay an antidumping duty. This paper analyzes the incentives to exporters to choose between duty or settlement outcomes and finds that due to the smaller loss in market share exporters may prefer an antidumping duty to voluntary settlement. The paper analyzes the welfare implications of these outcomes and finds that they are ambiguous.

Gupta, Sanjeev

PD February 2000. **TI** Corruption and Military Spending. **AU** Gupta, Sanjeev; de Mello, Luiz; Sharan, Raju. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/23; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 17. **PR** not available. **JE** H11, H56, H57. **KW** Corruption. Military Spending. Panel Data.

AB Anecdotal evidence relates corruption with high levels of military spending. This paper tests empirically whether such a relationship exists. The empirical analysis is based on data from four different sources for up to 120 countries in the period 1985-98. The association between military spending and corruption is ascertained by using panel regression techniques. The results suggest that corruption is indeed associated with higher military spending as a share of both GDP and total government spending, as well as with arms procurement in relation to GDP and total government spending. This evidence indicates that defense spending can be considered for constructing governance indicators.

PD December 1998. **TI** Economic Transition and Social Protection -- Issues and Agenda for Reform. **AA** International Monetary Fund. **SR** International Monetary Fund Papers on Policy Analysis and Assessment: PPAA/98/14; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. **PG** 13. **PR** not available. **JE** H53, I31, I38, P35. **KW** Transition. Social Protection.

AB This paper briefly describes the factors constraining the social protection policies in the Baltics, Russia, and other countries of the former Soviet Union (BRO). The analysis

considers public spending in social programs, including generalized subsidies for goods and consumer services, pensions, unemployment-related and social benefits, and education and health care. The paper then lists policies that can help mitigate the worsening living standards of the poor and the vulnerable in a fiscally sustainable manner.

Gurgen, Emine

TI Improving Governance and Fighting Corruption in the Baltic and CIS Countries: The Role of the IMF. **AU** Wolf, Thomas; Gurgen, Emine.

Gustafson, Cynthia K.

PD November 1998. **TI** Job Displacement and Mobility of Younger Workers. **AA** UC Berkeley. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 8; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. **PG** 48. **PR** no charge. **JE** J61, J63, J65. **KW** Job Displacement. Mobility.

AB This paper explores the long-term effects of job displacement on younger workers and how these effects depend on post-displacement mobility across location, industry and occupation. Data from the National Longitudinal Survey of Youth are used to construct a group of displaced workers and a comparison group containing non-displaced workers. Using a generalized "difference-in differences" model that includes individual fixed effects, I estimate what displaced workers' employment status, earnings, and hours worked would have been had they not been displaced and how these effects vary by post-displacement mobility decisions. I find that displacement has a large negative effect on employment, earnings, and hours worked. Seven percent of displaced workers are not employed six years after displacement yet would have been but for displacement. Among individuals who return to work, displacement decreases workers' earnings and hours worked by 14% and 8%, respectively, in the long-term. Workers who move locations find a long-term earnings cost of 10% compared with immobile workers' cost of 15%. Contrary to previous findings, workers who switch either industry or occupation have similar long-term earnings losses as workers who stay in their same industry or occupation. The effects of mobility, however, vary largely when conditioning on a worker characteristic.

Gutmann, Myron P.

PD December 1998. **TI** Intra-Ethnic Diversity in Hispanic Child Mortality, 1890-1910. **AU** Gutmann, Myron P.; Haines, Michael R.; Frisbie, W. Parker; Blanchard, K. Stephen. **AA** Gutmann and Frisbie: University of Texas at Austin. Haines: Colgate University and National Bureau of Economic Research. Blanchard: University of Texas at San Antonio. **SR** National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 111; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** J11, J15. **KW** Infant Mortality. Hispanic Population. Ethnic Diversity.

AB The recent demography of the Hispanic population of the United States has received considerable attention, but historical perspective is more elusive partly due to data limitations. A

nationally representative sample of the Hispanic population of the United States, based on the manuscripts of the 1910 census, now exists that includes 71,500 Hispanic-origin persons plus another 24,000 of their non-Hispanic neighbors. We estimate childhood mortality for 1890 to 1910, using indirect demographic methods of estimation and find infant and child mortality in the Hispanic population that was higher than for the non-Hispanic whites but slightly lower than for nonwhite, non-Hispanics (mostly African Americans). Hispanic rural, farm populations in California, Texas, and Arizona did the best, though still experiencing high mortality. The usual advantage of rural residence at the turn of the century holds outside of New Mexico and Florida.

Hahn, Jinyong

TI When to Control for Covariates? Panel-Asymptotic Results for Estimates of Treatment Effects. **AU** Angrist, Joshua D.; Hahn, Jinyong.

Haines, Michael R.

TI Intra-Ethnic Diversity in Hispanic Child Mortality, 1890-1910. **AU** Gutmann, Myron P.; Haines, Michael R.; Frisbie, W. Parker; Blanchard, K. Stephen.

Hakura, Dalia S.

TI International Trade and Productivity Growth: Exploring the Sectoral Effects for Developing Countries. **AU** Choudhri, Ehsan U.; Hakura, Dalia S.

Haldane, Andrew

PD February 2000. **TI** UK Phillips Curves and Monetary Policy. **AU** Haldane, Andrew; Quah, Danny. **AA** Haldane: Bank of England. Quah: London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 444; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 28. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** C22, C23, E24, E31, E32. **KW** Beliefs. Inflation. Natural Rate. Monetary Policy. Unemployment.

AB This paper documents some stylized facts on evolving UK Phillips curves, and shows how these differ from their US versions. We interpret UK Phillips curve dynamics in a positive theory of monetary policy -- how policy-maker attitudes on the Phillips curve have evolved since the 1950s -- rather than, more traditionally, as interaction between exogenous demand and supply disturbances. Combining this framework with reasoned conjectures on how policy-makers' beliefs have changed helps explain some features of the evolving UK Phillips curve. We suggest that correlations suggesting an extreme favorable unemployment-inflation tradeoff might indicate not something to be exploited but instead only policy-makers' correctly acknowledging that no tradeoff exists.

Hall, Bronwyn H.

PD May 1999. **TI** The Patent Paradox Revisited: Determinants of Patenting in the US Semiconductor Industry, 1980-94. **AU** Hall, Bronwyn H.; Ham, Rose Marie. **AA** Hall: UC Berkeley, Oxford University, IFS and NBER. Ham: UC Berkeley. **SR** University of California, Berkeley, Department of Economics Working Paper: E99/268; UC, Berkeley, Institute of Business and Economic Research, F502

Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/iber. **PG** 25. **PR** \$3.50 U.S., \$7.00 International. **JE** L51, L52, O31, O32. **KW** Patents. Intellectual Property. Cross-Licensing. Semiconductor Industry.

AB This paper examines the patenting behavior of firms in an industry characterized by rapid technological change and cumulative innovation. Recent evidence suggests that semiconductor firms do not rely heavily on patents, despite the strengthening of US patent rights in the early 1980s. Yet the propensity of semiconductor firms to patent has risen dramatically over the past decade. This paper explores this apparent paradox by analyzing the patenting activities of almost 100 US semiconductor firms during 1980-94. The results suggest that stronger patents may have facilitated entry by firms in niche product markets, while spawning "patent portfolio races" among capital-intensive firms.

TI Is Public R&D a Complement or Substitute for Private R&D? A Review of the Econometric Evidence. **AU** David, Paul A.; Hall, Bronwyn H.; Toole, Andrew A.

Hall, Robert E.

PD January 1999. **TI** Aggregate Job Destruction and Inventory Liquidation. **AA** Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6912; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** \$5.00. **JE** E24, E32. **KW** Recession. Job Destruction. Inventory Liquidation.

AB In a recession, jobs are destroyed and inventories are liquidated. I concentrate on the intertemporal mechanisms that result in economy-wide job destruction and inventory runoffs. Forces that raise the real interest rate -- especially temporarily -- also cause destruction and runoffs. I consider a model where the job destruction decision is made efficiently, will full consideration of the search costs imposed on discharged workers. I also consider a model of inefficient job destruction, where employers discharge workers who are paid fixed wages as long as they are employed. The impulse response functions for these models resemble those found in data for the United States. A shock that causes a jump in the expected real interest rate results in an immediate spike of job destruction and inventory liquidation, followed by a declining pattern of additional destruction and runoff.

PD January 1999. **TI** Controlling the Price Level. **AA** Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6914; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** E31, E42. **KW** Price Level. Unit of Value.

AB Governments determine the size of the unit of value just as they determine the length of the length and weight of physical units of measure. What are the different ways that a government can control the size of the unit of value, that is, control the price level? In general, the government designates a resource -- gold, paper currency, another country's currency -- and defines its units of value as a particular amount of that resource. An interesting variant -- proposed by Irving Fisher to 1913 and implemented more recently in Chile -- is to alter the resource content of the unit to stabilize the price level. Another

idea is to alter the interest rate paid on reserves in a way that stabilizes the price level.

Ham, Rose Marie

TI The Patent Paradox Revisited: Determinants of Patenting in the US Semiconductor Industry, 1980-94. AU Hall, Bronwyn H.; Ham, Rose Marie.

Hamermesh, Daniel S.

PD February 1999. TI The Art of Labormetrics. AA University of Texas and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6927; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 32. PR \$5.00. JE C13, J21, J22, J23. KW Labormetrics. Data Cleanliness. Extreme Observations.

AB Using a wide array of examples from the literature and from original estimates, this essay examines the pitfalls that make good empirical research in labor economics as much art as science. Appropriateness and cleanliness of data are considered, as are problems of extreme observations and interactions. The validity of attempts to produce exogeneity using instrumental variables and "natural experiments" is examined, as are the treatment of selectivity and unobservable individual effects. Testing empirical results to ensure that they make sense is stressed along with the importance of clear, economical and useful presentation of those results.

Hamilton, Bruce W.

PD March 1998. TI Competition and Car Longevity. AU Hamilton, Bruce W.; Macauley, Molly K. AA Hamilton: Johns Hopkins University. Macauley: Resources for the Future. SR Resources for the Future Discussion Paper: 98/20; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. PG 28. PR Foreign: \$15.00 Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. JE L01, L09. KW Market Concentration. Automobile Industry. Scrapage Models.

AB We examine determinants of the nearly thirty percent increase in the average age of domestically produced, registered automobiles since the mid-1960s. We find that very little of the increase in car longevity is attributable to improvements in the inherent durability of cars. Rather, we find that the temporal pattern of longevity improvement is highly correlated with the level of market concentration in the auto industry. In particular, we argue that the arrival of competition in the industry led to an increase in longevity largely by forcing a reduction in the price of auto maintenance and repair, which in turn induced consumers to maintain their cars into older age.

Hamoudi, Amar

PD March 1999. TI The Changing Global Distribution of Malaria: A Review. AU Hamoudi, Amar; Sachs, Jeffrey D. AA Hamoudi: Center for International Development at Harvard University. Sachs: Center for International Development at Harvard University and Harvard Institute for International Development. SR Harvard Center for International Development (CID) Working Paper: 2; Center for International Development, John Gallup, Editor, 79 John F. Kennedy Street, Cambridge, MA 02138. Website:

www.cid.harvard.edu/cidworkingpapers/cid_workingpapers.htm. PG 31. PR paper copies \$7.50 up to 80 pages long; \$12.00 80 pages long and longer. JE I12, N50, N70. KW Malaria. Geography. History.

AB Organized efforts to reduce the burden of malaria are as old as human societies. Understanding the historical relationships between humankind and malaria is important for natural and social scientists studying the disease, as well as policy makers trying to control it. Malaria once extended widely throughout the old world, reaching as far north as 64 degrees north latitude and as far south as 32 degrees south latitude. Today, however, malaria is almost exclusively a problem of the geographical tropics. Analysis of historical changes in malaria prevalence suggests a number of factors, which help to determine the likelihood and sustainability of success in malaria control. Among these are geography, evolutionary history of flora and fauna, infrastructure, and land use. It is due to these factors, much more than socio-economic ones, that attempts to control or interrupt transmission of the disease have historically been most successful on islands, in temperate climates, or at high elevations.

Hansen, Gary D.

PD January 1999. TI Malthus to Solow. AU Hansen, Gary D.; Prescott, Edward C. AA Hansen: UCLA. Prescott: Federal Reserve Bank of Minneapolis and University of Chicago. SR Federal Reserve Bank of Minneapolis Staff Report: 257; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 554880-0291. Website: http://woodrow.mpls.frb.fed.us. PG 23. PR no charge. JE E19, O11, O41. KW Malthus. Solow. Industrial Revolution.

AB A unified growth theory is developed that accounts for the roughly constant living standards displayed by world economies prior to 1800 as well as the growing living standards exhibited by modern industrial economies. Our theory also explains the industrial revolution, which is the transition from an era when per capita incomes are stagnant to one with sustained growth. We use a standard growth model with one good and two available technologies. The first, denoted the Malthus technology, requires land, labor, and reproducible capital as inputs. The second, denoted the Solow technology, does not require land. We show that in the early stages of development, only the Malthus technology is used, and, due to population growth, living standards are stagnant despite technological progress. Eventually, technological progress causes the Solow technology to become profitable, and both technologies are employed. In the limit, the economy behaves like a standard Solow growth model.

Hansen, Kirstine

TI Unions and the Sword of Justice: Unions and Pay Systems, Pay Inequality, Pay Discrimination and Low Pay. AU Metcalf, David; Hansen, Kirstine; Charlwood, Andy.

Hanson, Gordon H.

TI Who Gains from Trade Reform? Some Remaining Puzzles. AU Harrison, Ann E.; Hanson, Gordon H.

PD March 1999. TI Does Border Enforcement Protect U.S. Workers from Illegal Immigration? AU Hanson, Gordon H.; Robertson, Raymond; Spilimbergo, Antonio. AA Hanson: University of Michigan and National Bureau of Economic Research. Robertson: Syracuse University.

Spilimbergo: International Monetary Fund. **SR** National Bureau of Economic Research Working Paper: 7054; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** F22, J61. **KW** Immigration. Wages. Border Enforcement.

AB In this paper, we examine the impact of government enforcement of the U.S.-Mexican border on wages in the border region of the United States and Mexico. The U.S. Border Patrol policies U.S. boundaries, seeking to apprehend any individual attempting to enter the United States illegally. These efforts are concentrated on the Mexican border, as most illegal immigrants embark from a Mexican border city and choose a U.S. border state as their final destination. We examine labor markets in southern California, southwestern Texas, and Mexican cities on the U.S.- Mexico border. For each region, we have high-frequency time-series data on wages and on the number of person hours that the U.S. Border Patrol spends policing border areas. For a range of empirical specifications and definitions of regional labor markets, we find little impact of border enforcement on wages in U.S. border cities and a moderate negative impact of border enforcement on wages in Mexican border cities. These findings are consistent with two hypothesis: (1) border enforcement has a minimal impact on illegal immigration, or (2) immigration from Mexico has a minimal impact on wages in U.S. border cities.

Harel, Alon

TI Crime Rates and Expected Sanctions: The Economics of Deterrence Revisited. **AU** Bar-Gill, Oren; Harel, Alon.

Harker, Patrick T.

TI Staffing an Inbound Call Center. **AU** Aksin, O. Zeynep; Harker, Patrick T.

TI Modeling a Phone Center: Analysis of a Multi-Channel Multi-Resource Processor Shared Loss System. **AU** Aksin, O. Zeynep; Harker, Patrick T.

TI Computing Performance Measures in a Multi-Class Multi-Resource Processor-Shared Loss System. **AU** Aksin, O. Zeynep; Harker, Patrick T.

Harrington, Winston

TI Learning From Experiments: An Evaluation Plan for CMAQ Projects. **AU** Farrell, Deirdre; Harrington, Winston; Krupnick, Alan J.

TI Using Alternative Regulatory Instruments. **AU** Blackman, Allen; Harrington, Winston.

TI Fleet Turnover and Old Car Scrap Policies. **AU** Alberini, Anna; Harrington, Winston; McConnell, Virginia.

TI Estimating Full IM240 Emissions from Partial Test Results: Evidence from Arizona. **AU** Ando, Amy W.; Harrington, Winston; McConnell, Virginia.

PD April 1998. **TI** Overcoming Public Aversion to Congestion Pricing. **AU** Harrington, Winston; Krupnick, Alan J.; Alberini, Anna. **AA** Harrington and Krupnick: Resources for the Future. Alberini: University of Colorado. **SR** Resources for the Future Discussion Paper: 98/27; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 21. **PR** Foreign: \$15.00

Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** R41. **KW** Congestion. HOT Lanes. Freeways. Time-of-Day Pricing.

AB Transportation authorities have consistently failed to employ economic incentives on major roadways -- i.e. time-of-day pricing or "congestion fees" -- to internalize the costs of congestion. If congestion tolls truly do advance social welfare, why is it so difficult to find a way to implement them? Two common explanations for this difficulty are the following: (i) The public perceives such fees simply as tax increases. (ii) Motorists dislike congestion fees because they often have few if any practical alternatives to paying the fee. A policy option that offers motorists a choice of toll lanes and the more customary free lanes may be attractive. We have completed a survey of Southern California residents designed to test these hypotheses. Unlike most opinion surveys on congestion pricing, our survey was quite explicit about the fate of the collected revenues. We find that a promise to offset the imposition of congestion fees by other taxes can result in a 7 percentage point increase in support for congestion pricing policies, and the restriction of congestion pricing to a single lane on a freeway attracts from 9 to 17 percentage points of additional support.

Harrison, Ann E.

PD January 1999. **TI** Who Gains from Trade Reform? Some Remaining Puzzles. **AU** Harrison, Ann E.; Hanson, Gordon H. **AA** Harrison: Columbia Business School and National Bureau of Economic Research. Hanson: University of Michigan and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6915; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** \$5.00. **JE** F13, F16. **KW** Trade Reform.

AB This paper focuses on three unresolved issues with regard to the impact of trade reform. First, many studies linking trade reform to long run growth are surprisingly fragile. To illustrate the problems with this literature, we examine a popular measure of openness recently introduced by Sachs and Warner (1995). We show that their measure fails to establish a robust link between more open trade policies and long run growth. The second puzzle we identify is the small impact of trade reform on employment in developing countries. Finally, we analyze evidence on the relationship between trade reform and rising wage inequality, focusing on the 1985 Mexican trade reform. Wage inequality in Mexico rose after the reform, which is puzzling in a Heckscher-Ohlin context if Mexico has a comparative advantage in producing low skill-intensive goods.

TI Ownership versus Environment: Why Are Public Sector Firms Inefficient? **AU** Bartel, Ann P.; Harrison, Ann E.

Hassett, Kevin A.

TI A New Measure of Horizontal Equity. **AU** Auerbach, Alan J.; Hassett, Kevin A.

TI Uncertainty and the Design of Long-Run Fiscal Policy. **AU** Auerbach, Alan J.; Hassett, Kevin A.

Hatch, Nile W.

TI Price and Non-Price Influences on Water Conservation: An Econometric Model of Aggregate Demand Under Nonlinear Budget Constraint. **AU** Corral, Leonardo; Fisher, Anthony C.; Hatch, Nile W.

Hawawini, Gabriel

PD May 1998. **TI** The Cross Section of Common Stock Returns: A Review of the Evidence and Some New Findings. **AU** Hawawini, Gabriel; Keim, Donald B. **AA** Hawawini: INSEAD. Keim: University of Pennsylvania. **SR** INSEAD Working Paper: 99/38/FIN; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 31. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** G12, G14, G15. **KW** Stock-Price Premia. Risk. Stock Returns.

AB A growing number of empirical studies suggest that betas of common stocks do not adequately explain cross-sectional differences in stock returns. Instead, a number of other variables (e.g., size, ratio of book to market, earnings/price) that have no basis in extant theoretical models seem to have significant predictive ability. Some interpret the findings as evidence of market inefficiency. Others argue that the Capital Asset Pricing Model is an incomplete description of equilibrium price formation and these variables are proxies for additional risk factors. In this paper we review the evidence on the cross-sectional behavior of common stock returns on the U.S. and other equity markets around the world. We also report some new evidence on these cross-sectional relations using data from both U.S. and international stock markets. We find, among other results that although the return premia, associated with these ad hoc variables are significant in most international stock markets, the premia, are uncorrelated across markets. The accumulating evidence prompts the following question: If these return premia occur primarily in January and are uncorrelated across major international equity markets, is it reasonable to characterize them as compensation for risk?.

Hay, Donald

TI Competition in Retailing: One Stop Shopping. **AU** Smith, Howard; Hay, Donald.

Heijdra, Ben J.

PD January 2000. **TI** Deposit-Refund on Labor: A Solution to Equilibrium Unemployment? **AU** Heijdra, Ben J.; Ligthart, Jenny E. **AA** Heijdra: University of Groningen. Ligthart: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/09; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 17. **PR** not available. **JE** J38, J63, J68. **KW** Deposit-Refund Schemes. Firing Costs. Hiring Subsidies. Job Search. Unemployment.

AB The paper studies the employment effects of a deposit-refund scheme on labor in a simple search-theoretic model of the labor market. It is shown that if a firm pays a deposit to the government when it fires a worker, to be refunded when it employs the same or another worker, the vacancy rate increases and the unemployment rate declines. However, the scheme introduces rigidities in the labor market that may be undesirable in countries wanting to liberalize their labor markets.

Helmenstein, Christian

TI Human Capital Depletion, Human Capital Formation, and Migration: A Blessing in a "Curse"? **AU** Stark, Oded; Helmenstein, Christian; Prskawetz, Alexia.

Helpman, Elhanan

PD April 2000. **TI** Productivity in an Age of Globalization. **AA** Tel-Aviv University and CIAR. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/11; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 12. **PR** no charge. **JE** O47, O49. **KW** Economic Growth. **AB** The paper discusses the links between productivity and growth. It reviews major trends after the Second World War and it discusses new theoretical developments and empirical research. This paper is written in Arabic.

Hemming, Richard

TI What Should be Done with a Fiscal Surplus? **AU** Chalk, Nigel; Hemming, Richard.

Hendry, David F.

TI Computer Automation of General-to-Specific Model Selection Procedures. **AU** Krolzig, Hans-Martin; Hendry, David F.

PD April 2000. **TI** Modeling UK Inflation Over the Long Run. **AA** University of Oxford. **SR** Oxford Department of Economics Discussion Paper: 02; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. **PG** 23. **PR** no charge. **JE** E31, E32, F43. **KW** Inflation. Dynamic Modeling. Cointegration. Structural Breaks.

AB UK inflation varied greatly over 1865-1990, in response to many policy and exchange-rate regimes, two world wars and oil crises, and major legislative, and technological changes. It is modeled as responding to excess demands from all sectors of the economy: goods and services, factors of production, money, financial assets, foreign exchange, and government deficits, using indicator variables and commodity prices for special factors. Equilibrium-correction terms are developed for each of these. Variables representative of most theories of inflation mattered empirically over the sample, yielding an eclectic model that refutes any 'single cause' explanation.

TI Constructing Historical Euro-Zone Data. **AU** Beyer, Andreas; Doornik, Jurgen A.; Hendry, David F.

TI Forecasting with Difference-Stationary and Trend-Stationary Models. **AU** Clements, Michael P.; Hendry, David F.

Hermalin, Benjamin E.

PD December 1999. **TI** The Effect of Affect on Economic and Strategic Decision Making. **AU** Hermalin, Benjamin E.; Isen, Alice M. **AA** Hermalin: UC Berkeley. Isen: Cornell University. **SR** University of California, Berkeley, Department of Economics Working Paper: E99/270; UC, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. **PG** 22. **PR** \$3.50 U.S., \$7.00 International. **JE** B41, C73, D81, D99. **KW** Affect. Morale. Emotion.

AB The standard economic model of decision making assumes a decision maker makes her choices to maximize her utility or happiness. Her current emotional state is not explicitly considered. Yet there is a large psychological literature that

shows that current emotional state, in particular positive affect, has a significant effect on decision making. This paper offers a way to incorporate this insight from psychology into economic modeling. Moreover, this paper shows that this simple insight can parsimoniously explain a wide variety of behaviors.

Hernandez-Cata, Ernesto

PD May 2000. **TI** Raising Growth and Investment in Sub-Saharan Africa: What Can Be Done? **AA** International Monetary Fund. **SR** International Monetary Fund Policy Discussion Paper: PDP/00/04; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. **PG** 23. **PR** not available. **JE** O11, O19, O40, O55. **KW** Growth. Investment. Africa.

AB This paper argues that sub-Saharan Africa's growth performance needs to be improved substantially in order to raise standards of living to an acceptable level and achieve a visible reduction in poverty. The paper provides a broad overview of the explanations for sub-Saharan Africa's unsatisfactory growth performance in the past, paying particular attention to the empirical literature. It argues that growth has been hampered by economic distortions and institutional deficiencies that have increased the risk of investing in Africa, and lowered the rates of return on capital and labor as well as the growth of total factor productivity.

TI Africa: Is This the Turning Point? **AU** Fischer, Stanley; Hernandez-Cata, Ernesto; Khan, Mohsin S.

Hildreth, Andrew K. G.

TI Strikes, Inventories, and Union Legislation. **AU** Coles, Melvyn G.; Hildreth, Andrew K. G.

PD September 1998. **TI** Econometric Issues in the Analysis of Linked Cross-Section Employer-Worker Surveys. **AU** Hildreth, Andrew K. G.; Pudney, Stephen. **AA** Hildreth: UC Berkeley. Pudney: Leicester University. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 10; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. **PG** 28. **PR** no charge. **JE** C31, C81, J64. **KW** Linked Cross-Section. Unemployment Incidence. Unemployment Duration.

AB We consider the statistical problems involved in the econometric analysis of data from linked surveys of workers and employers. The context is a simple model of the incidence and duration of unemployment spells occurring between two waves of the UK New Earnings Survey, which have been linked to unemployment benefit records via the National Insurance number, and to Annual Business Inquiry respondent firms via the Inter-Departmental Business Register.

Hochman, Oded

PD January 1999. **TI** Zoning as a Control of Pollution in a Spatial Environment. **AU** Hochman, Oded; Rausser, Gordon C. **AA** Hochman: Ben Gurion University. Rausser: University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 875; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 56. **PR** \$14.00

Domestic; \$28.00 International Surface Rate. **JE** H23, Q28, R13, R50. **KW** Pigouvian Taxes. Land Utilization. Zoning. Pollution Control. Spatial Environment.

AB Space matters not only because of the transportation costs it imposes on the economy but also because it can serve as an effective instrument to control pollution damages. All possible location combinations of housing and industry are considered in this study. The results demonstrate that the management of pollution must recognize the trade-off between two cost components: pollution costs and transportation costs. This trade-off along with the non-convexity inherent in spatial models results in multiple local optima. Negligible commuting costs combined with pollution emissions bearing ill effects at a rate declining with distance leads to an allocation with one industrial zone and one residential zone. As commuting costs increase, the optimal allocation passes through an endogenously determined series of increasing thresholds. Each time a threshold is crossed the number of zones of each type increases until the internal solution is reached after the final threshold has been crossed. This solution has no commuting, and housing and industry assume adjacent locations. Here, Pigouvian taxes are generally inefficient. Instead, the efficient tax is a per unit land tax equal to the additional damages contributed by that land unit's pollution.

Hoddinott, John

PD March 1997. **TI** Testing Nash Bargaining Household Models with Time Series Data: Divorce Law Reform and Female Suicide in Canada. **AU** Hoddinott, John; Adam, Christopher. **AA** University of Oxford. **SR** Oxford Applied Economics Discussion Paper: 191; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. **PG** 37. **PR** 2 pounds (US \$4.00). **JE** J12, J17. **KW** Household. Collective Models. Divorce. Law Reform. Effects.

AB Recent literature surveys indicate the absence of definitive evidence distinguishing unitary from collective models of the household. In this paper, we exploit dramatic changes in divorce law legislation in Canada to test one variant of the collective approach, cooperative Nash bargained household models.

Hoeffler, Anke

TI Flight Capital as a Portfolio Choice. **AU** Collier, Paul; Hoeffler, Anke; Pattillo, Catherine.

Hoel, Michael

PD March 1999. **TI** Taxes and Quotas for a Stock Pollutant With Multiplicative Uncertainty. **AU** Hoel, Michael; Karp, Larry. **AA** Hoel: University of Oslo. Karp: University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 870R; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 32. **PR** \$7.25 Domestic; \$14.50 International Surface Rate. **JE** D82, H21, Q25, Q28. **KW** Pollution Control. Asymmetric Information. Taxes. Quotas. Stochastic Control.

AB We compare taxes and quotas when firms and the regulator have asymmetric information about abatement costs.

Damages are caused by a stock pollutant. Uncertainty enters multiplicatively, i.e. it affects the slope rather than the intercept of abatement costs. We calibrate the model using cost and damage estimates of greenhouse gasses. As with additive uncertainty, taxes dominate quotas. The advantage of taxes is much greater with multiplicative, compared to additive, uncertainty. The optimal expected steady state is higher under taxes than under quotas.

Hofer, Helmut

PD September 1998. **TI** Price and Quantity Adjustments in the Austrian Labour Markets. **AU** Hofer, Helmut; Pichelmann, Karl; Schuh, Andreas-Ulrich. **AA** Hofer and Pichelmann: Institute for Advanced Studies. Schuh: Ministry of Finance, Vienna. **SR** Institute for Advanced Studies (IHS) Economics Series Working Paper: 57; Institute for Advanced Studies, Stumpergasse 56, A-1060 Vienna, Austria. **Website:** www.ihs.ac.at/Library/libhome.html. **PG** 22. **PR** ATS 80.00 Individuals; ATS 250.00 Institutions. **JE** J31, J64. **KW** Austrian Labor. Real Wage Flexibility. Labor Market Dynamics. Relative Wages.

AB Austria is among the very few countries in the European Union that have managed to maintain comparatively low unemployment rates and high employment rates. In international comparison Austrian unemployment is very stable over the business cycle. This is mainly due to the high sensitivity of the labor force on cyclical conditions and, partly, also on the relatively weak responsiveness of employment to cyclical fluctuations in output, the latter being possibly attributable to the high degree of real wage flexibility in Austria. However, we also found evidence for outsider effects in the Austrian wage setting process stemming from the increased share of long term unemployed, which plausibly reflect human capital effects on reemployment possibilities for persons being unemployed for extended periods of time. Relative wage structures, on the other hand, appear to be rather rigid.

Hoffman, Sandra

TI Poverty Program Participation and Employment in Timber-Dependent Counties. **AU** Berck, Peter; Costello, Christopher; Hoffman, Sandra; Fortmann, Louise.

TI Poverty Program Participation and Employment in Timber-Dependent Counties. **AU** Berck, Peter; Costello, Christopher; Hoffman, Sandra; Fortmann, Louise.

Holmes, Thomas J.

TI Do Mergers Lead to Monopoly in the Long Run? Results From the Dominant Firm Model. **AU** Gowrisankaran, Gautam; Holmes, Thomas J.

PD May 1999. **TI** Bar Codes Lead to Frequent Deliveries and Superstores. **AA** Federal Reserve Bank of Minneapolis and University of Minnesota. **SR** Federal Reserve Bank of Minneapolis Staff Report: 261; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 55488-0291. **Website:** http://woodrow.mpls.frb.fed.us. **PG** 25. **PR** no charge. **JE** L11, L81. **KW** Bar Codes. Inventories. Establishment Size. Delivery Frequency. Superstores.

AB This paper explores the consequences of new information technologies, such as bar codes and computer-tracking of inventories, for the optimal organization of retail. The first

result is that there is a complementarity between the new information technology and frequent deliveries. This is consistent with the recent move in the retail sector toward higher-frequency delivery schedules. The second result is that adoption of the new technology tends to increase store size. This is consistent with recent increases in store size and the success of the superstore model of retail organization.

Hooker, Mark A.

PD February 1999. **TI** Measuring the Economic Effects of Military Base Closures. **AU** Hooker, Mark A.; Knetter, Michael M. **AA** Hooker: Federal Reserve Board. Knetter: Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6941; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **Website:** www.nber.org. **PG** 21. **PR** \$5.00. **JE** E24, J23, R23. **KW** Military Bases. Economic Costs. Employment.

AB Quite often, policy changes that are seen as welfare-improving at the national level encounter significant resistance in localities where the policies are implemented. Defense spending cuts and international trade agreements are classic examples. However, there is little systematic evidence on the magnitude of economic costs that fall on adversely affected communities. In this paper, we use a newly constructed dataset to analyze the county-level employment and personal income effects resulting from closures of military bases during 1971-1994. Our estimated multipliers are mostly less than one, and considerably smaller than those typically used in economic impact studies. We find that the employment costs are mostly limited to the direct job loss associated with military transfers out of the region, and per-capita income is little affected by closures on average.

Hopenhayn, Hugo

TI Rewarding Sequential Innovators: Prizes, Patents and Buyouts. **AU** Llobet, Gerald; Hopenhayn, Hugo; Mitchell, Matthew F.

Hotz, V. Joseph

PD May 1999. **TI** Predicting the Efficacy of Future Training Programs Using Past Experience. **AU** Hotz, V. Joseph; Imbens, Guido W.; Mortimer, Julie H. **AA** Hotz and Imbens: University of California, Los Angeles and National Bureau of Economic Research. Mortimer: University of California, Los Angeles. **SR** National Bureau of Economic Research Technical Paper: 238; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **Website:** www.nber.org. **PG** not available. **PR** \$5.00. **JE** J31, J64, J68. **KW** Program Evaluation. Job-Training Programs.

AB Training programs may differ both over the populations that participated in the programs and the different components that each program offers. Such variables must be explicitly taken into account when evaluating the efficacy of such programs and using this analysis to predict the average effect of a new training program. With sufficient detail on characteristics of the two populations and sufficient overlap in their distributions, it is possible to adjust for population differences. To investigate the empirical importance of these issues, we compare four job-training programs implemented in the mid-eighties in different parts of the U.S. We find that adjusting for pre-training earnings and individual characteristics removes

most of the differences between control units, but that even after such adjustments, post-training earnings for trainees are not comparable. We surmise that differences in treatment components across training programs are the likely cause, and that more details on the specific services provided by these programs are necessary to predict the effect of future programs. We conclude that, because of treatment effect heterogeneity, it is essential, even in experimental evaluations, to record pre-training earnings and individual characteristics in order to render the extrapolation of the results to different locations credible.

Hoxby, Caroline M.

PD January 1999. **TI** The Productivity of Schools and Other Local Public Goods Producers. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6911; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** H71, I22, L32, L51. **KW** Schools. Public Goods.

AB I construct an agency model of local public goods producers with special reference to public schools. The model assumes that households make Tiebout choices among jurisdictions, but it has more realistic assumptions about information and the cost of residential mobility. I examine producers' effort and rent under local property tax finance and centralized finance. I show that, if there are a sufficient number of jurisdictions to choose among, conventional local property tax finance substantially reduces the agency problem and associated loss of productivity. Specifically, I demonstrate that local property tax finance can attain about as much productivity as a social planner with centralized finance can, even if the social planner is armed with more information than a real social planner could plausibly have. The key insight is that decentralized Tiebout choices make some information the social planner would need verifiable and other information unnecessary.

Hoynes, Hilary Williamson

TI The Earned Income Tax Credit and the Labor Supply of Married Couples. **AU** Eissa, Nada; Hoynes, Hilary Williamson.

TI The Earned Income Tax Credit and the Labor Supply of Married Couples. **AU** Eissa, Nada; Hoynes, Hilary Williamson.

TI A Non-Experimental Analysis of "True" State Dependence in Monthly Welfare Participation Sequences. **AU** Chay, Kenneth Y.; Hoynes, Hilary Williamson; Hyslop, Dean.

Hsieh, Chang-Tai

PD January 1998. **TI** What Explains the Industrial Revolution in East Asia? Evidence From Factor Markets. **AA** Princeton University. **SR** Princeton University Discussion Papers in Economics, Woodrow Wilson School of Public and International Affairs: 196; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. Website: www.princeton.edu/other/workingpapers.html. **PG** 35. **PR** no charge. **JE** D24, O47, O53. **KW** Productivity Growth. Singapore. Capital Accumulation. Factor Returns.

AB This paper presents price-based (dual) estimates of total factor productivity growth (TFPG) for the East Asian countries. The dual estimates of TFPG for Singapore are higher than the primal estimates by about 2 percent a year. The basic reason is that despite the high rate of capital accumulation, there has been no appreciable decline in the real return to capital as predicted by a neoclassical growth model. Since real wages have increased rapidly without a corresponding fall in the return to capital, this implies a high rate of dual TFPG. This paper focuses on the difference between the dual and primal estimates of TFPG for Singapore and shows that errors in the national accounts, primarily overstatement of investment spending and undervaluation of the imputed rent on owner-occupied housing in the official statistics, can explain the difference between the dual and primal estimates of TFPG.

PD July 1998. **TI** Bargaining Over Reform. **AA** Princeton University. **SR** Princeton University Discussion Papers in Economics, Woodrow Wilson School of Public and International Affairs: 197; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. Website: www.princeton.edu/other/workingpapers.html. **PG** 16. **PR** no charge. **JE** C72, E32, E61. **KW** Macroeconomic Stabilization. Stabilization Costs. Bargaining.

AB This paper models the delay in a macroeconomic stabilization as the outcome of a bargaining game between two parties who must reach an agreement over how the stabilization cost is to be shared. The paper modifies Alesina and Drazen's (1991) war of attrition model by endogenizing the distribution of the stabilization costs through a bargaining game. Using this bargaining framework, the paper analyzes the role of crises and foreign assistance in bringing about a settlement to the distributional conflict. In the bargaining game, a crisis that increases the welfare loss from not stabilizing the economy will lower the probability of delay. In contrast, foreign aid that is used to reduce the stabilization costs will further increase the delay in reaching an agreement between the two parties.

PD August 1998. **TI** Measuring Biased Technological Change. **AA** Princeton University. **SR** Princeton University Discussion Papers in Economics, Woodrow Wilson School of Public and International Affairs: 198; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. Website: www.princeton.edu/other/workingpapers.html. **PG** 18. **PR** no charge. **JE** O33, O47. **KW** Technological Progress. Solow Residual. TFP Index.

AB This paper argues that when technological change is biased, the Solow residual from a standard growth accounting exercise conflates the contribution of factor accumulation with that of technological change. The difficulty of isolating the contribution of technological progress is related to the path-dependence properties of the total factor productivity (TFP) index. The paper uses the fundamental theorem of calculus for line integrals to prove that the TFP index is not path dependent if and only if technological change is Hicks-neutral. The paper illustrates possible magnitudes of this problem for standard estimates of the Solow residual and for exercises decomposing the sources of cross-country income differences.

Huaibin, Jia

TI Chinese Rural Migrants in Urban Enterprises: Three Perspectives. **AU** Knight, John; Song, Lina; Huaibin, Jia.

Huber, Joel

PD July 2000. **TI** On the Similarity of Classical and Bayesian Estimates of Individual Mean Partworths. **AU** Huber, Joel; Train, Kenneth. **AA** Huber: Duke University. Train: UC Berkeley. **SR** University of California, Berkeley, Department of Economics Working Paper: E00/289; UC, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. **PG** 12. **PR** \$3.50 U.S., \$7.00 International. **JE** C11, C13, C15, C25. **KW** Individual Partworths. Choice Models. Choice Simulators. Extreme Individuals.

AB An exciting development in modeling has been the ability to estimate reliable individual-level parameters for choice models. Individual partworths derived from these parameters have been very useful in segmentation, identifying extreme individuals, and in creating appropriate choice simulators. In marketing, hierarchical Bayes models have taken the lead in combining information about the aggregate distribution of tastes with the individual's choices to arrive at a conditional estimate of the individual's parameters. In economics, the same behavioral model has been derived from a classical rather than a Bayesian perspective. That is, instead of Gibbs sampling, the method of maximum simulated likelihood provides estimates of both the aggregate and the individual parameters. This paper explores the similarities and differences between classical and Bayesian methods and shows that they result in virtually equivalent conditional estimates of partworths for customers. Thus, the choice between Bayesian and classical estimation becomes one of implementation convenience and philosophical orientation, rather than pragmatic usefulness.

Huberman, Bernardo A.

TI Status Competition and Performance in Work Groups. **AU** Loch, Christoph H.; Stout, Suzanne K.; Huberman, Bernardo A.

TI Status Competition and Performance in Work Groups. **AU** Loch, Christoph H.; Huberman, Bernardo A.; Stout, Suzanne K.

TI Multi-Dimensional Status Competition and Group Performance. **AU** Loch, Christoph H.; Huberman, Bernardo A.; Ulku, Sezer.

Huberman, Gur

PD July 2000. **TI** Correct Belief, Wrong Action and A Puzzling Gender Difference. **AU** Huberman, Gur; Rubinstein, Ariel. **AA** Huberman: Columbia Business School. Rubinstein: Tel-Aviv University and Princeton University. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/17; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 15. **PR** no charge. **JE** C72, C91. **KW** Game. Coin-Die. Experiment. Gender.

AB We asked subjects to self-select into one of two contests, "coin" or "die." The winner in each of the contests is the person with most correct guesses of 20 coin flips or 20 rolls of a die, respectively. Most subjects reported that they believed that most people would go to the "coin" group. They were correct. Although the right action under this belief is to choose "die" most people chose to be with the majority. Both men and

women tended to make this mistake, but women's propensity to err in this particular experiment was stronger. This is puzzling as our overall impression (based on preliminary experiments which were not documented scientifically) does not support the existence of gender differences in strategic situations.

Huchzermeier, Arnd

PD March 1999. **TI** Project Management Under Risk: Using the Real Options Approach to Evaluate Flexibility in R&D. **AU** Huchzermeier, Arnd; Loch, Christoph H. **AA** Huchzermeier: WHU. Loch: INSEAD. **SR** INSEAD Working Paper: 99/15/TM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 27. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** C61, M11, O32. **KW** Real Options. R&D Projects. Project Evaluation. Decision Trees. Stochastic Dynamic Programming. Managerial Flexibility. Project Management.

AB In the context of uncertain R&D projects, managerial flexibility has a "real option value". We introduce, in addition to the familiar real option of abandonment, the option of corrective action that management can take during the project. The intuition from options pricing theory is that higher uncertainty in project payoffs increases the real option value of managerial decision flexibility. We identify five types of R&D uncertainty, in market payoffs, project budgets, product performance, market requirements, and project schedules. We find that if uncertainty is resolved or costs/revenues occur after all decisions have been made, more variability may "smear out" contingencies and thus reduce the value of flexibility. In addition, variability may reduce the probability of flexibility ever being exercised, which also reduces its value. This result runs counter to established option pricing theory intuition and contributes to a better risk management in R&D projects. Our model builds intuition for R&D managers as to when it is and when it is not worthwhile to delay commitments, for example, by postponing a design freeze, thus maintaining flexibility in R&D projects.

Hurd, Michael D.

PD March 1999. **TI** Mortality Risk and Consumption by Couples. **AA** RAND Corporation and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7048; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 36. **PR** \$5.00. **JE** D91, E21. **KW** Life-Cycle Consumption. Couples. Bequeathable Wealth.

AB This paper proposes and analyzes a life-cycle model of consumption by couples. The model is considerably more complicated than the standard model for singles because it has to account for the welfare of a surviving spouse. The determinants of consumption are the survival paths of each spouse, bequeathable wealth, the flow of annuities both before and after the death of one of the spouses, a motive for bequeathing at the death of the surviving spouse, and the parameters of the utility functions of the couple and of each spouse if widowed. The analysis shows how consumption and the rate of change of bequeathable wealth react to variations in these determinants, and it compares the consumption level of a single person to a couple. Summaries of wealth change and consumption in panel data are given which offer general

support for the life-cycle model.

Huy, Quy N.

PD May 1998. **TI** Change Navigation Styles and Corporate Revitalization. **AA** McGill University and INSEAD. **SR** INSEAD Working Paper: 98/78/SM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. **Website:** www.insead.fr/research. **PG** 30. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M11, M12, M14. **KW** Organizational Change. Time. Revitalization.

AB Four configurations of change navigation styles are proposed to synthesize the literature on planned change: Designing, Programming, Converting, and Animating. Four temporal dimensions are included: timing, sequencing, pacing, and duration. The performance implications of these four styles and their temporal characteristics are discussed in the context of corporate revitalization.

PD December 1998. **TI** Emotional Capability, Emotional Intelligence, and Radical Change. **AA** INSEAD. **SR** INSEAD Working Paper: 98/98/SM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. **Website:** www.insead.fr/research. **PG** 34. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M14, M21. **KW** Emotional Dynamics. Organizational Capability.

AB A multilevel theory of emotion and change is presented in this article, focusing on attributes of emotional intelligence at the individual level and of emotional capability at the organizational level. Emotional intelligence facilitates individual adaptation and change. Emotional capability increases the likelihood for organizations to realize change. A meso-level framework relating emotion-attending behaviors to three dynamics of change -- receptivity, mobilization, and learning -- is presented. These behaviors are called emotional dynamics and constitute the organization's emotional capability.

Hyslop, Dean

PD March 2000. **TI** The Covariance Structure of Intrafamily Earnings, Rising Inequality and Family Labor Supply. **AA** UCLA. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 23; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. **Website:** violet.berkeley.edu/~ir/cle/index.html. **PG** 29. **PR** no charge. **JE** J21, J22, J24. **KW** Labor Supply. Intra-family Earnings. Labor Supply Elasticity.

AB This paper uses an intertemporal family labor supply framework to study the evolution of individual and family earnings during the period of rapidly rising wage inequality in the early 1980s. Working couples have strongly positively correlated labor market outcomes. However, the correlation of a wife's wages or earnings with her husband's outcomes in earlier or later years is roughly constant, implying that the inter-family correlation is entirely attributable to permanent factors. This finding motivates a very simple intertemporal family labor supply model in which husbands' and wives' labor supply decisions are linked solely through the family budget constraint and permanent taste factors. Estimation results for

this model yield a small estimated intertemporal labor supply elasticity for married men (0.05), but a larger elasticity for married women (0.40). The magnitudes of these estimates imply that behavioral labor supply responses explain relatively little of the rise in annual earnings inequality for married men, but over 50 percent of the modest rise in inequality for married women, and 20 percent of the rise in family earnings inequality in the early 1980s.

PD July 2000. **TI** Understanding Changes in the Distribution of Household Incomes in New Zealand Between 1983-86 and 1995-98. **AU** Hyslop, Dean; Mare, Dave. **AA** Hyslop: UCLA and NZ Treasury. Mare: NZ Department of Labor. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 24; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. **Website:** violet.berkeley.edu/~ir/cle/index.html. **PG** 32. **PR** no charge. **JE** I38, J14, J26. **KW** Income Inequality. New Zealand. Kernel Density.

AB This paper presents an analysis of changes in the distribution of gross household income and income inequality over the period 1983-1998. The analysis applies a semiparametric approach to study the effects of changes in the distribution of household types, and changes in National Superannuation (old age pension), household socio-demographic attributes and employment outcomes, and in the "economic returns" to such attributes and employment outcomes on the distribution of income, and uses kernel density methods to estimate these effects. This approach provides a visual appreciation of the shape of the income distribution, and is important in understanding how each of these factors affected different parts of the distribution over the period. We also find that changes in household structure (particularly the declining proportion of two-parent families), attributes, and employment outcomes each contribute to the observed increase in inequality, while the changes in returns are estimated to reduce the level of inequality. Collectively these factors account for about 50 percent of the observed increase, depending on the measure of inequality used. The results confirm other research findings that the changes were concentrated during the late 1980s.

TI Identification and Estimation of Dynamic Binary Response Panel Data Models: Empirical Evidence Using Alternative Approaches. **AU** Chay, Kenneth Y.; Hyslop, Dean.

TI A Non-Experimental Analysis of "True" State Dependence in Monthly Welfare Participation Sequences. **AU** Chay, Kenneth Y.; Hoynes, Hilary Williamson; Hyslop, Dean.

Iakova, Dora

TI Exchange Rate Regimes in Selected Advanced Transition Economies -- Coping with Transition, Capital Inflows, and EU Accession. **AU** Corker, Robert; Beaumont, Craig; van Elkan, Rachel; Iakova, Dora.

Ikenberry, David

PD July 1998. **TI** Open Market Stock Repurchases: The Canadian Experience. **AU** Ikenberry, David; Lakonishok, Josef; Vermaelen, Theo. **AA** Ikenberry: Rice University and University of Washington. Lakonishok: University of Illinois. Vermaelen: INSEAD and University of Limburg.

SR INSEAD Working Paper: 98/75/FIN; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 22. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** G14, G32. **KW** Stock Repurchase. Canada. Long-Run Performance.

AB During the 1980s, U.S. firms announcing open market stock repurchase programs earned favorable long run stock returns. Recently, concerns have been raised regarding the robustness of these findings. This comes at a time of explosive growth worldwide in the adoption of repurchase programs. This study further investigates long-run performance following repurchase announcements using a recent sample of Canadian programs. As in the U.S., the Canadian stock market seems to discount the information contained in repurchase announcements. Toronto Stock Exchange firms announcing repurchase programs between 1989 and 1995 show excess performance measured relative to a Fama-French (1993) three-factor model of approximately .5% per month over a period of three years following the announcement. Canadian value stocks announcing repurchase programs, as well as firms announcing large repurchase programs, have particularly favorable abnormal long-run performance. Interestingly, despite regulatory oversight in the approval of repurchase programs, the completion rate is low in Canada. Completion rates are higher among value stocks. For Canadian firms increasing shares outstanding, either through a seasoned equity offering or stock-financed acquisition, we observe a downward drift in returns.

Imbens, Guido W.

PD April 1999. **TI** The Role of the Propensity Score in Estimating Dose-Response Function. **AA** University of California, Los Angeles and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 237; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** C42, I10. **KW** Propensity Score. Multi-Valued Treatments.

AB Estimation of average treatment effects in observational, or non- experimental, studies often requires adjustment for differences in pre- treatment variables. If the number of pre-treatment variables is large, and their distribution varies substantially with treatment status, standard adjustment methods such as covariance adjustment are often inadequate. Rosenbaum and Rubin (1983) propose an alternative method for adjusting for pre-treatment variables based on the propensity score, the conditional probability of receiving the treatment given pre-treatment variables. They demonstrate that adjusting solely for the propensity score removes all the bias associated with differences in pre-treatment variables between treatment and control groups. The Rosenbaum-Rubin proposals deal exclusively with the case where treatment takes on only two values. In this paper an extension of this methodology is proposed that allows for estimation of average causal effects with multi-valued treatments while maintaining the advantages of the propensity score approach.

TI Predicting the Efficacy of Future Training Programs Using Past Experience. **AU** Hotz, V. Joseph; Imbens, Guido W.; Mortimer, Julie H.

Isen, Alice M.

TI The Effect of Affect on Economic and Strategic Decision Making. **AU** Hermalin, Benjamin E.; Isen, Alice M.

Iyer, Ganesh

PD September 1998. **TI** Product-Mix Information Markets. **AU** Iyer, Ganesh; Soberman, David A. **AA** Iyer: Washington University. Soberman: INSEAD. **SR** INSEAD Working Paper: 98/82/MKT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 28. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** C72, M31. **KW** Marketing Information. Information Packaging. Exclusive Contracts. Conquesting Modifications. Retention Modifications. Product Modifications.

AB We consider two types of modifications that are often suggested by marketing information: "retention" type modifications that increase the attractiveness of a product to a firm's loyal customers and "conquesting" type modifications that allow a firm to increase its appeal to competitive customers. The paper examines two aspects of the markets for product-mix information: a) the manner in which retention and conquesting modifications affect competition between downstream firms and b) the optimal selling and pricing policies for a vendor who markets information that is useful for product modifications. Two important aspects of the vendor's contracting problem are considered First, how should a vendor package and target the information to downstream firms? In particular, we examine whether a vendor has an incentive to limit the type of information sold to these firms. Second, can a vendor gain by offering "exclusivity" to a firm buying the information? We address these issues in a game-theoretic model consisting of an information vendor facing two downstream firms who sell differentiated products.

PD February 1999. **TI** Innovators in Electronic Markets: Suppliers or Middlemen. **AU** Iyer, Ganesh; Soberman, David A. **AA** Iyer: Washington University. Soberman: INSEAD. **SR** INSEAD Working Paper: 99/12/MKT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 21. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** L14, L22. **KW** Vertical Integration. Electronic Markets. Innovations. Service Pre-Investments. Threat Potential. On-line Commerce.

AB Innovators in electronic markets are typically independent companies that specialize in the development of software which is then marketed to downstream firms such as retailers and banks. The economic characteristic of electronic innovations that is captured in this paper is their role in reducing the cost of a strategic downstream decision namely non-recoverable investment needed to provide a given level of service. This paper examines the manner in which an innovator should organize the sale of an electronic innovation. Should they sell the innovation outright to the downstream firms or should they act as a middleman and determine the level of service quality that is ultimately provided to end-consumers? Two effects govern the choice of the equilibrium selling approach. First, the outright sale of the innovation can lead to over-investment in service, the benefits of which are competed away by subsequent price competition. The second effect is the "threat potential" that is imposed on a potential non-buyer of

the innovation. We find that the innovator's threat potential is lower under the middleman strategy because the innovator has to pre-invest in the service level before the innovation can be sold.

PD September 1999. **TI** Markets for Product Modification Information. **AU** Iyer, Ganesh; Soberman, David A. **AA** Iyer: Washington University. Soberman: INSEAD. **SR** INSEAD Working Paper: 99/57/MKT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 31. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M21, M31. **KW** Information Marketing. Information Packaging. Exclusive Contracts. Retention Modifications. Conquesting Modifications. Passive Power Information.

AB We consider two types of value-adding modifications that are often facilitated by marketing information: "retention" type modifications that increase the attractiveness of a product to a firm's loyal customers and 11 conquesting" type modifications that allow a firm to increase the appeal of its product to a competitor's loyal customers. Two aspects of the markets for product modification information are examined: i) the manner in which retention and conquesting modifications affect competition between downstream firms and ii) the optimal selling and pricing policies for a vendor who markets product modification information. We consider several aspects of the vendor's contracting problem including how a vendor should package and target the information to the downstream firms and whether the vendor should limit the type of information that is sold? We also examine when a vendor can gain by offering exclusivity to a firm? We address these issues in a model consisting of an information vendor facing two downstream firms who sell differentiated products.

James, Estelle

PD March 1999. **TI** Mutual Funds and Institutional Investments: What is the Most Efficient Way to Set Up Individual Accounts in a Social Security System? **AU** James, Estelle; Ferrier, Gary; Smallhout, James; Vittas, Dimitri. **AA** James and Vittas: World Bank. Ferrier: University of Arkansas. Smallhout: The Hudson Institute. **SR** National Bureau of Economic Research Working Paper: 7049; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** \$5.00. **JE** D91, E21, H55, L11. **KW** Social Security. Scale Economies. Mandatory IA.

AB This paper investigates the cost-effectiveness of three options for constructing funded social security pillars: 1) IA's invested in the retail market with relatively open choice, 2) IA's invested in the institutional market with constrained choice among investment companies, and 3) a centralized fund without individual accounts or differentiated investments across individuals. Our questions: What is the most cost-effective way to organize a mandatory IA system, how does the cost of an efficient IA system compare with that of a single centralized fund, and are the cost differentials large enough to outweigh the other important considerations? We find that the retail market (option 1) allows individual investors to benefit from scale economies in asset management, but at the cost of high marketing expenses that are needed to attract and aggregate small sums of money into large pools. In contrast, a centralized fund (option 3) can be much cheaper because it achieves scale

economies without high marketing costs, but gives workers no choice and hence is subject to political manipulation and misallocation of capital. Mandatory IA systems can be structured to get the best of both worlds.

Jap, Sandy D.

PD November 1998. **TI** Vilification: Dysfunctional Dynamics in Interorganizational Collaborations. **AU** Jap, Sandy D.; Anderson, Erin. **AA** Jap: Massachusetts Institute of Technology. Anderson: INSEAD. **SR** INSEAD Working Paper: 99/06/MKT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 36. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M14, M21. **KW** Vilification. Bad-Faith.

AB While there has been a tremendous amount of interest in the buildup of close, relational exchanges between buyers and their suppliers, there is little systematic understanding of how these collaborations slip into decline. This research investigates one explanation -- vilification, the ascription of bad-faith to a counterpart -- and examines whether and how relationships suffer when one or both sides of an organizational dyad vilifies the other. A longitudinal survey of over 200 business-to-business buyer-supplier dyads indicates that the mere attribution of bad-faith to a counterpart has real, adverse effects on the collective functioning and performance of a dyad and individual outcomes up to one year later in the relationship. We also observe simultaneity of the vilification process across the dyad, and find that a counterpart's vilification process fuels the focal party's vilification process in the short-term, but does not impact relational outcomes over time. Collectively, the results underscore the persistent and adverse effects of vilification processes on relational outcomes, even after controlling for various environmental and interorganizational aspects of the collaboration.

Jean, Sebastien

TI Le marche du travail britannique vu de France. **AU** Fouquin, Michel; Jean, Sebastien; Sztulman, Aude.

TI Wages and Unemployment: Trade-Off Under Different Labour Market Paradigms. **AU** Bontout, Olivier; Jean, Sebastien.

Jeng, Leslie A.

PD January 1999. **TI** The Profits to Insider Trading: A Performance-Evaluation Perspective. **AU** Jeng, Leslie A.; Metrick, Andrew; Zeckhauser, Richard. **AA** Jeng: Boston University. Metrick and Zeckhauser: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6913; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 35. **PR** \$5.00. **JE** G14, G28. **KW** Insider Trading. Purchase Portfolio. Abnormal Returns.

AB This paper estimates the profits to insiders when they trade their company's stock. We construct a rolling "purchase portfolio" that holds all shares purchased by insiders over the previous year and an analogous "sale portfolio" that holds all shares sold by insiders over the previous year. We then analyzed the returns to these value-weighted portfolios using performance-evaluation methods. This approach allows us to study the returns to insider transactions beginning on the day

after their execution, and is free of the statistical difficulties that plague event studies on long-horizon returns. Using a comprehensive sample of reported insider transactions from 1975-1996, we find that the purchase portfolio earns abnormal returns of about 40 basis points per month, with about one-sixth of these abnormal returns accruing within the first five days after the initial transaction, and one-third within the first month. The sale portfolio does not earn abnormal returns. Our portfolio-based approach also allows for straightforward decompositions of the purchase and sale portfolios by various characteristics. We find that the abnormal returns to insider trades in small firms are not significantly different from those in large firms, and that top executives do not earn higher abnormal returns than do other insiders.

Jenkins, Glenn

PD July 1998. TI Tax Reform in Singapore. AU Jenkins, Glenn; Khadka, Rup. AA HIID. SR Harvard Institute for International Development Discussion Paper: 644; Harvard Institute for International Development, 14 Story Street, Cambridge, MA 02138. Website: www.hiid.harvard.edu/pub/ddps.html. PG 44. PR \$7.50 for papers up to 80 pages long; \$12.00 for papers 80 pages and longer. JE E62, H24, H25, O53. KW Singapore. Tax Reform. Income. Incentive.

AB Globalization has forced many governments to change their economic policies, including tax policies, in the recent years. It has had an even greater impact on Singapore's economy due to the high degree of its openness with respect to trade and investment. In this context, Singapore undertook a major restructuring of its tax system in the early 1990s. The introduction of a modern value added tax system (goods and services tax) was part of the overall tax reform package. This paper examines how Singapore has modified its tax system to be consistent with the changes in the Singaporean economy over time and is to put itself in step with current trends in taxation. It also analyzes in detail the principal measures that the Singapore government and its tax administration took to ensure a smooth implementation of the new goods and services tax.

Jenkins, Mauricio

PD August 1998. TI Export Processing Zones in Central America. AU Jenkins, Mauricio; Esquivel, Gerardo; Larrain B., Felipe. AA Jenkins: INCAE. Esquivel: HIID. Larrain B.: Harvard University and HIID. SR Harvard Institute for International Development Discussion Paper: 646; Harvard Institute for International Development, 14 Story Street, Cambridge, MA 02138. Website: www.hiid.harvard.edu/pub/ddps.html. PG 51. PR \$7.50 for papers up to 80 pages long; \$12.00 for papers 80 pages and longer. JE F13, F15, F21, F23. KW Export-Oriented. Export Processing Zones. Maquila. Central America. Industrial Development.

AB This paper analyzes Export Processing Zones (EPZs) from a worldwide perspective and draws lessons for the accumulated experience in several countries. It argues that developing countries can take advantage of the opportunities provided by EPZs for the acquisition of superior technology, upgrading of labor and managerial skills, and greater access to foreign markets. The paper then examines the development and economic significance of EPZs and similar export-oriented regimes in Central America. This analysis shows that during the

1990s the economic significance of EPZs and other export-oriented regimes increased rapidly, although not uniformly, throughout Central America. The paper ends with a series of considerations and policy proposals for EPZs development in the region. Among other policies, this paper focuses on the promotion of industry diversification of export-oriented activities, on the development of stronger backward linkages, and on the upgrading of the export-oriented legislation in Central America.

Jermann, Urban J.

TI Quantitative Asset Pricing Implications of Endogenous Solvency Constraints. AU Alvarez, Fernando; Jermann, Urban J.

TI Household Production and the Excess Sensitivity of Consumption to Current Income. AU Baxter, Marianne; Jermann, Urban J.

Johnson, Omotunde E. G.

PD May 1998. TI The Payment System and Monetary Policy. AA International Monetary Fund. SR International Monetary Fund Papers on Policy Analysis and Assessment: PPAA/98/04; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. PG 26. PR not available. JE E51, E52, E58. KW Monetary Policy. Interday Credit. Intraday Credit.

AB Achieving the primary objective of price stability without unduly compromising the operational efficiency of the payment system constitutes a major problem for central banks. Routine monetary policy presumes a given institutional and technological framework, including aspects of the payment system. Such a monetary policy concerns itself with intraday and interday credit for payments settlements and with float. Liquidity shocks and panics sometimes pose an additional challenge. In recent years, major and rapid institutional and technological changes in the payment system (mainly to lower risks and augment operational efficiency) have affected the monetary policy decision-making process, particularly in the short run.

Johnston, R. Barry

PD July 1998. TI Sequencing Capital Account Liberalizations and Financial Sector Reform. AA International Monetary Fund. SR International Monetary Fund Papers on Policy Analysis and Assessment: PPAA/98/08; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. PG 22. PR not available. JE E52, F31, F36, G28. KW Financial Reform. Liberalization. Capital Account.

AB Additional urgency should be attached to financial sector reform when a country begins to liberalize its capital account. The adoption of prudential regulations based on generally accepted best practices will normally not entail restrictions on capital flows and will support the move toward capital account convertibility. Monetary and exchange rate policy will be constrained by increased capital flows, and monetary instruments should be evolved toward more market-based arrangements. Discriminatory reserve requirements can introduce a wedge between domestic and foreign interest rates. The sequencing of liberalizations should reflect the more general objectives of improving efficiency and promoting financial and macroeconomic stability.

PD July 1999. **TI** A Modernized Approach to Managing the Risks in Cross-Border Capital Movements. **AU** Johnston, R. Barry; Otker-Robe, Inci. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Discussion Paper: PDP/99/06; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. **PG** 19. **PR** not available. **JE** E52, F32, G28. **KW** Capital Movements. Prudential Risk Management. Policy Mix. Time Consistency. Exchange Rate Policy.

AB This paper outlines a "modern" approach to managing risks in cross-border capital movements that is consistent with an environment of increased and liberalized capital flows. Key elements of this approach include: a consistent monetary and exchange rate policy mix to avoid incentives for volatile capital flows; prudential management of the specific risks in capital flows; supporting financial sector reforms; and appropriate sequencing of liberalization. The approach can reduce the potential size of the shocks associated with capital movements and increase the resilience of the financial system to such shocks when they occur; overtime, it is expected to reduce the need for recourse to capital controls.

Jolls, Christine

TI Managerial Value Diversion and Shareholder Wealth. **AU** Bebchuk, Lucian Arye; Jolls, Christine.

Jones, Larry E.

PD July 2000. **TI** Growth and Business Cycles. **AU** Jones, Larry E.; Manuelli, Rodolfo E.; Siu, Henry E. **AA** Jones: Federal Reserve Bank of Minneapolis and University of Minnesota. Manuelli: University of Wisconsin. Siu: Northwestern University. **SR** Federal Reserve Bank of Minneapolis Staff Report: 271; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 554880-0291. Website: <http://woodrow.mpls.frb.fed.us>. **PG** 29. **PR** no charge. **JE** E32, E44, O41, O42. **KW** Endogenous Growth. Business Cycles. Technology Shocks.

AB We present a class of convex endogenous growth models and analyze their performance in terms of both growth and business cycle criteria. The models we study have close analogs in the real business cycle literature. We interpret the exogenous growth rate of productivity as an endogenous growth rate of human capital. This perspective allows us to compare the strengths of the two classes of models. To highlight the mechanism that gives endogenous growth models the ability to improve upon their exogenous growth relatives, we study models that are symmetric in terms of human and physical capital formation - our two engines of growth. More precisely, we analyze models in which the technology used to produce human capital is identical to the technologies used to produce consumption and investment goods and in which the technology shocks in the two sectors are perfectly correlated.

PD August 2000. **TI** Endogenous Policy Choice: The Case of Pollution and Growth. **AU** Jones, Larry E.; Manuelli, Rodolfo E. **AA** Jones: University of Minnesota and Federal Reserve Bank of Minneapolis. Manuelli: University of Wisconsin. **SR** Federal Reserve Bank of Minneapolis Staff Report: 276; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 554880-0291. Website: <http://woodrow.mpls.frb.fed.us>. **PG** 43. **PR** no charge. **JE** E23, O11, O23, Q28. **KW** Growth. Pollution. Endogenous Policy.

AB What determines the relationship between pollution and growth? Are the forces that explain the behavior over time of these quantities potentially useful to understand more generally the relationship between policies and growth? In this paper, we make a first attempt to analyze the equilibrium behavior of two quantities -- the level of pollution and the level of income -- in a setting in which societies choose, via voting, how much to regulate pollution. Our major finding is that, consistent with the evidence, the relationship between pollution and growth need not be monotone and that the precise equilibrium nature of the relationship between the two variables depends on whether individuals vote over effluent charges or directly restrict the choice of technology. Moreover, our analysis of the pollution problem suggests that, more generally, endogenous policy choices should be taken seriously as potential sources of heterogeneity when studying cross-country differences in economic performance.

Jovanovic, Boyan

TI The IT Revolution and the Stock Market. **AU** Greenwood, Jeremy; Jovanovic, Boyan.

Juan-Ramon, V. Hugo

PD January 1999. **TI** Honduras's Growth Performance During 1970-1997. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Discussion Paper: PDP/99/01; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. **PG** 20. **PR** not available. **JE** F43, O40, O54. **KW** Honduras. Growth. Input Productivity. Human Capital. Investment Composition.

AB For more than three decades, Honduras's average annual growth in real per capita GDP has been almost zero and highly uneven, even though its total investment-to-GDP ratio has been relatively large. This paper argues that policy and efficiency variables seem to have had less of an influence on growth in Honduras than they had on other countries. Instead, lack of growth can be attributed to the offsetting negative influence of low labor and capital productivity, which result from deficient levels of human capital and inadequate composition of investment. Other constraints to growth in Honduras include inadequate physical and institutional infrastructures.

Kahan, Marcel

TI The "Lemons Effect" in Corporate Freeze-Outs. **AU** Bebchuk, Lucian Arye; Kahan, Marcel.

Kahkonen, Juha

TI Pros and Cons of Currency Board Arrangements in the Lead-up to EU Accession and Participation in the Euro Zone. **AU** Gulde, Anne-Marie; Kahkonen, Juha; Keller, Peter.

Kalra, Sanjay

PD January 2000. **TI** Property Prices and Speculative Bubbles: Evidence From Hong Kong SAR. **AU** Kalra, Sanjay; Mihajjek, Dubravko; Duenwald, Christoph. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/02; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 27. **PR** not available. **JE** C32, E31, G12. **KW** Hong Kong SAR. Property Prices. Speculative Bubbles.

AB This paper examines the determinants of residential property prices in Hong Kong SAR during 1980-98. It uses

time-series analysis techniques to characterize price developments, establish empirical regularities, and provide measures of the deviations of actual price changes from "trend." The analysis suggests that at the peak of the boom, in mid-1997, the level of property prices may have been 40-45 percent above levels suggested by developments in "fundamentals." The analysis highlights the role of demand-side factors, and the data are not inconsistent with the notion that the property market may be subject to speculative bubbles.

Kaminsky, Graciela L.

PD December 1999. **TI** Currency and Banking Crises: The Early Warnings of Distress. **AA** George Washington University. **SR** International Monetary Fund Working Paper: WP/99/178; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 35. **PR** not available. **JE** F31, F41, F47. **KW** Early Warnings. Currency Crises. Banking Crises.

AB The abruptness and virulence of the 1997 Asian crises have led many to claim that these crises are of a new breed and were thus unforecastable. This paper examines 102 financial crises in 20 countries and concludes that the Asian crises are not of a new variety. Overall, the 1997 Asian crises, as well as previous crises elsewhere, occur when economies are in distress, making the degree of fragility of the economy a useful indicator of future crises. Based on this idea, the paper proposes different composite leading indicators of crises, evaluated in terms of accuracy both in-sample and out-of-sample.

Kanaya, Akihiro

PD January 2000. **TI** The Japanese Banking Crisis of the 1990s: Sources and Lessons. **AU** Kanaya, Akihiro; Woo, David. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/07; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 36. **PR** not available. **JE** G21, G32. **KW** Japan. Banking Crisis. Bank Restructuring.

AB For a large part of the past decade, Japan has witnessed a steady deterioration in the health of its banking system. This paper examines what went wrong and why it has taken so long for the system to recover. While the paper traces the roots of the crisis to accelerated deregulation and deepening of capital markets without an appropriate adjustment in the regulatory framework, it identifies weak corporate governance and regulatory forbearance as the two factors behind what might have been an unnecessary prolongation of the distress of the financial system.

Kaplan, Todd R.

PD February 2000. **TI** Innovative Activity and Sunk Cost. **AU** Kaplan, Todd R.; Luski, Israel; Wettstein, David. **AA** Kaplan: Hebrew University of Jerusalem and Ben-Gurion University of the Negev. Luski and Wettstein: Ben-Gurion University of the Negev. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/06; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 19. **PR** no charge. **JE** D44, O31, O32. **KW** Innovation. Patent Races. Sunk Costs.

AB We analyze a patent race where the first innovator receives a time-dependent reward while all firms incur costs.

When firms are identical, there is a unique, symmetric, mixed-strategy equilibrium that yields zero expected profits for all firms. Furthermore, the expected innovation time is an increasing function of the number of firms and a decreasing function of the size of the reward. When one firm has a higher reward than another, it is more likely to win. Although similar to an all-pay auction, our approach may yield both similar and qualitatively different behavior.

Kaplow, Louis

PD March 1999. **TI** Any Non-Individualistic Social Welfare Function Violates the Pareto Principle. **AU** Kaplow, Louis; Shavell, Steven. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7051; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 5. **PR** \$5.00. **JE** D63, H43. **KW** Pareto Principle. Social Welfare Function.

AB The public at large, many policymakers, and some economists hold views of social welfare that attach some importance to factors other than individuals' utilities. This note shows that any such non-individualistic notion of social welfare conflicts with the Pareto principle.

Karceski, Jason

TI On Portfolio Optimization: Forecasting Covariances and Choosing the Risk Model. **AU** Chan, Louis K. C.; Karceski, Jason; Lakonishok, Josef.

Karp, Larry

PD December 1998. **TI** Valuing Tradeable CO2 Permits for OECD Countries. **AU** Karp, Larry; Liu, Xuemei. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 872; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 42. **PR** \$10.50 Domestic; \$21.00 International Surface Rate. **JE** F17, F40, Q25, Q28, Q43. **KW** Tradable Permits. Greenhouse Gases. Carbon Reductions. Kuznets Curve. Environmental Economics.

AB We estimate a structural model of OECD countries in which GDP and CO2 emissions are endogenous. We use the estimated model to simulate the price of tradable CO2 permits and the efficiency gains from trade. Our estimated prices are high, relative to previous estimates, and the efficiency gains are substantial. We also find, contrary to previous literature, that higher income is associated with reduced emissions.

TI Taxes and Quotas for a Stock Pollutant With Multiplicative Uncertainty. **AU** Hoel, Michael; Karp, Larry.

PD March 1999. **TI** Fundamentals Versus Beliefs Under Imperfect Information. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 871; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 33. **PR** \$8.25 Domestic; \$16.50 International Surface Rate. **JE** D70, D82,

D84, H20, J62. **KW** Equilibrium Selection. History. Expectations. Incomplete Information. Intersectoral Migration. **AB** Krugman showed in a model of intersectoral migration with adjustment costs, where one sector has increasing returns to scale, that the equilibrium may be indeterminate. The outcome depends on agents' beliefs, which are not uniquely determined by economic fundamentals. However, if agents have imperfect and heterogeneous information, there exists a unique equilibrium to this model. Two-way migration occurs in this equilibrium, and it is Pareto efficient in the limit as the amount of uncertainty becomes negligible.

PD July 1999. **TI** Adjustment Costs and General Equilibrium Effects in Transitional Economies. **AU** Karp, Larry; Thierry, Paul. **AA** Karp: University of California, Berkeley and University of Southampton. Thierry: GREQAM, Universite de la Mediterranee. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 893; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 40. **PR** \$10.00 Domestic; \$20.00 International Surface Rate. **JE** D50, F13, J24, J62, L52. **KW** General Equilibrium. Adjustment Costs. Dynamic Policies. Time Inconsistency. Markov Perfection.

AB We compare the advantages of targeting either the growing sector or the shrinking sector in an economy where migration occurs too slowly, and the government has only second-best policy instruments. If the government is able to make commitments, we show (in a special case) that it should target the growing sector. If the government cannot make commitments about future policy, it should target the shrinking sector. If it makes a mistake and targets the growing sector, equilibrium intervention may lower social welfare. These results arise in a model where inter-sectoral migration uses a mobile factor, such as skilled labor.

PD July 1999. **TI** Welfare Gains Under Tradeable CO2 Permits. **AU** Karp, Larry; Liu, Xuemei. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 897; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 24. **PR** \$6.00 Domestic; \$12.00 International Surface Rate. **JE** F17, F42, Q25, Q28, Q43. **KW** Tradable Permits. Greenhouse Gases. Carbon Reductions.

AB Most environmentalists favor the reduction in CO2 emissions but oppose international trade in emissions permits. Although economic theory provides a strong case in favor of trade in permits, there is little empirical evidence of the size of potential benefits. We estimate the benefits of this trade for OECD countries.

TI How Many Cake-Eaters? Chouette, on a du monde a diner! **AU** Favard, Pascal; Karp, Larry.

PD September 1999. **TI** Regulation of Stock Externalities With Learning. **AU** Karp, Larry; Zhang, Jiangfeng. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 892; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley,

Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 46. **PR** \$11.50 Domestic; \$23.00 International Surface Rate. **JE** D82, D83, H21, L51, Q28. **KW** Abatement Costs. Stock Externalities. Taxation. Asymmetric Information. Pollution Control.

AB We study the situation where firms' actions contribute to a stock externality. The regulator and firms have asymmetric information about serially correlated (abatement) costs. With price-based policies such as taxes, the regulator learns about the evolution of both stock and costs. This ability to learn is important in determining the ranking of taxes and quotas, and in determining the value of a feedback rather than an open-loop policy.

PD October 1999. **TI** Fundamentals Versus Beliefs Under Almost Common Knowledge. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 871R; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 34. **PR** \$8.50 Domestic; \$17.00 International Surface Rate. **JE** D70, D82, D84, J60, O40. **KW** Equilibrium Selection. History. Expectations. Economic Growth. Common Knowledge.

AB Several economic growth models show that the equilibrium outcome may depend on agents' beliefs (expectations) rather than on economic fundamentals (history). In this situation, the equilibrium is indeterminate. However, if agents have "almost common knowledge" rather than common knowledge about the economic fundamentals, this indeterminacy vanishes in one of these models. Even though the technology is non-convex, there is a unique competitive equilibrium. The limiting equilibrium (as the amount of uncertainty becomes small) is Pareto efficient.

Katz, Lawrence

TI Wage Dynamics: Reconciling Theory and Evidence. **AU** Blanchard, Olivier Jean; Katz, Lawrence.

Katz, Michael L.

TI Innovation, Rent Extraction, and Integration in Systems Markets. **AU** Farrell, Joseph; Katz, Michael L.

Keay, Ian

TI The Extinction of the Eastern Arctic Bowhead. **AU** Allen, Robert C.; Keay, Ian.

Kehoe, Patrick J.

PD March 2000. **TI** International Business Cycles With Endogenous Incomplete Markets. **AU** Kehoe, Patrick J.; Perri, Fabrizio **AA** Kehoe: Federal Reserve Bank of Minneapolis, University of Minnesota and NBER. Perri: New York University and Federal Reserve Bank of Minneapolis. **SR** Federal Reserve Bank of Minneapolis Staff Report: 265; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 554880-0291. Website: <http://woodrow.mpls.frb.fed.us>. **PG** 30. **PR** no charge. **JE** F21, F32, F41. **KW** Credit Constraints. Debt Constraints.

AB Backus, Kehoe and Kydland (1992), Baxter and Crucini (1995) and Stockman and Tesar (1995) find two major discrepancies between standard international business cycle

models with complete markets and the data: In the models, cross-country correlations are much higher for consumption than for output, while in the data the opposite is true; and cross-country correlations of employment and investment are negative, while in the data they are positive. This paper introduces a friction into a standard model that helps resolve these anomalies. The friction is that international loans are imperfectly enforceable; any country can renege on its debts and suffer the consequences for future borrowing. To solve for equilibrium in this economy with endogenous incomplete markets, the methods of Marcet and Marimon (1999) are extended. Incorporating the friction helps resolve the anomalies more than does exogenously restricting the assets that can be traded.

TI Can Sticky Price Models Generate Volatile and Persistent Real Exchange Rates? **AU** Chari, V. V.; Kehoe, Patrick J.; McGrattan, Ellen R.

TI Paths of Development for Early- and Late-Bloomers in a Dynamic Heckscher-Ohlin Model. **AU** Atkeson, Andrew; Kehoe, Patrick J.

TI Can Sticky Price Models Generate Volatile and Persistent Real Exchange Rates? **AU** Chari, V. V.; Kehoe, Patrick J.; McGrattan, Ellen R.

TI Money and Interest Rates with Endogenously Segmented Markets. **AU** Alvarez, Fernando; Atkeson, Andrew; Kehoe, Patrick J.

Keim, Donald B.

TI The Cross Section of Common Stock Returns: A Review of the Evidence and Some New Findings. **AU** Hawawini, Gabriel; Keim, Donald B.

Keller, Peter

TI Pros and Cons of Currency Board Arrangements in the Lead-up to EU Accession and Participation in the Euro Zone. **AU** Gulde, Anne-Marie; Kahkonen, Juha; Keller, Peter.

Kennedy, David M.

TI Testing for Structural Breaks in the Evaluation of Programs. **AU** Piehl, Anne Morrison; Cooper, Suzanne J.; Kennedy, David M.; Braga, Anthony A.

TI Testing for Structural Breaks in the Evaluation of Programs. **AU** Piehl, Anne Morrison; Cooper, Suzanne J.; Kennedy, David M.; Braga, Anthony A.

Kets de Vries, Manfred F. R.

PD 1998. **TI** The Anarchist Within: Clinical Reflections of Russian Character, Leadership Style, and Organizational Practices. **AA** INSEAD. **SR** INSEAD Working Paper: 98/96/ENT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 63. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** D73, N84, N85, P32, P41, P52. **KW** Russia. Communism. Soviet. Leadership Style. Organizational Practices. Paranoid Outlook. External Orientation. Authoritarianism. Collectivism. Envy. Oblomovism. Anarchism. Corruption. Conflict Avoidance. False-Self. Social Defense.

AB The objective of this article is to highlight a number of

salient aspects of the culture and character of Russia to facilitate an informed understanding of the way Russians approach leadership style and organizational practices. When appropriate, the clinical paradigm or cultural constructs are utilized. Contextual factors such as the harsh climate and the isolated agricultural community of the past contribute to stoicism as a character trait and make for a collectivist outlook. Russian child-rearing and educational practices are discussed. Attention is given to the development of a "false self" —a public self that is split from the true private self—especially during the Soviet era. Other themes discussed in the paper include: the role of women in Russian society; emotional expressiveness; the particularistic outlook toward other people; and Oblomovism—the tendency toward apathy and inertia; the oscillation between order and disorder is also highlighted. The last part of the article is devoted to the role of leadership in Russia and the specific leadership practices that are appropriate in tomorrow's workplace, given Russia's cultural heritage and character, is also addressed.

PD January 1999. **TI** Creating the "Authentizotic" Organization: Corporate Transformation and its Vicissitudes -- A Rejoinder. **AU** Kets de Vries, Manfred F. R.; Balazs, Katharina. **AA** Kets de Vries: INSEAD. Balazs: H.E.C. **SR** INSEAD Working Paper: 99/02/ENT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 21. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M14, M21. **KW** Individual Change. Organizational Change. Clinical Orientation. Organizational Paradigm. Transformation. Organizational Development. Working Life. Motivational Need Systems. Mental Health. Flow. Authentizotic Organization.

AB This article is a rejoinder to the critique by Robert Golembiewski of our article "Transforming the Mind-Set of the Organization: A Clinical Perspective". In this rejoinder we emphasize the difference between the usually small-scale change efforts as represented by Organizational Development (OD) and Quality of Working Life (QWL) methods and the major organizational transformation efforts we have been engaged in. In addition, the clinical orientation to organizational change adds an additional dimension to more conventional approaches to change. We point out that our approach may be more appropriate given the present shift in organizational paradigms. Furthermore, we clarify our definition of "healthy" organizations as being based on a set of motivational need systems. We introduce the concept of the authentizotic organization, indicating the type of organization representing a set of values that make it an invigorating place to work. These are the kinds of organizations that possess an ambiance where people have a greater sense of self-determination, a greater sense of impact, a greater sense of competence, a greater sense of belonging, a greater sense of enjoyment, and a sense of meaning.

Khadka, Rup

TI Tax Reform in Singapore. **AU** Jenkins, Glenn; Khadka, Rup.

Khan, Mahmood H.

PD May 1998. **TI** Taxing Agriculture in Pakistan. **AU** Khan, Mahmood H.; Khan, Mohsin S. **AA** Khan, M. H.: Simon Fraser University. Khan, M. S.: International

Monetary Fund. **SR** International Monetary Fund Papers on Policy Analysis and Assessment: PPAA/98/03; International Monetary Fund, Washington, DC 20431. **PG** 24. **PR** not available. **JE** E62, Q18. **KW** Pakistan. Taxation. Agriculture.

AB Pakistan's economic performance has been marred by persistently high fiscal deficits which have resulted largely from the inability to raise sufficient revenues. Agriculture is a dominant sector of the economy, but very limited revenue is generated from direct taxes on agricultural producers. The paper first reviews the history of attempts to tax agriculture in Pakistan, the purpose of which is to underscore the difficulty in adopting and implementing a sound agricultural tax policy. It then examines various alternatives with regard to the taxation of agricultural land and incomes. Finally, it presents the outlines of a fully-fledged agricultural income tax that could be implemented within the Constitutional framework in the next three to five years.

Khan, Mohsin S.

TI Taxing Agriculture in Pakistan. **AU** Khan, Mahmood H.; Khan, Mohsin S.

TI Africa: Is This the Turning Point? **AU** Fischer, Stanley; Hernandez-Cata, Ernesto; Khan, Mohsin S.

Khanna, Tarun

PD February 1999. **TI** Emerging Market Business Groups, Foreign Investors, and Corporate Governance. **AU** Khanna, Tarun; Palepu, Krishna. **AA** Harvard Business School. **SR** National Bureau of Economic Research Working Paper: 6955; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** \$5.00. **JE** G34, F21, F23. **KW** India. Monitors. Investment.

AB We examine the interaction between three kinds of concentrated owners commonly found in an emerging market: family-run business groups, domestic financial institutions, and foreign financial institutions. Using data from India in the early 1990s, we find evidence that domestic international investors are poor monitors, and that foreign institutional investors are good monitors. Whereas affiliates of those groups that attract foreign institutional investment are no more difficult to monitor than are unaffiliated firms, we find that group affiliation reduces the likelihood of foreign institutional investment. More transparent groups (where greater transparency is proxied for by a lower incidence of intra-group financial transaction) are more likely to attract such investment. We conclude that groups are difficult to monitor, and that foreign institutional investors serve valuable monitoring function as emerging markets integrate with the global economy.

Khmelnitskaya, Anna B.

PD May 1999. **TI** Social Choice with Independent Subgroup Utility Scales. **AU** Khmelnitskaya, Anna B.; Weymark, John A. **AA** Khmelnitskaya: St. Petersburg Institute for Economics and Mathematics. Weymark: University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 99/15; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 9. **PR** **JE** D71. **KW** Social Choice. Social Welfare Ordering. Interpersonal Utility Comparisons.

AB In this article, the kinds of utility comparisons that can be made may differ in distinct population subgroups. Within each subgroup, utility is either ordinally or cardinally measurable. Levels and differences of utility may or may not be interpersonally comparable within a subgroup. No utility comparisons are possible between subgroups. Given these informational assumptions, it is shown that any continuous social welfare ordering that satisfies the weak Pareto principle only depends on the utilities of one of the subgroups. The class of social welfare orderings consistent with these assumptions is determined by the scale type of the dictatorial subgroup.

Kilduff, Martin

PD 1998. **TI** The Reciprocal Effects of Top Management Team Cognitive Diversity and Firm Performance: Opening the Black Box. **AU** Kilduff, Martin; Angelmar, Reinhard; Mehra, Ajay. **AA** Kilduff and Mehra: Pennsylvania State University. Angelmar: INSEAD. **SR** INSEAD Working Paper: 98/91/MKT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 29. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M12, M21. **KW** Diversity. Teams. Cognitive Diversity. Team Life-Cycle.

AB Using data from 35 simulated firms run by a total of 159 managers attending executive education programs, this research tests several hypotheses concerned with: a) the relationship between demographic and cognitive team diversity; and b) reciprocal influence processes between team cognitive diversity and performance. Results showed that members of high performance teams tended to preserve multiple interpretations early in the team's life cycle, but moved toward greater clarity near the end of the life cycle. These high performing teams, therefore exhibited both early interpretative ambiguity and late heedful interrelating. Further, teams that improved firm performance early in the game tended to show increased diversity concerning perceptions of team decision making and structure over the course of the simulation. Thus cognitive diversity in teams both affected and was affected by changes in firm performance. Finally, there was a marginally significant tendency of teams heterogeneous in terms of nationality and functional background to show increases in market share over the course of the simulation.

PD 1999. **TI** Top Management Team Diversity and Firm Performance: Examining the Role of Cognitions. **AU** Kilduff, Martin; Angelmar, Reinhard; Mehra, Ajay. **AA** Kilduff: Pennsylvania State University. Angelmar: INSEAD. Mehra: University of Cincinnati. **SR** INSEAD Working Paper: 99/51/MKT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 30. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M12, M21. **KW** Cognitive Diversity. Teams. Management Teams.

AB Demography research rarely examines the black box within which the cognitive diversity of the top management team is assumed to affect firm performance. Using data from 35 simulated firms run by a total of 159 managers attending executive education programs, the current research tested several hypotheses concerned with: a) the relationship between demographic and cognitive team diversity; and b) the reciprocal effects of diversity and firm performance. Results showed that members of high-performing teams tended to

preserve multiple interpretations early in the team's life cycle, but moved toward greater clarity near the end of the cycle. These high-performing teams, therefore, exhibited both early interpretative ambiguity and late heedful interrelating. Cognitive diversity in teams both affected and was affected by changes in firm performance. Surprisingly, there was no evidence of any effect of demographic diversity on measures of cognitive diversity.

Kilian, Lutz

TI Unit Root Tests are Useful for Selecting Forecasting Models. **AU** Diebold, Francis X.; Kilian, Lutz.

Kim, Jungshik

TI The Big Players in the Foreign Exchange Market: Do They Trade on Information or Noise? **AU** Wei, Shang-Jin; Kim, Jungshik.

Kim, Woonchan

PD March 1999. **TI** Foreign Portfolio Investors Before and During a Crisis. **AU** Kim, Woonchan; Wei, Shang-Jin. **AA** Kim: John F. Kennedy School of Government. Wei: Center for International Development at Harvard University and John F. Kennedy School of Government. **SR** Harvard Center for International Development (CID) Working Paper: 6; Center for International Development; John Gallup, Editor; 79 John F. Kennedy Street, Cambridge, MA 02138. Website: www.cid.harvard.edu/cidworkingpapers/cid_workingpapers.htm. **PG** 30. **PR** paper copies \$7.50 up to 80 pages long; \$12.00 for 80 pages long and longer. **JE** F21, F32, G15. **KW** Foreign Portfolio Investment. Crisis. Feedback Trading. Herding.

AB Using a unique data set, we study the trading behavior of foreign portfolio investors in Korea before and during the currency crisis. Different categories of investors have significant differences as well as similarities. First, non-resident institutional investors are always positive feedback traders, whereas resident investors before the crisis were negative feedback (contrarian) traders but switch to be positive feedback traders during the crisis. Second, individual investors herd significantly more than institutional investors. Non-resident (institutional as well individual) investors herd significantly more than their resident counterparts. Third, differences in the Western and Korean news coverage are correlated with differences in net selling by non-resident investors relative to resident investors.

Kim, Yong Jin

PD March 1999. **TI** Overinvestment, Collateral Lending, and Economic Crisis. **AU** Kim, Yong Jin; Lee, Jong-Wha. **AA** Kim: Dongduk Women's University, Korea. Lee: Center for International Development at Harvard University and Korea University. **SR** Harvard Center for International Development (CID) Working Paper: 4; Center for International Development; John Gallup, Editor; 79 John F. Kennedy Street, Cambridge, MA 02138. Website: www.cid.harvard.edu/cidworkingpapers/cid_workingpapers.htm. **PG** 29. **PR** paper copies \$7.50 up to 80 pages long; \$12.00 80 pages long and longer. **JE** E44, F34, O16. **W** Economic Growth, Financial Crisis, Industrial Policy, Bank Run, Capital Market Liberalization.

AB This paper presents a model in which a high growth economy becomes susceptible to a sudden financial crisis. In

the model firms are motivated to over-invest because of government subsidies and then bear the burden of the inefficiencies caused by the government distortion. We assume that the firms compensate for their losses by obtaining bank loans and domestic banks will continuously lend money to the firms as long as the total amount of accumulated loans remain within the limit of the collateral value of real estate. Domestic banks borrow from foreign investors to provide loans for the firms. With these assumptions, we obtain the following results that may well be consistent with the recent experience of East Asian countries. The rapid growth caused by higher government subsidies makes the economy very vulnerable to adverse shocks. When adverse shocks hit the economy and the expected loan-to-collateral value ratio rapidly increases, foreign investors become suspicious about the safety of domestic banks and begin to withdraw their loans. Subsequently, financial panic and economic crisis suddenly occur. Third, capital market liberalization, by provoking huge foreign capital inflows and outflows, increases the possibility of crisis and amplifies the scale of crisis.

Klemperer, Paul

PD April 2000. **TI** Applying Auction Theory to Economics. **AA** University of Oxford. **SR** Oxford Department of Economics Discussion Paper: 01; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. **PG** 46. **PR** no charge. **JE** D43, D44, L13. **KW** Bidding. Auction Theory. Private Values. Common Values. Mechanism Design. Litigation. Stock Markets. Queues. Financial Crashes. Brand Loyalty. War of Attrition. Bertrand. Perfect Competition. E-commerce. Spectrum Auctions. Treasury Auctions. Electricity.

AB This is a preliminary draft of an Invited Symposium paper for the World Congress of the Econometric Society to be held in Seattle in August 2000. We discuss the strong connections between auction theory and "standard" economic theory, and argue that auction-theoretic tools and intuitions can provide useful arguments and insights in a broad range of mainstream economic settings that do not, at first sight, look like auctions. We also discuss some more obvious applications, especially to industrial organization.

Klette, Tor Jakob

PD February 1999. **TI** Do Subsidies to Commercial R&D Reduce Market Failures? **Microeconomic Evaluation Studies**. **AU** Klette, Tor Jakob; Moen, Jarle; Griliches, Zvi. **AA** Klette: University of Hslo. Moen: not available. Griliches: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6947; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** L16, O31, O32. **KW** Innovation. Research and Development.

AB A number of market failures have been associated with research and development (R&D) investments and significant amounts of public money have been spent on programs to stimulate innovative activities. In this paper, we review some recent microeconomic studies evaluating effects of government sponsored commercial R&D. We pay particular attention to the conceptual problems involved. Neither the firms receiving support, nor those not applying, constitute random samples. Furthermore, those not receiving support may be affected by the

programs due to spillover effects which often are a main justification for R&D subsidies. Constructing a valid control group under these circumstances is challenging, and we relate our discussion to recent advances in econometric methods for evaluation studies based on non-experimental data. We also discuss some analytical questions that need to be addressed in order to assess whether R&D support schemes can be justified. For instance, what are the implications of firms' R&D investments being complementary to each other, and to what extent are potential R&D spillovers internalized in the market?.

Kling, Jeffrey R.

TI Measuring Inter-Judge Sentencing Disparity Before and After the Federal Sentencing Guidelines. **AU** Anderson, James M.; Kling, Jeffrey R.; Stith, Kate.

Knetter, Michael M.

TI Measuring the Economic Effects of Military Base Closures. **AU** Hooker, Mark A.; Knetter, Michael M.

Knight, John

PD October 1996. **TI** Chinese Peasant Choices: Farming, Rural Industry or Migration. **AU** Knight, John; Song, Lina. **AA** University of Oxford. **SR** Oxford Applied Economics Discussion Paper: 188; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. **PG** 29. **PR** 2 pounds (US \$4.00). **JE** J61, O15. **KW** Migration. Rural. Urban. China. Choices.

AB A nationally representative rural labor force survey of China is analyzed to explore the allocation of labor among farming, local non-farming and temporary migration activities. The returns to non-farming greatly exceed those to farming, for reasons which are explored. Unconstrained and constrained choices are modeled theoretically and empirical estimates made of the personal and household determinants of activities and of the days worked in them. Not only the preferences of workers but also their productive characteristics and the opportunities available to them are found to be relevant. There is evidence that peasants are constrained in their choice of non-farming activities -- constraints which reflect restricted access, imperfect information and risk, and transaction costs. The loosening of constraints is important for rural development in China.

PD January 1997. **TI** Chinese Rural Migrants in Urban Enterprises: Three Perspectives. **AU** Knight, John; Song, Lina; Huaibin, Jia. **AA** University of Oxford. **SR** Oxford Applied Economics Discussion Paper: 190; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. **PG** 22. **PR** 2 pounds (US \$4.00). **JE** J61, O15. **KW** Migration. China. Control. Incentives.

AB A survey of rural migrants employed in enterprises in four Chinese cities is analyzed to answer the following questions. Are the productive characteristics of migrants rewarded in the urban labor market? How do migrants compare with non-migrants in their productive characteristics, occupational attainment and pay? Do migrants have an incentive to remain with the enterprise and in the city, and what factors influence these attitudes? What determines the extent of migrant employment? Do enterprises have an incentive to employ more migrants, and how do they value migrants relative

to non-migrants? How does policy influence migration: does government impede or encourage the flow of temporary migrants? Thus the process of migration is analyzed from three perspectives: that of the rural migrants themselves, of their urban employers, and of the government. The survey results are combined with macroeconomic projects to consider the future of migration in China.

Kocherlakota, Narayana R.

PD August 2000. **TI** Risky Collateral and Deposit Insurance. **AA** University of Minnesota and Federal Reserve Bank of Minneapolis. **SR** Federal Reserve Bank of Minneapolis Staff Report: 274; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 554880-0291. Website: <http://woodrow.mpls.frb.fed.us>. **PG** 19. **PR** no charge. **JE** D82, G21, G28. **KW** Limited Enforcement. Deposit Insurance. Collateral. Contracts.

AB This paper provides a new rationalization for deposit insurance and systemic disintermediations. I consider an environment in which borrowers face no penalty for failing to repay obligations except the loss of their collateral. I assume that this collateral has aggregate risk. For a subset of the exogenous parameters, I demonstrate that an optimal arrangement features deposit insurance. For a strictly smaller set of parameters, it is optimal in some states of the world to have systemic disintermediation and concomitant falls in real output.

PD August 2000. **TI** Societal Benefits of Nominal Bonds. **AA** University of Minnesota and Federal Reserve Bank of Minneapolis. **SR** Federal Reserve Bank of Minneapolis Staff Report: 275; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 554880-0291. Website: <http://woodrow.mpls.frb.fed.us>. **PG** 18. **PR** no charge. **JE** C78, E42, E58. **KW** Money. Nominal Bonds.

AB In this paper, I provide a possible explanation of why nominally risk-free bonds are essential in monetary economies. I argue that the role of nominal bonds is to serve as record-keeping devices in intertemporal exchanges of money. I show that bonds can only serve this role if they are illiquid (costly to exchange for goods). Finally, I show that in economies in which nominal bonds are essential, welfare and nominal interest rates are both positively associated with the supply of illiquid bonds (if that supply is small).

TI Efficient Allocations with Hidden Income and Hidden Storage. **AU** Cole, Harold L.; Kocherlakota, Narayana R.

Koen, Vincent

TI The "Soaring Eagle": Anatomy of the Polish Take-Off in the 1990s. **AU** De Broeck, Mark; Koen, Vincent.

TI The Great Contractions in Russia, the Baltics and the Other Countries of the Former Soviet Union: A View From the Supply Side. **AU** De Broeck, Mark; Koen, Vincent.

Koskela, Erkki

PD February 1999. **TI** Green Tax Reform and Competitiveness. **AU** Koskela, Erkki; Schob, Ronnie; Sinn, Hans-Werner. **AA** Koskela: University of Helsinki. Schob: University of Munich. Sinn: University of Munich and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6922; National Bureau of Economic Research, 1050 Massachusetts Avenue,

Cambridge, MA 02138. Website: www.nber.org. PG 14. PR \$5.00. JE H20, J51. KW Green-tax. Imported Energy. Competition.

AB This paper develops a model of a small open economy that produces an export good with domestic labor and imported energy and is stuck in an unemployment situation resulting from an excessive fixed net-of-tax wage rate. We study a revenue-neutral green tax reform that substitutes energy for wage taxes. A moderate green tax reform will boost employment, improve welfare, and increase the economy's competitiveness. The driving force behind these results is the technological substitution process that a green tax reform will bring about by inducing the producers to substitute labor for energy as factors of production. The resulting reduction in unemployment is welfare increasing since energy, which the country has to buy at its true national opportunity cost, is replaced with labor, whose price is above its social opportunity cost. As long as the labor tax rate exceeds the resource tax rate, a revenue-neutral green-tax reform will reduce the domestic firms' unit cost of production and hence increase international competitiveness and output of the economy.

Kraakman, Reinier

TI Stock Pyramids, Cross-Ownership, and the Dual Class Equity: The Creation and Agency Costs of Separating Control From Cash Flow Rights. AU Bebchuk, Lucian Arye; Kraakman, Reinier; Triantis, George.

Kramer, Charles

TI Global Liquidity and Asset Prices: Measurement, Implications, and Spillovers. AU Baks, Klaas; Kramer, Charles.

Krishna, Kala

PD February 1999. **TI** Efficient Competition With Small Numbers - With Applications to Privatisation and Mergers. AU Krishna, Kala; Traaen, Torben. AA Krishna: Pennsylvania State University and National Bureau of Economic Research. Traaen: University of Copenhagen. **SR** National Bureau of Economic Research Working Paper: 6952; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 19. PR \$5.00. JE C07, D04, L05. KW Privatisation. Mergers. Competition.

AB This paper studies competition between a small number of suppliers and a single buyer (or an auction with small number of bidders and a single seller), when total demand (supply) is uncertain. It is well known that when a small number of suppliers compete in supply functions then service is not provided efficiently. We show that production efficiency is obtained if suppliers compete in simple two-part bid functions. However, profits are not eliminated. Moreover, the buyers' (sellers') decision regarding how much to buy is not efficient. We also show that suppliers (bidders in an auction) always have an incentive to merge (form bidding rings) in this setting.

Krishna, Vijay

PD January 1999. **TI** A Model of Expertise. AU Krishna, Vijay; Morgan, John. AA Krishna: Penn State University. Morgan: Princeton University. **SR** Princeton University Discussion Papers in Economics, Woodrow Wilson School of Public and International Affairs: 206; Woodrow Wilson School of Public and International Affairs, Princeton

University, Princeton, NJ 08544-1013. Website: www.princeton.edu/other/workingpapers.html. PG 31. PR no charge. JE D72, D73, D82. KW Cheap-Talk. Signaling.

AB We study a model in which two perfectly informed experts offer advice to a decision maker whose actions affect the welfare of all. Experts are biased and thus may wish to pull the decision maker in different directions and to different degrees. When the decision maker consults only a single expert, the expert withholds substantial information from the decision maker. We ask whether this situation is improved by having the decision maker consult a cabinet of (two) experts. We first show that there is no perfect Bayesian equilibrium in which full revelation occurs. When both experts are biased in the same direction, it is never beneficial to consult both. In contrast, when experts are biased in opposite directions, it is always beneficial to consult both. Finally, a cabinet of extremists is of no value.

Krishnan, Vish

TI Capturing the Effect of Technology Improvements on Product Positioning and Introduction Sequence Decision-Making. AU Bhattacharya, Shantanu H.; Krishnan, Vish; Mahajan, Vijay.

PD October 1998. **TI** The Role of Design Flexibility in Defining Products Under Technology Uncertainty. AU Krishnan, Vish; Bhattacharya, Shantanu H. AA Krishnan: University of Texas at Austin. Bhattacharya: INSEAD. **SR** INSEAD Working Paper: 99/17/TM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. PG 34. PR no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. JE L63, O31, O32. KW Design Flexibility. Technology Uncertainty.

AB In this paper, we focus on the problem of defining products under technology uncertainty, which poses a major challenge to firms in the industry. We argue that the conventional pizza-bin approach of rejecting prospective technologies outright may not serve firms well in competitive environments where the pressure to differentiate products is enormous. After motivating the challenges and decisions facing firms using a real-life application from Dell Computer Corporation, we formulate a mathematical model of a firm that must define its products in the presence of technology uncertainty. Specifically, the firm faces two technology options: (i) a proven technology that is known to be viable and (ii) a prospective technology that offers superior price to performance results but whose viability is not a fully certain outcome. Our analytical results help demarcate the regions of appropriateness of the pizza-bin, parallel path and sufficient design approaches. We find that the pizza-bin approach is appropriate for firms with long development cycles. A firm should choose the parallel path approach when the ratio of variance to mean of the viability of the prospective technology is below a threshold value.

TI A Theory of Pricing for Information-Intensive Offerings. AU Balasubramanian, Sridhar; Bhattacharya, Shantanu H.; Krishnan, Vish.

Krolzig, Hans-Martin

PD March 2000. **TI** Computer Automation of General-

to-Specific Model Selection Procedures. AU Krolzig, Hans-Martin; Hendry, David F. AA University of Oxford. SR Oxford Department of Economics Discussion Paper: 03; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. PG 26. PR no charge. JE C22, C51. KW Econometric Methodology. Model Selection. Encompassing. Data Mining. Monte Carlo Experiments. Money Demand. Consumption Function.

AB Disputes about econometric methodology partly reflect a lack of evidence on alternative approaches. We reconsider econometric model selection from a computer-automation perspective, focusing on general- to-specific reductions, embodied in PcGets. Starting from a general congruent model, standard testing procedures eliminate statistically- insignificant variables, with diagnostic tests checking the validity of reductions, ensuring a congruent final selection. Since jointly selecting and diagnostic testing has eluded theoretical analysis, we study modeling strategies by simulation. The Monte Carlo experiments show that PcGets recovers the DGP specification from a general model with size and power close to commencing from the DGP itself.

PD April 1997. TI International Monetary Policy Coordination and Credibility Under Incomplete Information. AA University of Oxford. SR Oxford Applied Economics Discussion Paper: 193; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. PG 30. PR 2 pounds (US \$4.00). JE E58, F42. KW International Coordination. Monetary Policy. Reputation. Signaling.

AB Recent theories converge in the idea that international monetary policy cooperation can be counter-productive. This paper reconsiders the role of policy cooperation and credibility in a two-country model with incomplete information about the type of the coordination mechanism. In the perfect Bayesian Nash equilibrium, the Rogoff proposition does not hold if the public has incomplete information about the ability of the policymakers to adhere to international agreements. Even if non-cooperative policymakers are able to signal their type, cooperation of central banks is beneficial.

PD June 1997. TI International Business Cycles: Regime Shifts in the Stochastic Process of Economic Growth. AA University of Oxford. SR Oxford Applied Economics Discussion Paper: 194; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. PG 31. PR 2 pounds (US \$4.00). JE C32, E32, F23. KW International. Business Cycles. Hamilton Model.

AB This paper analyzes regime shifts in the stochastic process of economic growth of six major OECD countries over last three decades. For the statistical measurement of the underlying global business cycle, we generalize Hamilton's model of the U.S. business cycle to a Markov-switching vector autoregressive time series model. Applying the model to six series of quarterly GNP growth rates, the paper provides empirical evidence for the dominance of common stocks as a source of international business cycles. For all countries, business cycles can be identified as regime shifts in the mean growth rate occurring mainly simultaneously across countries. We also find significant evidence of a structural break in the second quarter of 1973 affecting the growth path of the world economy as well as the correlation structure of country-specific

shocks.

Krueger, Anne

PD March 1999. TI The Role of Bank Restructuring in Recovering from Crisis: Mexico 1995-98. AU Krueger, Anne; Tornell, Aaron. AA Krueger: Stanford University and National Bureau of Economic Research. Tornell: Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 7042; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 35. PR \$5.00. JE F23, F34, F36, F41. KW Mexico. Credit Crunch. Asymmetric Recovery.

AB In this paper we analyze the evolution of the Mexican economy between 1995 and 1998. The remarkable quick recovery seen in aggregate activity has not been uniform across the economy. The tradable sector has grown strongly, while the non-tradable sector has recuperated only sluggishly. This asymmetric response is intimately linked with the severe credit crunch that Mexico has experienced since 1995. Although fresh domestic bank lending dried up, tradable firms obtained financing in the international capital market. This was not the case in the non-tradable sector. A phenomenon that has gone hand in hand with the credit crunch is the steady increase in the share of non-performing loans. We analyze the reasons for this increase, the rationale for the partial bailout policy adopted in 1995, and we investigate why this policy stance did not solve the banking problem. An important lesson is that non-performing loans are unlikely to disappear on their own, even under a high GDP growth scenario. Furthermore, the existence of non-performing loans presents an obstacle for the banking system to adequately perform its functions.

Krueger, Dirk

PD June 1999. TI Risk Sharing: Private Insurance Markets or Redistributive Taxes? AU Krueger, Dirk; Perri, Fabrizio. AA Krueger: Federal Reserve Bank of Minneapolis and University of Minnesota. Perri: New York University. SR Federal Reserve Bank of Minneapolis Staff Report: 262; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 55488-0291. Website: <http://woodrow.mpls.frb.fed.us>. PG 77. PR no charge. JE D91, E62, H31. KW Risk Sharing. Redistributive Taxation. Incomplete Markets.

AB We explore the welfare consequences of different taxation schemes in an economy where agents are debt-constrained. If agents default on their debt, they are banned from future credit markets, but retain their private endowments, which are subject to income taxation. A change in the tax system changes the severity of punishment from default and, hence, leads to a limitation of possible risk sharing via private contracts. The welfare consequences of a change in the tax system depend on the relative magnitudes of increased risk sharing forced by the new tax system and the reduced risk sharing in private insurance markets. We quantitatively address this issue by calibrating an artificial economy to US income and tax data. We show that for a plausible selection of the structural parameters of our model, the change to a more redistributive tax system leads to less risk sharing among individuals and lower ex- ante welfare.

Krupnick, Alan J.

TI Intel's XL Permit: A Framework for Evaluation.

AU Boyd, James; Krupnick, Alan J.; Mazurek, Janice.

TI Learning From Experiments: An Evaluation Plan for CMAQ Projects. AU Farrell, Deirdre; Harrington, Winston; Krupnick, Alan J.

TI Overcoming Public Aversion to Congestion Pricing. AU Harrington, Winston; Krupnick, Alan J.; Alberini, Anna.

Kuester, Sabine

PD May 1999. TI Firm Strategy and Speed of Diffusion. AU Kuester, Sabine; Gatignon, Hubert; Robertson, Thomas S. AA Kuester: New York University. Gatignon: INSEAD. Robertson: Emory University. SR INSEAD Working Paper: 99/32/MKT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. PG 26. PR no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. JE M31, O33. KW Entry Strategy. Technological Choices. Innovation Diffusion.

AB Consumer and organizational behavior perspectives have dominated research on the diffusion of innovations within the marketing literature. These perspectives are important but under-represent the role of the firm's strategic actions in affecting diffusion. In this chapter, we view strategic actions as critical in accelerating or retarding the speed of adoption of an innovation. We are especially interested in the influence of the firm's technological choices and entry strategy on the speed of diffusion. We review the relevant literature and discuss the role played by technology and entry strategy in the diffusion of innovations. Issues that could be addressed to enhance the field's understanding of the interface between strategy and diffusion are also suggested.

Kunst, Robert M.

PD September 1998. TI Unit Roots, Change, and Decision Bounds. AA Institute for Advanced Studies. SR Institute for Advanced Studies (IHS) Economics Series Working Paper: 58; Institute for Advanced Studies, Stumpergasse 56, A-1060 Vienna, Austria. Website: www.ihs.ac.at/Library/libhome.html. PG 37. PR ATS 80.00 Individuals; ATS 250.00 Institutions. JE C22, C44. KW Time Series. Integrated Processes. Structural Breaks. Loss Function.

AB The problem of optimal decision among unit roots, trend stationarity, and trend stationarity with structural breaks is considered. A hierarchically random process whose parameters are distributed in a non-informative way represents each class. The prior frequency for all three processes is the same. Observed trajectories are classified by two information condenser statistics ζ_1 and ζ_2 . ζ_1 is the traditional Dickey-Fuller t-test statistic that allows for a linear trend. ζ_2 is a heuristic statistic that condenses information on structural breaks. Two loss functions are considered for determining decision contours within the (ζ_1, ζ_2) space. Whereas quadratic discrete loss expresses the interest of a researcher attempting to find out the true model, prediction error loss expresses the interest of a forecaster who sees models as intermediate aims. For both loss functions and the empirically relevant sample sizes of $T=50, 100, 150, 200$, optimal decision contours are established by means of Monte Carlo simulation.

Kurosaki, Takashi

PD July 2000. TI Insurance Market Efficiency and Crop

Choices in Pakistan. AU Kurosaki, Takashi; Fafchamps, Marcel. AA Kurosaki: Hitotsubashi University, Japan. Fafchamps: University of Oxford. SR Oxford Department of Economics Discussion Paper: 12; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. PG 51. PR no charge. JE O12, Q12. KW Risk. Agricultural Development. Household Models. Insurance Markets. Structural Estimation.

AB This paper tests the efficiency of insurance markets in the Pakistan Punjab by examining how crop choices are affected by the presence of price and yield risk. We estimate reduced-form and structural models of crop choices. Although we cannot reject the hypothesis that village members efficiently share risk among themselves, production choices are shown to depend on risk. Existing risk sharing and self-insurance mechanisms thus imperfectly protect Punjab farmers against village-level shocks. Results also indicate that households respond to consumption price risk, thereby suggesting that empirical and theoretical work on risk should avoid putting an exclusive emphasis on yield and output price risk.

Kuzmics, Christoph

TI Optimal Bandwidth Selection in Non-Parametric Spectral Density Estimation. AU Fortin, Ines; Kuzmics, Christoph.

LaFrance, Jeffrey T.

PD February 1999. TI Duality Theory for the Household. AA University of California, Berkeley. SR University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 873; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. PG 44. PR \$11.00 Domestic; \$22.00 International Surface Rate. JE D11, D13, D84, D91. KW Duality Theory. Household Production. Consumer Choice. Intertemporal Choice. Expectations.

AB The purpose of this paper is to present a concise summary of the current status of microeconomic theory of consumer choice. Section 1 briefly summarizes the neoclassical theory of consumer choice. Section 2 develops the theory of household production, combines and relates this theory to the neoclassical model and important special cases, including hedonic price functions, Gorman's and Lancaster's characteristics model of quality, and the Fisher-Shell repackaging model. Section 3 discusses dynamic models of consumer choice, with an emphasis on the role of individuals' expectations about their future economic environment, including models of perfect foresight and myopic, adaptive, quasi-rational, and rational expectations. Section 4 presents the economic theory of intertemporal choice in a household production framework with durable stocks. Some of these stocks may be unobservable "consumption habits" and naive and rational habit formation models are interpreted in this context. The final section summarizes the main results. The primary emphasis throughout the paper is to develop and analyze a valid duality in each of the generalizations to the neoclassical model of consumer choice.

PD May 1999. TI An Econometric Model of the Demand for Food and Nutrition. AA University of California, Berkeley. SR University of California, Berkeley, Department of Agricultural and Resource Economics and

Policy (CUDARE) Working Paper: 885; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. PG 36. PR \$9.00 Domestic; \$18.00 International Surface Rate. JE C50, D11, E21, I12. KW Aggregation. Demand. Food. Nutrition. Price Elasticities.

AB A flexible, full rank two model of food consumption that is globally consistent with economic theory, aggregates across income, demographic variables, and variations in micro demand parameters, and accommodates tradeoffs between tastes and nutrition is derived. The econometric demand model is estimated with per capita U.S. consumption of 21 foods on the time period 1919-1994, excluding the World War II years 1942-1946. An approach for inferring the percentage of nutrients available from the individual commodities in the U.S. food supply is derived and implemented empirically on the time period 1949-1995 for the nutrients energy, protein, total fat, carbohydrates, and cholesterol. The two sets of model results are combined to generate time paths for income and Hicksian compensated price elasticities of demand for individual foods and macronutrients.

PD June 1999. **TI** Integrability of the Linear Approximate Almost Ideal Demand System. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 891; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. PG 8. PR \$5.00 Domestic; \$10.00 International Surface Rate. JE D11. KW AIDS Model. Linear Approximation. Demand. Expenditure Functions. Consumer Theory.

AB The problem of integrability of the Linear Approximate Almost Ideal Demand System is solved and implications for the associated expenditure function are derived. There are two possibilities: (i) the vector of logarithmic income coefficients vanishes and the matrix of logarithmic price coefficients is symmetric; or (ii) the matrix of logarithmic price coefficients has rank at most equal to one and is proportional to the outer product of the vector of logarithmic income coefficients. Case (i) is a flexible form with respect to price elasticities, but globally restricts all income elasticities to equal plus one. Case (ii) is flexible with respect to income elasticities, but highly restrictive with respect to price elasticities. There are $\frac{1}{2}(n-1)(n+2)$ and $2n-1$ independent parameters in case (i) and (ii), respectively, as opposed to $1+\frac{1}{2}(n-1)(n+4)$ parameters in the integrable AIDS model. Closed form expressions for the expenditure function are obtained in all cases.

Lakonishok, Josef

TI Open Market Stock Repurchases: The Canadian Experience. **AU** Ikenberry, David; Lakonishok, Josef; Vermaelen, Theo.

TI On Portfolio Optimization: Forecasting Covariances and Choosing the Risk Model. **AU** Chan, Louis K. C.; Karceski, Jason; Lakonishok, Josef.

Lamont, Owen

PD March 1999. **TI** Economic Tracking Portfolios. **AA** University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research

Working Paper: 7055; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 31. PR \$5.00. JE E17, E44, G11. KW Macroeconomics. Forecasting. Stock Returns. Bond Returns. Tracking Portfolio.

AB An economic tracking portfolio is a portfolio of assets with returns that track an economic variable. Monthly returns on stocks and bonds are useful in forecasting post-war US output, consumption, labor income, inflation, stock returns, bond returns, and Treasury bill returns. These forecasting relationships define portfolios that track market expectations about future economic variables. Using tracking portfolio returns as instruments for future economic variables substantially raises the estimated sensitivity of asset prices to news about future economic variables. Out-of-sample results show that tracking portfolios are useful in forecasting macroeconomic variables and hedging economic risk.

Lane, Philip R.

PD July 1998. **TI** Why Aren't Savings Rates in Latin America Procyclical? **AU** Lane, Philip R.; Tornell, Aaron. **AA** Lane: Trinity College Dublin and CEPR. Tornell: HIID and NBER. **SR** Harvard Institute for International Development Discussion Paper: 642; Harvard Institute for International Development, 14 Story Street, Cambridge, MA 02138. Website: www.hiid.harvard.edu/pub/ddps.html. PG 16. PR \$7.50 for papers up to 80 pages long; \$12.00 for papers 80 pages and longer. JE E32, F43, Q33. KW Savings Rates. Cyclical. Common-Pool Problem.

AB We document a striking empirical regularity: Latin American savings rates are as a rule substantially less procyclical than for OECD countries and in some cases are actually countercyclical. We build a non-representative agent inter-temporal macroeconomic model that rationalizes this phenomenon as the equilibrium outcome of interaction between multiple groups that have common access to aggregate income. We conclude by suggesting that institutional reform may hold the key to improving the cyclical behavior of savings in Latin America.

Larrain B., Felipe

TI The External Debt Problem in Central America: Honduras, Nicaragua, and the HIPC Initiative. **AU** Esquivel, Gerardo; Larrain B., Felipe; Sachs, Jeffrey D.

TI Export Processing Zones in Central America. **AU** Jenkins, Mauricio; Esquivel, Gerardo; Larrain B., Felipe.

TI The Current Status of Pensions Systems in Central America: An Assessment. **AU** Cifuentes, Rodrigo; Larrain B., Felipe.

Larribeau, Sophie

TI Models of Exchange Rate Expectations: Heterogeneous Evidence from Panel Data. **AU** Benassy-Quere, Agnes; Larribeau, Sophie; MacDonald, Ronald.

Laursen, Thomas

PD February 2000. **TI** Pension System Viability and Reform Alternatives in the Czech Republic. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/16; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 28. PR not available.

JE E62, H55. **KW** Pension Reform. Czech Republic.

AB The finances of the Czech pension system have deteriorated markedly in recent years and the aging population will add further strains in the future. Significant distortions and disincentive effects also burden the system. This paper assesses the current pay-as-you-go (PAYG) system, including its long-run viability, and discusses reform options. It concludes that alterations to the basic PAYG parameters can go a long way toward addressing the problems, although more systemic changes -- such as pre-funding, strengthening the link between contributions and benefits, and diverting part of the pension contributions to a mandatory, private pension savings pillar -- could also help.

Lawrence, Denis A.

TI Progress in Measuring the Price and Quantity of Capital.
AU Diewert, W. Erwin; Lawrence, Denis A.

TI Should Canada's Rate of Capital Gains Taxation be Reduced? **AU** Diewert, W. Erwin; Lawrence, Denis A.

Lazear, Edward P.

PD February 1999. **TI** Personnel Economics: Past Lessons and Future Directions. **AA** Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6957; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 56. **PR** \$5.00. **JE** D23, K11, L10. **KW** Personnel Economics. Firm level data.

AB In 1987, the Journal of Labor Economics published an issue on the economics of personnel. Since then, personnel economics, defined as the application of labor economics principles to business issues, has become a major part of labor economics. Much work in personnel economics has been theoretical, in large part because relevant data has not been available. In recent years this situation has changed with a number of firm-based data sets becoming available. Using two such data sets, the implications of theories that relate to life-cycle incentives, tournaments, piecework incentives, pay compression, and peer pressure are given support. Firm-based data make asking and answering new kinds of questions feasible. Questions about the importance of a worker's relative position in a firm, about intrafirm mobility, about the effect of the firm's business environment on worker welfare, about the significance of first impressions can be answered using the data.

Le Cacheux, Jacques

TI Labour Market and Tax Policy in the EMU. **AU** Paque, Karl-Heinz; Le Cacheux, Jacques.

Lechene, Valerie

TI Children and Demand: Direct and Non-Direct Effects.
AU Browning, Martin; Lechene, Valerie.

Lee, Jong-Wha

TI Financial Crisis and Credit Crunch in Korea: Evidence from Firm-Level Data. **AU** Borensztein, Eduardo; Lee, Jong-Wha.

TI Overinvestment, Collateral Lending, and Economic Crisis. **AU** Kim, Yong Jin; Lee, Jong-Wha.

Lee, Julie

PD January 1999. **TI** The Distributional Effects of Medicare. **AU** Lee, Julie; McClellan, Mark; Skinner, Jonathan. **AA** Lee: National Bureau of Economic Research. McClellan: United States Department of the Treasury and National Bureau of Economic Research. Skinner: Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6910; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** H05, I18. **KW** Medicare. Transfers. Redistributive Effects.

AB The Medicare program is now an important source of transfers to elderly and disabled beneficiaries, and will continue to grow rapidly in the future. Because the Medicare program is so large in magnitude, it can have significant redistributive effects. In this paper, we measure the flow of Medicare benefits to high-income and low-income neighborhoods in 1990 and 1995. We find that Medicare spending per capita for the lowest income groups grew much more rapidly than Medicare spending in either high income or middle-income neighborhoods. Home health care spending played an important role in the increased spending among the lowest income neighborhoods. To our knowledge, this differential shift in spending has not been documented, yet it exceeds in magnitude the entire per capita transfer from the Earned Income Tax Credit (EITC) and is half of the average transfers to the elderly poor from Supplemental Security Income (SSI). Recent cutbacks in home health care benefits may undo some of this change. Still, this example illustrates how specific technical changes in Medicare policy can have redistributive effects comparable to major and much more visible expenditure and tax policies.

Lee, Khang Min

TI Dynamic Gains from International Trade with Imperfect Competition and Market Power. **AU** Devereux, Michael B.; Lee, Khang Min.

Lee, Michael

PD June 1999. **TI** An Empirical Analysis of Software Production Problems in European Software Units. **AU** Lee, Michael; Dutta, Soumitra; Van Wassenhove, Luk. **AA** INSEAD. **SR** INSEAD Working Paper: 99/28/TM/RISE; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 12. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** L63, M21. **KW** Software Production. Organizational Context.

AB In this paper, we analyze software production problem profiles and their link to the organizational contexts of European software production units. The data used in our study contains more than 3800 observations representing software production units in the Information Technology (IT), Production, and Service sectors. Software production problems examined in our study include those associated with management, technical, and quality related processes. Among the key findings in our analysis are: 1) across all sectors, software production units are concerned most with deficiencies in specifications related processes such as Requirement Specifications and Management of Customer Requirements, 2) the degree of software production problems vary according to

company size and show only weak impact on problem levels in Quality related processes, and 3) employee attitudes, in particular technical management attitudes, can have significant impact on problem levels in Quality and Specifications related software production processes.

Leiblein, Michael J.

PD January 1999. **TI** Building a Foreign Sales Base: The Roles of Capabilities and Alliances For Entrepreneurial and Established Semiconductor Firms. **AU** Leiblein, Michael J.; Reuer, Jeffrey J. **AA** Leiblein: Ohio State University. Reuer: INSEAD. **SR** INSEAD Working Paper: 99/08/SM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. **Website:** www.insead.fr/research. **PG** 17. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** F23, L63. **KW** International Collaboration. Technological Capabilities. Collaborative Linkages. **AB** This study examines how technological capabilities and international collaborative linkages jointly and interactively shape entrepreneurial and established firms' abilities to build a foreign sales base in a highly-competitive, global industry. The empirical evidence for a sample of North American semiconductor firms indicates that both technological capabilities and international collaboration aid firms' development of foreign sales, yet the effects differ substantially across small and large competitors.

Leidner, Dorothy E.

TI Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues. **AU** Alavi, Maryam; Leidner, Dorothy E.

Lemieux, Thomas

TI Can Falling Supply Explain the Rising Return to College for Younger Men? A Cohort-Based Analysis. **AU** Card, David; Lemieux, Thomas.

Leonard, Carol Scott

PD July 2000. **TI** Rational Resistance to Land Privatisation in Russia: Modelling the Behaviour of Rural Producers in Response to Agrarian Reforms, 1861-2000. **AA** Oxford University. **SR** Oxford Department of Economics Discussion Paper: 13; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. **Website:** www.economics.ox.ac.uk/. **PG** 41. **PR** no charge. **JE** N44, N54. **KW** Russian Land Reform. Economic History. Status-Quo Preference. Uncertainty. Development. Property Rights.

AB This paper argues that rural opposition to land reform in transition Russia is a consequence of individually rational decisions by members of former state and collective farms about whether to support further land reform, or preserve the status quo, collective farming. Evidence from survey data shows that despite the government's efforts to promote a land market and independent farming in the 1990s, preferences in 1996 still favored the largely unreformed status quo. The visible consequence of stalemated reform has been persistent agricultural output decline and widespread bankruptcy of large farm entities, without any significant rise of independent farming. This paper formalizes a dynamic argument for rational opposition to land reform, given the existence of uncertainty

about the costs that individual cultivators will incur. It turns out that the consequence of initial decisions could have decisive impact on rejection of reform later on. It can be seen that opposition to reform during the post-Emancipation and Stolypin Eras, too, was individually rational, given incomplete property rights reform. The state bears responsibility in contemporary and historical times for failing to improve the unclear property rights that dampen reform incentives.

TI The Rural Urban Wage Gap in the Industrialization of Russia, 1885- 1913. **AU** Borodkin, Leonid; Leonard, Carol Scott.

Lerer, Leonard B.

PD 1999. **TI** Quality and Complexity in the Health Care Sector: Towards an Inclusive Model. **AA** INSEAD. **SR** INSEAD Working Paper: 99/46/HMI; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. **Website:** www.insead.fr/research. **PG** 23. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** I11, M11, M21. **KW** Health Care. Quality Management.

AB Quality management techniques, often borrowed directly and unchanged, from manufacturing and service sector settings, have often not lived up to their promise in terms of improved health care provider performance and hospital competitiveness. Quality in health care has mainly been "process-focused", which encompasses aspects of access, care, outcomes and evaluation. The failure to recognize that these processes represent an important, but single part of health care has resulted in too high expectations of quality interventions. The process or mechanics of quality improvement alone cannot accommodate the needs of the health care consumer or deal with the complexity of institutions. With this in mind, a putative model is presented, which seeks to place health sector quality within a broader strategic framework. Refining and widening the spectrum of health care quality to include patient or consumer, and organizational components achieve this. The patient/consumer and the organization represent the "context" in which the "process" of quality improvement occurs. Consideration of the "context" of quality may help managers look beyond purely mechanistic approaches to quality improvement and enter the realm of value, knowledge and sustainable improvement in complex organizations.

Levine, Phillip B.

TI Child Care and Mothers' Employment Decisions. **AU** Anderson, Patricia M.; Levine, Phillip B.

Levitt, Steven D.

PD February 1999. **TI** Estimating the Effect of Alcohol on Driver Risk Using Only Fatal Accident Statistics. **AU** Levitt, Steven D.; Porter, Jack. **AA** Levitt: University of Chicago and National Bureau of Economic Research. Porter: Harvard University. **SR** National Bureau of Economic Research Working Paper: 6944; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **Website:** www.nber.org. **PG** 34. **PR** \$5.00. **JE** C13, I12, K42. **KW** Fatal Crashes. Crash Likelihood.

AB This paper outlines a methodology for measuring fatal crash likelihood that relies solely on fatal crash data. The key to our identification strategy is the hidden richness inherent to two-car crashes. Crashes involving two drinking drivers are

proportional to the square of the number of drinking drivers on the road; crashes with one drinking and one sober driver increase linearly in the number of drinking drivers. Imposing a limited set of assumptions (e.g. independence across crashes, equal missing on the roads), we are able to estimate both the likelihood of causing a fatal crash and the fraction of drivers of each type on the road. Our estimates suggest that drivers with alcohol in their blood are at least eight times more likely to cause a fatal crash; legally drunk drivers pose a risk at least 15 times greater than sober drivers. Males, young drivers, and drivers with bad past driving records are all more dangerous, but the impact of these other factors is far less than that of alcohol.

Li, Chao-an

TI Solving Unit Commitment by a Unit Decommitment Method. **AU** Tseng, Chung-Li; Li, Chao-an; Shmuel, S. Oren.

Lighthart, Jenny E.

TI Deposit-Refund on Labor: A Solution to Equilibrium Unemployment? **AU** Heijdra, Ben J.; Lighthart, Jenny E.

PD January 2000. **TI** Public Capital and Output Growth in Portugal: An Empirical Analysis. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/11; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 15. **PR** not available. **JE** H54, O52. **KW** Cointegration. Granger Causality. Infrastructure. Public Investment.

AB The paper investigates the growth effects of public capital in Portugal using annual data for the period 1965-95. Both a production function and a vector autoregressive model are estimated. Public capital is shown to be a significant long-term determinant of output growth. The size of the estimated production elasticity indicates, in line with studies for other countries, a substantial growth payoff from public investment. Disaggregating public capital shows that investment related to, among other things, roads, railways, and airports is more productive than public investment in other major categories.

Lindauer, David L.

TI Why Not Africa? **AU** Freeman, Richard B.; Lindauer, David L.

Lipow, Jonathan

TI Managerial Reputation and the "Endgame". **AU** Berck, Peter; Lipow, Jonathan.

Lipsey, Robert E.

TI Foreign Ownership and Wages in the United States, 1987-1992. **AU** Feliciano, Zadia; Lipsey, Robert E.

Liu, Meng-chun

TI A Ricardian Model with Endogenous Comparative Advantage and Endogenous Trade Policy Regimes. **AU** Cheng, Wen Li; Liu, Meng-chun; Yang, Xiaokai.

Liu, Pak-Wai

PD April 1999. **TI** Division of Labor, Transaction Cost, Emergence of the Firm and Firm Size. **AU** Liu, Pak-Wai; Yang, Xiaokai. **AA** Liu: Chinese University of Hong Kong.

Yang: Center for International Development at Harvard University. **SR** Harvard Center for International Development (CID) Working Paper: 10; Center for International Development; John Gallup, Editor; 79 John F. Kennedy Street, Cambridge, MA 02138. Website: www.cid.harvard.edu/cidworkingpapers/cid_workingpapers.htm. **PG** 22. **PR** paper copies \$7.50 up to 80 pages long; \$12.00 for 80 pages long and longer. **JE** D23, L11, L22, L23, L33. **KW** Firm Size Irrelevance. Division of Labor. Theory of the Firm.

AB In this paper a general equilibrium model is constructed to explain the emergence of firms and a change in firm size by the tradeoff between economies of specialization and transaction cost. We show that firms emerge from the development of division of labor if the transaction efficiency for labor is smaller than that for intermediate goods. Given the emergence of firms, change in the average size of firms (average employment) will depend on the change in transaction efficiency for intermediate goods relative to that for labor. If the transaction efficiency is improved in such a way that the transaction efficiency for intermediate goods becomes higher than that for labor, average employment will decrease. We present evidence showing that it is not uncommon that average employment declines as the economy develops. The general equilibrium model provides an explanation for the concurrent increase of productivity and decrease in average employment which is observed in a number of countries. Models based on economies of scale instead of economies of specialization would have yielded the opposite prediction.

Liu, Xuemei

TI Valuing Tradeable CO2 Permits for OECD Countries. **AU** Karp, Larry; Liu, Xuemei.

TI Welfare Gains Under Tradeable CO2 Permits. **AU** Karp, Larry; Liu, Xuemei.

Llobet, Gerald

PD July 2000. **TI** Rewarding Sequential Innovators: Prizes, Patents and Buyouts. **AU** Llobet, Gerald; Hopenhayn, Hugo; Mitchell, Matthew F. **AA** Llobet: University of Rochester and CEMFI. Hopenhayn: Universidad Torcuato Di Tella and University of Rochester. Mitchell: University of Minnesota and Federal Reserve Bank of Minneapolis. **SR** Federal Reserve Bank of Minneapolis Staff Report: 273; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 554880-0291. Website: <http://woodrow.mpls.frb.fed.us>. **PG** 39. **PR** no charge. **JE** D82, K23, H41, L51. **KW** Patents. Innovation. Policy. Asymmetric Information.

AB This paper presents a model of cumulative innovation where firms are heterogeneous in their research ability. We study the optimal reward policy when the quality of the ideas and their subsequent development effort are private information. The optimal assignment of property rights must counterbalance the incentives of current and future innovators. The resulting mechanism resembles a menu of patents that have infinite duration and fixed scope, where the latter increases in the value of the idea. Finally, we provide a way to implement this patent menu by using a simple buyout scheme: The innovator commits at the outset to a price ceiling at which he will sell his rights to a future inventor. By paying a larger fee initially, a higher price ceiling is obtained. Any subsequent innovator must pay this price and purchase its own buyout fee

contract.

Loch, Christoph H.

PD November 1998. **TI** Status Competition and Performance in Work Groups. **AU** Loch, Christoph H.; Stout, Suzanne K.; Huberman, Bernardo A. **AA** Loch and Stout: INSEAD. Huberman: Xerox PARC. **SR** INSEAD Working Paper: 98/97/TM/OB; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 27. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** C63, D23, M12. **KW** Status. Equilibrium. Simulation. Team Production. Group Collaboration.

AB There is disagreement about whether status competition enhances group performance by pushing group members to work harder; or whether it retards performance by causing unproductive behavior. We build a dynamic simulation model of a work group, where members are paid a bonus based on group performance. In addition to compensation, group members value a high status relative to their peers. Status is influenced both by contribution to group output and by non-productive, social activities of status enhancement. Group members allocate their total time between working and non-productive status enhancement, trying to maximize the combined utility from compensation and status rank. We show that status competition can serve to push group members to work hard and perform, provided that it is mainly based on merit. However, if status is also based on political maneuvering, status competition can lead to low group performance, especially in larger groups. Although a firm may not be able to avoid status competition, it may succeed in influencing its effects indirectly. We demonstrate these results analytically and via simulation.

TI Project Management Under Risk: Using the Real Options Approach to Evaluate Flexibility in R&D. **AU** Huchzermeier, Arnd; Loch, Christoph H.

PD April 1999. **TI** Expansion Options: Strategic Opportunities Created By Research Projects at BestPharma. **AU** Loch, Christoph H.; Bode-Greuel, Kerstin; Smuck, Steven. **AA** Loch: INSEAD. Bode-Greuel: Decision Support, Zurich, Switzerland. Smuck: Amgen Corporation. **SR** INSEAD Working Paper: 99/21/TM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 16. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** L65, M21, O31. **KW** BestPharma. Pharmaceuticals. Research Initiatives. Project Assessment.

AB We discuss the problem of choosing among several strategic research initiatives at BestPharma, a large international pharmaceutical company. The financial value of research projects is difficult to assess because they are highly uncertain. Too often, the result is either an overly conservative approach to strategic innovation, based on financial analyses stressing the quantifiable cost side, or an overly aggressive approach based on optimistic qualitative portfolios ignoring economic realities. In the case of BestPharma, a major contributor to project value was uncovered by a quantitative evaluation of strategic expansion options, or management's ability to seize opportunities in some of the possible project outcomes. BestPharma developed a decision tree representation

of the projects, which helped to provide transparency about project value and how it was affected by the presence of strategic options. The tree representation highlighted key decision points, payoffs, and key sources of risk. It also illustrated where higher volatility of payoffs made it important to delay decisions and commitments until key uncertainties were resolved.

PD September 1999. **TI** Status Competition and Performance in Work Groups. **AU** Loch, Christoph H.; Huberman, Bernardo A.; Stout, Suzanne K. **AA** Loch and Stout: INSEAD. Huberman: Xerox PARC. **SR** INSEAD Working Paper: 99/49/TM/OB; (Revised version of 99/25/TM/OB) INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 27. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** J32, M12. **KW** Status Competition. Social Rank. Equilibrium. Simulation. Team Production. Group Collaboration.

AB We study the dynamics of a work group whose members value not only compensation, but also having a high status relative to their peers. Compensation takes the form of a fixed salary plus a bonus based on group performance. Status is determined both by contributing to group output and by non-productive, social activities which we call "politics". Group members allocate their time between working and non-productive status enhancement, trying to maximize the combined utility from compensation and status rank. We show that status competition based on merit can push group members to work hard. However, if status can also be achieved through political maneuvering, it can lead to lower overall performance. Moreover, group performance may fluctuate and be unstable over time if the results of effort are noisy or if shared ranks are not allowed in the group. These results help to clarify the question of whether status competition enhances group performance by pushing group members to work harder, or retards it by causing unproductive behavior. They also suggest ways through which a firm can influence the effects of status competition on overall performance.

PD September 1999. **TI** Selecting R&D Projects at BMW: A Case Study of Adopting Mathematical Programming Models. **AU** Loch, Christoph H.; Pich, Michael T.; Terwiesch, Christian; Urbschat, Michael. **AA** Loch and Pich: INSEAD. Terwiesch: University of Pennsylvania. Urbschat: BMW. **SR** INSEAD Working Paper: 99/52/TM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 21. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** L62, O31, O32. **KW** R&D. Project Selection. Mathematical Programming. Analytical Models. Technology Transfer. Gatekeeper. Tacit Knowledge. Pre-Development. Automotive Industry.

AB R&D project selection is a critical interface between the product development strategy of an organization and the process of managing projects day-to-day. This article describes the project selection problem faced by the transmission pre-development group of BMW. The group had to choose a portfolio of projects to set the foundation for the "best powertrain 2000." This problem of project selection was structured as minimizing the gap between target performance and actual performance along chosen criteria. A mathematical programming model helped this organization to increase the

transparency of their selection process, which previously had been based on experience coupled with evaluation of individual projects in isolation. The model was used to structure data collection, to apply to consistent criteria to the selection of pre-development projects, and to compare weighted project benefits. The organization adopted only those elements of the modeling method that could be transferred within the resource constraints, focusing on those elements offering the highest benefit per effort invested.

PD September 1999. **TI** Parallel and Sequential Testing of Design Alternatives. **AU** Loch, Christoph H.; Terwiesch, Christian; Thomke, Stefan. **AA** Loch: INSEAD. Terwiesch: The Wharton School. Thomke: Harvard Business School. **SR** INSEAD Working Paper: 99/58/TM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 21. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M11, M21. **KW** Testing. Prototyping. Learning. Optimal Search. Modularity.

AB An important managerial problem in product design is the extent to which testing activities are carried out in parallel or in series. Parallel testing has the advantage of proceeding more rapidly than serial testing but does not take advantage of the potential for learning between tests, thus resulting in a larger number of tests. We model this trade-off in form of a dynamic program and derive the optimal testing strategy (or mix of parallel and serial testing) that minimizes both the total cost and time of testing. We derive the optimal testing strategy as a function of testing cost, prior knowledge, and testing lead-time. Using information theory to measure the amount of learning between tests, we further show that in the case of imperfect testing (due to noise or simulated test conditions) the attractiveness of parallel strategies increases. Finally, we analyze the relationship between testing strategies and the structure of design hierarchy. We show that a key benefit of modular product architecture lies in the reduction of testing cost.

PD October 1999. **TI** Multi-Dimensional Status Competition and Group Performance. **AU** Loch, Christoph H.; Huberman, Bernardo A.; Ulku, Sezer. **AA** Loch and Ulku: INSEAD. Huberman: Xerox PARC. **SR** INSEAD Working Paper: 99/59/TM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 23. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** J32, M12. **KW** Status Competition. Social Rank. Equilibrium. Simulation. Team Production. Group Collaboration. Status Dimensions.

AB We build a dynamic simulation model of an organizational group where members collectively produce an output. In addition to compensation, group members value a high status relative to their peers, which can be achieved by non-productive, social activities of status enhancement. Group members allocate their total time between working and non-productive status enhancement, trying to maximize the combined utility from compensation and status rank. Often, several dimensions exist along which group members evaluate their status. It has not been explored whether multiple dimensions exacerbate status competition or mitigate it, as individuals can choose dimensions along which they look good, which relieve them of the need to constantly assert themselves.

Via an analytical model and simulation, we show that status competition becomes worse when several status dimensions are present.

Lockwood, Graeme

TI The Right To Know: Disclosure of Information for Collective Bargaining and Joint Consultation. **AU** Gospel, Howard; Lockwood, Graeme; Willman, Paul.

Loewenstein, George

PD June 2000. **TI** Projection Bias in Predicting Future Utility. **AU** Loewenstein, George; O'Donoghue, Ted; Rabin, Matthew. **AA** Loewenstein: Carnegie Mellon University. O'Donoghue: Cornell University. Rabin: UC Berkeley. **SR** University of California, Berkeley, Department of Economics Working Paper: E00/284; UC, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. **PG** 42. **PR** \$3.50 U.S., \$7.00 International. **JE** A12, B49, D11, D91, E21. **KW** Addiction. Consumption. Cooling Off. Misprediction. Projection Bias. Reference Dependence.

AB People under-appreciate how their own behavior and exogenous factors affect their future utility, and thus exaggerate the degree to which their future preferences resemble their current preferences. We present evidence which demonstrates the prevalence of such projection bias, and develop a formal model that draws out both descriptive and welfare implications of the bias. The model helps interpret established behavioral anomalies such as the endowment effect, and helps to explain commonly observed suboptimal patterns of behavior such as addiction and excessive pursuit of a high material standard of living. The model also suggests potentially welfare-improving policies, such as mandatory "cooling-off periods" for certain types of consumer decisions.

Lopez, Humberto

TI Global Equilibrium Exchange Rates: Euro, Dollar, "Ins," "Outs," and Other Major Currencies in a Panel Cointegration Framework. **AU** Alberola, Enrique; Cervero, Susana G.; Lopez, Humberto; Ubide, Angel.

Lu, Mingshan

PD May 2000. **TI** Risk Selection and Matching in Performance-Based Contracting. **AU** Lu, Mingshan; Ma, Ching-to Albert; Yuan, Lasheng. **AA** Lu and Yuan: University of Calgary. Ma: Boston University. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 101; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. **PG** 33. **PR** no charge. **JE** I11, I18. **KW** Performance Contracting. Matching. Risk Selection.

AB This paper examines the incentive effects of Performance-Based Contracting (PBC) in a model of patient heterogeneity, provider horizontal differentiation and asymmetric information. The match between a patient's illness severity and a provider's treatment intensity affects treatment effectiveness. Before PBC, a provider's revenue is unrelated to treatment effectiveness; therefore, providers supply treatments even if their treatment intensities do not match with the patients' severities. Under PBC, budget allocation is (positively) related to treatment performance; patient-provider mismatch is reduced because patients are referred more often. Using data from the state of Maine, we show that PBC leads to

more referrals, better match between illness severity and treatment intensity, and increased patient compliance. Moreover, PBC has not led to a decrease in overall patient severity, indicating that dumping has been insignificant.

Lubotsy, Darren

PD April 1999. **TI** The Labor Market Effects of Welfare Reform. **AA** UC Berkeley. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 12; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. **Website:** violet.berkeley.edu/~ir/cle/index.html. **PG** 45. **PR** no charge. **JE** H53, I38, J22. **KW** Welfare Reform. General Assistance. Labor Market Outcomes.

AB The recent reform of the federal welfare system is meant to encourage recipients to leave welfare and enter the workforce. If the reform is successful there are likely to be effects felt throughout the low- skilled end of the labor market. As former welfare recipients enter the labor market, they may exert downward pressure on wages or displace employment of others already in the labor market. Since there has been limited changes in eligibility for federal welfare programs from which to draw inferences, the magnitude of these labor market effects are open to debate. This study considers these issues in general and evaluates how labor markets in Michigan were affected when the General Assistance program in that state was eliminated in 1991. General Assistance was a large-scale, state-administered program that provided benefits to people who fell through the cracks in federal anti-poverty programs. In all, about eighty to one-hundred thousand able-bodied adults lost benefits. Increased labor force participation among these people resulted in a decline in weekly hours among high school drop-outs of 1.2 to 2.4 percent. There is little evidence of declines in hourly earnings, except in the Detroit area, where wages fell by about five percent.

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Ludvigson, Sydney

PD March 1999. **TI** Approximation Bias in Linearized Euler Equations. **AU** Ludvigson, Sydney; Paxson, Christina H. **AA** Ludvigson: Federal Reserve Bank of New York. Paxson: Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 236; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **Website:** www.nber.org. **PG** not available. **PR** \$5.00. **JE** D81, D91, E21. **KW** Euler Equations. Precautionary Savings. Uncertainty. Prudence.

AB Wide ranges of empirical applications rely on linear approximations to dynamic Euler equations. Among the most notable of these is the large and growing literature on precautionary saving that examines how consumption growth and saving behavior are affected by uncertainty and prudence. Linear approximations to Euler equations imply a linear relationship between expected consumption growth and uncertainty in consumption growth, with a slope coefficient that is a function of the coefficient of relative prudence. This literature has produced puzzling results: Estimates of the coefficient of relative prudence (and the coefficient of relative risk aversion) from regressions of consumption growth on uncertainty in consumption growth imply estimates of prudence and risk aversion that are unrealistically low. Using numerical solutions to a fairly standard intertemporal optimization

problem, our results show that the actual relationship between expected consumption growth and uncertainty in consumption growth differs substantially from the relationship implied by a linear approximation. We also present Monte Carlo evidence that shows that the instrumental variables methods commonly used to estimate the parameters correct some, but not all, of the approximation bias.

Lund, Susan

TI Risk-Sharing Networks in Rural Philippines. **AU** Fafchamps, Marcel; Lund, Susan.

Luski, Israel

TI Innovative Activity and Sunk Cost. **AU** Kaplan, Todd R.; Luski, Israel; Wettstein, David.

Luttmer, Erzo F. P.

TI Networks Effects and Welfare Cultures. **AU** Bertrand, Marianne; Luttmer, Erzo F. P.; Mullainathan, Sendhil.

Ma, Ching-to Albert

TI Risk Selection and Matching in Performance-Based Contracting. **AU** Lu, Mingshan; Ma, Ching-to Albert; Yuan, Lasheng.

TI Price and Quality Competition Under Adverse Selection: Market Organization and Efficiency. **AU** Biglaiser, Gary; Ma, Ching-to Albert.

PD August 1997. **TI** Health Insurance, Moral Hazard, and Managed Care. **AU** Ma, Ching-to Albert; Riordan, Michael H. **AA** Boston University. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 80; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. **Website:** econ.bu.edu/ISP/. **PG** 21. **PR** no charge. **JE** D82, I11. **KW** Insurance. Moral Hazard. Health Care. Managed Care.

AB We consider a model of health insurance and show that the popular wisdom that moral hazard leads to excessive treatment is due to the neglect of income effects. In fact, treatment is likely to be excessive only if consumers are globally risk averse, in the sense that a small, discrete change in income causes a large reduction in utility, and demand is inelastic with respect to the utility loss arising from consumers' health expense. We introduce managed care, which allows an insurer to reward a physician if treatment is withheld, and show that it may achieve the first best.

PD September 1997. **TI** Costs and Incentives in a Mental Health and Substance Abuse Carve Out. **AU** Ma, Ching-to Albert; McGuire, Thomas G. **AA** Boston University. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 81; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. **Website:** econ.bu.edu/ISP/. **PG** 16. **PR** no charge. **JE** I12, I18. **KW** Mental Health. Reputation Effect.

AB This paper examines the changes in costs of mental health and substance abuse services in a carve out program initiated in 1993 by the Group Insurance Commission (GIC) of the Commonwealth of Massachusetts, and relates those changes to incentives in the contract the GIC agreed upon with the managed behavioral health care vendor. The exact financial arrangements in the payer-vendor contract are examined and described. The paper provides a full description of incentives,

including multi-year contract renewals, and the payments and incentives associated with the administrative portion of the contracts. Our findings indicate significant savings after the carve out. The pattern of cost reductions are similar for outpatient and inpatient services, as well as for mental health and substance abuse services. Incentives to produce savings of this magnitude were not only a consequence of the payer-vendor contract, but, we speculate, derive from the growth potential facing companies in the market for managed behavioral health care. We label this incentive a "reputation effect."

TI Moral Hazard, Insurance, and Some Collusion.
AU Brundin, Ingela; Ma, Ching-to Albert.

PD October 1998. **TI** Network Incentives in Managed Health Care. **AU** Ma, Ching-to Albert; McGuire, Thomas G. **AA** Boston University. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 94; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. **PG** 41. **PR** no charge. **JE** I11, I18. **KW** Health Provider Network. Payment System. Managed Care. Carve Out. **AB** A theory of network incentives in managed health care is introduced. Participation in the plan's "network" confers providers an economic benefit in exchange for compliance with the plan protocols. The network sets a target for the number of outpatient visits in an episode of care. A provider failing to satisfy the target may be penalized by the plan's attempt to direct patients to other network providers. An equilibrium exists in which every network provider uses the target. We test the theory by observing providers' behavior before and after the introduction of managed mental health care in a large, employed population. Managed care consisted of price reductions, utilization review, and network creation. Quantity per episode of care fell sharply after initiation of managed care. We identify a network effect in our empirical work. The results indicate that network incentives account for most of the quantity reduction due to managed care.

PD December 1998. **TI** Cost and Quality Incentives in Health Care: Altruistic Providers. **AA** Boston University. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 84; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. **PG** 22. **PR** no charge. **JE** I11, I18, L11, L51. **KW** Cost. Quality. Dumping. Prospective Payment. Cost Reimbursement. Hospital. Health Care.

AB This paper compares the cost and quality incentive effects of cost reimbursement and prospective payment systems in the health industry when providers are altruistic. Providers' behavioral rule is governed by a desire to maximize a weighted sum of profit and consumers' health benefit. When providers exert costly efforts to enhance quality and reduce cost, the first best -- a regime in which efforts are contractible -- can be implemented by prospective payment. Cost reimbursement does not implement the first-best efforts. Necessary conditions are derived for the implementation of the first best by a combination of prospective and cost reimbursement payments when the provider can refuse services to expensive patients.

Macauley, Molly K.

PD December 1997. **TI** Allocation of Orbit and Spectrum Resources for Regional Communications: What's at Stake?

AA Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/10; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 27. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** H04, Q02. **KW** Outer Space. Communications Satellites. Pricing Natural Resources.

AB Contentious debate surrounds allocation of the geostationary orbit and electromagnetic spectrum, two resources used by communications satellites. An extensive economics literature alleges that the nonmarket administrative allocative procedures now in place are highly inefficient, but no research has empirically estimated the welfare loss. This paper develops a conceptual framework and a computerized model to estimate the economic value of the resources, the size and distribution of welfare costs associated with the present regulatory regime, and the potential gains from more market-like allocation.

TI Competition and Car Longevity. **AU** Hamilton, Bruce W.; Macauley, Molly K.

MacCulloch, Robert

TI Does the Welfare State Destroy the Family? **AU** Di Tella, Rafael; MacCulloch, Robert.

MacDonald, Ronald

TI Models of Exchange Rate Expectations: Heterogeneous Evidence from Panel Data. **AU** Benassy-Quere, Agnes; Larribeau, Sophie; MacDonald, Ronald.

Machado, Matilde Pinto

PD January 1998. **TI** Dollars and Performance: Cost Effectiveness of Substance Abuse Treatment in Maine. **AA** University Carlos III de Madrid. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 85; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. **PG** 58. **PR** no charge. **JE** C33, H51, I11, L31. **KW** Substance Abuse. Fund Allocation. Cost-Effectiveness. Endogeneity.

AB If public funds are allocated efficiently, an increase in expenditures should improve the performance of substance abuse treatment programs. However, the unconditional correlation between performance and expenditures per patient is non-positive in our data set. One explanation for this seemingly surprising result is that programs that treat more difficult patients receive more resources per patient. We address this potential endogeneity both theoretically and empirically. We ask whether the "fraction of patients that are abstinent 30 days prior to their discharge" is affected by resources. We use data from outpatient drug-free programs receiving public funding from the state of Maine between 1991 and 1994. Two estimation methods are used, one based on Maximum Likelihood derived from the theoretical model and the other based on I.V. Both sets of estimates indicate that the marginal impact of spending per patient on performance is small and, in general, not statistically different from zero.

Machin, Stephen

PD April 2000. **TI** Union Decline in Britain. **AA** London School of Economics and University College London. **SR** London School of Economics, Centre for

Economic Performance Discussion Paper: 455; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 14. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** J51, J53. **KW** Union Recognition. Union Density. Establishment Age. Trade Unions.

AB In this paper I consider the rapid decline in the unionization rate that has occurred in Britain since the late 1970s. An establishment based analysis reports that the overwhelming factor in explaining falling unionization was a failure to organize the new sorts of establishments that were set up in the last twenty years or so. Patterns showing low rates of union recognition and density in new establishments set up in the 1980s and 1990s are seen to be very similar for new workplaces in both decades, reflecting that the developments since 1990 represent a continuation of the pattern revealed in earlier work for the 1980-90 period. The sharpest falls in unionization occurred in private manufacturing establishments set up post-1980, with significant falls also occurring, but from a lower initial level, in private sector services. In the public sector there is no establishment age based decline in recognition. Finally, there is some evidence that age of workplace, rather than age of worker, is the critical age based factor. This seems to be the case as the negative association between unionization and the post-1980 set up of the establishment is found to hold for workers of all ages.

PD May 1998. **TI** *Technology and Changes in Skill Structure: Evidence from Seven OECD Countries.* **AU** Machin, Stephen; Van Reenen, John. **AA** Machin: University College London and London School of Economics. Van Reenen: Institute for Fiscal Studies and University College London. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 3; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. **PG** 33. **PR** no charge. **JE** J51, O33. **KW** Employment. Wages. Skills. Technology. R&D.

AB Much of the dramatic change in skill and wage structure observed in recent years in the United States is believed to stem from the impact of new technology. This paper compares the changing skill structure of wage bills and employment in the United States with six other OECD countries -- the United Kingdom (where wage inequality rose even faster in the 1980s than in the United States), two Continental European countries (France and Germany), two Scandinavian countries (Denmark and Sweden) and Japan. We investigate whether a directly observed measure of technical change (R&D intensity) is able to account for the growth in the importance of more highly skilled workers, which has occurred in all countries. Evidence of a significant association between R&D intensity and skill upgrading is uncovered in all seven countries. These results provide evidence that skill biased technical change is an international phenomenon that has had a clear effect of increasing the relative demand for skilled workers.

Maggi, Giovanni

TI *Diversity and Trade.* **AU** Grossman, Gene M.; Maggi, Giovanni.

Mahajan, Vijay

TI *Capturing the Effect of Technology Improvements on*

Product Positioning and Introduction Sequence Decision-Making. **AU** Bhattacharya, Shantanu H.; Krishnan, Vish; Mahajan, Vijay.

Manacorda, Marco

PD June 1998. **TI** *Just Can't Get Enough: More on Skill-Biased Change and Labour Market Performance.* **AU** Manacorda, Marco; Manning, Alan. **AA** Manacorda: University College London and London School of Economics. Manning: London School of Economics. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 7; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. **PG** 48. **PR** no charge. **JE** J31, J64. **KW** Unemployment. Wage Inequality.

AB It is common to hear the argument that poor labour market performance in OECD countries in recent years is the result of shifts in relative demand against less-skilled workers. But, there is much dispute about whether these trends have been occurring and, if they have, how important they are in quantitative terms. In part these problems come from the absence of a clear conceptual framework in which to think about these issues. In this paper we propose such a framework, propose a measure of skill mismatch that is independent of the definitions of skill and demonstrate using data from a number of countries how it can be used to assess the importance in skill-biased change in understanding labour market changes in recent years. Our findings suggest that while increased skill mismatch does seem to have occurred in the US and UK, it has not occurred in the other European countries in our sample.

PD April 1999. **TI** *The Evolution of Earnings Inequality in Italy and the Escalator Clause.* **AA** UC Berkeley and UCL. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 16; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. **PG** 67. **PR** no charge. **JE** J31, J51. **KW** Scala Mobile. Wage Inequality. Kernel Density Estimates.

AB This paper investigates the effect of changes in the 'toughness' of the Scala Mobile, a wage indexation mechanism linking wage growth to price inflation, over the distribution of wages in Italy from 1977 to 1993. By granting a flat universal increase in wages for each percentage point rise in the consumer price index, the Scala Mobile had a potential to compress wage differentials. Yet, this potential was reduced over time. Based on SHIW data, I show that latent wage inequality in Italy has been constantly rising over the 80s but the indexation mechanism counteracted the decompression of earnings. As the Scala Mobile was curbed, observed wage inequality increased appreciably.

Manning, Alan

PD March 2000. **TI** *Labour Supply, Search and Taxes.* **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 449; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 23. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** H24, H31, J22, J64. **KW** Labor Supply.

Taxation. Search. Work Incentives.

AB Classical labor supply theory is one of the most sophisticated parts of labor economics. Yet, there is no compelling theoretical reason to believe in an outcome on a classical labor supply curve and it is unclear whether it is a good empirical description of the way in which labor markets actually work. This paper uses the techniques of search theory to analyze the impact of changes in the tax system on incentives to work when individuals do not have flexibility of hours within jobs. It is shown how the traditional comparative statics are of some use but are rarely the whole story and some comparative statics results are surprising. For example, it is shown how a revenue-neutral increase in marginal tax rates will increase incentives to work.

TI Just Can't Get Enough: More on Skill-Biased Change and Labour Market Performance. **AU** Manacorda, Marco; Manning, Alan.

Manski, Charles F.

PD May 1999. **TI** Statistical Treatment Rules for Heterogeneous Populations: With Application to Randomized Experiments. **AA** Northwestern University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 242; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** C44. **KW** Conditional Success Rule. Unconditional Success Rule. Statistical Treatment Rule.

AB This paper uses Wald's concept of the risk of a statistical decision function to address the question: How should sample data on treatment response be used to guide treatment choices in a heterogeneous population? Statistical treatment rules (STRs) are statistical decision functions that map observed covariates of population members and sample data on treatment response into treatment choices. I propose evaluation of STRs by their expected welfare (negative risk in Wald's terms), and I apply this criterion to compare two STRs when the sample data are generated by a classical randomized experiment. The rules both embody the reasonable idea that persons should be assigned the treatment with the best empirical success rate, but they differ in their use of covariate information. The conditional success (CS) rule selects treatments with the best empirical success rates conditional on specified covariates and the unconditional success (US) rule selects a treatment with the best unconditional empirical success rate. The main finding is a proposition giving finite-sample bounds on expected welfare under the two rules. The bounds, which rest on a large-deviations theorem of Hoeffding, yield explicit sample-size and distributional conditions under which the CS Rule is superior to the US rule.

Manuelli, Rodolfo E.

TI Growth and Business Cycles. **AU** Jones, Larry E.; Manuelli, Rodolfo E.; Siu, Henry E.

TI Endogenous Policy Choice: The Case of Pollution and Growth. **AU** Jones, Larry E.; Manuelli, Rodolfo E.

Mare, Dave

TI Understanding Changes in the Distribution of Household Incomes in New Zealand Between 1983-86 and 1995-98. **AU** Hyslop, Dean; Mare, Dave.

Markowitz, Sara

PD January 1999. **TI** The Price of Alcohol, Wife Abuse, and Husband Abuse. **AA** New Jersey Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6916; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** \$5.00. **JE** I12. **KW** Alcohol Consumption. Spousal Violence.

AB Alcohol consumption has been frequently linked to family violence. The purpose of the paper is to examine the direct relationship between the price of alcohol, which determines consumption, and violence towards spouses. The data come from the 1985 cross section and the 1985-1987 panel of the National Family Violence Survey. The 1985 data are a nationally representative sample while the panel oversamples violent individuals. Dichotomous indicators of severe violence towards wives and husbands are used. A reduced-form violence equation is estimated, and individual-level fixed effects are used to control for unobserved characteristics in the panel. A consistent result that emerges from this paper is that increase in the pure price of alcohol, as measured by a weighted average of the price of alcohol from beer, wine, and liquor, will serve to reduce severe violence aimed at wives. By contrast, the evidence on the propensity of an increase in the price of alcohol to lower violence towards husbands is mixed. When individual level characteristics are not controlled for, the price is not a predictor of violence towards men. However, once the individual traits are controlled for, a negative relationship between the price and violence emerges.

Marsden, David

PD April 2000. **TI** Teachers Before the 'Threshold'. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 454; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 23. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** I20, J33, J45, J50, M12. **KW** School Teachers. Compensation. Work Motivation. Public Sector. Education.

AB During the summer of 2000, the government will introduce a new system of pay and performance management for teachers. The Centre for Economic Performance is conducting a "before-and-after" panel study of teachers and schools to ascertain its effects on motivation and performance. This paper reports preliminary findings from the first wave of the survey, before the introduction of the new system. The likely effects of the new system, on the basis of these results, are examined from the point of view of motivation and work behavior, and potential recruitment. The danger of widespread de-motivation is a serious one, and it is essential that the new scheme be seen by teachers to operate fairly and to provide the necessary support to teachers wishing to pass the "Threshold." A key role is envisaged from the teachers' unions in building teachers' confidence that the scheme will be operated fairly, and this, it is argued, fits with the government's views on the benefits of labor-management partnership.

Marston, David

TI Mapping Financial Sector Vulnerability in a Non-Crisis Country. **AU** Downes, Patrick T.; Marston, David; Otker,

Inci.

Marston, Richard C.

TI Pass-Through and Exposure. AU Bodnar, Gordon M.; Dumas, Bernard; Marston, Richard C.

Martijn, Jan Kees

PD December 1999. TI Central Bank Independence and the Conduct of Monetary Policy in the United Kingdom. AU Martijn, Jan Kees; Samiei, Hossein. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/99/170; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 20. PR not available. JE E31, E52. KW Inflation Targeting. Central Bank Independence. United Kingdom.

AB The U.K. monetary policy framework, which combines inflation targeting with operational independence, provides a suitable arrangement for focused and credible monetary policy. However, potential weaknesses could result from features that have not yet been fully tested: the credibility and transparency of the inflation forecasts, which form the core of policy decisions, have diminished as a result of independence; and the framework could encourage excessive activism and frequent changes in interest rates. Although policy coordination could also suffer from independence, the new partly rules-based fiscal and monetary regimes will promote overall macroeconomic stability.

Martin, Philippe

PD March 2000. TI Financial Super-Markets: Size Matters for Asset Trade. AU Martin, Philippe; Rey, Helene. AA Martin: CERAS-ENCP, Paris, CIIS, Geneva and Centre for Economic Policy Research. Rey: London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 450; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 16. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE F12, F36, F41, G12, G15. KW International Macroeconomics. Asset Trade. Transaction Costs. Incomplete Markets.

AB The paper presents a two-country macroeconomic model in which the number of financial assets is endogenous. Imperfect substitutability of assets and international transaction costs give a comparative advantage to large markets, because of demand effects. Agents have more incentives to undertake risky investments on those markets; they can also diversify risk at a lower cost. Prices of financial assets are higher in the large area because asset markets are broader. We also analyze the impact of domestic transaction costs and issuing costs on financial markets and returns. Our theory has important implications for the pattern of international trade in risky assets.

PD March 2000. TI Financial Integration and Asset Returns. AU Martin, Philippe; Rey, Helene. AA Martin: CERAS-ENCP, Paris, CIIS, Geneva and Centre for Economic Policy Research. Rey: London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 451; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 18. PR 5 pounds for

individual copies; 95 pounds for yearly subscription. JE F12, F36, F41, G12, G15. KW Financial Integration. Asset Trade. Transaction Costs. Cross-Listing. International Finance.

AB The paper investigates the impact of financial integration on asset return, risk diversification and breadth of financial markets. We analyze a three-country macroeconomic model in which (i) the number of financial assets is endogenous; (ii) assets are imperfect substitutes; (iii) cross-border asset trade entails some transaction costs; (iv) the investment technology is indivisible. In such an environment, lower transaction costs between two financial markets, translate to higher demand for assets issued on those markets, higher asset price and greater diversification. For the country left outside the integrated area, the welfare impact is ambiguous: it enjoys better risk diversification but faces an adverse movement in its financial terms of trade. When we endogenize financial market location, we find that financial integration benefits the largest economy of the integrated area. Only when transaction costs become very small does financial integration lead to relocation of markets in the smallest economy.

Mash, Richard

PD July 2000. TI The Time Inconsistency of Monetary Policy with Inflation Persistence. AA Oxford University. SR Oxford Department of Economics Discussion Paper: 15; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. PG 38. PR no charge. JE C61, E52, E58. KW Monetary Policy. Time Inconsistency. Inflation Persistence.

AB In a monetary policy model incorporating partial persistence in inflation it is shown that inflation bias is reduced and the response to shocks improved if the policy maker has a discount rate lower than its true social value. Thus a patient central banker is shown to be a third mechanism for offsetting time inconsistency problems in addition to Rogoff's conservative central banker and the principal-agent approach of Walsh. The paper also analyzes outcomes under the latter regimes and the optimal rule, finding important differences from the results of earlier literature that excludes inflation persistence.

Masson, Paul R.

PD July 1999. TI Monetary and Exchange Rate Policy of Transition of Economies of Central and Eastern Europe after the Launch of EMU. AA International Monetary Fund. SR International Monetary Fund Policy Discussion Paper: PDP/99/05; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. PG 22. PR not available. JE F14, F21, F41, P24, P27. KW EMU. Exchange Rates. Transition Economies.

AB The more advanced Central and Eastern European Countries (CEECS) face an evolving set of considerations in choosing their exchange rate policies. On the one hand, capital mobility is increasing, and this imposes additional constraints on fixed exchange rate regimes, while trend real appreciation makes the combination of low inflation and exchange rate stability problematic. On the other hand, the objectives of EU and eventual EMU membership make attractive a peg to the euro at some stage in the transition. The paper discusses these conflicting considerations, and considers the feasibility of an alternative monetary framework, inflation targeting.

PD November 1999. **TI** Multiple Equilibria, Contagion, and the Emerging Market Crises. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/164; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 20. **PR** not available. **JE** F31, F41. **KW** Contagion. Multiple Equilibria. Currency Crisis.

AB The paper surveys the types of models producing multiple equilibria in financial markets. It argues that such models are consistent with observed phenomena, such as the greater volatility of financial asset prices than of macroeconomic fundamentals. Alternative explanations are compared with the stylized facts concerning capital flows, portfolio shifts, and exchange rate crises. Implications for crisis prediction and prevention are then discussed.

Matovu, John M.

PD February 2000. **TI** Composition of Government Expenditure, Human Capital Accumulation, and Welfare. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/15; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 25. **PR** not available. **JE** E62, H53. **KW** Government Expenditure. Welfare. Growth.

AB This paper uses a dynamic general equilibrium model calibrated to Ugandan data to examine the welfare effects of alternative scenarios of government expenditure and tax financing. Two expenditure types are considered: social spending that affects human capital, and infrastructure expenditures that affect productivity. The paper finds that social expenditures lead to higher economic growth depending on the form of financing; young generations benefit most from social spending financed by consumption taxes; agents do not substitute between human and physical capital as a result of changes in expenditure composition; and improving the productivity of fiscal expenditure is both growth and welfare enhancing.

Mauro, Paolo

TI The Role of Human Capital in Economic Growth: The Case of Spain. **AU** Fernandez, Enric; Mauro, Paolo.

Mazurek, Janice

TI Intel's XL Permit: A Framework for Evaluation. **AU** Boyd, James; Krupnick, Alan J.; Mazurek, Janice.

McClellan, Mark

TI The Distributional Effects of Medicare. **AU** Lee, Julie; McClellan, Mark; Skinner, Jonathan.

McCluskey, Jill J.

PD February 1999. **TI** Estimation of Perceived Risk and its Effect on Property Values. **AU** McCluskey, Jill J.; Rausser, Gordon C. **AA** McCluskey: Washington State University. Rausser: University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 879; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 21. **PR** \$5.25 Domestic; \$10.50 International Surface Rate. **JE** D80, Q20,

R10, R31, R33. **KW** Perceived Risk. Hazardous Waste. Media. Property Values. Hedonic Pricing.

AB A dynamic discrete time model is estimated in order to analyze the evolution of perceived risk around a hazardous waste site and its effect on property values. Residential property values are modeled as a function of housing attributes and perceived risk to health from a nearby hazardous waste site using a hedonic price framework. Perceived risk enters the model as a state equation, which includes a media coverage variable. An aggregate measure of perceived risk is estimated and weighted by the distance to the hazardous waste site in order to individualize risk to each location. Using a data set that spans seventeen years of property values around a hazardous waste site, the results indicate that media coverage and high prior risk perception increase current perceived risk. Increased perceived risk surrounding the hazardous waste site, in turn, lowers property values. The implications of these findings for compensation for property value diminution are discussed.

PD June 1999. **TI** Stigmatized Asset Value: Is it Temporary or Permanent? **AU** McCluskey, Jill J.; Rausser, Gordon C. **AA** McCluskey: Washington State University. Rausser: University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 877; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 33. **PR** \$8.25 Domestic; \$16.50 International Surface Rate. **JE** L85, Q20, R31, R33. **KW** Real Estate. Property Values. Hazardous Waste. Stigma. Hedonic Pricing.

AB Stigma is a negative attribute of real estate acquired by the discovery of contamination and reflected in its value (Elliot-Jones, 1996). Using a theoretical model with external economies and adjustment costs, we show that both temporary stigma and permanent stigma are possible equilibrium outcomes after the discovery and cleanup of a hazardous waste site. The existence and duration of stigma are examined using hedonic price techniques with data from housing sales prices in Dallas County, Texas. The empirical evidence shows that stigma exists after cleanup only for properties in very close proximity to the hazardous waste site.

McConnell, Virginia

TI Fleet Turnover and Old Car Scrap Policies. **AU** Alberini, Anna; Harrington, Winston; McConnell, Virginia.

TI Estimating Full IM240 Emissions from Partial Test Results: Evidence from Arizona. **AU** Ando, Amy W.; Harrington, Winston; McConnell, Virginia.

McDermott, C. John

TI The Myth of Comoving Commodity Prices. **AU** Cashin, Paul; McDermott, C. John; Scott, Alasdair.

McDonald, Calvin

PD December 1999. **TI** Income Distribution, Informal Safety Nets, and Social Expenditures in Uganda. **AU** McDonald, Calvin; Schiller, Christian; Ueda, Kenichi. **AA** McDonald and Schiller: International Monetary Fund. Ueda: University of Chicago. **SR** International Monetary Fund Working Paper: WP/99/163; International Monetary

Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. PG 32. PR not available. JE H51, H52, H53, I31. KW Income Distribution. Safety Nets. Social Expenditures. Structural Adjustment.

AB Inequality in Uganda rose during 1989-95, although this rise moderated in 1993-95. In 1993-95, real food consumption became more equal. Regional and urban-rural disparities in income and variations in income accruing to individuals with different educational levels principally explain "between group inequality." While informal safety nets appear to work for Ugandan middle-class families, a lack of mutual insurance among poor production workers and farmers accentuates the inequality trends. An expansion of formal safety nets would help this segment of the population. The intra-sectoral allocation and benefit incidence of expenditures on education and health can be improved to reduce inequality.

McGrattan, Ellen R.

TI Can Sticky Price Models Generate Volatile and Persistent Real Exchange Rates? AU Chari, V. V.; Kehoe, Patrick J.; McGrattan, Ellen R.

TI Can Sticky Price Models Generate Volatile and Persistent Real Exchange Rates? AU Chari, V. V.; Kehoe, Patrick J.; McGrattan, Ellen R.

McGuire, Thomas G.

TI Costs and Incentives in a Mental Health and Substance Abuse Care Out. AU Ma, Ching-to Albert; McGuire, Thomas G.

TI Network Incentives in Managed Health Care. AU Ma, Ching-to Albert; McGuire, Thomas G.

TI Economics and Mental Health. AU Frank, Richard G.; McGuire, Thomas G.

McIntosh, Steven

PD August 1999. TI A Cross-Country Comparison of the Determinants of Vocational Training. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 432; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 32. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE I20, J10, J24, J32. KW Vocational Training. Skill. Human Capital. Education.

AB Using data from the European Labour Force Survey, the characteristics of individuals who receive vocational training are compared in six European countries; Germany, France, the Netherlands, Portugal, Sweden and the UK. As well as the incidence of training, the intensity is also considered. In addition, training is split into its on-the-job and off-the-job components. The spectrum of training within these six countries runs from Germany at one end, where most training is the intensive upskilling of young, unqualified workers, to Sweden at the other end, where the typical training spell is of short duration and is given to middle-aged, well-educated employees in professional jobs. Thus the pattern of training is largely determined by a country's system of education. In Germany, vocational skills are not taught within the formal education sector, and are learned through participation on an apprenticeship scheme, while in Sweden, students do learn vocational skills at school, and so the workplace training we

observe is mainly "top-up" courses.

TI AU Green, Francis; McIntosh, Steven; Vignoles, Anna.

McKendrick, David

PD October 1998. TI Institutional Influences on Market Behavior: Diversification in Indonesian Leasing. AU McKendrick, David; Stout, Suzanne K. AA McKendrick: University of California at San Diego. Stout: INSEAD. SR INSEAD Working Paper: 98/93/OB; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. PG 35. PR no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. JE L22, L23, O53. KW Dominant Institutions. Industrial Growth. Leasing. Market Diversification.

AB We examine institutional effects on market behavior by developing and testing hypotheses about the effects of two dominant institutions, the nation-state and the multinational corporation, on market diversification. Analysis of diversification in the Indonesian leasing industry between its establishment in 1975 and 1995 shows that diversification into leasing markets by state-owned firms and other firms in the industry mimic U.S. multinationals. In contrast, firms in the industry avoid following Japanese multinationals into leasing markets. In addition, these institutional effects vary with time: dominant institutions shape market behavior during the earliest stages of industrial growth, but their influence on behavior wanes as an industry ages.

Mehra, Ajay

TI The Reciprocal Effects of Top Management Team Cognitive Diversity and Firm Performance: Opening the Black Box. AU Kilduff, Martin; Angelmar, Reinhard; Mehra, Ajay.

TI Top Management Team Diversity and Firm Performance: Examining the Role of Cognitions. AU Kilduff, Martin; Angelmar, Reinhard; Mehra, Ajay.

Mellander, Erik

PD February 2000. TI The Multi-Dimensional Nature of Labor Demand and Skill-Biased Technical Change. AA Research Institute of Industrial Economics (IUI), Stockholm, Sweden and Office Labor Market Policy Evaluation (IFAU), Uppsala, Sweden. SR London School of Economics, Centre for Economic Performance Discussion Paper: 440; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 66. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE D21, J23, J31, L60, O33. KW Robustness Tests. Labor Quality. Technological Change. Human Capital. Manufacturing.

AB Investigating the robustness of the skill-biased technological change hypothesis, this analysis incorporates two novel features. First, effective labor is modeled as the product of a quantity measure -- number of employees with a given level of education -- and a quality index, depending on, i.a., demographic characteristics and fields-of-study. Second, low-skilled labor is more disaggregated than in earlier studies. A fully specified structural model is used, containing demand equations for four categories of labor, two types of capital and intermediate goods. The empirical application covers 24 industries in the Swedish manufacturing sector 1985-1995. The

skill-bias is further corroborated: it is confirmed although the specification of effective labor is supported. Substantial differences are, however, found among the low-skilled.

Mellinger, Andrew

TI Geography and Economic Development. AU Gallup, John Luke; Sachs, Jeffrey D.; Mellinger, Andrew.

Mendoza, Enrique G.

PD March 1999. TI The Business Cycles of Balance-of-Payments Crises: A Revision of a Mundellian Framework. AU Mendoza, Enrique G.; Uribe, Martin. AA Mendoza: Duke University and National Bureau of Economic Research. Uribe: University of Pennsylvania. SR National Bureau of Economic Research Working Paper: 7045; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG not available. PR \$5.00. JE E32, F31, F32, F41. KW Foreign Reserves. Currency Crises.

AB In his seminal 1960 article Robert Mundell proposed a model of balance-of-payments crises in which confidence in the continuation of a currency peg depended on the observed holdings of central bank foreign reserves. We examine the implications of a reformulation of this view from the perspective of an equilibrium business cycle model in which the probability of devaluation is an endogenous variable conditioned on foreign reserves. The model explains some business cycle regularities of exchange-rate-based stabilization while also producing devaluation probabilities that capture some features of devaluation probabilities estimated in the data. The analysis aims to explain both the real effects and the collapse of temporary fixed-exchange-rate regimes in a unified framework, and provides an economic interpretation for the evidence that foreign reserves are a robust leading indicator of currency crises.

Metcalf, David

PD April 2000. TI Unions and the Sword of Justice: Unions and Pay Systems, Pay Inequality, Pay Discrimination and Low Pay. AU Metcalf, David; Hansen, Kirstine; Charlwood, Andy. AA London School of Economics. SR London School of Economics, Centre for Economic Performance Discussion Paper: 452; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 31. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE J31, J51. KW Trade Unions. Pay Distribution. Discrimination. Wages. Human Capital.

AB Dispersion in pay is lower among union members than among non-unionists. This reflects two factors. First, union members and jobs are more homogenous than their non-union counterparts. Second, union wage policies within and across firms lower pay dispersion. Unions' minimum wage targets also truncate the lower tail of the union distribution. There are two major consequences of these egalitarian union wage policies. First, the return to human capital is lower in firms which recognize unions than in the unorganized sector. Second, unions compress the wage structure by gender, race and occupation.

Metrick, Andrew

TI The Profits to Insider Trading: A Performance-Evaluation

Perspective. AU Jeng, Leslie A.; Metrick, Andrew; Zeckhauser, Richard.

Michalopoulos, Charles

TI Measuring Wage Growth Among Former Welfare Recipients. AU Card, David; Michalopoulos, Charles; Robins, Philip K.

Mihaljek, Dubravko

TI Property Prices and Speculative Bubbles: Evidence From Hong Kong SAR. AU Kalra, Sanjay; Mihaljek, Dubravko; Duenwald, Christoph.

Mihov, Ilian

TI Government Size and Automatic Stabilizers: International and Intranational Evidence. AU Fatas, Antonio; Mihov, Ilian.

TI Deflation and Monetary Contraction in the Great Depression: An Analysis by Simple Ratios. AU Bernanke, Ben S.; Mihov, Ilian.

Miller, Geoffrey P.

TI Central Bank Reform, Liberalization and Inflation in Transition Economies -- An International Perspective. AU Cukierman, Alex; Miller, Geoffrey P.; Neyapti, Bilin.

Miller, Preston J.

PD April 2000. TI Some Fresh Perspectives on Price-Support Policies. AA Federal Reserve Bank of Minneapolis and Congressional Budget Office. SR Federal Reserve Bank of Minneapolis Staff Report: 266; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 554880-0291. Website: <http://woodrow.mpls.frb.fed.us>. PG 30. PR no charge. JE D51, E52, E63, F42, Q18. KW Price Supports. Budget Policy. Monetary Policy. General Equilibrium. Dynamic. Strategic.

AB Trade protection remains a prominent feature of the current world economy and likely has significant effects on industries and macroeconomies. In this paper a particular type of policy, price supports, is analyzed in a two-country, dynamic, general equilibrium model. This model brings new perspectives to the analysis in that it is monetary and has labor mobility within countries between the traded-goods and non-traded-goods sectors. It is found that: The introduction of price supports in an economy benefits only the agents currently working in the traded-goods sector. Cooperation among countries in setting policies results in a higher level of price supports than does non-cooperation. Price-support policies can importantly affect the transmission of monetary policy effects, introducing permanent changes in real variables where there were none before and even reversing the signs of changes in some variables.

TI Predicting Turning Points. AU Chin, Dan; Geweke, John; Miller, Preston J.

PD January 1999. TI The Jointly Optimal Inflation Tax, Income Tax Structure, and Transfers. AA Federal Reserve Bank of Minneapolis. SR Federal Reserve Bank of Minneapolis Staff Report: 193; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 554880-0291. Website: <http://woodrow.mpls.frb.fed.us>.

PG 25. **PR** no charge. **JE** E51, E62, H11, H21. **KW** Tax Structure. Intergenerational Transfers. Money Creation.

AB The welfare-maximizing income tax structure, rate of money creation, and amounts of intergenerational transfers are jointly determined for given rates of government consumption. When government consumption is zero, it is found for the parameter values examined that the income tax structure is progressive, the rate of money change is negative, and positive transfers are made to the old. As government consumption increases, the tax structure's progressivity declines and turns increasingly regressive, the rate of money change rises, and transfers decrease. It is found that the bulk of the increase in government consumption is optimally financed by a cut in transfers.

Minehart, Deborah

PD October 1997. **TI** Termination and Coordination in Partnerships. **AU** Minehart, Deborah; Neeman, Zvika. **AA** Boston University. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 83; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. **PG** 25. **PR** no charge. **JE** D21, D23, D44, D82, L14, L22. **KW** Joint Ventures. Partnerships. Hold-Up Problem. Asymmetric Information.

AB It is common practice for firms to pool their expertise by forming partnerships such as joint ventures and strategic alliances. A central organizational problem in such partnerships is that managers may behave non-cooperatively in order to advance the interests of their parent firms. We ask whether contracts can be designed so that managers will maximize total profits. We characterize first best contracts for a wide variety of "reasonable" environments and show that efficiency imposes some restrictions on the ownership shares. In addition, we evaluate the performance of two termination contracts that are widely used in practice: the shot-gun rule and price competition. We find that although these contracts do not achieve full efficiency, they both perform very well. We provide insight into when each rule is more efficient.

Miron, Jeffrey A.

PD April 1997. **TI** The Effect of Alcohol Prohibition on Alcohol Consumption. **AA** Boston University and National Bureau of Economic Research. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 78; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. **PG** 45. **PR** no charge. **JE** J18, K42, N41. **KW** Prohibition. Alcohol Consumption.

AB See the abstract for Jeffrey A. Miron, February 1999. "Violence and the U.S. Prohibition of Drugs and Alcohol." National Bureau of Economic Research Working Paper: 6950; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org.

PD August 1998. **TI** Violence and the U.S. Prohibition of Drugs and Alcohol. **AA** Boston University and National Bureau of Economic Research. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 90; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. **PG** 39. **PR** no charge. **JE** I12, K42. **KW** Violence. Drug Prohibition. Alcohol Prohibition.

AB Among the many unresolved questions regarding the determinants of violence is the role of prohibitions against drugs and alcohol. Conventional wisdom holds that consumption of these goods encourages violence and that prohibitions discourage such consumption; thus, prohibitions reduce violence. An alternative view, however, is that prohibitions create black markets, and in black markets participants use violence to resolve commercial disputes. Thus, prohibitions potentially increase violence. This paper examines the relation between prohibitions and violence using the historical behavior of the homicide rate in the United States. The results document that increases in enforcement of drug and alcohol prohibition have been associated with increases in the homicide rate, and auxiliary evidence suggests this positive correlation reflects a causal effect of prohibition enforcement on homicide.

PD February 1999. **TI** Violence and the U.S. Prohibition of Drugs and Alcohol. **AA** Boston University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6950; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** K42. **KW** Violence. Drugs and Alcohol. Black Markets.

AB Among the many unresolved questions regarding the determinants of violence is the role of prohibitions against drugs and alcohol. Conventional wisdom holds that consumption of these goods encourages violence and that prohibitions discourage such consumption; thus, prohibitions reduce violence. An alternative view, however, is that prohibitions create black markets, and in black markets participants use violence to resolve commercial disputes. Thus, prohibitions potentially increase violence. This paper examines the relation between prohibitions and violence using the historical behavior of the homicide rate in the United States. The results document that increases in enforcement of drug and alcohol prohibition have been associated with increases in the homicide rate, and auxiliary evidence suggests this positive correlation reflects a causal effect of prohibition enforcement on homicide. Controlling for other potential determinants of the homicide rate - the death penalty - does not alter the conclusion that drug and alcohol prohibition have substantially raised the homicide rate in the United States over much of the past 100 years.

Mishkin, Frederic S.

PD March 1999. **TI** International Experiences with Different Monetary Policy Regimes. **AA** Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7044; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 41. **PR** \$5.00. **JE** E52, F31. **KW** Monetary Policy Regimes. Transparency. Accountability. **AB** This paper examines the international experiences with four basic types of monetary policy regimes: 1) exchange-rate targeting, 2) monetary targeting, 3) inflation targeting, and 4) monetary policy with an implicit but not an explicit nominal anchor. The basic theme that emerges from this analysis is that transparency and accountability are crucial to constraining discretionary monetary policy so that it produces desirable long-run outcomes. Because the devil is in the details in achieving transparency and accountability, what strategy will

work best in a country depends on its political, cultural and economic institutions and its past history.

Mitchell, Matthew F.

PD April 2000. **TI** The Scale of Production in Technological Revolutions. **AA** Federal Reserve Bank of Minneapolis and University of Minnesota. **SR** Federal Reserve Bank of Minneapolis Staff Report: 269; Research Department, Federal Reserve Bank of Minneapolis, P.O. Box 291, Minneapolis, MN 554880-0291. Website: <http://woodrow.mpls.frb.fed.us>. **PG** 27. **PR** no charge. **JE** L11, L60, O31. **KW** Plant Size. Productivity Growth. Technological Change.

AB Many manufacturing industries, including the computer industry, have seen large increases in productivity growth rates and have experienced a reduction in average establishment size and a decrease in the variance of the sizes of plants. A vintage capital model is introduced where learning increases productivity on any given technology and firms choose when to adopt a new vintage. In the model, a rise in the rate of technological change leads to a decrease in both the mean and variance of the size distribution.

TI Rewarding Sequential Innovators: Prizes, Patents and Buyouts. **AU** Llobet, Gerald; Hopenhayn, Hugo; Mitchell, Matthew F.

Moen, Jarle

TI Do Subsidies to Commercial R&D Reduce Market Failures? Microeconomic Evaluation Studies. **AU** Klette, Tor Jakob; Moen, Jarle; Griliches, Zvi.

Mojon, Benoit

PD November 1998. **TI** Structures financières et transmission de la politique monétaire en Europe, analyses comparatives de l'Allemagne, la France, l'Italie et le Royaume-Uni. **AA** CEPII. **SR** CEPII Working Paper: 98/12; Centre d'Etudes Prospectives et d'Informations Internationales (CEPII), 9 rue Georges Pitard, 75740 Paris cedex 15, France. Website: www.cepii.fr. **PG** 63. **PR** no charge. **JE** E43, E52, G21. **KW** Monetary Transmission. Financial System. European Monetary Union. Credit Channel. **AB** This paper proposes an analysis of the financial determinants of the transmission of monetary policy in Germany, France, Italy and the United Kingdom. This raises the question whether the financial structures of the members of the future monetary union are homogeneous enough so that a single monetary policy will have homogeneous effects. The paper evaluates the financial systems of these four countries to underline institutional asymmetries likely to disturb the transmission of a unified monetary policy. This highlights the differences in the elasticity of bank interest rates with respect to the instrument rate of monetary policy: each country is dominated by a single type of credit contract; the variations of interest rates apply to debts of unequal importance; the level of exposure of the financial intermediaries' balance sheets appears heterogeneous. Empirical work on the existence of a credit channel does not show a quantitative rationing of borrowers after shocks on monetary policy. This paper is written in French.

Moran, John

PD August 1998. **TI** Lake Wobegon Revisited:

Equilibrium Embellishment and Discrimination in Recruiting. **AU** Moran, John; Morgan, John. **AA** Moran: University of Michigan. Morgan: Princeton University. **SR** Princeton University Discussion Papers in Economics, Woodrow Wilson School of Public and International Affairs: 199; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. Website: www.princeton.edu/other/workingpapers.html. **PG** 24. **PR** no charge. **JE** D82, J63, J71. **KW** Embellishment. Discrimination. Screening. Wobegon Effect.

AB Employers, educational institutions, and other organizations are often faced with the problem of identifying the most qualified candidate to fill an available position. We present an equilibrium model of the candidate selection process when both candidates and referees can credibly misrepresent a candidate's qualifications at some cost. We show that the resulting equilibrium often entails embellishment by both candidates and referees (a phenomenon known as the "Lake Wobegon effect") but, despite this, the process always results in the selection of the most qualified candidate. We also examine the implications of our model for current proposals for color-blind hiring procedures and show that, in the presence of the Lake Wobegon effect, such rules constitute a subtle form of discrimination against disadvantaged candidates. In such cases, affirmative action policies are necessary to create a "level playing field" and promote labor market efficiency.

Moretti, Enrico

PD November 1998. **TI** Social Returns to Education and Human Capital Externalities: Evidence from Cities. **AA** UC Berkeley. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 9; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. **PG** 45. **PR** no charge. **JE** H52, I20, J31, R11. **KW** Returns to Education. Human Capital. Externalities. Metropolitan Areas.

AB Private and social returns to education may differ in the presence of externalities. In this paper, I estimate the external return to education by comparing wages for otherwise similar individuals who work in cities with higher and lower average levels of education. I use changes in wages across the 1980 and 1990 Censuses to abstract from any permanent sources of unobserved heterogeneity across cities. To further control for the potential endogeneity of the growth in education across cities, I use an instrumental variable scheme motivated by the observation that younger cohorts have higher education than older cohorts. Specifically, I use the demographic structure of different cities in 1970 as an instrument for changes in education over the 1980s. The results suggest that a one year increase in average education raises the wage of an average worker by about 14%. A rise in the portion of better educated workers has a larger positive effect on less-educated workers. Even for college graduates, however, the external effect is large enough to generate a net positive gain to working in a better-educated city.

PD October 1999. **TI** Workers' Education, Externalities and Technology Adoption: Evidence from Plant-Level Production Functions. **AA** UC Berkeley. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 21; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website:

violet.berkeley.edu/~ir/cle/index.html. PG 44. PR no charge. JE J31, J41. KW Externalities. Technology. Education and Schooling.

AB In this paper I propose a direct approach to the identification of human capital externalities. I find that the external effect of education on productivity is larger for those plants in which the share of skilled workers is larger, suggesting that human capital externalities are more important in human-capital-intensive productions. I consider two explanations. The first is the presence of omitted variables that may raise both productivity and education. To investigate this possibility I exploit the longitudinal structure of the data, finding little evidence that omitted variables play a major role. A second explanation is that in cities with a better-educated labor force plants tend to be equipped with better technology. I find more support for the second hypothesis. In plants that are situated in cities with higher average education, both investment in computers and the fraction of new machinery to the total stock of machinery are larger, after controlling for a plant's characteristics. Furthermore, within a given city, the investment in computers in a particular plant is positively associated with the number of workers who use computers outside the plant.

PD October 1999. TI Estimating the Social Return to Education: Evidence from Repeated Cross-Sectional and Longitudinal Data. AA UC Berkeley. SR University of California, Berkeley, The Center for Labor Economics Working Paper: 22; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. PG 56. PR no charge. JE I20, J31, J32. KW Return to Education. Externalities. Cities.

AB In this paper, I estimate externalities from education by comparing wages for otherwise similar individuals who work in cities with higher or lower shares of college-educated workers in the labor force. The presence of city-wide unobservable factors may raise wages and attract more highly educated workers to different cities. To control for the potential endogeneity of education across cities, I use three instrumental variables: the presence of a land-grant college; the cost of tuition at state colleges and universities; and the city demographic structure. I then investigate the hypothesis that the correlation between college share and wages is due to omitted individual characteristics, such as ability. By observing the same individual over time and in different cities, I can control for permanent factors that make an individual-city match particularly productive. A percentage point increase in the supply of college graduates raises high-school drop-outs' wages by 2.3%, high-school graduates' wages by 1.4%, the wages of college graduates by 1.2%. The effect is larger for less educated groups, but even for college graduates, an increase in the supply of college graduates increases wages, as predicted by a model that includes both conventional demand and supply factors and externalities.

Morgan, John

PD February 1998. TI Is Timing Everything? A Model of Endogenous Sequential Contests. AA Princeton University. SR Princeton University Discussion Papers in Economics, Woodrow Wilson School of Public and International Affairs: 194; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013.

Website: www.princeton.edu/other/workingpapers.html. PG 16. PR no charge. JE C72, C73, D61. KW Contests. Rent-Seeking.

AB We compare expected rent-seeking expenditures of efficiency of simultaneous versus sequential rent-seeking contests. We find that when two risk neutral ex ante symmetric agents are competing, sequential contests are ex ante Pareto superior to simultaneous contests. We then endogenize the timing decision of rent-seeking expenditures and show that with an ante identical contestants, all subgame perfect equilibria of this game are sequential contests.

PD July 1998. TI An Analysis of Stock Recommendations. AU Morgan, John; Stocken, Phillip. AA Morgan: Princeton University. Stocken: University of Pennsylvania. SR Princeton University Discussion Papers in Economics, Woodrow Wilson School of Public and International Affairs: 204; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. Website: www.princeton.edu/other/workingpapers.html. PG 23. PR no charge. JE D82, G29. KW Cheap-Talk. Signaling. Equity Analysis.

AB We analyze the information content of stock recommendations by a sell-side equity analyst when investors are uncertain about the analyst's incentives. In our model, an analyst can either be "unbiased", having incentives that are congruent with those of the investor, or "biased". We find that investor uncertainty about an analyst's incentives dramatically reduces the information content of stock recommendations. Specifically, when the investor cannot infer the analyst's bias simply from his recommendation, all perfect Bayesian equilibria of the game are equivalent to partition equilibria -- equilibria where the analyst's recommendations correspond to a finite partition of the (continuous) state space. Partition equilibria are consistent with the traditional three-category system (buy, hold, and sell) frequently employed by analysts. These equilibria also have the properties that: (a) the possibility that an analyst is biased eliminates the incentives of even unbiased analysts to reveal all relevant information in their recommendations; (b) both types of analysts issue overly-optimistic recommendations, but the degree of over-optimism is greater for biased than for unbiased analysts; and (c) despite the information loss arising from uncertainty about the incentives of analysts, stock recommendations do contain some information and hence price responses to recommendations are consistent with rational investor behavior.

TI Information Gatekeepers and the Competitiveness of Homogeneous Product Markets. AU Baye, Michael R.; Morgan, John.

TI Lake Wobegon Revisited: Equilibrium Embellishment and Discrimination in Recruiting. AU Moran, John; Morgan, John.

PD September 1998. TI An Experimental Investigation of Unprofitable Games. AU Morgan, John; Sefton, Martin. AA Morgan: Princeton University. Sefton: University of Newcastle. SR Princeton University Discussion Papers in Economics, Woodrow Wilson School of Public and International Affairs: 200; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. Website: www.princeton.edu/other/workingpapers.html. PG 16. PR no charge. JE C72, C91. KW Unprofitable Games. Maximin Payoffs. Learning Models.

AB We investigate behavior in experiments with unprofitable games. In these games Maxmin strategies do not form a Nash equilibrium, yet they guarantee the Nash payoff. Behavior is examined in two unprofitable games that differ in the riskiness of Nash strategies and in the gain from deviating against Maxmin play. In the game where the Nash strategy is more risky, Maxmin outperforms Nash in accounting for subject choices. In contrast, in the less risky treatment, Nash outperforms Maxmin. Nonetheless, neither solution concept accounts for more than 53% of choices in either game. Thus, we find that neither the Nash nor the Maxmin solution concept works particularly well in describing subject behavior in the games we consider. The predictive performance of several alternative models is compared. We find a quantal response equilibrium model is the best static model. However, dynamic models that account for subjects' experiences from previous rounds do even better. In particular, an experience weighted attraction model captures the heterogeneity of strategies and outperforms all other models according to the scoring rule we employ.

TI A Model of Expertise. **AU** Krishna, Vijay; Morgan, John.

Mortimer, Julie H.

TI Predicting the Efficacy of Future Training Programs Using Past Experience. **AU** Hotz, V. Joseph; Imbens, Guido W.; Mortimer, Julie H.

Mortimer, Rika Onishi

PD November 1997. **TI** Demand for Prescription Drugs: The Effects of Managed Care Pharmacy Benefits. **AA** UC Berkeley. **SR** University of California, Berkeley, Department of Economics Working Paper: 97/258; UC, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. **PG** 32. **PR** \$3.50 U.S., \$7.00 International. **JE** I11, L65. **KW** Prescription drugs. Health Insurance. Pharmaceutical Markets.

AB This paper examines how demand for prescription drugs is influenced by different types of insurance. In order to understand demand characteristics and the competitiveness of pharmaceutical markets, both intermolecular (therapeutic) and intramolecular (generic) substations are studied in the antidepressant and beta blocker (anti-hypertensive) markets. Mixed logit and other discrete choice models are applied to national survey and product sales data. The results indicate that demand in managed care sectors is more price elastic than in other sectors. Demand in the self-paid sector is found to be least price elastic, despite the fact that patients must pay for the entire cost of drugs. The results confirm the effectiveness of managed care incentives in shifting prescription patterns toward less expensive products, and suggest the existence of an agency problem between physicians and patients.

Moshkin, Nickolay

PD January 2000. **TI** Switching Costs or Search Costs. **AU** Moshkin, Nickolay; Shachar, Ron. **AA** Moshkin: Yale University. Shachar: Tel-Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/03; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 37. **PR** no charge. **JE** C51, D83, L10. **KW** Brand Loyalty.

Incomplete Information. Search.

AB One of the most significant and robust characteristics of decision making is persistence. An example of this is brand loyalty - the repeat purchase of new products of the same brand. This paper attempts to show that previous explanations of this phenomenon (switching costs, habit and unobserved heterogeneity) are incomplete, and presents another explanation, namely that individuals possess asymmetric information about their alternatives and are faced with search costs. This explanation can be distinguished empirically from the previous ones using standard panel data set since it has unique implications. It is important to distinguish between the different explanations, since grouping them together under "switching costs" leads to seriously misleading empirical and theoretical conclusions. We demonstrate the explanatory power of our approach with an empirical example on television viewing behavior. Furthermore, we find that the welfare loss due to incomplete information (versus complete information) is significant.

Mullainathan, Sendhil

TI Networks Effects and Welfare Cultures. **AU** Bertrand, Marianne; Luttmer, Erzo F. P.; Mullainathan, Sendhil.

TI Executive Compensation and Incentives: The Impact of Takeover Legislation. **AU** Bertrand, Marianne; Mullainathan, Sendhil.

TI Is There Discretion in Wage Setting? A Test Using Takeover Legislation. **AU** Bertrand, Marianne; Mullainathan, Sendhil.

Nak, Song Byung

TI The Korean Financial Crisis of 1997-98. **AU** Adelman, Irma; Nak, Song Byung.

Neeman, Zvika

TI Termination and Coordination in Partnerships. **AU** Minehart, Deborah; Neeman, Zvika.

PD May 1998. **TI** The Effectiveness of Simple Auctions. **AA** Boston University. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 95; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. **PG** 28. **PR** no charge. **JE** D44, D82. **KW** Effectiveness. English Auction. Second Price Auction. Private Values.

AB We study the performance of English and second price auctions in which the seller sets an optimal reserve price given his beliefs. We define the effectiveness of an auction as the ratio between the expected revenue it generates for the seller and the expected valuation of the object to the bidder with the highest valuation (total surplus). We identify tight lower bounds on the effectiveness of English and second price auctions for general private values environments, for private values environments where bidders' valuations are positively correlated and when their expected valuations of the object are at least as high as 60% of the maximal possible valuation, an optimal English auction sells the object at a price that is at least 83% of its value to the bidder with the highest valuation; if the environment is i.i.d., this worst case bound increases to 96%.

PD September 1998. **TI** Herding and the Winner's Curse in Markets with Sequential Bidders. **AU** Neeman, Zvika;

Orosel, Gerhard O. AA Neeman: Boston University. Orosel: University of Vienna. SR Boston University, Industry Studies Program Working Paper Series on Economics: 92; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. PG 31. PR no charge. JE D82, D83. KW Information Cascade. Herding. Sequential Auctions. Winner's Curse. Social Learning.

AB We present a model of social learning in an environment with common values where informational cascades and herding arise in combination with the winner's curse. A seller of an object sequentially obtains bids from potential buyers. The buyers have the same ex post valuation of the object but differ in their estimates of what this value is. We characterize three classes of equilibria that differ widely in their information aggregation properties, and in the size of the rent the seller captures from the buyers. We compare the procedure of sequentially soliciting bids from the buyers to conducting an English auction for the object in terms of maximization of seller's revenue and demonstrate the superiority of the former.

PD September 1998. TI The Relevance of Private Information in Mechanism Design. AA Boston University. SR Boston University, Industry Studies Program Working Paper Series on Economics: 93; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. PG 32. PR no charge. JE D44, D82, H41. KW Surplus Extraction. Information Rents. Mechanism Design. Private Information. Correlated Information.

AB A number of recent results in mechanism design literature show that in virtually all mechanism design environments of interest, as long as agents' private information is correlated, it is possible to design mechanisms that leave agents with arbitrarily small information rents. This paper presents a critique of these results. It is argued that rather than generic, full rent extraction hinges on the implausible assumption that agents' beliefs uniquely determine their preferences. A model that incorporates a richer structure of information where this assumption is relaxed is presented and two applications are analyzed: single object private-value auctions and public good provision. In the former application, it is shown that even the optimal auction fails to extract the bidders' full surplus. In the latter one, it is shown that the probability a public good can be voluntarily provided decreases to zero at a polynomial rate as the number of individuals involved increases.

Nellor, David C. L.

PD February 1999. TI Tax Policy and the Asian Crisis. AA International Monetary Fund. SR International Monetary Fund Policy Discussion Paper: PDP/99/02; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. PG 22. PR not available. JE E62, H25, H87. KW Tax Policy. Capital. Asian Crisis.

AB The Asian crisis offers a backdrop for looking at tax policy in relation to two interrelated developments. One, globalization, led to an array of tax breaks for mobile capital and a second, technological change, made it difficult to tax capital. Tax reform can promote sustainable recovery by removing financial sector distortions and facilitating corporate restructuring even though tax policies were neither a necessary nor sufficient trigger for the Asian crisis. Broader lessons are that tax administration requires strengthening when capital

accounts are liberalized and international cooperation is needed to apply conventional taxation principles. The Thai and Philippines' tax systems are used to illustrate some points.

Neusser, Klaus

TI Evaluating Theories of the Income Dynamics: A Probabilistic Approach. AU Aebi, Robert; Neusser, Klaus; Steiner, Peter.

Nevo, Aviv

PD February 1999. TI Prices and Coupons for Breakfast Cereals. AU Nevo, Aviv; Wolfram, Catherine. AA Nevo: University of California, Berkeley and National Bureau of Economic Research. Wolfram: Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6932; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 29. PR \$5.00. JE D21, D43. KW Coupons. Shelf-Pricing. Breakfast Cereals. Price Discrimination.

AB This paper explores the relationship between shelf prices and manufacturers' coupons for 25 ready-to-eat breakfast cereals. Contrary to the predictions of static monopoly price discrimination, we find the shelf prices for a particular brand in a particular city are generally lower during periods when coupons are available. We find evidence that is also inconsistent with dynamic theories of pricing that predict lower prices and coupons after periods of low demand, and find little support for explanations of couponing based on the vertical relationship between manufacturers and retailers. We find some support for models of price discrimination in oligopoly settings that suggest inter-brand competition can cause all prices to be lower than the uniform (non-discriminatory) price. We also find some evidence suggesting that firm-wide incentives may induce managers to use coupons and price cuts simultaneously in order, for example, to meet market share targets.

Neyapti, Bilin

TI Central Bank Reform, Liberalization and Inflation in Transition Economies -- An International Perspective. AU Cukierman, Alex; Miller, Geoffrey P.; Neyapti, Bilin.

Ng, Yew-Kwang

PD March 1999. TI Specialization, Information, and Growth: A Sequential Equilibrium Analysis. AU Ng, Yew-Kwang; Yang, Xiaokai. AA Ng: Monash University. Yang: Center for International Development at Harvard University. SR Harvard Center for International Development (CID) Working Paper: 7; Center for International Development; John Gallup, Editor; 79 John F. Kennedy Street, Cambridge, MA 02138. Website: www.cid.harvard.edu/cidworkingpapers/cid_workingpapers.htm. PG 37. PR paper copies \$7.50 up to 80 pages long; \$12.00 for 80 pages long and longer. JE D23, D51, D91, D92, O12. KW Information Evolution. Information Specialization. Adaptive Decision. Bounded Rationality. Sequential Equilibrium. Economic Development.

AB Pricing costs and information problems are introduced into a framework with consumer-producers, economies of specialization, and transaction costs to predict the endogenous and concurrent evolution in division of labor and in the information of organization acquired by society. The concurrent evolution generates endogenous growth based on the tradeoff between gains from information about the efficient

pattern of division of labor, which can be acquired via experiments with various patterns of division of labor, and experimentation costs, which relate to the costs in discovering prices. The concept of Walras sequential equilibrium is developed to analyze the social learning process which is featured with uncertainties of the direction of the evolution as well as a certain trend of the evolution.

Nickell, Stephen

PD March 2000. **TI** Employment Patterns in OECD Countries. **AU** Nickell, Stephen; Nunziata, Luca. **AA** Nickell: London School of Economics. Nunziata: Nuffield College, Oxford. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 448; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 22. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** J23, J51, J68, K31. **KW** Employment. Wages. Inactivity. Labor Demand. Trade Unions.

AB This paper studies the dynamics of labor demand and the determinants of employment rates across the OECD. We find: (i) labor demand adjusts less rapidly when employment protection is more strict and union density is higher; (ii) there is no evidence that overall job turnover is influenced by employment protection; (iii) union density and coverage are negatively related to employment/population ratios, although this effect can be entirely offset by coordination; (iv) strict employment protection laws are strongly associated with lower employment rates for women and young people but have no impact on the rates for prime age men.

TI The Effectiveness of Top Management Groups in Manufacturing Organisations. **AU** West, Michael; Patterson, Malcolm; Dawson, Jeremy; Nickell, Stephen.

Noda, Tomo

PD February 1999. **TI** The Evolution of Intra-Industry Firm Heterogeneity: Insights From a Process Study. **AU** Noda, Tomo; Collis, David J. **AA** Noda: INSEAD. Collis: Yale University. **SR** INSEAD Working Paper: 99/19/SM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 44. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** L11, M21. **KW** Firm Heterogeneity.

AB This paper develops a process framework for understanding the evolution of intra-industry firm heterogeneity from a longitudinal study of the cellular telephone business in seven Baby Bells. The framework depicts market, competitive, and intra-organizational forces whose dynamic interplay shapes a process in which diversity among firms within an industry is created, developed and sustained. The paper elucidates path dependence in firm evolution, and highlights possible roles for strategic leadership in affecting that path.

Norregaard, John

PD January 2000. **TI** Taxes and Tradable Permits as Instruments for Controlling Pollution: Theory and Practice. **AU** Norregaard, John; Reppelin-Hill, Valerie. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/13; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 45. **PR** not available.

JE H23, Q28, Q38. **KW** Environmental Taxes. Tradable Permits.

AB This paper examines the relative merits of two dominant economic instruments for reducing pollution -- "green" taxes and tradable permits. Theoretically, the two instruments share many similarities, and on balance, neither seems preferable to the other. In practice, however, most countries have relied more on taxes than on permits to control pollution. The analysis suggests a number of lessons to be learned from country experiences regarding the design and implementation of both instruments. While many, particularly European countries, currently have long-term programs involving environmental taxes, a willingness to experiment with tradable permits seems to be growing, especially given the Kyoto protocol emission targets.

Nsouli, Saleh M.

PD September 1998. **TI** Capital Account Liberalization in the Southern Mediterranean Region. **AU** Nsouli, Saleh M.; Rached, Mounir. **AA** International Monetary Fund. **SR** International Monetary Fund Papers on Policy Analysis and Assessment: PPAA/98/11; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. **PG** 23. **PR** not available. **JE** E63, F02, F21, F31, F33, F36. **KW** Capital Account. Convertibility. Policy Reform Speed. Reform Sequencing.

AB The countries in the Southern Mediterranean region can benefit from the globalization of financial markets by moving to establish capital account convertibility. Some countries in the region (Egypt, Israel, Jordan, Lebanon, and Turkey) already have substantial capital account convertibility, while others (Algeria, Morocco, Syria, and Tunisia) still retain significant restrictions. This paper examines the extent to which the countries with substantial capital account convertibility need to reinforce their policies to sustain it, and identifies the actions the other countries need to take for an orderly transition to full convertibility. The paper also reviews some of the considerations regarding the speed and sequencing of the requisite policy actions.

Nunziata, Luca

TI Employment Patterns in OECD Countries. **AU** Nickell, Stephen; Nunziata, Luca.

O'Donoghue, Ted

PD June 2000. **TI** Choice and Procrastination. **AU** O'Donoghue, Ted; Rabin, Matthew. **AA** O'Donoghue: Cornell University. Rabin: UC Berkeley. **SR** University of California, Berkeley, Department of Economics Working Paper: E00/281; UC, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. **PG** 27. **PR** \$3.50 U.S., \$7.00 International. **JE** A12, B49, C73, D11, D74, D91, E21. **KW** Choice. Naivete. Partial Naivete. Present-Biased Preferences. Procrastination. Self Control. Sophistication. Time Inconsistency.

AB Recent models of procrastination due to self-control problems assume that a procrastinator considers just one option and is unaware of her self-control problems. We develop a model where a person chooses from a menu of options and is partially aware of her self-control problems. This menu model replicates earlier results and generates new ones. A person might forego completing an attractive option because she plans

to complete a more attractive but never-to-be-completed option. Hence, providing a non-procrastinator additional options can induce procrastination, and a person may procrastinate worse pursuing important goals than unimportant ones.

TI Projection Bias in Predicting Future Utility. **AU** Loewenstein, George; O'Donoghue, Ted; Rabin, Matthew.

PD June 2000. **TI** Risky Behavior Among Youths: Some Issues from Behavioral Economics. **AU** O'Donoghue, Ted; Rabin, Matthew. **AA** O'Donoghue: Cornell University. Rabin: UC Berkeley. **SR** University of California, Berkeley, Department of Economics Working Paper: E00/285; UC, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. **PG** 37. **PR** \$3.50 U.S., \$7.00 International. **JE** D81, J13. **KW** Adolescents. Risk-taking Behaviour.

AB This paper explores some of the ways that economists can incorporate insights from recent research combining psychology and economics to help understand risky behavior by adolescents.

PD January 1997. **TI** Doing It Now or Later. **AU** O'Donoghue, Ted; Rabin, Matthew. **AA** O'Donoghue: Northwestern University. Rabin: UC Berkeley. **SR** University of California, Berkeley, Department of Economics Working Paper: 97/253; UC Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. **PG** 42. **PR** \$3.50 U.S., \$7.00 International. **JE** A12, B49, C70, D11, D60, D74, D91, E21. **KW** Doing It. Hyperbolic Discounting. Preproperation. Procrastination. Time Inconsistency.

AB Evidence suggests that a person's relative preference for well-being at an earlier moment over a later moment increases as the earlier moment gets closer. We explore the behavioral and welfare implications of such time-inconsistent preferences in a simple model where a person must engage in an activity exactly once during some duration. We focus on two sets of distinctions. First choices may involve salient costs or salient rewards -- where the costs (or rewards) of an action are immediate but any rewards (or costs) are delayed. Second, people may be sophisticated or naive in so far as they foresee (or do not foresee) future self-control problems. If costs are salient, sophistication mitigates procrastination, and can even lead sophisticated people to do the activity sooner than if they had no self-control problem. If rewards are salient, sophistication exacerbates preproperation. These behavioral results have corresponding welfare implications: With salient costs, mild self-control problems can severely damage a person only if she is naive, while with salient rewards mild self-control problems can severely damage a person only if she is sophisticated. We also consider a multiple-activity version of the model and discuss how our results might apply to savings, addiction, and other behaviors.

PD September 1998. **TI** Patents in a Model of Endogenous Growth. **AU** O'Donoghue, Ted; Zweimüller, Josef. **AA** O'Donoghue: Cornell University. Zweimüller: University of Zurich and Centre for Economic Policy Research. **SR** Institute for Advanced Studies (IHS) Economics Series Working Paper: 56; Institute for Advanced Studies, Stumpergasse 56, A-1060 Vienna, Austria. Website:

www.ihs.ac.at/Library/libhome.html. **PG** 42. **PR** ATS 80.00 Individuals; ATS 250.00 Institutions. **JE** O31, O34, O38. **KW** Innovation. Patent Policy. Intellectual Property. Patent Design.

AB This paper examines patent protection in an endogenous-growth model. Our aim is twofold. First, we show how the patent policies discussed by the recent patent-design literature can influence R&D in the endogenous-growth framework, where the role of patents has been largely ignored. Second, we explore how the general-equilibrium framework contributes to the results of the patent-design literature. In a general-equilibrium model, both incentives to innovate and monopoly distortions depend on the proportion of industries that conduct R&D. Furthermore, patents affect the allocation of R&D resources across industries, and patents can distort resources away from industries where they are most productive.

O'Shaughnessy, Terry

PD July 2000. **TI** Unions and Equity. **AA** St. Anne's College, Oxford. **SR** Oxford Department of Economics Discussion Paper: 17; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. **PG** 48. **PR** no charge. **JE** H23, J51. **KW** Trade Unions. Distribution. Tax-Benefit System.

AB Trade unions have been successful in compressing the wage distribution but not in influencing the share of national income going to labor. This paper claims that a compressed wage distribution provides insurance in the same way that the tax and benefit system does and thus may be welfare-improving. Moreover, a union-based wage compression system may be better than a conventional tax-benefit system in providing such insurance and may well complement the operation of the latter. Models of wage compression and of taxes and benefits are evaluated and then combined in a single model. The wage compression system works well for the least skilled but the tax-benefit approach is better if average utility is being maximized. In the combined model the two mechanisms complement one another. Equity-efficiency trade-offs in the combined system mostly dominate those obtained from each mechanism acting on its own. A key factor is the willingness of skilled workers to "defect" from a wage compression agreement. Encouraging "defection" may appeal to policy-makers (labor markets are more "flexible") but the benefits of a compressed wage distribution may be lost, placing stress on welfare state institutions and undermining the insurance function that the combined wage-compression/tax-benefit system delivers relatively efficiently.

Obersteiner, Michael

TI Efficiency and Economies of Scale in Academic Knowledge Production. **AU** Felderer, Bernhard; Obersteiner, Michael.

Obstfeld, Maurice

PD August 1998. **TI** Risk and Exchange Rates. **AU** Obstfeld, Maurice; Rogoff, Kenneth. **AA** Obstfeld: University of California, Berkeley. Rogoff: Princeton University. **SR** Princeton University Discussion Papers in Economics, Woodrow Wilson School of Public and International Affairs: 193; Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, NJ 08544-1013. Website: www.princeton.edu/other/

workingpapers.html. PG 44. PR no charge. JE F31, F41. KW Exchange Rate. Forward Premium. International Policy Coordination.

AB This paper develops an explicitly stochastic "new open economy macroeconomics" model, which can potentially be used to explore the qualitative and quantitative welfare differences between alternative exchange rate regimes. A crucial feature is that we do not simplify by assuming certainty equivalence for producer price setting behavior. Our framework also provides a sticky price alternative to the Lucas' (1982) exchange rate risk premium model. We show that the "level-risk premium" in the exchange rate is potentially quite large and may be an important missing fundamental in empirical exchange rate equations. As a by-product, our analysis also suggests an intriguing possible explanation of the forward premium puzzle.

Odling-Smee, John

PD May 1998. TI External Borrowing in the Baltics, Russia, and Other States of the Former Soviet Union -- the Transition to a Market Economy. AU Odling-Smee, John; Zavoico, Basil. AA International Monetary Fund. SR International Monetary Fund Papers on Policy Analysis and Assessment: PPAA/98/05; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. PG 10. PR not available. JE F34, H63. KW Russia. Baltics. CIS. External Financing. External Debt.

AB The external debt of many countries of the Baltics, Russia, and the former Soviet Union has been growing rapidly in recent years and has played an important part in the transition process. However, it is vital to strike a balance between financing transition and ensuring that the external debt is not used to finance wasteful expenditures or delay the transition process. This is especially important since the rising stock of external debt makes the borrowing countries increasingly vulnerable to changes in perceived creditworthiness. Accordingly, countries must adopt policies, including pressing ahead with structural reforms, to ensure that the borrowing is used to promote sound growth.

Ohanian, Lee E.

TI Re-Examining the Contributions of Money and Banking Shocks to the U.S. Great Depression. AU Cole, Harold L.; Ohanian, Lee E.

Okada, Akiro

PD April 1999. TI Inefficiency and Social Exclusion in a Coalition Formation Game. AU Okada, Akiro; Riedl, Arno. AA Okada: Kyoto University. Riedl: University of Amsterdam. SR Institute for Advanced Studies (IHS) Economics Series Working Paper: 64; Institute for Advanced Studies, Stumpergasse 56, A-1060 Vienna, Austria. Website: www.ihs.ac.at/Library/libhome.html. PG 29. PR ATS 80.00 Individuals; ATS 250.00 Institutions. JE A13, C91, D61, D63. KW Coalition Formation. Inefficiency. Reciprocity. Social Exclusion.

AB This paper reports the results of experiments involving a 3-person coalition formation game with an ultimatum bargaining character. The grand coalition was always the efficient coalition decision, whereas the values of the 2-person coalitions are varied such that they lead to an efficiency loss in the range of 6.7 up to 30 percent. Furthermore, the 2-person coalition implies social exclusion, since the not chosen member

always receives a payoff of zero. Consistent with results reported in the literature on 2-person ultimatum bargaining experiments, negative reciprocity (i.e. punishment of unfair offers) plays a crucial role in decision making. The hypothesis that selfishness and anticipated negative reciprocity by proposers together with actual negative reciprocal behavior of responders lead to inefficient outcomes and social exclusion is strongly supported by the data. It turns out that a huge majority of proposers choose the inefficient and unfair 2-person coalition. Proposer-induced efficiency losses vary between 5 and 20 percent, and one sixth to almost one third of the population is excluded from participation.

Olarreaga, Marcelo

TI Harmonizing External Quotas in an FTA: A Step Backward? AU Cadot, Olivier; De Melo, Jaime; Olarreaga, Marcelo.

Olk, Paul M.

TI Formation Process of R&D Consortia: Which Path to Take? Where Does it Lead? AU Doz, Yves L.; Olk, Paul M.; Smith Ring, Peter.

Onculer, Ayse

PD December 1998. TI Rent-Seeking for a Risky Rent: A Model and Experimental Investigation. AU Onculer, Ayse; Croson, Rachel. AA Onculer: INSEAD. Croson: The Wharton School. SR INSEAD Working Paper: 98/99/TM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. PG 23. PR no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. JE D72, C92. KW Rent-Seeking. Experiment. International.

AB This paper extends Tullock's (1980) rent-seeking model to the case of a risky rent. We derive equilibrium and comparative static predictions from our extended model and present the results of an experiment with subjects from the US and Turkey to test it. Results are consistent with the comparative static predictions of the model, although we observe significantly more absolute levels of rent-seeking than the model predicts.

Oreopoulos, Philip

TI Generational Accounting and Immigration in the United States. AU Auerbach, Alan J.; Oreopoulos, Philip.

Orlando, Michael J.

PD July 2000. TI On the Importance of Geographic and Technological Proximity for R&D Spillovers: An Empirical Investigation. AA Federal Reserve Bank of Kansas City. SR Federal Reserve Bank of Kansas City Research Working Paper: RWP 00/02; Economic Research Department, 925 Grand Blvd., Kansas City, MO 64198. Website: www.kc.frb.org/publicat/reswkpap/rwpmain.htm. PG 37. PR no charge. JE L60, O31. KW R&D. Spillovers. Industrial Agglomeration. Geography. Empirical Studies.

AB Empirical studies of the external effects of R&D suggest that both geographic and technological distance attenuate inter-firm spillovers from innovative activity. The results presented here indicate that the tendency for R&D spillovers to localize economic activity is conditional on the technological relation between spillover generating and receiving firms. The

production function framework is generalized to control for correlation between measures of geographic and technological proximity. Coefficient estimates confirm that R&D spillovers are largest among technological neighbors. However, spillovers within narrowly defined technological groups do not appear to be attenuated by distance. Geographic proximity serves to attenuate only those inter-firm spillovers that cross narrowly defined technological boundaries.

Orosel, Gerhard O.

TI Herding and the Winner's Curse in Markets with Sequential Bidders. AU Neeman, Zvika; Orosel, Gerhard O.

Otker, Inci

TI Mapping Financial Sector Vulnerability in a Non-Crisis Country. AU Downes, Patrick T.; Marston, David; Otker, Inci.

Otker-Robe, Inci

TI A Modernized Approach to Managing the Risks in Cross-Border Capital Movements. AU Johnston, R. Barry; Otker-Robe, Inci.

Overman, Henry G.

PD August 1999. TI Unemployment Clusters Across European Regions and Countries. AU Overman, Henry G.; Puga, Diego. AA Overman: London School of Economics. Puga: University of Toronto. SR London School of Economics, Centre for Economic Performance Discussion Paper: 434; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. PG 36. PR 5 pounds for individual copies; 95 pounds for yearly subscription. JE E24, F15, J64, R11, R23. KW Unemployment. Labor Force. Regional Economics. Economic Integration.

AB European regions have experienced a polarization of their unemployment rates between 1986 and 1996, as regions with intermediate rates have moved towards either extreme. This process has been driven by changes in regional employment, only partly offset by labor force changes. Regions' outcomes have closely followed those of neighboring regions. This is only weakly explained by regions being part of the same Member State, having a similar skill composition, or broad sectoral specialization. Even more surprisingly, foreign neighbors matter as much as domestic neighbors. All of this suggests a reorganization of economic activities with increasing disregard for national borders.

Pacula, Rosalie Liccardo

TI Do Higher Cigarette Prices Encourage Youth to Use Marijuana? AU Chaloupka, Frank J.; Pacula, Rosalie Liccardo; Farrelly, Matthew C.; Johnston, Lloyd D.; O'Malley, Patrick M.; Bray, Jeremy W.

Padilla, A. Jorge

PD January 1997. TI Financial Distress, Bank Debt Restructurings and Layoffs: Theory and Evidence. AU Padilla, A. Jorge; Requejo, Alejandro. AA Padilla: Boston University, CEMFI and Centre for Economic Policy Research. SR Boston University, Industry Studies Program Working Paper Series on Economics: 74; Industry Studies Program, Department of Economics, Boston University,

Boston, MA 02215. Website: econ.bu.edu/ISP/. PG 46. PR no charge. JE G32, G33, J21. KW Bank Debt. Financial Distress. Layoffs. Limited Liability. Reorganization Law.

AB We develop a model of a financially distressed firm to analyze the implications of a bank debt restructuring when the operational characteristics of the firm's project for the post-distress period are endogenously determined as part of the workout. We establish a formal link between the debt restructuring and operational actions such as employee layoffs, and show how these actions are affected by: the firm's capital structure, the ordering of absolute priorities, and the allocation of control rights and residual claims after reorganization. Finally, we present some empirical evidence, using data on Spanish firms for the period 1983-1994, showing the interconnection between layoffs and changes in the debt maturity structure for firms in financial distress.

Pakes, Ariel

TI A Dynamic Oligopoly with Collusion and Price Wars. AU Fershtman, Chaim; Pakes, Ariel.

Palepu, Krishna

TI Emerging Market Business Groups, Foreign Investors, and Corporate Governance. AU Khanna, Tarun; Palepu, Krishna.

Palmer, Karen L.

TI Getting on the Map: The Political Economy of State-Level Electricity Restructuring. AU Ando, Amy W.; Palmer, Karen L.

Panayotou, Theodore

PD July 1998. TI Demystifying the Environmental Kuznets Curve: Turning a Black Box into a Policy Tool. AA HIID. SR Harvard Institute for International Development Discussion Paper: 643; Harvard Institute for International Development, 14 Story Street, Cambridge, MA 02138. Website: www.hiid.harvard.edu/pub/ddps.html. PG 30. PR \$7.50 for papers up to 80 pages long; \$12.00 for papers 80 pages and longer. JE F43, Q25, R11. KW Economic Growth. Policy Variables. Scale Effects. Structure Effects. Pure Economic Effects.

AB The reduced-form approach to the income-environment relationship has been a useful first step towards answering the question of how economic growth affects the environment. However, without an explicit consideration of the underlying determinants of environmental quality, the scope for policy intervention is unduly circumscribed. In this paper a modest attempt is made to incorporate explicit policy considerations into the income-environment relationship and to explore its determinants as a step towards a better understanding of this relationship and its potential as a policy tool. The role of the rate of economic growth and population density is also explored. A main finding is that at least in the case of ambient SO₂ levels, policies and institutions can significantly reduce environmental degradation at low income levels and speed up improvements at higher income levels, thereby flattening the EKC and reducing the environmental price of economic growth.

Paque, Karl-Heinz

PD March 1999. TI Labour Market and Tax Policy in the

EMU. AU Paque, Karl-Heinz; Le Cacheux, Jacques.
 AA Paque: Otto von Guericke University. Le Cacheux:
 University of Pau. SR CEPII Working Paper: 99/02; Centre
 d'Etudes Prospectives et d'Informations Internationales
 (CEPII), 9 rue Georges Pitard, 75740 Paris cedex 15, France.
 Website: www.cepii.fr. PG 38. PR no charge. JE E24,
 E62, J58. KW Flexibility. Real Wages. Tax Competition.
 Business Taxation. Social Dumping.

AB This working paper publishes the two papers discussed at
 the 3rd meeting of the French-German Economic Forum,
 organized in July 1998. The first paper focuses on the impact
 of the EMU on the labor market; it analyses why the real wage
 flexibility is a challenge for the welfare state as well as for the
 labor market institutions, how the transition to EMU can be
 managed and what could be a labor market reform agenda for a
 continental European country that is member of the EMU. The
 second paper focuses on the impact of the EMU on tax
 competition that will strengthen. This competition will
 probably be particularly severe on business taxation to attract
 firms or provide existing ones with a competitive advantage.
 The instruments of this competition could be taxes on incomes
 from capital, as well as taxes on firms' production costs.

Parker, Philip M.

TI Market Prices and Modern Retailing. AU Soberman,
 David A.; Parker, Philip M.

Parry, Ian W. H.

TI The Cost-Effectiveness of Alternative Instruments for
 Environmental Protection in a Second-Best Setting.
 AU Goulder, Lawrence H.; Parry, Ian W. H.; Williams,
 Robert C., III; Burtraw, Dallas.

Patterson, Malcolm

TI The Effectiveness of Top Management Groups in
 Manufacturing Organisations. AU West, Michael; Patterson,
 Malcolm; Dawson, Jeremy; Nickell, Stephen.

Pattillo, Catherine

TI Flight Capital as a Portfolio Choice. AU Collier, Paul;
 Hoeffler, Anke; Pattillo, Catherine.

Paxson, Christina H.

TI Approximation Bias in Linearized Euler Equations.
 AU Ludvigson, Sydney; Paxson, Christina H.

Pendakur, Krishna

TI Equivalent-Income Functions and Income-Dependent
 Equivalence Scales. AU Donaldson, David; Pendakur,
 Krishna.

Perri, Fabrizio

TI International Business Cycles With Endogenous
 Incomplete Markets. AU Kehoe, Patrick J.; Perri, Fabrizio

TI Risk Sharing: Private Insurance Markets or
 Redistributive Taxes? AU Krueger, Dirk; Perri, Fabrizio.

Pestieau, Pierre

PD December 1999. TI The Political Economy of
 Redistributive Social Security. AA CREPP, Universite de
 Liege, CORE, and Delta. SR International Monetary Fund
 Working Paper: WP/99/180; International Monetary Fund, 700

19th Street, Washington, DC 20431. Website: www.imf.org.
 PG 20. PR not available. JE H55, O41. KW Social
 Security. Majority Voting. Entitlements. Aging.

AB Population aging puts significant pressure on social
 security systems that are based mainly on a pay-as-you-go
 (PAYG) formula and determined by the political process in
 which both retirees and future retirees participate. This paper
 demonstrates that in an economic and demographic steady
 state, majoritarian democracy overspends on social security. It
 then shows that in case of demographic shock, the regular
 majority process can be paralyzed by the development of
 entrenched interest groups that could lose from majority
 decisions. Depending on the way these entrenched interests
 operate, they can be judged more or less desirable from the
 viewpoint of social justice.

Petrongolo, Barbara

TI Workers' Transitions from Temporary to Permanent
 Employment: The Spanish Case. AU Guell-Rotllan, Maia;
 Petrongolo, Barbara.

Phelan, Christopher

PD April 2000. TI On the Irrelevance of the Maturity
 Structure of Government Debt Without Commitment.
 AA Federal Reserve Bank of Minneapolis. SR Federal
 Reserve Bank of Minneapolis Staff Report: 268; Research
 Department, Federal Reserve Bank of Minneapolis, P.O. Box
 291, Minneapolis, MN 554880-0291. Website:
 http://woodrow.mpls.frb.fed.us. PG 18. PR no charge.
 JE F34, H63. KW Government Debt. Term Structure. Debt
 Crisis.

AB This paper presents a government debt game with the
 property that if the timing of debt auctions within a period is
 sufficiently unfettered, the set of equilibrium outcome paths of
 real economic variables, given the government has access to a
 rich debt structure, is identical to the set of equilibrium
 outcome paths given the government can issue only one-period
 debt.

PD February 1999. TI Sequential Equilibria in a Ramsey
 Tax Model. AU Phelan, Christopher; Stacchetti, Ennio.
 AA Phelan: Federal Reserve Bank of Minneapolis and
 Northwestern University. Stacchetti: University of Michigan.
 SR Federal Reserve Bank of Minneapolis Staff Report: 258;
 Research Department, Federal Reserve Bank of Minneapolis,
 P.O. Box 291, Minneapolis, MN 554880-0291. Website:
 http://woodrow.mpls.frb.fed.us. PG 42. PR no charge.
 JE C73, D91, E62. KW Macroeconomics. Taxation.
 Capital Tax.

AB This paper presents a full characterization of the
 equilibrium value set of a Ramsey tax model. More generally, it
 develops a dynamic programming method for a class of policy
 games between the government and a continuum of consumers.
 By selectively incorporating Euler conditions into a strategic
 dynamic programming framework, we wed two technologies
 that are usually considered competing alternatives, resulting in
 a dramatic simplification of the problem.

TI A Recursive Formulation for Repeated Agency with
 History Dependence. AU Fernandes, Ana; Phelan,
 Christopher.

Philipson, Tomas

PD March 1999. TI Economic Epidemiology and

Infectious Diseases. **AA** University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 7037; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 32. **PR** \$5.00. **JE** 112, 118. **KW** Rational Epidemics. Infectious Diseases. Public Health.

AB Infectious disease is currently the main cause of mortality in the world and has been even more important historically. This paper reviews recent research in economic epidemiology. Specifically, it discusses the occurrence of infectious diseases and the effects of public health interventions designed to control them. Several key points include: differences in the predictions regarding short- and long-run disease occurrence between rational and epidemiological epidemics, the nonstandard effects of interventions when epidemics are rational, the desirability and possibility of eradicating infectious diseases, as well as the components of the welfare loss induced by infectious diseases.

Pich, Michael T.

TI Selecting R&D Projects at BMW: A Case Study of Adopting Mathematical Programming Models. **AU** Loch, Christoph H.; Pich, Michael T.; Terwiesch, Christian; Urbschat, Michael.

Pichelmann, Karl

TI Price and Quantity Adjustments in the Austrian Labour Markets. **AU** Hofer, Helmut; Pichelmann, Karl; Schuh, Andreas-Ulrich.

Piehl, Anne Morrison

PD April 1999. **TI** Testing for Structural Breaks in the Evaluation of Programs. **AU** Piehl, Anne Morrison; Cooper, Suzanne J.; Kennedy, David M.; Braga, Anthony A. **AA** Piehl: UC Berkeley, Harvard University and NBER. Cooper, Kennedy and Braga: Harvard University. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 15; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. **PG** 25. **PR** no charge. **JE** C22, K42. **KW** Structural Break. Program Evaluation. Youth Homicide.

AB There are many instances of program evaluation in which the analysis of time series variation provides the best test of impact. Techniques developed for the analysis of the macroeconomy can be successfully applied to these settings. Tests for parameter instability developed in Andrews (1993) provide a flexible framework for testing a range of hypotheses. Furthermore, these tests help pinpoint the timing of maximal break and provide a valid test of statistical significance, which is particularly useful when the start date of the intervention and any effect is unclear and possibly endogenous due to implementation lags. These tests are applied in an evaluation of the effects of a comprehensive effort to reduce youth homicide in Boston in the mid 1990s. The intervention was associated with about a 60 percent decline in youth homicide.

Pines, David

PD August 2000. **TI** On Alternative Urban Growth Patterns. **AA** Tel-Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for

Economic Research Working Paper: 00/20; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 45. **PR** no charge. **JE** D62, H23, R11. **KW** Urban Growth. Catastrophic Bifurcation. Panic Migration.

AB This paper discusses three aspects of urbanization: the effect of urbanization (that is, aggregate urban population growth) on agglomeration, the discontinuity of urban population partition among urban areas, and the failure of laissez-faire to induce the emergence of new urban areas (abandonment of established urban areas) at an appropriate point in time. The present paper synthesizes two specifications and extends them to highlight the underlying assumptions that yield the opposing implications. As a result, the alleged discontinuous urban population partition ("catastrophic bifurcation" or "panic migration" hypothesis) is shown to be vulnerable to admissible modifications in the functional and parametric specifications. Likewise, under laissez-faire (vis-a-vis optimal) allocation, new urban areas may emerge prematurely, implying insufficient agglomeration, rather than belatedly, implying excessive agglomeration. Although urban policy is necessary because the market can fail in both cases, it is impossible to determine whether to encourage the early (vis-a-vis laissez-faire) emergence of new cities or, rather, to deter their emergence to a later (vis-a-vis laissez-faire) stage of urbanization.

Polinsky, A. Mitchell

PD February 1999. **TI** Corruption and Optimal Law Enforcement. **AU** Polinsky, A. Mitchell; Shavell, Steven. **AA** Polinsky: Stanford Law School and National Bureau of Economic Research. Shavell: Harvard Law School and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6945; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** D61, K42. **KW** Bribery. Corruption. Deterrence.

AB This article analyzes corruption of law enforcement agents: payment of bribes to agents so that they will not report violations. Corruption dilutes deterrence because bribe payments are less than sanctions. The state may not be able to offset this effect of bribery by raising sanctions for the underlying offense. Thus, it may be optimal to expend resources to detect and penalize corruption. At the optimum, however, corruption may not be deterred. Nonetheless, it may be desirable to attempt to control corruption in order to raise the offender's costs - the sum of the bribe payment and the expected sanction for bribery - and thereby increase deterrence of the underlying violation.

Pope, Gregory

TI Using Diagnoses to Describe Populations and Predict Costs. **AU** Ash, Arlene S.; Ellis, Randall P.; Pope, Gregory; Ayanian, John; Bates, David; Burstin, Helen; Iezzoni, Lisa; McKay, Elizabeth; Yu, Wei.

Porter, Jack

TI Estimating the Effect of Alcohol on Driver Risk Using Only Fatal Accident Statistics. **AU** Levitt, Steven D.; Porter, Jack.

Portes, Richard

PD February 2000. **TI** The Determinants of Cross-Border Equity Flows. **AU** Portes, Richard; Rey, Helene. **AA** Portes: London Business School. Rey: London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 446; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 25. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** F12, F21, F30, F41, G15. **KW** Equity Flows. Portfolio Choice. Asymmetric Information. Gravity Model. International Finance.

AB The authors apply a new approach to a new panel data set on bilateral gross cross-border equity flows between 14 countries, 1989-96. The authors find that the geography of information heavily determines the pattern of international transactions. Their model integrates elements of the finance literature on portfolio composition and the international macroeconomics and asset trade literature. Gross asset flows depend on market size in both source and destination country as well as trading costs, in which both information and the transaction technology play a role. The resulting augmented "gravity" equation has equity market capitalization representing market size and distance proxying some informational asymmetries, as well as a variable representing openness of each economy. But other variables explicitly represent information transmission, an information asymmetry between domestic and foreign investors, and the efficiency of transactions. This equation accounts for almost 70% of the variance of the transaction flows. Dummy variables do not improve the results, nor does a variable representing destination country stock market returns. The key role of informational asymmetries is confirmed.

Poterba, James M.

PD January 1999. **TI** The Costs of Annuitizing Retirement Payouts from Individual Accounts. **AU** Poterba, James M.; Warshawsky, Mark J. **AA** Poterba: Massachusetts Institute of Technology and National Bureau of Economic Research. Warshawsky: TIAA-CREF Institute. **SR** National Bureau of Economic Research Working Paper: 6918; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** \$5.00. **JE** G22, H55, J14. **KW** Annuity Contracts. Retirement System.

AB This paper presents information on life annuity contracts that are now available in the individual single-premium-immediate annuity marketplace. For a 65-year-old male annuity buyer, the expected present discounted value of the payouts offered by the average policy available in June 1998 was approximately 85 percent of the purchase price. This assumes that the individual faces the mortality risks of the average individual in the population, and that the payouts are discounted at a riskless interest rate. Second, the paper considers individual annuity policies available to participants in the government's Thrift Savings Plan. Because these annuities are purchased through a large group retirement saving program, some of the administrative costs are lower than those in the national individual annuity market. Third, the paper describes the individual annuity products offered by TIAA-CREF, the retirement system for college and university employees. TIAA offers annuities with non-guaranteed

elements, which have among the highest payouts in the individual annuity market, mainly due to superior investment returns and low expenses. CREF annuities offer valuable payouts that reflect, on at least an annual basis, the investment experience of the accounts.

Prasad, Eswar S.

PD February 2000. **TI** The Unbearable Stability of the German Wage Structure: Evidence and Interpretation. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/22; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 46. **PR** not available. **JE** J31, E24. **KW** Wage Inequality. Earnings Inequality. Human Capital. Labor Market Outcomes. Skill Groups.

AB This paper uses micro data from the German Socio-Economic Panel to document that the wage structure in West Germany was remarkably stable during 1984-97, with little variation over time in wage or earnings inequality between and within different skill groups. Empirical evidence suggests that this stability is attributable to institutional factors rather than market forces. The rigidity of relative wages, despite relative shifts in labor demand that favor skilled workers, has resulted in sharp declines in employment rates for unskilled workers. The microeconomic evidence is shown to have important implications for interpreting trends in wage shares, capital-labor ratios, and aggregate unemployment.

Prendergast, Joe

TI Recent G3 Current Account Imbalances: How Important Are Structural Factors? **AU** Clarida, Richard; Prendergast, Joe.

Prescott, Edward C.

TI Malthus to Solow. **AU** Hansen, Gary D.; Prescott, Edward C.

Prince, Joseph M.

PD December 1998. **TI** Tallest in the World: Native American of the Great Plains in the Nineteenth Century. **AU** Prince, Joseph M.; Steckel, Richard H. **AA** Prince: University of Tennessee. Steckel: Ohio State University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 112; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** I12, J11, J15. **KW** Native American. Health. Height.

AB Historians often portray Native Americans as merely unfortunate victims of European disease and aggression, with lives in disarray that followed the arrival of Columbus and other explorers or conquerors. The data we analyze on human stature show, in contrast, that some Native Americans such as the equestrian Plains nomads, were remarkably ingenious and adaptive in the face of exceptional demographic stress. Using anthropometric data originally collected by Franz Boas, we show that the Plains nomads were tallest in the world during the mid-nineteenth century. We link this extraordinary achievement to a rich and varied diet, modest disease loads other than epidemics, a remarkable facility at reorganization following demographic disasters, and egalitarian principles of operation. The analysis provides a useful mirror for

understanding the health of Euro-Americans.

Prskawetz, Alexia

TI Human Capital Depletion, Human Capital Formation, and Migration: A Blessing in a "Curse"? **AU** Stark, Oded; Helmenstein, Christian; Prskawetz, Alexia.

Prusa, Thomas J.

TI Contingent Protection as Better Insurance. **AU** Fischer, Ronald D.; Prusa, Thomas J.

Pudney, Stephen

TI Econometric Issues in the Analysis of Linked Cross-Section Employer- Worker Surveys. **AU** Hildreth, Andrew K. G.; Pudney, Stephen.

Puga, Diego

TI Nursery Cities: Urban Diversity, Process Innovation, and the Life- Cycle of Products. **AU** Duranton, Gilles; Puga, Diego.

TI Diversity and Specialisation in Cities: Why, Where and When Does it Matter? **AU** Duranton, Gilles; Puga, Diego.

TI Unemployment Clusters Across European Regions and Countries. **AU** Overman, Henry G.; Puga, Diego.

Quah, Danny

PD February 2000. **TI** Internet Cluster Emergence. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 441; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 17. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** D30, O18, O22, R12, R30. **KW** Distribution Dynamics. Economic Geography. Internet. Location. Spatial Economics.

AB Internet development holds the promise of transmitting economic value across physical space at zero marginal cost. In such a "weightless economy", what factors matter for the location of economic activity and thus for economic development? This paper sketches a model of spatial dynamics over a three-dimensional globe, where transportation costs don't matter. The paper develops conditions under which clusters of activity emerge.

PD February 2000. **TI** Cross-Country Growth Comparison: Theory to Empirics. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 442; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: cep.lse.ac.uk. **PG** 28. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** C20, D30, E13, O30, O41. **KW** Convergence. Cross-Section. Regressions. Distribution Dynamics. Endogenous Growth.

AB This paper reviews the cross-country record of economic growth, using as an organizing framework how economic theory has guided that empirical analysis. The paper argues that recent studies of economic growth -- both empirical and theoretical - are distinguished from previous work in three distinct ways: 1. An explicit focus on cross-country growth and

development experiences; 2. Improved, more extensive cross-country data; 3. A heightened need, driven by real-world topicality, for understanding the role of knowledge and technology in economic growth.

TI UK Phillips Curves and Monetary Policy. **AU** Haldane, Andrew; Quah, Danny.

Quisumbing, Agnes R.

TI Social Roles, Human Capital, and the Intrahousehold Division of Labor: Evidence from Pakistan. **AU** Fafchamps, Marcel; Quisumbing, Agnes R.

Rabin, Matthew

PD June 2000. **TI** Risk Aversion and Expected-Utility Theory: A Calibration Theorem. **AA** UC Berkeley. **SR** University of California, Berkeley, Department of Economics Working Paper: E00/279; UC, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/iber. **PG** 10. **PR** \$3.50 U.S., \$7.00 International. **JE** B49, D11, D81. **KW** Diminishing Marginal Utility. Expected Utility. Risk Aversion.

AB Within the expected-utility framework, the only explanation for risk aversion is that the utility function for wealth is concave. A person has lower marginal utility for additional wealth when she is wealthy than when she is poor. This paper provides a theorem showing that expected-utility theory is an utterly implausible explanation for appreciable risk aversion over modest stakes: Within expected-utility theory, for any concave utility function, even very little risk aversion over modest stakes implies an absurd degree of risk aversion over large stakes. Illustrative calibrations are provided.

TI Choice and Procrastination. **AU** O'Donoghue, Ted; Rabin, Matthew.

PD June 2000. **TI** Inference by Believers in the Law of Small Numbers. **AA** UC Berkeley. **SR** University of California, Berkeley, Department of Economics Working Paper: E00/282; UC, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/iber. **PG** 45. **PR** \$3.50 U.S., \$7.00 International. **JE** B49, C11, C15, D81. **KW** Bayesian Inference. The Gambler's Fallacy. Law of Large Numbers. Law of Small Numbers. Over-Inference.

AB Many people believe in the "Law of Small Numbers," exaggerating the degree to which a small sample resembles the population from which it is drawn. To model this, I assume that a person exaggerates the likelihood that a short sequence of i.i.d signals resembles the long-run rate at which those signals are generated. Such a person believes in the "gambler's fallacy", thinking early draws of one signal increase the odds of next drawing other signals. When uncertain about the rate, the person over-infers from short sequences of signals, and is prone to think the rate is more extreme than it is. When the person makes inferences about the frequency at which rates are generated by different sources -- such as the distribution of talent among financial analysts - - based on few observations from each source, he tends to exaggerate how much variance there is in the rates. Hence, the model predicts that people may pay for financial advice from "experts" whose expertise is entirely illusory. Other economic applications are discussed.

TI Social Preferences: Some Simple Tests and a New

Model. AU Charness, Gary; Rabin, Matthew.

TI Projection Bias in Predicting Future Utility. AU Loewenstein, George; O'Donoghue, Ted; Rabin, Matthew.

TI Risky Behavior Among Youths: Some Issues from Behavioral Economics. AU O'Donoghue, Ted; Rabin, Matthew.

PD June 2000. TI Diminishing Marginal Utility of Wealth Cannot Explain Risk Aversion. AA UC Berkeley. SR University of California, Berkeley, Department of Economics Working Paper: E00/287; UC, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. PG 8. PR \$3.50 U.S., \$7.00 International. JE D11, D81, D91. KW Risk Neutrality. Risk Aversion. Uncertainty. Marginal Utility of Wealth.

AB Economists pervasively explain widespread risk aversion by the realistic assumption that people generally have diminishing marginal utility of wealth. We dislike vast uncertainty in lifetime wealth because the marginal value of a dollar when we are poor is higher than when we are rich. Within the expected-utility framework, the concavity of the utility-of-wealth function is not only sufficient to explain risk aversion-it is also necessary: Diminishing marginal utility of wealth is the sole explanation for risk aversion. Unfortunately, it is an utterly implausible explanation for appreciable risk aversion, except when the stakes are very large. Any utility-of-wealth function that doesn't predict absurdly severe risk aversion over very large stakes predicts negligible risk aversion over modest stakes. Expected-utility maximizers are arbitrarily close to risk neutral when stakes are arbitrarily small. While most economists understand this formal limit result, fewer appreciate that the approximate risk-neutrality prediction holds not just for very small stakes, but also for quite sizable and economically important stakes. This paper illustrates and provides intuition for these claims, and then argues that economists often reach misleading conclusions by invoking expected-utility theory to explain substantial risk aversion in contexts where the theory actually predicts virtual risk neutrality.

PD July 2000. TI Bargaining Structure, Fairness and Efficiency. AA UC Berkeley. SR University of California, Berkeley, Department of Economics Working Paper: E00/280; UC, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. PG 17. PR \$3.50 U.S., \$7.00 International. JE A12, A13, B49, C70, D63. KW Bargaining. Efficiency. Fairness. Inefficiency. Inequality. Ultimatum Game.

AB Experiments with the ultimatum game -- where one party can make a take-it-or-leave-it offer to a second party on how to split a pie -- illustrate that conventional game theory has been wrong in its prediction regarding the simplest of bargaining settings: Even when one party has enormous bargaining power, she may be able to extract all the surplus from trade, because the second party will reject grossly unequal proposals. But ultimatum games may lead us to misconstrue some general lessons: Given plausible assumptions about what preferences underlie ultimatum-game behavior, alternative bargaining structures that also give a Proposer enormous bargaining power may lead to very different outcomes. For virtually any outcome in which the Proposer gets more than half the pie, there exists a

bargaining structure yielding that outcome. Notably, many bargaining structures can lead to inefficiency even under complete information. Moreover, inefficiency is partly caused by asymmetric bargaining power, so that "fairer environments" can lead to more efficient outcomes. Results characterize how other features of simple bargaining structures affect the efficiency and distribution of bargaining outcomes and generate testable hypotheses for simple non-ultimatum bargaining games.

PD January 1997. TI First Impressions Matter: A Model of Confirmatory Bias. AU Rabin, Matthew; Schrag, Joel. AA UC Berkeley. SR University of California, Berkeley, Department of Economics Working Paper: 97/250; UC Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. PG 31. PR \$3.50 U.S., \$7.00 International. JE A12, B49, D83. KW Confirmatory Bias. Overconfidence. Bounded Rationality.

AB Psychological research indicates that people have a cognitive bias that leads them to misinterpret new information as supporting previously held hypotheses. We model such confirmatory bias in a symmetric model in which exactly one of two hypotheses is true. We show that the confirmatory bias induces overconfidence: Given any probabilistic assessment by an agent that one of the hypotheses is probably true, the appropriate beliefs should deem it less likely to be true. When the agent believes relatively weakly in a hypothesis after receiving extensive information, the hypothesis he believes in may be more likely to be wrong than right. If the confirmatory bias is strong enough, with positive probability the agent may eventually come to believe with near certainty in a false hypothesis even after receiving an infinite amount of information.

PD January 1997. TI Psychology and Economics. AA UC Berkeley. SR University of California, Berkeley, Department of Economics Working Paper: 97/251; UC Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. PG 99. PR \$3.50 U.S., \$7.00 International. JE A12, B49, D11, D81, D83, D91. KW Bounded Rationality. Decision Making. Fairness. Framing. Effects. Heuristics and Biases. Preferences. Psychology. Reciprocity. Reference-Dependent Utility.

AB Because psychology systematically explores human judgment, behavior, and well-being, it can teach us important facts about how humans differ from traditional economic assumptions. In this essay I discuss a selection of psychological findings relevant to economics. Standard economics assumes that each person has stable, well-defined preferences, and that she rationally maximizes those preferences. Section 2 considers what psychological research teaches us about the true form of preferences, allowing us to make economics more realistic within the rational-choice framework. Section 3 reviews research on biases in judgment under uncertainty; because those biases lead people to make systematic errors in their attempts to maximize their preferences, this research poses a more radical challenge to the economics model. The array of psychological findings reviewed in Section 4 points to an even more radical critique of the economics model: Even if we are willing to modify our familiar assumptions about preferences, or allow that people make systematic errors in their attempts to maximize those preferences, it is sometimes misleading to conceptualize people as attempting to maximize well-defined

coherent, or stable preferences.

PD January 1997. **TI** Fairness in Repeated Games. **AA** UC Berkeley. **SR** University of California, Berkeley, Department of Economics Working Paper: 97/252; UC Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. **PG** 36. **PR** \$3.50 U.S., \$7.00 International. **JE** A12, A13, B49, C70, D63. **KW** Fairness. Incremental Games. Psychological Games. Public Goods. Reciprocal Altruism. Repeated Games. Replicated Games. Revenge.

AB In addition to pursuing their material self-interest, people are motivated to help those who are kind to them, and to hurt those who are mean to them. Such social preferences influence behavior most when material stakes are small. Rabin (1993) defines an outcome reflecting such preferences as fairness equilibrium. This paper applies a version of fairness equilibrium to repeated games. Some fairness-equilibrium outcomes in small-stakes, one-shot games are shown to be fairness-equilibrium outcomes every period in incremental games, which are finitely repeated games of large overall material stakes but very small per-period stakes. For instance, it is a fairness equilibrium for players to cooperate in every period of the finitely repeated Prisoners' Dilemma with arbitrarily high total payoffs, so long as the per-period material payoffs are small. I also show that outcomes that yield either player below her minmax payoffs (which is often true of fairness equilibria in small-stakes, one-shot games) cannot be stationary fairness-equilibrium outcomes for any fairness preferences meeting the general assumptions in incremental games of sufficiently large overall payoffs.

TI Doing It Now or Later. **AU** O'Donoghue, Ted; Rabin, Matthew.

Rached, Mounir

TI Capital Account Liberalization in the Southern Mediterranean Region. **AU** Nsouli, Saleh M.; Rached, Mounir.

Ramey, Garey

TI Liquidity Flows and Fragility of Business Enterprises. **AU** den Haan, Wouter J.; Ramey, Garey; Watson, Joel.

Rangel, Antonio

PD February 1999. **TI** Can Market and Voting Institutions Generate Optimal Intergenerational Risk Sharing? **AU** Rangel, Antonio; Zeckhauser, Richard. **AA** Rangel: Stanford University. Zeckhauser: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6949; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** \$5.00. **JE** D80, D90. **KW** Risk-Sharing. Intergenerational Risk.

AB Are market and voting institutions capable of producing optimal intergenerational risk-sharing? To study this question, we consider a simple endowment economy with uncertainty and overlapping generations. Endowments are stochastic; thus it is possible to increase the welfare of every generation using intergenerational transfers that might depend on the state of the world. We characterize the transfers that are necessary to restore efficiency and compare them to the transfers that take

place in markets and voting institutions. Unlike most of that literature, we study both ex-ante and interim risk-sharing. Our main conclusion is that both types of institutions have serious problems. Markets cannot generate ex-ante risk-sharing because agents can trade only after they are born. Furthermore, markets generate interim efficient insurance in some but not all economies because they cannot generate forward (old to young) intergenerational transfers. This market failure, in theory, could be corrected by government intervention. However, as long as government policy is determined by voting, intergenerational transfers might be driven more by redistributive politics than by risk sharing considerations. Successful government intervention can arise, even though agents can only vote after they are born, but only if the young determine policy in every election.

Rauch, James E.

PD March 1999. **TI** Starting Small in an Unfamiliar Environment. **AU** Rauch, James E.; Watson, Joel. **AA** Rauch: University of California, San Diego and National Bureau of Economic Research. Watson: University of California, San Diego. **SR** National Bureau of Economic Research Working Paper: 7053; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** D21, F12. **KW** Matching. Pilot Projects. LDC Firms. International Partnerships.

AB Motivated by a characteristic way in which firms in developed countries make their decisions regarding cooperation with potential partners from less developed countries, we design a simple model of a DC firm's search for an LDC partner/supplier and the subsequent relationship between the two parties. Matched firms can "start small" with a trial order or pilot project of variable size in order to gain information about the ability of the LDC firm to successfully carry out a large project. We derive results relating whether and how the parties start small to the characteristics of the large project and to the matching environment. Among other results, we show how risk and search cost are associated with the propensity to start small and we establish a connection between starting small and the expected longevity of successful partnerships. We also address methods of contract enforcement and demonstrate the relationship between starting small and monitoring.

Rausser, Gordon C.

TI Zoning as a Control of Pollution in a Spatial Environment. **AU** Hochman, Oded; Rausser, Gordon C.

TI Estimation of Perceived Risk and its Effect on Property Values. **AU** McCluskey, Jill J.; Rausser, Gordon C.

PD April 1999. **TI** Intellectual Property and Market Structure in Agriculture. **AU** Rausser, Gordon C.; Scotchmer, Suzanne; Simon, Leo. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 880; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 48. **PR** \$12.00 Domestic; \$24.00 International Surface Rate. **JE** G34, L14, O34, Q13. **KW** Intellectual Property. Agricultural Marketing. Market Structure. Mergers. Seed

Industry.

AB In the past several years, the seed industry worldwide has been dramatically restructured, mostly through mergers and acquisitions. We argue that the restructuring has been technologically driven, and has also resulted in the transformation of several chemical conglomerates into life-sciences firms. We discuss why the restructuring has mostly occurred through mergers rather than contractual relationships such as licensing, and investigate its efficiency implications, both as it concerns anticompetitive effects and the joint use of complementary assets.

TI Do Incentives Matter? Product Quality and Contract Incentives in Processing Tomatoes. **AU** Alexander, Corinne; Goodhue, Rachael E.; Rausser, Gordon C.

TI Stigmatized Asset Value: Is it Temporary or Permanent? **AU** McCluskey, Jill J.; Rausser, Gordon C.

Raventos, Pedro

PD August 1998. **TI** Telecommunications in Central America. **AA** INCAE. **SR** Harvard Institute for International Development Discussion Paper: 648; Harvard Institute for International Development, 14 Story Street, Cambridge, MA 02138. **Website:** www.hiid.harvard.edu/pub/ddps.html. **PG** 52. **PR** \$7.50 for papers up to 80 pages long; \$12.00 for papers 80 pages and longer. **JE** L33, L51, L96. **KW** Telecommunications. Privatization. Regulation. Competition.

AB Important links run in both directions between telecommunications and economic development. This paper examines the telecommunications sector in Central America in the context of national and regional growth and sustainable development. Its analysis of the telecommunications sector in Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua shows that the sector developed substantially in the last several years even while under tight regulation or monopoly and that current telephone penetration is relatively high in relation to per capita income. Still, unmet demand for telephone service is substantial and geographic distribution of service is uneven. Moreover, revenues rely heavily on international calling, and Central America has the highest traffic imbalance in the world. This paper discusses prospects for expansion of the sector and revenues in each country under a variety of frameworks: continued monopolies; planned or on-going privatization programs; new regulatory frameworks; and/or deregulation. Technology and regulation are moving the telecommunications sector in all countries toward competition, but the approach to reform varies in each country. These different approaches will transform regional cooperation, possibly making certain agreements more difficult but also increasing the potential benefit from regional regulation.

Razin, Assaf

PD November 1998. **TI** Tax Burden and Migration. **AU** Razin, Assaf; Sadka, Efraim; Swagel, Phillip. **AA** Razin and Sadka: Tel Aviv University. Swagel: International Monetary Fund. **SR** Institute for Advanced Studies (IHS) Economics Series Working Paper: 59; Institute for Advanced Studies, Stumpergasse 56, A-1060 Vienna, Austria. **Website:** www.ihs.ac.at/Library/libhome.html. **PG** 22. **PR** ATS 80.00 Individuals; ATS 250.00 Institutions. **JE** D33, D71, F22, J61. **KW** Migration. Political-Economy. Equilibrium. Tax-Transfer Policy.

AB The extent of taxation and redistribution policy is generally determined as a political-economy equilibrium by a balance between those who gain from higher taxes/transfers and those who lose. In a stylized model of migration and human capital formation, we show -- somewhat against the conventional wisdom -- that low-skill immigration may lead to a lower tax burden and less redistribution than would be the case with no immigration, even though migrants (naturally) join the pro-tax/transfer coalition. Data on 11 European countries over the period 1974 to 1992 are consistent with the implications of the theory: a higher share of immigrants in the population leads to a lower tax rate on labor income, with the effect statistically significant even after controlling for the generosity and size of the welfare state, demographics, and the international exposure of the economy. As predicted by the theory, it is the increased share of low-education immigrants that leads to the smaller tax burden.

Redding, Stephen

PD January 2000. **TI** The Dynamics of International Specialisation. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 437; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. **Website:** cep.lse.ac.uk. **PG** 51. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription. **JE** C14, F11, F14, F41, F43. **KW** Distribution Dynamics. Factor Endowments. International Trade. Neoclassical Models. Comparative Advantage.

AB The theoretical literature on trade and growth suggests that comparative advantage is endogenous and evolves over time. However, most empirical analysis of international trade flows is essentially static in nature. This paper proposes an empirical model of the dynamics of international specialization. Employing disaggregated data on twenty industries in seven OECD countries, we examine the evolution of patterns of international specialization over time and evaluate the role of changes in factor endowments in explaining observed dynamics.

Redish, Angela

PD September 1999. **TI** The Mortgage Market in Upper Canada Window on the Pioneer Economy. **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 99/23; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. **Website:** web.arts.ubc.ca/econ/dpintro.htm. **PG** 18. **PR** **JE** N21. **KW** Mortgages. Canada. Economic History. Financial Market.

AB This paper presents new data on the characteristics of the mortgage market in the Niagara District, Ontario, between 1795 and 1850. The data show that private mortgage lending occurred on the same scale as bank lending. The largest single type of loan was between a yeoman farmer borrower, and a lender resident in Niagara District, for an amount somewhat in excess of a year's farm output. There were also many loans to merchants and large land owners, which tended to be for larger amounts lent by non-residents of the District. Up to a quarter of all mortgages were used to finance the purchase of land. The data provide ambiguous evidence on the cyclicity of mortgage lending, but, consistent with those who have argued

against a dominant role for wheat exports in the upper Canadian economy, there is not a significant correlation between the number of mortgages and wheat prices.

TI Canada's Monetary System in Historical Perspective Two Faces of the Exchange Rate Regime. **AU** Bordo, Michael; Redish, Angela; Shearer, Ronald A.

Reed, Howard

TI Interpreting Movements in Aggregate Wages: The Role of Labor Market Participation. **AU** Blundell, Richard; Reed, Howard; Stoker, Thomas.

Refalo, James F.

TI An Options-Based Analysis of Emerging Market Exchange Rate Expectations: Brazil's Real Plan, 1994-1997. **AU** Campa, Jose M.; Chang, P. H. Kevin; Refalo, James F.

Reppelin-Hill, Valerie

TI Taxes and Tradable Permits as Instruments for Controlling Pollution: Theory and Practice. **AU** Norregaard, John; Reppelin-Hill, Valerie.

Requejo, Alejandro

TI Financial Distress, Bank Debt Restructurings and Layoffs: Theory and Evidence. **AU** Padilla, A. Jorge; Requejo, Alejandro.

Ruer, Jeffrey J.

TI Post-Formation Dynamics in High-Tech Alliances. **AU** Zollo, Maurizio; Ruer, Jeffrey J.; Singh, Harbir.

TI Building a Foreign Sales Base: The Roles of Capabilities and Alliances For Entrepreneurial and Established Semiconductor Firms. **AU** Leiblein, Michael J.; Ruer, Jeffrey J.

TI Experience Trajectories, Governance Design, and the Performance of High-Tech Alliances. **AU** Zollo, Maurizio; Ruer, Jeffrey J.; Singh, Harbir.

PD May 1999. **TI** Managing Governance Adaptations in Strategic Alliances. **AU** Ruer, Jeffrey J.; Zollo, Maurizio. **AA** INSEAD. **SR** INSEAD Working Paper: 99/27/SM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 20. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** L11, L22, L69. **KW** Alliance Dynamics. Collaborative Strategy. Governance Changes.

AB One important question confronting firms engaged in a strategic alliance is how to adapt the relationship over time. This article identifies specific governance changes firms make in strategic alliances. Using illustrative data on strategic alliances in the biotechnology industry, the authors consider the frequency of governance adaptations and explore some of the factors affecting parent firms' interventions in their collaborative agreements. The data patterns demonstrate the relevance of parent firms' prior experiences with alliances as well as specific features of the alliance in influencing the likelihood and type of adjustments undertaken by parent firms. While alliance adaptation has previously been a black box in the alliance area, the article begins to specify some of the dimensions of alliance adaptation and their drivers.

Rey, Helene

TI The Determinants of Cross-Border Equity Flows. **AU** Portes, Richard; Rey, Helene.

TI Financial Super-Markets: Size Matters for Asset Trade. **AU** Martin, Philippe; Rey, Helene.

TI Financial Integration and Asset Returns. **AU** Martin, Philippe; Rey, Helene.

Riddell, W. Craig

PD September 1999. **TI** Measuring Unemployment and Structural Unemployment. **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 99/21; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 13. **PR** **JE** J02, J06. **KW** Unemployment. Labor Force. Participation. Job Search. Work Availability. Labor Market Transitions. Discouraged Workers.

AB This paper surveys recent research on how to measure labor market activities such as unemployment and labor force participation. The conventional approach to distinguishing between unemployment and non-participation is to use a priori reasoning and self-reported survey responses about current activities, specifically availability for work and job search. In contrast, the research surveyed here employs evidence on the subsequent consequences of current activities, in particular on transitions among labor force states. This general approach appears to be a promising method for bringing evidence to bear on these difficult measurement issues.

PD September 1999. **TI** Canadian Labour Market Performance in International Perspective. **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 99/25; University of British Columbia, Department of Economics, Room 997, Buchanan Tower, 1873 East Mall, Vancouver, B.C. V6T 1Z1 Canada. Website: web.arts.ubc.ca/econ/dpintro.htm. **PG** 55. **PR** **JE** J02, J06. **KW** International Comparisons. Unemployment. Employment. Labor Force Attachment. Earnings Inequality. Skill-Bias. Technological Change.

AB This paper assesses recent Canadian labor market outcomes and compares Canada's performance to that experienced in other industrialized countries. The focus is on three key dimensions employment, unemployment, and the structure of earnings. Particular attention is devoted to the hypothesis that rising unemployment and widening earnings inequality are principally due to a relative shift in demand towards the skilled and away from the less skilled.

Riedl, Arno

TI Inefficiency and Social Exclusion in a Coalition Formation Game. **AU** Okada, Akiro; Riedl, Arno.

Riordan, Michael H.

TI Health Insurance, Moral Hazard, and Managed Care. **AU** Ma, Ching-to Albert; Riordan, Michael H.

Roberts, Kevin

PD April 2000. **TI** A Reconsideration of the Optimal Income Tax. **AA** University of Oxford. **SR** Oxford Department of Economics Discussion Paper: 06; Institute of

Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. PG 23. PR no charge. JE H21, H31. KW Nonlinear Taxation. Income Taxation. Bunching. Tax Reform.

AB This paper develops a formula for the optimal nonlinear income tax, the terms of which are familiar from the theory of linear income taxation. The development uses the idea of perturbation of the optimal schedule and is based upon an assumption of differentiability. It is also shown that the introduction of non-differentiability, implying bunching of taxpayers, may be desirable and, in this case, the optimal schedule may be difficult to determine. The analysis can be applied to nonlinear tax reform.

Robertson, Raymond

TI Does Border Enforcement Protect U.S. Workers from Illegal Immigration? AU Hanson, Gordon H.; Robertson, Raymond; Spilimbergo, Antonio.

Robertson, Thomas S.

TI Firm Strategy and Speed of Diffusion. AU Kuester, Sabine; Gagnon, Hubert; Robertson, Thomas S.

Robins, Philip K.

TI Measuring Wage Growth Among Former Welfare Recipients. AU Card, David; Michalopoulos, Charles; Robins, Philip K.

Rodriguez-Planas, Nuria

PD January 2000. TI Can Asymmetric Information Solve Puzzles From the Reemployment Bonus Experiments? AA Mathematica Policy Research, Inc. SR Boston University, Industry Studies Program Working Paper Series on Economics: 98; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. PG 31. PR no charge. JE J63, J64, J65. KW Layoffs. Recall Expectations. Unemployment. Signaling. Reemployment Bonus.

AB Temporary layoffs are an important feature of the United States labor market. If these employer-employee relationships exist because of valuable job-matches, unemployment among high-productivity laid-off workers may be optimal from societal perspective. However, because of asymmetric information, low-productivity workers may behave strategically, imitate high-productivity workers, and choose unemployment instead of a low-wage job, resulting in an inefficiently high level of unemployment. In such cases, a re-employment bonus that encourages low-productivity workers not to wait unemployed but does not discourage high-productivity workers from waiting may maximize overall welfare. This paper examines the conditions under which a reemployment bonus gives the correct incentives to laid-off workers and achieves the optimal equilibrium. The paper also analyzes the equity properties of such a policy and its cost effectiveness. In addition, the model explains some of the empirical puzzles found in the re-employment bonus literature, and suggests several policy implications.

PD January 1998. TI Playing Hard to Get: Theory and Evidence on Layoffs, Recalls, and Unemployment. AA Boston University and The Brookings Institution. SR Boston University, Industry Studies Program Working

Paper Series on Economics: 86; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. PG 50. PR no charge. JE J31, J63. KW Permanent Lay-off. Temporary Lay-Off. Signaling. Unemployment. Earnings Profiles.

AB In the United States, many laid-off workers are recalled to their former employer. I develop an asymmetric information model of layoffs in which high productivity workers are more likely to be recalled and may choose to remain unemployed rather than accept a low-wage job. In this case, unemployment can serve as a signal of productivity, and unemployment duration may be positively related to post-laid-off wages even among workers who are not recalled. In contrast, since workers whose plant closed cannot be recalled, longer unemployment duration should not have a positive signaling benefit for such workers. Analysis of the data from the January 1988-1992 Displaced Workers Supplements to the Current Population Survey and from the Panel Study of Income Dynamics (waves XIII to XXIV) reveals that the wage/unemployment duration relation differs between the two groups in the predicted way, and finds evidence consistent with asymmetric information in the U.S. labor market.

Rogoff, Kenneth

TI Risk and Exchange Rates. AU Obstfeld, Maurice; Rogoff, Kenneth.

Romer, Christina D.

PD February 1999. TI Changes in Business Cycles: Evidence and Explanations. AA University of California, Berkeley and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 6948; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 33. PR \$5.00. JE E32, E63, N12. KW Business Cycles. Countercyclical Policy. Monetary Policy.

AB This paper analyzes changes in American business cycles over the twentieth century and suggests a possible explanation for the major changes that have and have not occurred. The empirical analysis shows that the volatility of annual real macroeconomic indicators and the average severity of recessions have declined only slightly between the pre-World War I and post-World War II eras. Recessions have, however, become somewhat less frequent and more uniform. The paper goes on to suggest that the advent of macroeconomic policy after World War II can account for both the continuity and the changes in business cycles. Countercyclical monetary policy and automatic stabilizers have prolonged postwar expansions and prevented severe depressions. At the same time, policy-induced booms and recessions have led to the continued volatility of the postwar economy.

Rosenbloom, Joshua L.

PD February 1999. TI The Challenges of Economic Maturity: New England, 1880-1940. AA University of Kansas and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 113; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. PG not available. PR \$5.00. JE N12, N22, N32, N62, O18. KW Regional Growth. New England.

AB This paper provides an account of the complex changes taking place within New England in the years from 1880 to 1940. After 1880, technological changes and market shifts undermined the sources of comparative advantage that had promoted the concentration of textile and footwear production within the region and propelled regional economic growth. Regional economic growth slowed in the wake of these events, but the impact of this slowdown on living standards was moderated, by market driven adjustments. Within the region's traditional industries, manufacturers shifted product lines to take advantage of the areas in which they could still compete. At the same time, the growth of other manufacturing activities and an increasingly robust service sector created new employment opportunities that laid the foundation for the region's post-World War II recovery. The responsiveness of international and interregional labor migration moderated the growth of regional labor supplies in response to diminishing opportunities. Meanwhile, financial market integration enabled New Englanders to share in the benefits of more rapid growth elsewhere in the country.

Rosenthal, Robert W.

TI Experimentation, Imitation, and Stochastic Stability. **AU** Gale, Douglas; Rosenthal, Robert W.

TI On Some Myths About Sequenced Common-Value Auctions. **AU** de Frutos, Maria Angeles; Rosenthal, Robert W.

Ross, William T., Jr.

TI Social Contracts and Marketing Ethics. **AU** Dunfee, Thomas W.; Smith, N. Craig; Ross, William T., Jr..

Rostagno, Massimo

TI Redistribution Through Public Employment: The Case of Italy. **AU** Alesina, Alberto; Danninger, Stephan; Rostagno, Massimo.

Rousseau, Peter L.

PD February 1999. **TI** Share Liquidity and Industrial Growth in an Emerging Market: The Case of New England, 1854-1897. **AA** Vanderbilt University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 117; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** E44, N11, N21. **KW** Liquidity. Finance Led Industrialization.

AB There remains a strong notion that liquidity promotes participation in equity markets and is thus central to their deepening. Interestingly, the first U.S. market for industrial equities arose in Boston more than 150 years ago, when capital flows were considerably less volatile than those of today's emerging markets. This paper formulates and presents broad-based indices of annual prices and returns for banking and industrial equities traded from 1854 to 1897, as well as measures of overall market capitalization in these sectors, using primary sources. A set of vector autoregressive models then relates increases in liquidity, as measured by the falling par values of industrial shares, to rising prices and capitalizations of firms traded in the Boston market. Increases in liquidity and the real market value of equity capital in banks and industrials are also linked to higher annual earnings among the region's

industrial workers. The results support the view that share liquidity was a key factor in the rise of the U.S. as a classic case of finance-led industrialization.

Rubenstein, Yona

PD December 1999. **TI** Born to be Unemployed: Unemployment and Wages Over the Business Cycle. **AU** Rubenstein, Yona; Tsiddon, Daniel. **AA** Rubenstein: Tel-Aviv University. **Tsiddon**: Tel-Aviv University and CEPR. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 99/39; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 60. **PR** no charge. **JE** E24, E32, I21, I39, J31, J63. **KW** Unemployment. Business Cycles. Skills.

AB This work decomposes the human capital bundle into two characteristics: "knowledge", associated with one's own education and experience, and "general skills", associated with parents' education. Using this decomposition we provide a new set of observations on the cyclicity of both wages and employment: (a) For every level of education and age group, average unemployment is higher among those with less educated parents. (b) Within each education group, the gap between the rate of unemployment of those with less educated parents and those with more educated parents increases during recessions. (c) College graduates with educated parents face no cyclical unemployment. (d) During recessions, the wage of those with less educated parents decreases by more than the wage of those with more educated parents. (e) The wage of college graduates with more educated parents goes up in absolute terms during recessions. We interpret these findings to imply that "general skills" or "ability" are more in demand during recessions.

Rubik, Frieder

TI Application Patterns of Life Cycle Assessment in German, Italian, Swedish and Swiss Companies. Comparative Results and Conclusions. **AU** Frankl, Paolo; Rubik, Frieder.

Rubinstein, Ariel

PD April 2000. **TI** A.A,A,A,A or A.A,B,C,D? Over-Diversification in Repeated Decision Problems. **AA** Tel-Aviv University and Princeton University. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/10; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 12. **PR** no charge. **JE** C91, D81, D83. **KW** Repeated Decisions. Over-Diversification.

AB The paper deals with repeated decision problems which are similar to the task of guessing the color outcomes of five independent spinings of a roulette wheel, 60% of whose slots are covered in red and 40% in white, where each correct guess yields a prize of \$1. The results confirm the hypothesis that subjects over-diversify their choices when facing a repeated decision problem in situations where the choice is between lotteries with clear objective probabilities. The over-diversification is more intense when the subjects face uncertainty without objective probabilities, and weaker when the choice is stated as a choice problem which involves real-life actions.

TI Correct Belief, Wrong Action and A Puzzling Gender Difference. **AU** Huberman, Gur; Rubinstein, Ariel.

PD November 1999. **TI** Defineable Preferences: Another Example. **AA** Tel-Aviv University and Princeton University. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 99/37; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 11. **PR** no charge. **JE** B41, C69, D11, D79. **KW** Preferences. Defineability. Language.

AB The paper argues for the formal investigation of conditions under which preference relations are definable in various simple languages. An example of such an investigation is given. It is shown that if a formula in the "pure language with equality" induces a preference relation on the set of T-tuples of objects in a set (independently of the number of elements in the set), then it must be that there is a sequence of preferences P_n on the set of partitions of $\{1, \dots, T\}$ such that (x_1, \dots, x_t) is preferred to (y_1, \dots, y_t) if and only if the set of objects is of size n and $E(x_1, \dots, x_t)P_n, E(y_1, \dots, y_t)$ where $E(x_1, \dots, x_t)$ is the partition of $\{1, \dots, T\}$ where i and j are in the same cell if $x_i = x_j$. Furthermore, for all large enough n the relations P_n are identical.

Ruenstler, Gerhard

PD March 1998. **TI** Unemployment Dynamics: An Unobserved Components Approach. **AA** Institute for Advanced Studies, Vienna. **SR** Institute for Advanced Studies (IHS) Economics Series Working Paper: 53; Institute for Advanced Studies, Stumpergasse 56, A-1060 Vienna, Austria. Website: www.ihs.ac.at/Library/libhome.html. **PG** 13. **PR** ATS 80.00 Individuals; ATS 250.00 Institutions. **JE** C22, E32. **KW** Trend-and-Cycle. Decomposing Time Series. Persistence. Stochastic Cycles.

AB The study uses a bivariate unobserved components model for output and the unemployment rate in order to examine stylized facts of the cyclical behavior of unemployment and to estimate the size of persistence. The model is applied to the U.S., Canada, and major European economies. Estimates of cyclically adjusted unemployment rates are obtained that account for persistence effects and are subject to considerably smaller confidence bounds compared to approaches based on wage and price setting equations.

Sachs, Jeffrey D.

TI The External Debt Problem in Central America: Honduras, Nicaragua, and the HIPC Initiative. **AU** Esquivel, Gerardo; Larrain B., Felipe; Sachs, Jeffrey D.

TI Geography and Economic Development. **AU** Gallup, John Luke; Sachs, Jeffrey D.; Mellinger, Andrew.

TI The Changing Global Distribution of Malaria: A Review. **AU** Hamoudi, Amar; Sachs, Jeffrey D.

PD March 1999. **TI** Trade Pattern and Economic Development when Endogenous and Exogenous Comparative Advantages Coexist. **AU** Sachs, Jeffrey D.; Yang, Xiaokai; Zhang, Dingsheng. **AA** Sachs: Center for International Development at Harvard University and Harvard Institute for International Development. Yang: Center for International Development at Harvard University. Zhang: Wuhan University. **SR** Harvard Center for International Development (CID) Working Paper: 3; Center for International Development; John Gallup, Editor; 79 John F. Kennedy Street, Cambridge, MA 02138. Website: www.cid.harvard.edu/cidworkingpapers/cid_workingpapers.htm.

PG 28. **PR** paper copies \$7.50 up to 80 pages long; \$12.00 80 pages long and longer. **JE** F01, O01. **KW** Trade Pattern. Dual Economy. Endogenous Comparative Advantage. Endogenous Specialization. Division of Labor.

AB This paper applies the infra-marginal analysis to a model with both constant returns and increasing returns in production and with exogenous and endogenous comparative advantages. It demonstrates that as transaction conditions are improved, the general equilibrium discontinuously jumps from autarky to partial division of labor with a dual structure, then to the complete division of labor where dual structure disappears. Two types of dual structure may occur in the transitional stage of economic development and globalization. One of them involves the division of labor in the developed economy and autarky in the less developed economy, generating increasing disparity of per capita real income between the two types of economies. The other involves a domestic dual structure in the less developed economy, where the population is divided between commercialized sector which trades with foreign country and self-sufficient sector which is not involved in trade. All gains from trade go to the developed economy. This paper shows that deterioration of a country's terms of trade may concur with an increase of gains that this country receives from trade provided productivity progress from an expanded network of division of labor outpaces the deterioration of terms of trade.

TI An Inframarginal Analysis of the Heckscher-Ohlin Model with Transaction Costs and Technological Comparative Advantage. **AU** Cheng, Wen Li; Sachs, Jeffrey D.; Yang, Xiaokai.

PD April 1999. **TI** Gradual Spread of Market-Led Industrialization. **AU** Sachs, Jeffrey D.; Yang, Xiaokai. **AA** Sachs: Center for International Development at Harvard University and Harvard Institute for International Development. Yang: Center for International Development at Harvard University. **SR** Harvard Center for International Development (CID) Working Paper: 11; Center for International Development; John Gallup, Editor; 79 John F. Kennedy Street, Cambridge, MA 02138. Website: www.cid.harvard.edu/cidworkingpapers/cid_workingpapers.htm. **PG** 31. **PR** paper copies \$7.50 up to 80 pages long; \$12.00 for 80 pages long and longer. **JE** F11, F12, O40. **KW** Globalization. Industrialization. Market-Led Development.

AB The paper introduces asymmetric production conditions between firms and asymmetric transaction conditions between countries into the Murphy-Shleifer-Vishny (MSV) model of industrialization. It explores a general equilibrium mechanism that generates the following circular causation loop: each firm's profitability and its decisions regarding its industrial linkages and trade flows is determined by the size of the network, while the network size is in turn determined by all firms' participation decisions. It shows that the function of the market is to network self-interested decision makers and utilize the network effects of industrialization. Market led industrialization will gradually spread until the whole world economy is integrated in a single network of trade and industrial linkages as transaction conditions are improved. This paper devises a new approach to specifying zero profit conditions for a marginal modern firm, while keeping the original feedback loop between positive profit and the extent of the market of the MSV model. Hence, this new method and the trade off between economies of scale and transaction costs can be used to endogenize the number of modern sectors.

TI An Infra-Marginal Analysis of the Ricardian Model.
AU Cheng, Wen Li; Sachs, Jeffrey D.; Yang, Xiaokai.

PD April 1999. **TI** Pattern of Trade and Economic Development in the Model of Monopolistic Competition.
AU Sachs, Jeffrey D.; Yang, Xiaokai; Zhang, Dingsheng.
AA Sachs: Center for International Development at Harvard University and Harvard Institute for International Development. Yang: Center for International Development at Harvard University. Zhang: Wuhan University. **SR** Harvard Center for International Development (CID) Working Paper: 14; Center for International Development; John Gallup, Editor; 79 John F. Kennedy Street, Cambridge, MA 02138. Website: www.cid.harvard.edu/cidworkingpapers/cid_workingpapers.htm. **PG** 29. **PR** paper copies \$7.50 up to 80 pages long; \$12.00 for 80 pages long and longer. **JE** F12, F13, O10. **KW** Trade Pattern. Development Strategy. Income Distribution. Terms of Trade.

AB The paper introduces differences in production and transaction conditions between countries into a model of monopolistic competition to investigate the interplay between trade policies and development strategies. It applies inframarginal analysis, which is total benefit analysis between corner solutions in addition to marginal analysis of each corner solution, to show that as transaction conditions are improved, the general equilibrium may discontinuously jump across different patterns of trade and economic development. It compares the marginal and inframarginal comparative statics of equilibrium in the model of monopolistic competition with the core theorems in the neoclassical trade models and with conventional wisdom in development economics. It shows that as analytical framework is altered, the meanings of concepts and related empirical observations will be changed too.

Sadka, Efraim

TI Tax Burden and Migration. **AU** Razin, Assaf; Sadka, Efraim; Swagel, Phillip.

Saffer, Henry

PD February 1999. **TI** Tobacco Advertising: Economic Theory and International Evidence. **AU** Saffer, Henry; Chaloupka, Frank J. **AA** Saffer: National Bureau of Economic Research. Chaloupka: University of Illinois and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6958; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 20. **PR** \$5.00. **JE** I12, I18. **KW** Tobacco Advertising. Comprehensive Bans.

AB Tobacco advertising is a public health issue if these activities increase smoking. Although public health advocates assert that tobacco advertising does increase smoking, there is significant empirical literature that finds little or no effect of tobacco advertising on smoking. In this paper, these prior studies are examined more closely with several important insights emerging from this analysis. In addition this paper provides new empirical evidence on the effect of tobacco advertising. The primary conclusion is that a comprehensive set of tobacco advertising bans can reduce tobacco consumption and that a limited set of tobacco advertising bans will have little or no effect. Among other important policy conclusions the regression results indicate that the ban on outdoor advertising, included in the US tobacco industry state level settlement, will probably not result in much change in

advertising expenditures nor in tobacco use. However the counteradvertising that is also included in the settlement which requires the tobacco industry to contribute \$1.5 billion over five years for public education on tobacco use could reduce tobacco use by about two percent.

Sahay, Ratna

TI The Transition Economies After Ten Years.
AU Fischer, Stanley; Sahay, Ratna.

Sahn, David E.

PD December 1999. **TI** Dominance Testing of Social Sector Expenditures and Taxes in Africa. **AU** Sahn, David E.; Younger, Stephen D. **AA** Cornell University. **SR** International Monetary Fund Working Paper: WP/99/172; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 38. **PR** not available. **JE** H22, I38, O55. **KW** Taxes. Health. Education. Income Distribution.

AB This paper examines the progressivity of social sector expenditures and taxes in eight sub-Saharan African countries. It uses dominance tests to determine whether health and education expenditures redistribute resources to the poor. The paper finds that social services are poorly targeted. Among the services examined, primary education tends to be most progressive, and university education is least progressive. The paper finds that many taxes are progressive as well as efficient, including some broad-based taxes such as the VAT and wage taxation. Taxes on kerosene and exports appear to be the only examples of regressive taxes.

Sakellaris, Plutarchos

TI News About News: Information Arrival and Irreversible Investment. **AU** Drazen, Allen; Sakellaris, Plutarchos.

Salomon, Marc

TI Inventory Control in Hybrid Systems with Remanufacturing. **AU** Van Der Laan, Erwin; Salomon, Marc; Dekker, Rommert; Van Wassenhove, Luk.

Samiei, Hossein

TI Central Bank Independence and the Conduct of Monetary Policy in the United Kingdom. **AU** Martijn, Jan Kees; Samiei, Hossein.

Savaskan, Rezzan Canan

PD March 1999. **TI** Channel Choice and Coordination in a Remanufacturing Environment. **AU** Savaskan, Rezzan Canan; Bhattacharya, Shantanu H.; Van Wassenhove, Luk N. **AA** INSEAD. **SR** INSEAD Working Paper: 99/14/TM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 24. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** L11, L22, L23. **KW** Collection Effort. Reuse. **AB** The importance of the reuse of components and materials from post-consumer products has been widely recognized in literature and in practice. In this paper, we address the problem of choosing the appropriate channel structure for the collection of post-consumer products from customers. Specifically, we consider a manufacturer who has three options for collecting such products: (a) she can undertake the collection effort herself, (b) she can provide suitable incentives to an existing

retailer (who already has a distribution channel) to undertake the collection effort, and (c) she can subcontract the collection effort to a third party. Based on our observations in industry, we model the three options described above as a decentralized decision-making process using a Stackelberg equilibrium scenario with the manufacturer as the leader. With regard to the choice of channel, we find that *ceteris paribus*, agencies that are closer to the customer, e.g. retailers, are the most effective undertakers of the collection effort for the manufacturer. Coordination mechanisms are then characterized which enable the different players to achieve profits that are equivalent to the profits in a coordinated channel. Finally, the model considers the impact of asymmetry of information among the different players in the channel on the collection effort.

Schankerman, Mark

PD July 2000. **TI** Damages and Injunctions in Protecting Proprietary Research Tools. **AU** Schankerman, Mark; Scotchmer, Suzanne. **AA** Schankerman: LSE. Scotchmer: UC Berkeley. **SR** University of California, Berkeley, Department of Economics Working Paper: E00/288; UC, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. **PG** 26. **PR** \$3.50 U.S., \$7.00 International. **JE** K11, O31, O33. **KW** Intellectual Property. Damages. Injunctions. Research Tools.

AB We investigate how liability rules and property rules affect the incentives to invest in research tools. We argue that it is hard to deter infringement under any of the enforcement regimes available. However, counterintuitively, a credible threat of infringement can actually be beneficial to the patentholder. We compare the two doctrines of damages under the liability rule, namely, lost profit (lost royalty) and unjust enrichment, and argue that unjust enrichment protects the patentholder better than lost royalty. Both can be superior to a property rule (the right to enjoin infringement), depending on how much delay is permitted before infringement is enjoined. We also show that, for patents on end-user products, the ranking of liability doctrines is reversed: unjust enrichment is inferior to lost profits.

Scheve, Kenneth F.

PD February 1999. **TI** Labor-Market Competition and Individual Preferences Over Immigration Policy. **AU** Scheve, Kenneth F.; Slaughter, Matthew J. **AA** Scheve: Harvard University. Slaughter: Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6946; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** \$5.00. **JE** F22, J31, J61. **KW** Immigration Policy. Trade Models.

AB This paper uses an individual-level data set to analyze the determinants of individual preferences over immigration policy in the United States. In particular, we test for a link from individual skill levels to stated immigration-policy preferences. Different economic models make contrasting predictions about the nature of this link. We have two main empirical results. First, less-skilled workers are significantly more likely to prefer limiting immigrant inflows into the United States. The result is robust to several different econometric specifications which account for determinants of policy preferences other than skills. Our findings suggest that over time horizons relevant to

individuals when evaluating immigration policy, individuals thank that the U.S. economy absorbs immigrant inflows at least partly by changing wages. These preferences are consistent with a "multi-cone" Heckscher Ohlin model and with a factor-proportions-analysis labor model. Second, we find no evidence that less-skilled workers in high-immigration communities are especially anti-immigrationist. If anything, our evidence suggests attenuation of skills-preferences correlation in high-immigration communities. These preferences are inconsistent with an area-analysis labor market.

Schiller, Christian

TI Income Distribution, Informal Safety Nets, and Social Expenditures in Uganda. **AU** McDonald, Calvin; Schiller, Christian; Ueda, Kenichi.

Schmidt, Christoph M.

PD October 1999. **TI** The Heterogeneity and Cyclical Sensitivity of Unemployment: An Exploration of German Labor Market Flows. **AA** AWI-University of Heidelberg, IZA-Bonn and CEPR. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 18; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~ir/cle/index.html. **PG** 29. **PR** no charge. **JE** J21, J63, J64. **KW** Skills. Transitions. Unemployment Duration. Labor Market States.

AB It is often argued that the labor market outcomes of several "problem groups" of German workers suffer disproportionately in an economic downturn. These groups are women, the unskilled, and young and old workers, respectively. Using monthly individual level data for West Germany for the period 1983 to 1994, this paper explores both the demographic heterogeneity of German unemployment in the long term, and the cyclical sensitivity of the unemployment experience across demographic groups. The analysis moves beyond that of unemployment rates to a detailed investigation of transition rates from employment to unemployment and vice versa. While long-term differences across demographic groups are dominating the structure of both job loss and re-employment, estimation of a nonlinear regression model reveals additional aspects of cyclical sensitivity. In particular, young workers experience drastically more pronounced swings in their labor market performance than the average worker, whereas old workers seem basically isolated from the economic cycle. By contrast, in terms of its cyclical sensitivity, the labor market performance of women and of unskilled workers is not dramatically different from that of the average worker.

Schmitz, James A., Jr.

TI Threats to Industry Survival and Labor Productivity: World Iron-Ore Markets in the 1980's. **AU** Galdon Sanchez, Jose E.; Schmitz, James A., Jr..

Schneider, Friedrich

PD February 2000. **TI** Shadow Economies Around the World: Size, Causes and Consequences. **AU** Schneider, Friedrich; Enste, Dominik. **AA** Schneider: Johannes Kepler University of Linz. Enste: University of Cologne. **SR** International Monetary Fund Working Paper: WP/00/26; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 44. **PR** not available.

JE D78, H26, O17, O57. **KW** Shadow Economy. Corruption. Taxation.

AB This paper presents estimates of the size of the shadow economy in 76 developing, transition, and OECD countries, which are derived by combining figures from different estimation methods. We describe and discuss the strengths and weaknesses of the different estimation methods. We find that the growth of the shadow economy, which is now remarkably large in the 76 countries, is strongly related to increasing burdens of taxation and social security contributions, as well as to the extent of state regulatory activities. Rising corruption also has a clearly positive impact on the growth of the shadow economy.

Schob, Ronnie

TI Green Tax Reform and Competitiveness. **AU** Koskela, Erkki; Schob, Ronnie; Sinn, Hans-Werner.

Schrag, Joel

TI First Impressions Matter: A Model of Confirmatory Bias. **AU** Rabin, Matthew; Schrag, Joel.

Schreft, Stacey L.

PD April 2000. **TI** Private Money, Settlement, and Discount: A Comment. **AA** Federal Reserve Bank of Kansas City. **SR** Federal Reserve Bank of Kansas City Research Working Paper: RWP 00/01; Economic Research Department, 925 Grand Blvd., Kansas City, MO 64198. Website: www.kc.frb.org/publicat/reswkpap/rwpmain.htm. **PG** 8. **PR** no charge. **JE** E42, G21. **KW** Private Money. Payments. Electronic Money.

AB Temzelides and Williamson present a model of private currency issuance to study the effect of clearing arrangements on the prices at which private currencies trade, on the volume of exchange, and on welfare. Their findings hinge on three factors: the location of the issuers relative to the area in which their currencies circulate, whether there is an arrangement for clearing nonlocally issued currencies, and whether agents are fully informed about the quality of the currencies. This paper finds that the Temzelides-Williamson model provides valuable insights about historical experiences with private paper monies, but it raises more questions than it answers regarding electronic currencies. The model can, however, serve as a useful point of departure for further research.

Schuh, Andreas-Ulrich

TI Price and Quantity Adjustments in the Austrian Labour Markets. **AU** Hofer, Helmut; Pichelmann, Karl; Schuh, Andreas-Ulrich.

Scotchmer, Suzanne

TI Damages and Injunctions in Protecting Proprietary Research Tools. **AU** Schankerman, Mark; Scotchmer, Suzanne.

PD March 1999. **TI** Delegating Investment in a Common-Value Project. **AA** UC Berkeley. **SR** University of California, Berkeley, Department of Economics Working Paper: E99/266; UC, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. **PG** 12. **PR** \$3.50 U.S., \$7.00 International. **JE** D81, D82, L15, O32. **KW** Common Values. Delegation. Patents. Information

Aggregation.

AB I investigate the problem of delegating an investment effort when it is not known in advance which firm is most efficient, or whether the investment should be made at all. The motivating problem is that of commissioning research and development instead of relying on patent incentives. Firms have different private signals of a project's private (and social) value, and different costs of achieving it. I show that the investment to the least-cost firm can simultaneously be solved with no more profit dissipation than a procurement mechanism would require, assuming that the signals of value were known in advance.

TI Intellectual Property and Market Structure in Agriculture. **AU** Raussler, Gordon C.; Scotchmer, Suzanne; Simon, Leo.

Scott, Alasdair

TI The Myth of Comoving Commodity Prices. **AU** Cashin, Paul; McDermott, C. John; Scott, Alasdair.

Sefton, Martin

TI An Experimental Investigation of Unprofitable Games. **AU** Morgan, John; Sefton, Martin.

Segal, Ilya

PD December 1997. **TI** Contracting with Externalities. **AA** UC Berkeley. **SR** University of California, Berkeley, Department of Economics Working Paper: 97/259; UC, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. **PG** 72. **PR** \$3.50 U.S., \$7.00 International. **JE** C78, D62, G34, L42. **KW** Bargaining Externalities. Common Agency. Debt Workouts. Exclusive Dealing. Merger. Network Externalities. Public Goods. Takeovers. Vertical Contracting. Coase Theorem. Mechanism Design. Non-Pivotal Agents.

AB The paper studies inefficiencies arising in contracting between one principal and N agents when the utility of each agent depends on all agents' trades with the principal. When the principal commits to a set of publicly observable bilateral contract offers, the arising inefficiency is due entirely to the externalities imposed on non-signers. In contrast, when the principal's offers are privately observed, the distortion is due to the externalities given agents' equilibrium trades. Comparison of the two externalities determines the relative efficiency of the two contracting regimes. In both cases, we show that when N is large, each agent can be treated as non-pivotal, provided that appropriate continuity assumptions are satisfied. We also study the case in which the principal can condition each agent's trade on other agents' messages. We characterize the set of such mechanisms in which each agent's participation is voluntary. When the principal can commit to any such mechanism, she implements the first-best outcome, while threatening each deviator with the harshest possible punishment. However, in the presence of noise that goes to zero slower than N goes to infinity, in the limit we obtain a (generally inefficient) outcome in which each agent feels non-pivotal.

Sensier, Marianne

PD April 1997. **TI** Inventories and Asymmetric Business Cycle Fluctuations in the UK. **AA** University of Oxford. **SR** Oxford Applied Economics Discussion Paper: 192;

Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. PG 26. PR 2 pounds (US \$4.00). JE C32, E22. KW Asymmetries. Production-Smoothing. Inventory Models. Non-Symmetric ECM. Step-Response Functions.

AB This paper shows that the behavior of inventories is not symmetrical and that their modeling requires more than just a linear regression. Models of inventory behavior are described and symmetric and non-symmetric error-correction models are formulated which divide the changes in production into positive and negative components. Deepness and steepness tests are calculated for inventories of the disaggregate manufacturing sectors in the UK for evidence of asymmetry. The results of the symmetric and asymmetric error-correction models are presented and compared by a series of tests. Step response functions of the non-symmetric error-correction models are reported to show the full extent of this asymmetry.

Shachar, Ron

TI Switching Costs or Search Costs. AU Moshkin, Nickolay; Shachar, Ron.

TI An Empirical Analysis of Spatial Competition. AU Goettler, Ronald; Shachar, Ron.

TI Brands, Information, and Loyalty. AU Anand, Bharat N.; Shachar, Ron.

Shannon, Chris

TI Uniqueness, Stability, and Comparative Statics in Rationalizable Walrasian Markets. AU Brown, Donald J.; Shannon, Chris.

PD December 1999. TI Quadratic Concavity and Determinacy of Equilibrium. AU Shannon, Chris; Zame, William R. AA Shannon: UC Berkeley. Zame: UCLA. SR University of California, Berkeley, Department of Economics Working Paper: E99/271; UC, Berkeley, Institute of Business and Economic Research, F502 Haas #1922, Berkeley, CA 94720-1922. Website: www.haas.berkeley.edu/~iber. PG 51. PR \$3.50 U.S., \$7.00 International. JE C62, D41, D51, G12. KW Determinacy. Commodity Spaces. Competitive Equilibria. Continuous-Time Finance. Commodity Differentiation. Infinite Horizon Economies. Lipschitz Economies.

AB One of the central features of classical models of competitive markets is the generic determinacy of competitive equilibria. For smooth economies with a finite number of commodities and finite number of consumers, almost all initial endowments admit only a finite number of competitive equilibria, and these equilibria vary (locally) smoothly with endowments; thus equilibrium comparative statics are locally determinate. This paper establishes parallel results for economies with finitely many consumers and infinitely many commodities. The most important new condition we introduce, quadratic concavity, rules out preferences in which goods are perfect substitutes globally, locally, or asymptotically. Our framework is sufficiently general to encompass many of the models that have proved important in the study of continuous-time trading in financial markets, trading over an infinite time horizon, and trading of finely differentiated commodities.

Sharan, Raju

TI Corruption and Military Spending. AU Gupta,

Sanjeev; de Mello, Luiz; Sharan, Raju.

Shavell, Steven

TI Corruption and Optimal Law Enforcement. AU Polinsky, A. Mitchell; Shavell, Steven.

PD February 1999. TI Rewards versus Intellectual Property Rights. AU Shavell, Steven; Ypersele, Tanguy van. AA Shavell: Harvard Law School and National Bureau of Economic Research. Ypersele: Tilburg University. SR National Bureau of Economic Research Working Paper: 6956; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 27. PR \$5.00. JE D23, K11, L10. KW Patents. Copyrights. Reward Systems.

AB This paper compares reward systems to intellectual property rights (patents and copyrights). Under a reward system, innovators are paid for innovations directly by government (possibly on the basis of sales), and innovations pass immediately into the public domain. Thus, reward systems engender incentives to innovate without creating the monopoly power of intellectual property rights, but a principal difficulty with rewards is the information required for their determination. We conclude in our model that intellectual property rights do not possess a fundamental social advantage over reward systems, and that an optional reward system - under which innovators choose between rewards and intellectual property rights - is superior to intellectual property rights.

TI Any Non-Individualistic Social Welfare Function Violates the Pareto Principle. AU Kaplow, Louis; Shavell, Steven.

Shearer, Ronald A.

TI Canada's Monetary System in Historical Perspective Two Faces of the Exchange Rate Regime. AU Bordo, Michael; Redish, Angela; Shearer, Ronald A.

Shen, Yujing

PD November 1999. TI Cost-Minimizing Risk Adjustment. AU Shen, Yujing; Ellis, Randall P. AA Shen: Boston University School of Public Health. Ellis: Boston University. SR Boston University, Industry Studies Program Working Paper Series on Economics: 97; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. PG 28. PR no charge. JE I11, L21. KW Risk Adjustment. Selection. Asymmetric Information. HMOs.

AB Conventional risk adjustment, which sets capitation payments equal to the average cost of individuals with similar observable characteristics, is not optimal if health plans can use private information to select low-cost enrollees. We introduce the notion of "cost-minimizing risk adjustment" and apply it to a setting in which a payer wishes to minimize total payments: the sum of capitated premiums for HMO enrollees and the cost of services for FFS enrollees. Cost-minimizing risk adjustment balances HMO cost efficiency against the overpayment resulting from HMO selection. Simulations using privately-insured dataset suggest that cost-minimizing risk-adjustment premiums may be substantially below conventional risk-adjustment premiums.

Shmuel, S. Oren

TI Solving Unit Commitment by a Unit Decommitment Method. **AU** Tseng, Chung-Li; Li, Chao-an; Shmuel, S. Oren.

Shukla, Gangadhar P.

PD September 1998. **TI** Building Systems of Income Taxation in a Transition Economy: The Case of Vietnam. **AU** Shukla, Gangadhar P.; El-Hifnawi, M. Baher. **AA** Shukla: Harvard University and HIID. El-Hifnawi: HIID. **SR** Harvard Institute for International Development Discussion Paper: 649; Harvard Institute for International Development, 14 Story Street, Cambridge, MA 02138. Website: www.hiid.harvard.edu/pub/ddps.html. **PG** 29. **PR** \$7.50 for papers up to 80 pages long; \$12.00 for papers 80 pages and longer. **JE** H22, H24, H25. **KW** Taxation. Vietnam. ASEAN.

AB Vietnam started its market-oriented tax reforms in 1990. The current income tax system suffers from several shortcomings typical of many developing countries and economies in transition. While the recently passed CIT law provides for a broader tax base, better defined expenses, the law failed to reduce the many tax exemptions and reductions that erode the tax base and generate political pressure for further incentives. Furthermore, the law did not level the playing field between foreign and domestic investors. The current and proposed personal income tax laws suffer from high tax rates, many brackets, and they generate low revenues. For Vietnam to succeed in attracting high tech industries, it has to lower the extremely high personal income tax rates. The tax laws in Vietnam need to converge with the tax regimes in ASEAN but the longer it takes to develop a credible and fair law, the more difficult it will be for Vietnam to reconcile between past laws applying to current investors and new laws applying to new investors. Expectations of more changes, among other things, will continue to slow down investors, both local and foreign, in anticipation of what the new laws may offer.

Sidgwick, Eric

TI Systemic Banking Distress: The Need for an Enhanced Monetary Survey. **AU** Frecaut, Olivier; Sidgwick, Eric.

Simon, Leo

TI Intellectual Property and Market Structure in Agriculture. **AU** Rausser, Gordon C.; Scotchmer, Suzanne; Simon, Leo.

Sinclair-Desgagne, Bernard

TI The Firm, Its Procedures, and Win-Win Environmental Regulations. **AU** Gabel, H. Landis; Sinclair-Desgagne, Bernard.

Singh, Harbir

TI Post-Formation Dynamics in High-Tech Alliances. **AU** Zollo, Maurizio; Reuer, Jeffrey J.; Singh, Harbir.

TI Post-Acquisition Strategies, Integration Capability, and the Economic Performance of Corporate Acquisitions. **AU** Zollo, Maurizio; Singh, Harbir.

TI Experience Trajectories, Governance Design, and the Performance of High-Tech Alliances. **AU** Zollo, Maurizio; Reuer, Jeffrey J.; Singh, Harbir.

Sinn, Hans-Werner

TI Green Tax Reform and Competitiveness. **AU** Koskela, Erkki; Schob, Ronnie; Sinn, Hans-Werner.

Siu, Henry E.

TI Growth and Business Cycles. **AU** Jones, Larry E.; Manuelli, Rodolfo E.; Siu, Henry E.

Skinner, Jonathan

TI The Distributional Effects of Medicare. **AU** Lee, Julie; McClellan, Mark; Skinner, Jonathan.

Slaughter, Matthew J.

TI Labor-Market Competition and Individual Preferences Over Immigration Policy. **AU** Scheve, Kenneth F.; Slaughter, Matthew J.

TI Foreign-Affiliate Activity and U.S. Skill Upgrading. **AU** Blonigen, Bruce A.; Slaughter, Matthew J.

Slok, Torsten

PD February 2000. **TI** Monetary Policy in Transition: The Case of Mongolia. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/21; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 17. **PR** not available. **JE** E31, E41, O53, P24. **KW** Money Demand. Transition Economies.

AB This paper analyzes monetary policy in transition. It examines the dynamics of monetary policy in Mongolia using Granger-causality tests for monetary variables and inflation. The paper also analyzes money demand using data from 22 Mongolian regions during 1993-1998. The analyses confirm the key role of monetary policy in stabilization and reveal that even in a transition economy as rudimentary as Mongolia, a stable money demand and a predictable relationship between inflation and monetary variables do exist. Hence market-based monetary policy is effective. In addition, the analysis points to a difference between transition and industrial economies in the elasticity of money demand with respect to activity, reflecting the larger role for transactions demand for money.

Smallhout, James

TI Mutual Funds and Institutional Investments: What is the Most Efficient Way to Set Up Individual Accounts in a Social Security System? **AU** James, Estelle; Ferrier, Gary; Smallhout, James; Vittas, Dimitri.

Smith Ring, Peter

TI Formation Process of R&D Consortia: Which Path to Take? Where Does it Lead? **AU** Doz, Yves L.; Olk, Paul M.; Smith Ring, Peter.

Smith, Howard

PD April 2000. **TI** Entry and Exit in Grocery Retailing: Local Pre-Emption and Social Efficiency. **AA** University of Oxford. **SR** Oxford Department of Economics Discussion Paper: 07; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. **PG** 27. **PR** no charge. **JE** L11, L13, L81. **KW** Concentration. Entry. Retailing. Differentiated Products. Multi-Product Firms. Pre-Emption. Environmental Planning.

AB This paper develops an asymmetric price setting oligopoly model of store opening and closure decisions in the UK supermarket industry which is estimated using a survey of consumer choices and a dataset of store characteristics. The model is used to examine the strategic local entry and exit behavior of the firms and the social efficiency of store numbers and store characteristics. It is found that firms use store openings to pre-empt rival competition and there is a degree of local clustering. A welfare analysis of store characteristics and store numbers shows that most existing stores and some hypothetical extra stores are welfare enhancing at the margin. Location is not optimal but location inefficiencies are small and firms have incentives to relocate in socially preferred directions. Recent trends in store characteristics -- larger stores and more stores openings by large firms -- are welfare improving.

PD January 1997. **TI** Competition in Retailing: One Stop Shopping. **AU** Smith, Howard; Hay, Donald. **AA** University of Oxford. **SR** Oxford Applied Economics Discussion Paper: 189; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. **PG** 49. **PR** 2 pounds (US \$4.00). **JE** L13, L41, L81. **KW** Product Lines. One Stop Shopping. Retailing.

AB Competition between shopping centers, whether supermarkets or streets, is explored in a model in which the consumers' choice of center is determined by the range of products on offer, the price vector, and other unobserved center characteristics. Supermarkets set lower prices than streets but may set a higher or lower level of product variety. Supermarkets are less profitable than streets and supermarket operation reduces the number of shopping centers. The number of varieties and products in supermarket or street equilibrium is lower than the social optimum while there may be too many or too few centers in free market equilibrium.

Smith, N. Craig

TI Social Contracts and Marketing Ethics. **AU** Dunfee, Thomas W.; Smith, N. Craig; Ross, William T., Jr..

Smuck, Steven

TI Expansion Options: Strategic Opportunities Created By Research Projects at BestPharma. **AU** Loch, Christoph H.; Bode-Greuel, Kerstin; Smuck, Steven.

Soberman, David A.

TI Product-Mix Information Markets. **AU** Iyer, Ganesh; Soberman, David A.

PD 1999. **TI** Product Warranties and Double Adverse Selection. **AA** INSEAD. **SR** INSEAD Working Paper: 99/01/MKT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 26. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** D82, D83. **KW** Extended Warranty. Signaling. Screening. Unobservable Quality. Adverse Selection. Price Discrimination. Contract Menu.

AB A frequently cited role for warranty policy is to facilitate price discrimination when consumer-types are unobservable. A second role for warranties is to signal product quality to consumers when quality is not observable prior to buying. A warranty must play both of these roles when buyers cannot

observe product quality and sellers cannot identify buyers who have heterogeneous valuations for the product. This study develops a model that examines optimal warranty policy. Specifically, the seller chooses a base price and warranty and the duration and pricing for optional extended coverage. The objective is to understand how sellers set warranty menus to maximize profit when the only potential signals of quality to buyers are the prices and warranty lengths. The main results are first, a seller of premium quality can use a warranty menu to signal premium quality and price discriminate simultaneously under most conditions. When the incremental benefit of premium quality to buyers is high, the warranty menu cannot play both roles simultaneously. When the incremental benefit associated with premium quality is above a certain level, a seller of premium quality will alter the menu in order to simultaneously maximize his profit and deter sellers of standard quality from mimicking.

TI Good Marketing to "Bad Consumers": Outlet Malls, Gray Markets, and Warehouse Sales. **AU** Coughlan, Anne T.; Soberman, David A.

TI Innovators in Electronic Markets: Suppliers or Middlemen. **AU** Iyer, Ganesh; Soberman, David A.

PD March 1999. **TI** Joint Research and Development: The Lure of Dominance. **AA** INSEAD. **SR** INSEAD Working Paper: 99/18/MKT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 23. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** L11, O31, O32. **KW** Joint R&D. Threat of Entry. Process Innovation. Barriers to Entry. Strategic Cooperation. Cournot Competition.

AB This paper examines how the tendency of incumbent firms in an industry to jointly pursue R&D projects is affected by the potential entry of a new competitor. We restrict our attention to R&D that can reduce the marginal cost of producing a product or service and base our analysis on a game theoretic model with two symmetric incumbent firms who decide whether to pursue an R&D project jointly or independently. After the completion of the R&D efforts, an entrant makes a decision whether or not to enter a market characterized by quantity competition. In the case of non-drastic innovations, the imminent entry of a new competitor causes incumbents to increase their tendency to cooperate. Surprisingly however, when R&D has the potential to keep a new competitor out of the market, the tendency of incumbents to form joint ventures is relatively unaffected. Two forces affect the incentives of incumbent firms: The "lure of dominance", reflects the attractiveness of an innovation due to its ability to provide substantial profits to a sole owner; while the "need to share costs" is important when incumbents perceive the ultimate market outcome to be relatively unaffected by R&D policy.

PD July 1999. **TI** Market Prices and Modern Retailing. **AU** Soberman, David A.; Parker, Philip M. **AA** INSEAD. **SR** INSEAD Working Paper: 99/39/MKT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 22. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M31, M37. **KW** Retail Prices. Private Labels.

AB Empirical research has found that retail prices do not

necessarily fall with the introduction of private label brands that today represent some 18% of all retail products sold. In this paper, we show that equilibrium exists whereby national brands engage in heavy advertising and retailers introduce private label brands to better serve their customers. We focus our analysis on a specific type of private label brand, a quality-equivalent private label supplied by the national brand manufacturer. Our analysis suggests that in these conditions, quality-equivalent private label will often lead to higher average prices for consumers and higher profits for retailers and manufacturers.

TI Good Marketing to "Bad Consumers": Outlet Malls, Gray Markets and Warehouse Sales. **AU** Coughlan, Anne T.; Soberman, David A.

TI Markets for Product Modification Information. **AU** Iyer, Ganesh; Soberman, David A.

Song, Lina

TI Chinese Peasant Choices: Farming, Rural Industry or Migration. **AU** Knight, John; Song, Lina.

TI Chinese Rural Migrants in Urban Enterprises: Three Perspectives. **AU** Knight, John; Song, Lina; Huaibin, Jia.

Sorsa, Piritta

TI Trade Policy in Financial Services. **AU** Tamirisa, Natalia; Sorsa, Piritta; Bannister, Geoffrey; McDonald, Bradley; Wiecek, Jaroslaw.

Spilimbergo, Antonio

TI Does Border Enforcement Protect U.S. Workers from Illegal Immigration? **AU** Hanson, Gordon H.; Robertson, Raymond; Spilimbergo, Antonio.

Sriram, Subramanian S.

PD December 1999. **TI** Demand for M2 in an Emerging-Market Economy: An Error-Correction Model for Malaysia. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/173; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 43. **PR** not available. **JE** E41, E44, G21. **KW** Asia. Malaysia. Financial System. Money Demand. Cointegration. Error-Correction.

AB This paper analyses demand for M2 in Malaysia from August 1973 to December 1995 under both the closed- and open-economy framework. Based on the cointegration and weak exogeneity test results, short-run dynamic error-correction models are specified and estimated. Both the long- and short-run models are well-specified and are fairly stable. The long-run income elasticity is close to one with the opportunity cost variables carrying the expected signs. The external events have influence on the stability.

Stacchetti, Ennio

TI Sequential Equilibria in a Ramsey Tax Model. **AU** Phelan, Christopher; Stacchetti, Ennio.

Stambaugh, Robert F.

PD May 1999. **TI** Predictive Regressions. **AA** University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 240; National Bureau of Economic

Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** C11, C32, G11. **KW** Portfolio Choice. Bayesian Distribution.

AB When a rate of return is regressed on a lagged stochastic regressor, such as a dividend yield, the regression disturbance is correlated with the regressor's innovation. The OLS estimator's finite-sample properties, derived here, can depart substantially from the standard regression setting. Bayesian posterior distributions for the regression parameters are obtained under specifications that differ with respect to (i) prior beliefs about the autocorrelation of the regressor and (ii) whether the initial observation of the regressor is specified as fixed or stochastic. The posteriors differ across such specifications, and asset allocations in the presence of estimation risk exhibit sensitivity to those differences.

Stark, Oded

PD May 1998. **TI** Equal Bequests and Parental Altruism: Compatibility or Orthogonality? **AA** University of Oslo. **SR** Institute for Advanced Studies (IHS) Economics Series Working Paper: 54; Institute for Advanced Studies, Stumpergasse 56, A-1060 Vienna, Austria. Website: www.ihs.ac.at/Library/libhome.html. **PG** 7. **PR** ATS 80.00 Individuals; ATS 250.00 Institutions. **JE** D31, D63, D64. **KW** Parental Altruism. Equal Bequests.

AB The large amount of equal division of bequests by parents who otherwise would have compensated the earning differences among their children is attributed to the cost associated with unequal bequests. This paper identifies a source of this cost and explains why equal bequests to children whose earnings differ, and parental altruism toward these children, are not mutually exclusive.

PD June 1998. **TI** Human Capital Depletion, Human Capital Formation, and Migration: A Blessing in a "Curse"? **AU** Stark, Oded; Helmenstein, Christian; Prskawetz, Alexia. **AA** Stark: University of Oslo. Helmenstein: Institute for Advanced Studies. Prskawetz: Institute for Demography, Austrian Academy of Sciences. **SR** Institute for Advanced Studies (IHS) Economics Series Working Paper: 55; Institute for Advanced Studies, Stumpergasse 56, A-1060 Vienna, Austria. Website: www.ihs.ac.at/Library/libhome.html. **PG** 7. **PR** ATS 80.00 Individuals; ATS 250.00 Institutions. **JE** F22, J24. **KW** Human Capital Formation. Migration.

AB We specify conditions under which a strictly positive probability of employment in a foreign country raises the level of human capital formed by optimizing workers in the home country. While some workers migrate, "taking along" more human capital than if they had migrated without factoring in the possibility of migration (a form of brain drain), other workers stay at home with more human capital than they would have formed in the absence of the possibility of migration (a form of brain gain).

Stavins, Robert N.

TI How Do Economists Really Think About the Environment. **AU** Fullerton, Don; Stavins, Robert N.

PD March 1998. **TI** Market-Based Environmental Policies. **AA** Harvard University and Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/26; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 36.

PR Foreign: \$15.00 Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** K32, Q28. **KW** Market-Based Instruments. Pigovian Taxes. Tradable Permits. Deposit- Refund Systems.

AB Some eighty years ago, economists first proposed the use of corrective taxes to internalize environmental and other externalities. Fifty years later, the portfolio of potential economic-incentive instruments was expanded to include quantity-based mechanisms -- tradable permits. Thus, economic-incentive approaches to environmental protection are clearly not a new policy idea, and over the past two decades, they have held varying degrees of prominence in environmental policy discussions. This paper summarizes U.S. experiences with such market-based policy instruments, including: pollution charges; deposit- refund systems; tradable permits; market barrier reductions; and government subsidy reductions. No particular form of government intervention, no individual policy instrument -- whether market-based or conventional -- is appropriate for all environmental problems. Which instrument is best in any given situation depends upon a variety of characteristics of the environmental problem, and the social, political, and economic context in which it is being regulated. There is no policy panacea. Indeed, the real challenge for bureaucrats, elected officials, and other participants in the environmental policy process comes in analyzing and then selecting the best instrument for each situation that arises.

Steckel, Richard H.

TI Tallest in the World: Native American of the Great Plains in the Nineteenth Century. **AU** Prince, Joseph M.; Steckel, Richard H.

PD August 1999. **TI** Industrialization and Health in Historical Perspective. **AA** Ohio State University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 118; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** I12, N30. **KW** Health. Industrialization. Urbanization.

AB This essay discusses recent progress that has been made in understanding the connection between health and industrialization in 8 developed countries. Because earlier efforts have been stymied by lack of reliable measures of mortality, the most recent work utilizes average height obtained from military records. Average heights measure a population's history of net nutrition during the growing years. Based on this measure, health improved uniformly during industrialization in Sweden, but it actually declined for several decades in two countries and generally improved with interruptions in others. Health was inversely correlated with the degree of urbanization across countries and rising urbanization led to health deterioration, especially in England, Australia, and Japan. Public health policy, diets, and business cycles were also important for health during industrialization.

Steiner, Peter

TI Evaluating Theories of the Income Dynamics: A Probabilistic Approach. **AU** Aebi, Robert; Neusser, Klaus; Steiner, Peter.

Stevens, Ann Huff

TI Job Loss and Retirement Behavior of Older Men.

AU Chan, Sewin; Stevens, Ann Huff.

Stith, Kate

TI Measuring Inter-Judge Sentencing Disparity Before and After the Federal Sentencing Guidelines. **AU** Anderson, James M.; Kling, Jeffrey R.; Stith, Kate.

Stocken, Phillip

TI An Analysis of Stock Recommendations. **AU** Morgan, John; Stocken, Phillip.

Stoker, Thomas

TI Interpreting Movements in Aggregate Wages: The Role of Labor Market Participation. **AU** Blundell, Richard; Reed, Howard; Stoker, Thomas.

Stone, Mark R.

PD October 1998. **TI** Corporate Debt Restructuring in East Asia: Some Lessons from International Experience. **AA** International Monetary Fund. **SR** International Monetary Fund Papers on Policy Analysis and Assessment: PPAA/98/13; International Monetary Fund, Washington, DC 20431. Website: www.imf.org. **PG** 24. **PR** not available. **JE** G32, G34. **KW** East Asia. Corporate Debt. Corporate Restructuring.

AB This paper summarizes some lessons international experience for corporate debt restructuring in East Asia. Basic principles of debt restructuring are described, the experiences of Mexico, Chile, the United Kingdom, Hungary, and Poland are examined, and general lessons are drawn. The approaches currently being adopted in Indonesia, Korea, Malaysia and Thailand are then reviewed in the context of these lessons.

Stout, Suzanne K.

TI Institutional Influences on Market Behavior: Diversification in Indonesian Leasing. **AU** McKendrick, David; Stout, Suzanne K.

TI Status Competition and Performance in Work Groups. **AU** Loch, Christoph H.; Stout, Suzanne K.; Huberman, Bernardo A.

TI Status Competition and Performance in Work Groups. **AU** Loch, Christoph H.; Huberman, Bernardo A.; Stout, Suzanne K.

Swagel, Phillip

TI Tax Burden and Migration. **AU** Razin, Assaf; Sadka, Efraim; Swagel, Phillip.

Sztulman, Aude

TI Le marche du travail britannique vu de France. **AU** Fouquin, Michel; Jean, Sebastien; Sztulman, Aude.

Tamirisa, Natalia

PD February 2000. **TI** Trade Policy in Financial Services. **AU** Tamirisa, Natalia; Sorsa, Piritta; Bannister, Geoffrey; McDonald, Bradley; Wiczorek, Jaroslaw. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/31; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 26. **PR** not available. **JE** F13, F23, G18. **KW** Financial Services. Capital Account. Trade. GATS.

AB This paper reviews the economics of trade policy in financial services, highlighting differences between trade across borders and through commercial presence. Trade liberalization could complement other financial reforms by enhancing the efficiency, quality, and variety of financial services and by *encouraging improvement of financial regulations and practices*. However, it raises sectoral, strategic, and cultural concerns. The design of trade policy should therefore emphasize the nexus with the macroeconomic framework and other financial sector policies, especially prudential and capital account regulations. It should also differentiate between types of trade. National reforms should be coordinated with multilateral trade agreements and initiatives on international financial architecture.

Tanzi, Vito

PD January 2000. **TI** Globalization and the Future of Social Protection. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/12; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 20. **PR** not available. **JE** F39, F41, H11, H26, H53, I18, O23. **KW** Globalization. Welfare State. Tax Expenditure. Regulations. Taxes. Public Spending. Social Expenditure.

AB Social protection in industrial countries has been provided through regulations, tax expenditures, and public spending. This paper argues that globalization will affect governments' ability to continue providing this social protection at the level of recent decades. Specifically, tax competition among jurisdictions, ballooning electronic commerce, and increased mobility of the factors of production will likely cause significant falls in tax revenue in future years. The paper concludes that the welfare states need to look for alternative ways to provide social protection.

Tauras, John A.

PD February 1999. **TI** Price, Clean Indoor Air Laws, and Cigarette Smoking: Evidence from Longitudinal Data for Young Adults. **AU** Tauras, John A.; Chaloupka, Frank J. **AA** Tauras: University of Michigan and National Bureau of Economic Research. Chaloupka: University of Illinois and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 6937; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** I12, I18. **KW** Youth Smoking. Young Adults. Fixed Effects. Cigarette Prices.

AB The upward trend in cigarette smoking among teenagers throughout the 1990's has spurred a great deal of interest on how to discourage young people from smoking. This paper contributes to the policy debate by providing evidence on the effects cigarette prices and restrictions on smoking in public places and private worksites have on the use of cigarettes by young adults. Data on cigarette use are taken from the 1976 through 1993 surveys of high school seniors as part of the Monitoring the Future program. Seven follow-ups are conducted on each senior class and therefore each individual is sampled up to eight times. Site-specific data on cigarette prices and clean indoor air laws are added to the survey data. Individual fixed effects methods are used to estimate smoking participation and conditional demand equations. The results indicate that increases in cigarette prices would lead to significant reductions in both the number of people smoking

and the frequency with which individuals smoke. The estimated overall average price elasticity of demand is -0.791. In addition, restrictions on smoking in public places and private worksites are found to be effective in reducing both the intensity and the propensity to smoke.

Temin, Peter

PD December 1998. **TI** The Stability of the American Business Elite. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 110; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** J15, J16, J21, J71, J78. **KW** Discrimination. Business Management.

AB This paper begins the task of explaining why the American business elite has remained white, male and mostly native-born Protestants for a century, as verified in a previous paper (Temin, 1997). I argue that the evidence is inconsistent with the hypotheses that the stability is due to discrimination on the job or to principal-agent factors. The most likely explanation is that this demographic group makes the best business managers. I suggest that this in turn is not because they are inherently superior, but because they have had access to superior education, a result of past discrimination.

PD February 1999. **TI** The Industrialization of New England, 1830-1880. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 114; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** N31, N61. **KW** New England. Manufacturing.

AB This paper surveys the economy of New England in the half-century following 1830. It begins by discussing reasons why manufacturing grew in the United States and especially in New England. The paper surveys the outputs of New England industry, particularly machine tools and textiles. It then discusses the inputs to industry. Women formed an important part of the New England labor force; the histories of Boston and Lowell illustrate the increasing urbanization of the labor force. Capital for industry was raised both through formal credit instruments (for large enterprises) and through local banks (for smaller ones).

Templeton, Scott R.

PD May 1999. **TI** An Analysis of the Horticultural Economy in California. **AU** Templeton, Scott R.; Brown, Cheryl; Goldman, George E.; Yoo, Seung Jick; Pradhan, Vijay S. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics and Policy (CUDARE) Working Paper: 883; Giannini Foundation of Agricultural Economics Library, 248 Giannini Hall, #3310, University of California, Berkeley, Berkeley CA 94720-3310. Website: agecon.lib.umn.edu/ucb.html. **PG** 30. **PR** \$7.50 Domestic; \$15.00 International Surface Rate. **JE** Q10, Q24, R12, R14, R15. **KW** Environmental Horticulture. Landscaping Services. Regional Economics. Spatial Impacts. Turfgrass Industry.

AB Californians spent \$8.5 billion on environmental

horticulture and generated \$10.1 billion of horticultural sales in 1995. These sales directly supported 129,000 jobs. These estimates cover both market and in-house activities. Horticultural landscapes covered almost 1.37 million acres in the state. Expenditures per acre, which range from \$927 for vegetation under electrical power lines to \$11,718 for arboreta and botanical gardens, tend to increase as the importance of plant variety and quality in the landscape for the associated consumption activity increases. California farmers had \$1.8 billion and \$20.3 billion in sales, respectively, from horticultural and agricultural crop production in 1995. Forecasts of nominal horticultural expenditures and sales in 1998 are \$9.8 billion and \$11.5 billion, respectively. Information on the estimated size of the industry and its breakdown by landscape type can help businesses to develop marketing strategies and new products. Policy makers can use results of this study to estimate water and chemical use by landscape type and justify more budgetary support for education, extension, research, and regulation that address important issues related to this growing industry.

Terwiesch, Christian

TI Selecting R&D Projects at BMW: A Case Study of Adopting Mathematical Programming Models. **AU** Loch, Christoph H.; Pich, Michael T.; Terwiesch, Christian; Urbschat, Michael.

TI Selecting R&D Projects at BMW: A Case Study of Adopting Mathematical Programming Models. **AU** Loch, Christoph H.; Pich, Michael T.; Terwiesch, Christian; Urbschat, Michael.

TI Parallel and Sequential Testing of Design Alternatives. **AU** Loch, Christoph H.; Terwiesch, Christian; Thomke, Stefan.

Thierry, Paul

TI Adjustment Costs and General Equilibrium Effects in Transitional Economies. **AU** Karp, Larry; Thierry, Paul.

Thomas, Duncan

TI Early Test Scores, Socioeconomic Status and Future Outcomes. **AU** Currie, Janet; Thomas, Duncan.

Thomke, Stefan

TI Parallel and Sequential Testing of Design Alternatives. **AU** Loch, Christoph H.; Terwiesch, Christian; Thomke, Stefan.

Toktay, L. Beril

PD April 1999. **TI** Analysis of a Forecasting-Production-Inventory System with Stationary Demand. **AU** Toktay, L. Beril; Wein, Lawrence M. **AA** Toktay: INSEAD. Wein: Massachusetts Institute of Technology. **SR** INSEAD Working Paper: 99/23/TM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 19. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** C61, E22, M11. **KW** Inventories. Stationary Demand. Inventory Holding Costs. Backorder Costs.

AB We consider a production stage that produces a single item in a make-to-stock manner. Demand for finished goods is stationary. In each time period, an updated vector of demand

forecasts over the forecast horizon becomes available for use in production decisions. We model the sequence of forecast update vectors using the Martingale Model of Forecast Evolution developed by Graves et al. (1986, 1998) and Heath and Jackson (1994). The production stage is modeled as a single-server discrete-time continuous-state queue. We focus on the stationary version of a class of policies that is shown to be optimal in the finite time horizon, deterministic-capacity case, and use an approximate analysis rooted in heavy traffic theory and random walk theory to obtain a closed-form expression for the (forecast-corrected) base-stock level that minimizes the expected steady-state inventory holding and backorder costs. This expression, which is shown to be accurate under certain conditions in a simulation study, sheds some light on the interrelationships among safety stock, stochastic correlated demand, inaccurate forecasts, and random and capacitated production in forecasting-production-inventory systems.

Toole, Andrew A.

TI Is Public R&D a Complement or Substitute for Private R&D? A Review of the Econometric Evidence. **AU** David, Paul A.; Hall, Bronwyn H.; Toole, Andrew A.

Tornell, Aaron

TI Why Aren't Savings Rates in Latin America Procyclical? **AU** Lane, Philip R.; Tornell, Aaron.

TI The Role of Bank Restructuring in Recovering from Crisis: Mexico 1995-98. **AU** Krueger, Anne; Tornell, Aaron.

Traca, Daniel A.

PD February 1999. **TI** Import-Competition, Market Power and the Infant-Industry Argument. **AA** INSEAD. **SR** INSEAD Working Paper: 99/33/EPS; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 24. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** F13, F43. **KW** Import-Competition. Infant-Industry. R&D.

AB This paper addresses the impact of import-competition on the investment in R&D of a domestic monopolist, in a developing country, that competes with technologically advanced world producers. For an infant-industry, with a high productivity gap, the monopolist chooses to concede, whereas for mature industries, with a low productivity gap, import-competition stimulates productivity growth. Temporary protection sways an infant-industry to fight and catch-up, and is welfare increasing, - due to the distortion from the firm's market power. In the long-run, free-trade is the optimal policy. Hence we integrate the 'old' argument for the temporary protection of infant-industries, with the notion that import-competition fosters innovation and productivity.

PD April 1999. **TI** Globalization, Wage Volatility and the Welfare of Workers. **AA** INSEAD. **SR** INSEAD Working Paper: 99/26/EPS; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 23. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** D33, F16. **KW** Income Distribution. Trade and Wages. Wage Volatility. Globalization.

AB We address the impact of globalization on the volatility of factor returns, when volatility arises from domestic, sector-

specific productivity shocks. We show that, because factor returns in tradables are more volatile than in non-tradables, an increase in the terms-of-trade may reduce wages and the welfare of workers. We analyze also the impact of protectionism on the income and welfare of capitalists and workers.

PD September 1999. **TI** Globalization, Labor Mobility and the Wage Skill Gap. **AA** INSEAD. **SR** INSEAD Working Paper: 99/56/EPS; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 16. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** D33, F16. **KW** Wage-Skill Gap. Trade and Wages. Wage Volatility. Globalization.

AB This paper analyzes the labor market effects of globalization, defined as the expansion in openness that follows an increase in the terms-of-trade, in the presence of a non-tradable sector and uncertainty. The results show an increase in the wage skill gap, a decline in the real wage and welfare of unskilled workers, and an expansion of inter-sectoral labor mobility and wage volatility. These results accord with stylized facts and, remarkably, are robust to the empirical evidence usually presented to dismiss the role of international trade. The model assumes that labor demand uncertainty arises from industry-specific productivity shocks, and that the costs of inter-sectoral mobility are lower for skilled workers.

Train, Kenneth

TI On the Similarity of Classical and Bayesian Estimates of Individual Mean Partworths. **AU** Huber, Joel; Train, Kenneth.

Trajtenberg, Manuel

PD February 2000. **TI** R&D Policy in Israel: An Overview and Reassessment. **AA** Tel-Aviv University, NBER and CIAR. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 00/07; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. Website: <http://econ.tau.ac.il>. **PG** 54. **PR** no charge. **JE** H89, O31, O32, O33. **KW** R&D Policy. High-Tech. Innovation.

AB This paper examines R&D policy in Israel, and suggests possible changes to it. In Part I we review the programs of the Office of the Chief Scientist (OCS) of the Ministry of Industry and Trade. We present quantitative indicators of OCS activities over time; review econometric studies on the impact of the OCS; and provide an overview of the rise of the High-Tech sector in Israel with the aid patent data. In Part II we examine outstanding policy issues and put forward suggestions for reforms. This includes a discussion of allocation schemes and an examination of departures from the principle of "neutrality". A range of related issues are examined. Lastly, we tackle the issue of how much should the Israeli economy invest in R&D, and what does such a target imply in terms of Government support. Clearly, these policy issues are of relevance not just for Israel but for any economy contemplating active government involvement in R&D.

Tranaes, Torben

TI Efficient Competition With Small Numbers - With Applications to Privatisation and Mergers. **AU** Krishna,

Kala; Tranaes, Torben.

Triantis, George

TI Stock Pyramids, Cross-Ownership, and the Dual Class Equity: The Creation and Agency Costs of Separating Control From Cash Flow Rights. **AU** Bebchuk, Lucian Arye; Kraakman, Reinier; Triantis, George.

Tseng, Chung-Li

PD February 1997. **TI** Solving Unit Commitment by a Unit Decommitment Method. **AU** Tseng, Chung-Li; Li, Chao-an; Shmuel, S. Oren. **AA** Tseng: Edison Source. Li: Pacific Gas & Electric Company. Shmuel: University of California, Berkeley. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 79; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. **PG** 19. **PR** no charge. **JE** C10. **KW** Unit Commitment. Unit Decommitment.

AB In this paper, we present an efficient and robust method for solving unit commitment problem using a unit decommitment method.

Tsiddon, Daniel

TI Born to be Unemployed: Unemployment and Wages Over the Business Cycle. **AU** Rubenstein, Yona; Tsiddon, Daniel.

Ubide, Angel

TI Global Equilibrium Exchange Rates: Euro, Dollar, "Ins," "Outs," and Other Major Currencies in a Panel Cointegration Framework. **AU** Alberola, Enrique; Cervero, Susana G.; Lopez, Humberto; Ubide, Angel.

Ueda, Kenichi

TI Income Distribution, Informal Safety Nets, and Social Expenditures in Uganda. **AU** McDonald, Calvin; Schiller, Christian; Ueda, Kenichi.

Ulku, Sezer

TI Multi-Dimensional Status Competition and Group Performance. **AU** Loch, Christoph H.; Huberman, Bernardo A.; Ulku, Sezer.

Uppal, Raman

TI Efficient Intertemporal Allocations with Recursive Utility. **AU** Dumas, Bernard; Uppal, Raman; Wang, Tan.

Uribe, Martin

TI The Business Cycles of Balance-of-Payments Crises: A Revision of a Mundellian Framework. **AU** Mendoza, Enrique G.; Uribe, Martin.

Urquiola, Miguel

PD April 1999. **TI** Demand Matters: School District Concentration, Composition, and Educational Expenditure. **AA** UC Berkeley. **SR** University of California, Berkeley, The Center for Labor Economics Working Paper: 14; The Center for Labor Economics, University of California, Department of Economics, 549 Evans Hall, #3880, Berkeley, CA 94720-3380. Website: violet.berkeley.edu/~tir/cle/index.html. **PG** 49. **PR** no

charge. **JE** H11, H42, I22. **KW** Tiebout. Local Public Economics. Educational Finance.

AB Whether inter-jurisdictional competition improves governments' efficiency is an enduring question in Local Public Economics. Competing literatures have drawn on Tiebout's framework to support their respective claims that decentralization and centralization lower expenditures without sacrificing quality. These literatures disagree because they emphasize different aspects of a Tiebout system: competition, on the one hand, and the effects of stratification on demand patterns, on the other. The endogeneity of district formation makes it difficult to test their claims. To address these issues, this paper notes that metropolitan areas in fact contain two educational markets, one at the primary and one at the secondary level. Because in many cases different numbers of districts operate at each level, it is possible to identify the effects of concentration using differences in district availability between levels, within areas. This approach introduces significant controls for unobserved heterogeneity. Additionally, it requires the use of educational level-specific data, which allows controls for systematic between-level differences that previous work ignored. The results suggest district availability does lead to Tiebout-style segregation, making relevant the mechanisms emphasized by the School Finance Reform literature. Their presence may explain why greater district availability is also found to be associated with greater average expenditure.

Van Der Laan, Erwin

PD January 1999. **TI** Inventory Control in Hybrid Systems with Remanufacturing. **AU** Van Der Laan, Erwin; Salomon, Marc; Dekker, Rommert; Van Wassenhove, Luk. **AA** Van Der Laan and Dekker: Erasmus University. Salomon: Tilburg University. Wassenhove: INSEAD. **SR** INSEAD Working Paper: 99/11/TM/CIMSO7; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. **Website:** www.insead.fr/research. **PG** 25. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** E22, M11. **KW** Production Planning. Inventory Control. Manufacturing. Remanufacturing. Re-Order Point Models. Computational Experiments.

AB This paper is on production planning and inventory control in systems where manufacturing and remanufacturing operations occur simultaneously. Typical for these hybrid systems is, that both the output of the manufacturing process and the output of the remanufacturing process can be used to fulfill customer demands. Here, we consider a relatively simple hybrid system, related to a single component durable product. For this system, we present a methodology to analyze a PUSH control strategy (in which all returned products are remanufactured as early as possible) and a PULL control strategy (in which all returned products are remanufactured as late as convenient). The main contributions of this paper are (i) to compare traditional systems without remanufacturing to PUSH and to PULL controlled systems with remanufacturing, and (ii) to derive managerial insights into the inventory related effects of remanufacturing.

van Elkan, Rachel

TI Exchange Rate Regimes in Selected Advanced Transition Economies -- Coping with Transition, Capital Inflows, and EU Accession. **AU** Corker, Robert; Beaumont, Craig; van Elkan,

Rachel; Iakova, Dora.

Van Reenen, John

TI Technology and Changes in Skill Structure: Evidence from Seven OECD Countries. **AU** Machin, Stephen; Van Reenen, John.

Van Wassenhove, Luk

TI An Empirical Analysis of Software Production Problems in European Software Units. **AU** Lee, Michael; Dutta, Soumitra; Van Wassenhove, Luk.

Vegh, Carlos A.

TI Inflation Stabilization and BOP Crises in Developing Countries. **AU** Calvo, Guillermo A.; Vegh, Carlos A.

Vermaelen, Theo

TI Open Market Stock Repurchases: The Canadian Experience. **AU** Ikenberry, David; Lakonishok, Josef; Vermaelen, Theo.

Vignoles, Anna

TI **AU** Green, Francis; McIntosh, Steven; Vignoles, Anna.

Vittas, Dimitri

TI Mutual Funds and Institutional Investments: What is the Most Efficient Way to Set Up Individual Accounts in a Social Security System? **AU** James, Estelle; Ferrier, Gary; Smallhout, James; Vittas, Dimitri.

von Weizsacker, Robert K.

TI Risk, Resources, and Education -- Public Versus Private Financing of Higher Education. **AU** Wigger, Berthold U.; von Weizsacker, Robert K.

Walliser, Jan

PD July 1999. **TI** Would Saving U.S. Social Security Raise National Saving? **AA** International Monetary Fund. **SR** International Monetary Fund Policy Discussion Paper: PDP/99/07; International Monetary Fund, Washington, DC 20431. **Website:** www.imf.org. **PG** 21. **PR** not available. **JE** E21, H55. **KW** National Saving. Social Security. United States.

AB Analysts agree that raising national saving is one of the key objectives of social security reform in the United States. Hence, to judge the merits of proposals requires a comparison of saving responses. The paper outlines the difficulties involved in making those comparisons, which arise from the unsustainability of the current social security system and the uncertainty regarding the use of projected budget surpluses. Building on previously developed arguments, it discusses three typical reform plans and also draws some conclusions about the relationship between social security reform and the long-run sustainability of fiscal policy.

Walter, Ingo

PD 1999. **TI** Financial Services Strategies in the Euro-Zone. **AA** INSEAD. **SR** INSEAD Working Paper: 99/10/EPS/FIN; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. **Website:** www.insead.fr/research. **PG** 36. **PR** no charge up to five copies; after five copies 18FF per working paper plus

postage and VAT. **JE** F33, G20, G38, O52. **KW** Financial Intermediation. Europe. Institutional Microstructure.

AB The launching of the euro at the beginning of 1999 will accelerate the reconfiguration of the financial intermediation process in Europe -- a process that is already well underway -- with dramatic consequences for commercial banking, investment banking, insurance and asset management functions. Banks, insurance companies and other financial intermediaries face strategic choices, to be weighed with great care. This paper begins with a series of suppositions -- essentially maximum-likelihood state-variables relating to financial system conditions in the euro-zone, assuming a five-year time horizon. These suppositions set the framework for a discussion of strategic positioning and implementation on the part of financial services firms expecting to compete successfully in the euro-zone. We focus on the institutional microstructure of the financial intermediation process and the determinants of competitive performance. This is followed by an assessment of strategic options facing financial firms in the euro-zone, and alternative institutional outcomes from the perspective of efficiency and stability of the euro-zone financial system. Where appropriate, comparisons are drawn with the U.S. financial system, which has operated under a single currency and since 1865. The final section of the paper provides some strategy and policy indications for the future.

Wang, Tan

TI Efficient Intertemporal Allocations with Recursive Utility. **AU** Dumas, Bernard; Uppal, Raman; Wang, Tan.

Warner, Kenneth E.

TI The Economics of Smoking. **AU** Chaloupka, Frank J.; Warner, Kenneth E.

Warshawsky, Mark J.

TI The Costs of Annuitizing Retirement Payouts from Individual Accounts. **AU** Poterba, James M.; Warshawsky, Mark J.

Watson, Joel

TI Starting Small in an Unfamiliar Environment. **AU** Rauch, James E.; Watson, Joel.

TI Liquidity Flows and Fragility of Business Enterprises. **AU** den Haan, Wouter J.; Ramey, Garey; Watson, Joel.

Wei, Shang-Jin

PD March 1999. **TI** The Big Players in the Foreign Exchange Market: Do They Trade on Information or Noise? **AU** Wei, Shang-Jin; Kim, Jungshik. **AA** Wei: Center for International Development at Harvard University and John F. Kennedy School of Government. Kim: John F. Kennedy School of Government. **SR** Harvard Center for International Development (CID) Working Paper: 5; Center for International Development; John Gallup, Editor; 79 John F. Kennedy Street, Cambridge, MA 02138. **Website:** www.cid.harvard.edu/cidworkingpapers/cid_workingpapers.htm. **PG** 25. **PR** paper copies \$7.50 up to 80 pages long; \$12.00 for 80 pages long and longer. **JE** F31, F33. **KW** Exchange Rate. Asymmetric Information. Noise Trading.

AB This paper studies whether there exists private information in the foreign exchange market, and whether speculation reduces or exacerbates volatility. It makes use of a

recent data set on foreign currency positions by large market participants that include positions on options and other derivatives. This is the first data set that describes comprehensive currency positions of market participants. There are two main findings. First, not only the absolute value of the options position but also that of spot, forward and futures positions by large participants Granger-causes exchange rate volatility. This suggests that the large participants' currency speculation does not stabilize exchange rate volatility. Second, regression analyses do not find any positive association between large participants' position in a foreign currency with its subsequent appreciation. A non-parametric approach finds some weak support for a positive association but not on a systematic level. This casts into doubt the view that large participants have better information about the future movement of exchange rates. It further strengthens the case that the large players trade on noise rather than on information.

TI Foreign Portfolio Investors Before and During a Crisis. **AU** Kim, Woochan; Wei, Shang-Jin.

Wein, Lawrence M.

TI Analysis of a Forecasting-Production-Inventory System with Stationary Demand. **AU** Toktay, L. Beril; Wein, Lawrence M.

Weiss, Andrew

PD March 1998. **TI** The Fair Tax: A Tax Proposal to Smooth Business Cycles, Encourage Investment and Remove Biases Against Small Firms. **AA** Boston University. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 87; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. **Website:** econ.bu.edu/ISP/. **PG** 22. **PR** no charge. **JE** E32, H21, H25. **KW** Business Cycles. Tax Policy. Stabilization Policy. Corporate Profit Tax. Tax Biases.

AB Proposal: Treat profits and losses symmetrically so that the taxing authority shares in losses in the same proportion as it shares in profits. Just as companies making profits pay a share of those profits in taxes, companies making losses would receive a subsidy or negative tax from the government that would be a similar share of the losses. This proposal will reduce the volatility of the business cycle, eliminate the tax biases against small firms and new ventures, reduce distortions caused by capital imperfections, and encourage risk taking.

Weiss, Yoram

TI An Equilibrium Analysis of Divorce. **AU** Chiappori, Pierre Andre; Weiss, Yoram.

West, Michael

PD November 1999. **TI** The Effectiveness of Top Management Groups in Manufacturing Organisations. **AU** West, Michael; Patterson, Malcolm; Dawson, Jeremy; Nickell, Stephen. **AA** West and Dawson: Aston Business School, Birmingham. Patterson: Institute of Work Psychology, Sheffield. Nickell: London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 436; Centre for Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. **Website:** cep.lse.ac.uk. **PG** 24. **PR** 5 pounds for individual copies; 95 pounds for yearly subscription.

JE J10, J24, L20, L60, M10. **KW** Top Management. Manufacturing. Productivity. Production Management.

AB We test whether demographic characteristics and team processes in top management teams predict the subsequent productivity and profitability of their companies in 42 UK manufacturing organizations. The results suggest that there are independent effects of both demographic characteristics and team processes. Team member mean educational level and team tenure both predict the subsequent productivity and profitability of the companies positively, while age diversity in the team is a negative predictor of company performance. Team processes (clarity of and commitment to objectives, participation, task orientation, and support for innovation) predict (positively) company performance. Only mean educational level, of the demographic variables, also predicts team processes, suggesting that the effects of demographic variables on company performance are not strongly mediated by team processes. The implications of these findings for the composition and development of top management teams are discussed.

West, Sarah

TI Can Taxes on Cars and on Gasoline Mimic an Unavailable Tax on Emissions? **AU** Fullerton, Don; West, Sarah.

Wettstein, David

TI Innovative Activity and Sunk Cost. **AU** Kaplan, Todd R.; Luski, Israel; Wettstein, David.

Weyers, Sonia

PD May 1999. **TI** Convergence to Competitive Equilibria in a Double Auction. **AA** INSEAD. **SR** INSEAD Working Paper: 99/29/EPS; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 50. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** C72, D44. **KW** Double Auction. Competitive Equilibria.

AB I study a double auction modeled as a strategic market game with limit prices based on the limit-price mechanism (Mertens, 1996). I address the classic questions of convergence to competitive equilibria and the existence of no-trade equilibria that are sometimes considered to be pathological. I show that the set of equilibria of this game converges to the set containing competitive equilibria and no-trade, when players are replicated. Moreover, two rounds of iterated deletion of weakly dominated strategies eliminate the no-trade equilibria. Hence replication paired with two rounds of iterated dominance gives a prediction of competitive equilibrium.

Weymark, John A.

TI Social Choice with Independent Subgroup Utility Scales. **AU** Khmel'nitskaya, Anna B.; Weymark, John A.

Wigger, Berthold U.

PD December 1999. **TI** Risk, Resources, and Education -- Public Versus Private Financing of Higher Education. **AU** Wigger, Berthold U.; von Weizsacker, Robert K. **AA** University of Mannheim. **SR** International Monetary Fund Working Paper: WP/99/174; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 19. **PR** not available. **JE** D81, H52,

I22. **KW** Public Education. Tuition Fees. Uncertainty.

AB This paper develops a public education scheme that takes uncertainty aspects of private educational investments explicitly into account. In the author's framework, the social merits of public education schemes are related to the lack of markets in which students can insure against educational risks. A case is made for tuition fees that depend on the expected returns of investments in education. The consideration of uncertainty provides a neglected link between educational choice, resource endowment, and productivity growth, which may serve to redefine the public role of education financing.

Williams, Robert C., III

TI The Cost-Effectiveness of Alternative Instruments for Environmental Protection in a Second-Best Setting. **AU** Goulder, Lawrence H.; Parry, Ian W. H.; Williams, Robert C., III; Burtraw, Dallas.

TI The Cost-Effectiveness of Alternative Instruments for Environmental Protection in a Second-Best Setting. **AU** Goulder, Lawrence H.; Parry, Ian W. H.; Williams, Robert C., III; Burtraw, Dallas.

Williamson, Jeffrey G.

PD February 1999. **TI** The Impact of Globalization on Pre-Industrial, Technologically Quiescent Economics: Real Wages, Relative Factor Prices and Commodity Convergence in the Third World Before 1940. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 115; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** N35, N36. **KW** Third World. Real Wages. Relative Factor Prices.

AB This paper uses a new pre-1940 Third World data base documenting real wages and relative factor prices to explore their determinants. There are three possibilities: external price shocks, factor endowment changes, and technological change. As the paper's title suggests, technological change is an unlikely explanation. The paper lays out an explicit econometric agenda for the future, although more casual empiricism suggests that external price shocks were doing most of the work, and declining-transport-cost-induced commodity price convergence in particular. Real wages in Asia, the Middle East, and Latin America never showed any signs of catching up with the European industrial leaders prior to 1914, but they did hold their own. The ratio of wages to land rents, on the other hand, declined up to World War 1, and so did the ratio of wages to GDP per capita. The trend reversed thereafter. These relative factor price movements help sharpen our understanding of the sources of growth (or lack of it) in Asia and Latin America prior to 1940. They also offer strong hints about changes in income distribution there.

TI Capital Goods Prices, Global Capital Markets and Accumulation: 1870- 1950. **AU** Collins, William J.; Williamson, Jeffrey G.

Willman, Paul

TI The Right To Know: Disclosure of Information for Collective Bargaining and Joint Consultation. **AU** Gospel, Howard; Lockwood, Graeme; Willman, Paul.

Wilson, James D.

PD February 1998. **TI** Default and Inference Options: Use in Recurrent and Ordinary Risk Decisions. **AA** Resources for the Future. **SR** Resources for the Future Discussion Paper: 98/17; Resources for the Future, 1616 P Street, NW, Washington, D.C. 20036. Website: www.rff.org. **PG** 24. **PR** Foreign: \$15.00 Air Mail; \$8.00 Surface Mail. Domestic: \$10.00 First Class; \$6.00 Book Rate. **JE** Q28, Q29. **KW** Risk. Regulation. Decision Making. Default Options. EPA. FDA. Science. Policy. Public Participation. Risk Analysis.

AB How default options should be used in health risk assessment divides the risk analysis profession. Some argue that these should be set by policy ("default option"), others argue that they should be science-based ("inference option"), identified by consensus of the professional community. This paper shows that both positions have validity, and that both are incomplete. We develop a theory that explains why these two different kinds of construct exist, and comment on some of the implications. "Inference options" provide practitioners with consensus theories, models, or parameters that can be used to bridge knowledge gaps in specific analysis. Inference options must be treated as priors in an empirical-Bayesian inference process. "Default options" constitute policy-derived components of particular kinds of decisions, serving as instructions to analysts. Such use is appropriate when many very similar, nontrivial, "recurrent" decisions are to be made by a particular agency. Authority to make these decisions is often delegated to permanent staff members who have the requisite expertise. Policy-based default options exist in part to protect the organization from the risks imposed by delegation. Default options need to be tailored to the policy ends served, which generally means that some or all will be biased.

Winter, Sidney G.

TI From Organizational Routines to Dynamic Capabilities. **AU** Zollo, Maurizio; Winter, Sidney G.

Wolf, Thomas

PD January 2000. **TI** Improving Governance and Fighting Corruption in the Baltic and CIS Countries: The Role of the IMF. **AU** Wolf, Thomas; Gurgun, Ermine. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/01; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 15. **PR** not available. **JE** D72, H11, K42, O17, P51. **KW** Governance. Corruption. Transition. Baltic. CIS. IMF.

AB This paper examines the indirect role the IMF plays in combating corruption in the Baltic and CIS countries by promoting structural reforms that help improve economic governance and thus reduce opportunities for rent-seeking behavior. The analysis draws on examples of actual experience with corruption and outlines some of the structural measures under IMF-supported arrangements, which, if successfully implemented, can be expected to help gradually alleviate corruption. It also summarizes IMF-wide initiatives under way to strengthen public sector transparency and accountability, and highlights the key structural areas likely to receive emphasis in the IMF's future policy advice to countries in the region.

Wolfram, Catherine

TI Prices and Coupons for Breakfast Cereals. **AU** Nevo,

Aviv; Wolfram, Catherine.

Wolinsky, Asher

TI Rationalizable Outcomes of Large Independent Private-Value First-Price Discrete Auctions. **AU** Dekel, Eddie; Wolinsky, Asher.

Woo, David

TI The Japanese Banking Crisis of the 1990s: Sources and Lessons. **AU** Kanaya, Akihiro; Woo, David.

PD March 2000. **TI** Two Approaches to Resolving Nonperforming Assets During Financial Crises. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/33; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 32. **PR** not available. **JE** G28, G38. **KW** Nonperforming Assets. Asset Management. Debt Workout.

AB The unprecedented rise in nonperforming assets during the recent Asian financial crisis severely tested the limit and capacity of the existing asset management infrastructure, leading policymakers to consider new approaches to resolve them. This paper examines two such approaches: the creation of asset management companies and the development of out-of-court centralized corporate debt workout frameworks, that came to define the core asset management setting in countries most seriously affected by the crisis. In addition to investigating their respective role, and evaluating their strengths and weaknesses, this paper seeks to benchmark some best practices in their design.

Xepapadeas, Anastasios

PD August 1999. **TI** Environmental Policy and Firm Behavior: Abatement Investment and Location Decisions under Uncertainty and Irreversibility. **AA** University of Crete. **SR** National Bureau of Economic Research Technical Paper: 243; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** Q25, Q28. **KW** Abatement Investment. Location Decisions.

AB This paper explores abatement investment and location responses to environmental policy, which takes the form of emission taxes or tradable emission permits and subsidies against the costs of abatement investment, under uncertainty and irreversibility. Uncertainty is associated with output price, environmental policy parameters, or technological parameters. Irreversibility is related to abatement expenses and movements to a new location. Uncertainty is modeled by Ito stochastic differential equations, and the problem is analyzed by using optimal stopping methodologies. Continuation intervals during which firms do not engage in abatement investment or relocate and intervals during which firms take the irreversible decision of undertaking abatement expenses or relocating are defined. Free boundaries are characterized for a variety of cases that include output-price uncertainty, policy uncertainty expressed both in terms of continuous fluctuations of permit prices and unpredictable policy changes, and combined policy and technological uncertainty. An optimal environmental policy is defined as the combination of policy parameters that makes the free boundary corresponding to the profit maximization problem coincide with the free boundary corresponding to a social optimization problem.

Yang, Xiaokai

TI Trade Pattern and Economic Development when Endogenous and Exogenous Comparative Advantages Coexist. **AU** Sachs, Jeffrey D.; Yang, Xiaokai; Zhang, Dingsheng.

TI Specialization, Information, and Growth: A Sequential Equilibrium Analysis. **AU** Ng, Yew-Kwang; Yang, Xiaokai.

PD March 1999. **TI** The Division of Labor, Investment, and Capital. **AA** Center for International Development at Harvard University. **SR** Harvard Center for International Development (CID) Working Paper: 8; Center for International Development; John Gallup, Editor; 79 John F. Kennedy Street, Cambridge, MA 02138. **Website:**

www.cid.harvard.edu/cidworkingpapers/cid_workingpapers.htm. **PG** 22. **PR** paper copies \$7.50 up to 80 pages long; \$12.00 for 80 pages long and longer. **JE** D23, D51, D91, D92, O12. **KW** Investment Fundamentalism. Technology Fundamentalism. Smithian Investment. Smithian Growth Mechanism. Evolution.

AB This paper uses a dynamic general equilibrium model based on corner solutions to formalize the classical theory of investment and capital, which considers investment to be a vehicle for developing a high level of division of labor in roundabout productive activities. If it takes time for a specialist producer of tractors to learn the right method in producing commercially viable tractors, specialization in producing tractors is infeasible in the absence of investment in terms of consumption goods, which are consumed by the specialist producer of tractor before he can sell tractors. If specialized learning by doing can speed up accumulation of professional knowledge so that roundabout productive machines becomes cheap, such investment for increasing the level of division of labor in roundabout productive activities will speed up economic growth. Due to the tradeoff between economies of specialized learning by doing and transaction costs, the model can be used to investigate the effects of a change in the transaction cost coefficient, which can be affected by policy, the legal system, and urbanization, on the evolution of division of labor, on real interest rates, and on saving rate.

TI An Inframarginal Analysis of the Heckscher-Ohlin Model with Transaction Costs and Technological Comparative Advantage. **AU** Cheng, Wen Li; Sachs, Jeffrey D.; Yang, Xiaokai.

TI Division of Labor, Transaction Cost, Emergence of the Firm and Firm Size. **AU** Liu, Pak-Wai; Yang, Xiaokai.

TI Gradual Spread of Market-Led Industrialization. **AU** Sachs, Jeffrey D.; Yang, Xiaokai.

TI A Ricardian Model with Endogenous Comparative Advantage and Endogenous Trade Policy Regimes. **AU** Cheng, Wen Li; Liu, Meng-chun; Yang, Xiaokai.

TI An Infra-Marginal Analysis of the Ricardian Model. **AU** Cheng, Wen Li; Sachs, Jeffrey D.; Yang, Xiaokai.

TI Pattern of Trade and Economic Development in the Model of Monopolistic Competition. **AU** Sachs, Jeffrey D.; Yang, Xiaokai; Zhang, Dingsheng.

Yashiv, Eran

PD October 1999. **TI** Hiring As Investment Behavior. **AA** Tel-Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic

Research Working Paper: 99/35; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. **Website:** <http://econ.tau.ac.il>. **PG** 34. **PR** no charge. **JE** E24, E32. **KW** Aggregate Hiring. Present Value. Business Cycles. Unemployment. Structural Estimation. Asset Pricing. Hiring Subsidies.

AB This paper explores the determinants and stochastic properties of hiring at the aggregate, macroeconomic level. At the core of the analysis is a present value relation, which defines the worker's "asset value" for the firm and determines optimal hiring. The paper validates this relation using volatility tests and infers the unobserved asset values by estimating it. Asset values are quantified, and their fluctuations are shown to stem mostly from fluctuations in future, expected marginal profit rates, as well as in bank credit rates. Hiring and asset values are found to be weakly correlated with traditional measures of the business cycle and to be much more volatile. The results do not support an "opportunity cost" approach to hiring behavior. The response of hiring to changes in its determinants exhibits substantial asymmetry and, within a certain range, the dynamic demand curve for labor is quite flat. As an important by-product, the paper demonstrates the links between models employed and issues examined in finance and the labor market.

PD October 1999. **TI** The Determinants of Equilibrium Unemployment. **AA** Tel-Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research and Sackler Institute for Economic Research Working Paper: 99/36; The Eitan Berglas School of Economics, Tel Aviv University, Tel Aviv 69978, Israel. **Website:** <http://econ.tau.ac.il>. **PG** 62. **PR** no charge. **JE** E24, E27, E32, J63, J64. **KW** Search. Matching. Unemployment. Structural Estimation.

AB The paper takes the search and matching model of the aggregate labor market to the data. It tests the model's empirical validity and employs structural estimation to generate a characterization of the optimal behavior of firms and workers. The model is applied to Israeli data that are uniquely suited for this kind of empirical investigation. The structural estimates are used to quantify the frictions embodied in the model, including the costs of search, the congestion and trading externality effects, and the matching process. A calibration-simulation analysis then studies the effect of several key variables on equilibrium unemployment.

Yeldan, Erinc A.

TI The End of the Developmental State? A General Equilibrium Investigation on the Sources of the Asian Crisis within a Multi-Region, Inter-temporal CGE Model. **AU** Adelman, Irma; Yeldan, Erinc A.

Younger, Stephen D.

TI Dominance Testing of Social Sector Expenditures and Taxes in Africa. **AU** Sahn, David E.; Younger, Stephen D.

Yousef, Tarik

TI Intra-Arab Trade: Is It Too Little? **AU** Al-Atrash, Hassan; Yousef, Tarik.

Ypersele, Tanguy van

TI Rewards versus Intellectual Property Rights. **AU** Shavell, Steven; Ypersele, Tanguy van.

Yu, Wei

PD March 1998. **TI** Using the Diagnostic Cost Group (DGC) Model to Measure Risk Selection in the Massachusetts State Employee Health Insurance Program. **AU** Yu, Wei; Ellis, Randall P.; Ash, Arlene S. **AA** Boston University. **SR** Boston University, Industry Studies Program Working Paper Series on Economics: 88; Industry Studies Program, Department of Economics, Boston University, Boston, MA 02215. Website: econ.bu.edu/ISP/. **PG** 23. **PR** no charge. **JE** I11, I12, I18. **KW** Health Insurance. Adverse Selection. Risk Adjustment. Health Plan.

AB Using the Diagnostic Cost Group (DCG) model, we examined biased selection between one fee-for-service (FFS) plan, one preferred provider organization, and several health maintenance organizations. The proportions of enrollees in low-risk groups are higher in the managed care plans and lower in the FFS plan, and the average age in the FFS plan is 9 years older than the managed care plans. However, actual premium rates set by a bidding process are not consistent with risk levels among HMO plans, resulting in gains in some HMO plans and losses in the others as high as 20% if premium rates are risk-adjusted by the DCG model.

Yuan, Lasheng

TI Risk Selection and Matching in Performance-Based Contracting. **AU** Lu, Mingshan; Ma, Ching-to Albert; Yuan, Lasheng.

Zame, William R.

TI Quadratic Concavity and Determinacy of Equilibrium. **AU** Shannon, Chris; Zame, William R.

Zarkin, Gary A.

TI The Effects of Prices and Policies on the Demand for Marijuana: Evidence from the National Household Surveys on Drug Abuse. **AU** Farrelly, Matthew C.; Bray, Jeremy W.; Zarkin, Gary A.; Wendling, Brett W.; Pacula, Rosalie Liccardo.

TI The Effects of Prices and Policies on the Demand for Marijuana: Evidence from the National Household Surveys on Drug Abuse. **AU** Farrelly, Matthew C.; Bray, Jeremy W.; Zarkin, Gary A.; Wendling, Brett W.; Pacula, Rosalie Liccardo.

Zavoico, Basil

TI External Borrowing in the Baltics, Russia, and Other States of the Former Soviet Union -- the Transition to a Market Economy. **AU** Odling-Smee, John; Zavoico, Basil.

Zeckhauser, Richard

TI The Profits to Insider Trading: A Performance-Evaluation Perspective. **AU** Jeng, Leslie A.; Metrick, Andrew; Zeckhauser, Richard.

TI Can Market and Voting Institutions Generate Optimal Intergenerational Risk Sharing? **AU** Rangel, Antonio; Zeckhauser, Richard.

Zhang, Dingsheng

TI Trade Pattern and Economic Development when Endogenous and Exogenous Comparative Advantages Coexist. **AU** Sachs, Jeffrey D.; Yang, Xiaokai; Zhang, Dingsheng.

TI Pattern of Trade and Economic Development in the Model of Monopolistic Competition. **AU** Sachs, Jeffrey D.;

Yang, Xiaokai; Zhang, Dingsheng.

Zhang, Jiangfeng

TI Regulation of Stock Externalities With Learning. **AU** Karp, Larry; Zhang, Jiangfeng.

Zieschang, Kimberly D.

PD February 2000. **TI** A Framework for Price Statistics. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/00/24; International Monetary Fund, 700 19th Street, Washington, DC 20431. Website: www.imf.org. **PG** 42. **PR** not available. **JE** C43, C51, C52, E31. **KW** Price Statistics. Consumer Price Index. Producer Price Index. Export Price Index. Import Price Index. CPI. PPI. National Accounts.

AB This paper describes the primary framework associating the four principal price indices in the system of economic statistics-the Producer Price Index (PPI), the Consumer Price Index (CPI), and the Export and Import Price Indices MI and MPI)-with the macroeconomic value aggregates they decompose into price and volume components. The paper begins by defining the basic algebra of price indices. It then discusses the definition of value aggregates and provides an overview of the goods and services components of the System of National Accounts 1993 (1993 & VA). The paper establishes the relationships among the four major price series by associating them with certain of the interlocking aggregates defined in the 1993 SNA, and concludes by briefly considering purchasing power parities and labor compensation indices.

Zollo, Maurizio

PD November 1998. **TI** Post-Formation Dynamics in High-Tech Alliances. **AU** Zollo, Maurizio; Reuer, Jeffrey J.; Singh, Harbir. **AA** Zollo and Reuer: INSEAD. Singh: University of Pennsylvania. **SR** INSEAD Working Paper: 98/95/SM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 25. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M11, M12, M21. **KW** Strategic Alliances. Biotechnology.

AB This paper investigates the occurrence and determinants of post-formation governance changes in strategic alliances, including alterations in alliances' contracts, boards or oversight committees, and monitoring mechanisms. We examine alliances in the biotechnology industry and find that firms' unique alliance experience trajectories affect the likelihood and extent of such ex post adjustments in these partnerships. Transactional features such as the alliance's scope, its division of labor, and the relevance of the collaboration to the parent firm also bear upon the alliance's dynamics. We discuss the implications of these findings and how they complement prior research focusing on alliance design or termination at opposite ends of the alliance life cycle.

PD 1999. **TI** Post-Acquisition Strategies, Integration Capability, and the Economic Performance of Corporate Acquisitions. **AU** Zollo, Maurizio; Singh, Harbir. **AA** Zollo: INSEAD. Singh: University of Pennsylvania. **SR** INSEAD Working Paper: 99/42/SM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 37. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage

and VAT. **JE** G34, M21. **KW** Experience Accumulation. Knowledge Codification. Firm Acquisition.

AB This paper introduces a knowledge-based view of corporate acquisitions, and tests the post-acquisition performance consequences of two capability-building mechanisms: experience accumulation and knowledge codification. In the model, the acquiring firm makes decisions about the level of integration and the degree of replacement of the target's top management team, and can develop a capability to manage the post-acquisition integration process by tacitly accumulating acquisition experience and explicitly codifying it in manuals, systems and other acquisition-specific tools. In a sample of 228 acquisitions in the US banking industry, we find that experience accumulation fails to have a significant impact on performance, but that knowledge codification has a strong and positive influence. The impact of codification is also strengthened with increasing levels of post-acquisition integration, i.e. when the organizational challenge becomes increasingly complex. Finally, the level of integration between the two firms involved in the acquisition significantly enhances performance, while the replacement of top managers in the acquired firm impacts performance in a negative fashion. Implications are drawn for organizational learning theory and for a knowledge-based approach to corporate strategy research.

PD 1999. **TI** From Organizational Routines to Dynamic Capabilities. **AU** Zollo, Maurizio; Winter, Sidney G. **AA** Zollo: INSEAD. Winter: University of Pennsylvania. **SR** INSEAD Working Paper: 99/48/SM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 32. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** M14, M21. **KW** Organizational Routines. Dynamic Capabilities. Knowledge Codification.

AB This paper investigates the mechanisms through which organizations develop capabilities in a dynamic sense and reflects upon the role of (1) experience accumulation, (2) knowledge articulation and (3) knowledge codification processes in creating and constantly reshaping organizational routines. The argument is made that dynamic capabilities originate from the co-evolution of these three mechanisms. At any point in time firms adopt a mix of learning behaviors constituted by a semi-automatic accumulation of experience and by increasingly deliberate investments in knowledge articulation and codification activities. Further, the relative effectiveness of these capability-building mechanisms is analyzed here in their interaction with selected features of the task to be learned, such as its frequency, homogeneity and degree of causal ambiguity. Testable hypotheses are developed in the context of a theoretical model of dynamic capability building, and some preliminary empirical evidence in support of the arguments made is reviewed. Finally, implications of the analysis for evolutionary economics and for the emerging knowledge-based view of the firms are discussed and an agenda for future research efforts on these issues is advanced.

PD April 1999. **TI** Experience Trajectories, Governance Design, and the Performance of High-Tech Alliances. **AU** Zollo, Maurizio; Reuer, Jeffrey J.; Singh, Harbir. **AA** Zollo and Reuer: INSEAD. Singh: University of Pennsylvania. **SR** INSEAD Working Paper: 99/22/SM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 26. **PR** no charge up to five

copies; after five copies 18FF per working paper plus postage and VAT. **JE** L11, L22, M21. **KW** High-tech Alliances. Experience Accumulation.

AB Drawing upon the knowledge-based view of the firm and transaction cost theory, this paper combines experience accumulation and governance design arguments to examine the performance of high-tech alliances. We differentiate three alliance experience trajectories partner-specific experience (i.e., prior alliances with the same partner), technology-specific experience (i.e., prior alliances in similar product areas), and general collaborative experience - and suggest that experience accumulation at the parent firm level and governance design at the alliance level jointly influence the odds of alliance success. Based on a sample of 144 biotechnology alliances, we examine the extent to which these alliances result in knowledge accumulation, create new opportunities, and enable parent firms to achieve their objectives. We find that only partner-specific experience has a positive impact on alliance performance, and that this effect is due to the interaction between partner-specific experience and the alliance's governance design. The development of inter-firm routines can enhance the effectiveness of partnerships, particularly non-equity alliances lacking formal coordination and control mechanisms.

TI Managing Governance Adaptations in Strategic Alliances. **AU** Reuer, Jeffrey J.; Zollo, Maurizio.

Zott, Christoph

PD July 1999. **TI** When Adaptation Fails: An Agent-Based Explanation of Inefficient Bargaining Under Private Information. **AA** INSEAD. **SR** INSEAD Working Paper: 99/44/ENT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 35. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** C78, D83. **KW** Inefficient Bargaining. Adaptive Failure. Adaptive Learning.

AB In this study, we develop a rationale based on adaptive learning that can explain inefficient bargaining under private information. We build a dynamic bargaining model in which independent, but interacting artificial agents co-evolve their offers with the help of genetic algorithms. In the context of this model, we conduct a computational experiment that serves to compare bargaining outcomes under complete and incomplete information. Results from the experiment show that inefficient bargaining (i.e., delays and failures to agree) may be due to problems in the agents' adaptive processes that arise because of incomplete information. In addition, we find that adaptive failures may occur even under complete information, and that "fair" bargaining outcomes may be a consequence of adaptive learning.

Zweimueller, Josef

TI Patents in a Model of Endogenous Growth. **AU** O'Donoghue, Ted; Zweimueller, Josef.