

ABSTRACTS OF WORKING PAPERS IN ECONOMICS

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Abowd, John M.

PD May 1999. **TI** Executive Compensation: Six Questions the Need Answering. **AU** Abowd, John M.; Kaplan, David S. **AA** Abowd: Cornell University and NBER. Kaplan: Bureau of Labor Statistics. **SR** National Bureau of Economic Research Working Paper: 7124; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 17. **PR** \$5.00. **JE** D82, G30, J33, J41. **KW** Executive Compensation. Agency Theory. Contracts.

AB This article focuses on how recent research advances can be used to address the following six questions: (1) How much does executive compensation cost the firm? (2) How much is executive compensation worth to the recipient? (3) How well does executive compensation work? (4) What are the effects of executive compensation? (5) How much executive compensation is enough? (6) Could executive compensation be improved? The authors stress the formal link between executive pay and performance that is provided by stock options and equivalent forms of long term compensation. They compare executive compensation in 12 OECD countries for the period from 1984-1996. There are good reasons why the answers to the first two questions are different. Agency theory remains the only viable candidate for answering the question about how executive compensation works, but the empirical research to date cannot explain very much about the structure of the optimal contract. For this reason, it is also hard to answer questions four, five and six, although it is clear that companies can provide both too little and too much contingent compensation, in the context of agency theory.

Acemoglu, Daron

PD June 1999. **TI** Minimum Wages and On-the-Job Training. **AU** Acemoglu, Daron; Pischke, Jorn-Steffen. **AA** MIT and NBER. **SR** National Bureau of Economic Research Working Paper: 7184; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** J24, J31, J41. **KW** Human Capital. Minimum Wages.

AB Becker's theory of human capital predicts that minimum wages should reduce training investments for affected workers, because they prevent these workers from taking wage cuts necessary to finance training. We show that when the assumption of perfectly competitive labor markets underlying this theory is relaxed, minimum wages can increase training of affected workers, by inducing firms to train their unskilled employees. More generally, a minimum wage increases training for constrained workers, while reducing it for those taking wage cuts to finance their training. We provide new estimates

on the impact of the state and federal increases in the minimum wage between 1987 and 1992 of the training of low wage workers. We find no evidence that minimum wages reduce training. These results are consistent with our model, but difficult to reconcile with the standard theory of human capital.

Adams, F. Gerard

PD September 2000. **TI** The Effects of the East Asian Crisis on the Region's Energy Consumption. **AU** Adams, F. Gerard; Shachmurove, Yochanan. **AA** Adams: Northwestern University. Shachmurove: City University of New York and University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/13; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104- 6297. Website: www.econ.upenn.edu/CARESS. **PG** 14. **PR** no charge. **JE** C30, E20, F43, N75, Q41. **KW** East Asian Crisis. Energy. Economic Growth. Gross Domestic Product. Energy Elasticities.

AB The potential impact of continued economic growth on world energy markets could be substantial. Rapid growth projections into the next ten and twenty years suggested that the East Asian area (Korea, China, Hong Kong, Malaysia, Philippines, Thailand, Indonesia, and Singapore, where Japan is included with the OECD high-income countries) would be a major center of world GDP. Thus, the region's burgeoning energy needs would make an important difference in the supply-demand balance and would raise world energy prices. The environmental implications for the rise in energy are evident. This paper analyzes the implications of the 1997 East Asian crisis on the projections of energy used by this region. Estimates of the energy elasticities based on pooled cross section and time series are used to forecast energy and petroleum consumption and imports into the region under a variety of assumptions about the future economic outlook and policy.

Adner, Ron

PD 1999. **TI** Technology Evolution and Demand Heterogeneity: Implications for Product and Process Innovation. **AU** Adner, Ron; Levinthal, Daniel. **AA** Adner: INSEAD. Levinthal: University of Pennsylvania. **SR** INSEAD Working Paper: 99/74/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** O11, O31, O33. **KW** Technology Evolution. Demand Heterogeneity.

AB While research on the evolution of new technologies has emphasized the "supply side" activities of firms, there is growing recognition that the external demand environment can exercise significant influence over these activities. This paper presents a demand-based view of technology evolution that is focused on the interaction between technology development and the demand environment in which the technology is ultimately evaluated. We develop a formal model that explicitly considers the influence of heterogeneity in market demand - the presence of consumers with different needs and requirements - on firms' innovation choices. The model is analyzed using computer simulation. The model is used to examine the dynamics of product and process innovation (Utterback and Abernathy, 1975). The analysis reveals that demand heterogeneity offers an alternative to supply-side explanations of the technology life cycle. Further, by considering the possibility of technologically satisfied consumers, the model also suggests a rationale for a new stage in the technology life cycle characterized by increasing performance at a stable price. This stage has not yet been treated formally in the literature, but is increasingly evident in digital and information based technologies.

PD October 1999. **TI** A Demand-Based View of Technology Competition: Demand Structure and Technology Displacement. **AA** INSEAD. **SR** INSEAD Working Paper: 99/75/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** D11, D21, L11, L22. **KW** Technology Competition. Demand Heterogeneity.

AB This paper investigates how the structure of market demand affects the nature and extent of competition over consumer subgroups in the market. It develops an analytic model to examine how the satisfaction of consumers' requirements and the relationships between consumers' preferences interact to affect competitive interactions. The model, tested using simulation, reveals demand-side influences on the emergence of three distinct competitive regimes: isolation, in which technologies do not interact throughout the course of their evolution-, convergence, in which technologies evolve to compete head-on for the same consumer groups; and displacement, in which one technology cedes dominance of its home market to its rival. The model highlights the critical role played by price in influencing technology displacements and sheds some new light, supported by empirical data from the disk drive industry, on the important phenomenon of disruptive technologies.

PD October 1999. **TI** Exploration Through Exploitation: Leveraging the Co-Evolution of Markets and Technologies. **AA** INSEAD. **SR** INSEAD Working Paper: 99/76/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, O32. **KW** Organizational Adaptation. Organizational Design.

AB The challenge of organizational adaptation is often presented in terms of the tension between the exploration of new possibilities and the exploitation of existing capabilities. This tension, however, is not axiomatic. This essay argues that firms can leverage investments in market activity to foster a process of exploration through exploitation by focusing on the

heterogeneity of needs and feedback sources present in the market. Recognition of the diversity of requirements and preferences present in the market at any given point in time offers the possibility of engaging different market groups at different points in a technology's evolution. Considering the development of technologies as a sequential progression, in which the choice of markets co-evolves with the state of the technology, complements current thinking on managing technology investments as real options and offers implications for organization design.

Aizenman, Joshua

PD July 1999. **TI** Reserve Uncertainty and the Supply of International Credit. **AU** Aizenman, Joshua; Marion, Nancy. **AA** Aizenman: Dartmouth College and NBER. Marion: Dartmouth College. **SR** National Bureau of Economic Research Working Paper: 7202; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 18. **PR** \$5.00. **JE** F31, F33, F36. **KW** Foreign Exchange Reserves. International Credit.

AB This paper examines how increased uncertainty about an emerging market's international reserves affects the willingness of foreign investors to supply international credits. We illustrate the relevance of this concern for South Korea during the recent financial crisis. Using available information about Korea's reserves at the onset of the crisis, we show that "usable" reserves turned out to be much lower than what a reasonable forecast would have predicted. We then develop a model of emerging-market economy where there is sovereign risk and moral hazard is a problem because agents expect the emerging market to bail out creditors with its reserves. We show that reserve uncertainty has a non-linear effect on the supply of credit. When the expected reserve position of an emerging market is large relative to the potential bailout in bad states of nature, reserve volatility does not matter. However, the same amount of reserve volatility can cause a large reduction in the supply of international credit if the emerging market's foreign debt is large enough or if the collapse of output forces the private sector to downgrade its priors about repayment possibilities.

Akkermans, Henk A.

PD 1999. **TI** The Impact of ERP on Supply Chain Management: Exploratory Findings From a European Delphi Study. **AU** Akkermans, Henk A.; Bogerd, Paul; Yucesan, Enver; Van Wassenhove, Luk N. **AA** Akkermans: Eindhoven University of Technology. Bogerd: Origin Nederland B.V. Yucesan and Wassenhove: INSEAD. **SR** INSEAD Working Paper: 99/72/TM; 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** M11, M21. **KW** Supply Chain. Management. ERP Systems. Delphi Study.

AB This article presents results from a Delphi study on the future impact of Enterprise Resource Planning (ERP) systems on Supply Chain Management (SCM). The Delphi study was conducted with 23 Dutch supply chain executives of European multinationals. The implications of increasing industry clockspeeds on supply chain management, as laid out by Fine, match closely with assessments from European practitioners. The key SCM issues for the coming years are: (1) further

integration of activities between suppliers and customers across the entire supply chain; (2) ongoing changes in supply chain needs and required flexibility from IT; (3) more mass customization of products and services leading to increasing assortments while decreasing cycle times and inventories; (4) the locus of the driver's seat of the entire supply chain and (5) supply chains consisting of several independent enterprises.

Albaek, Karsten

PD July 1999. **TI** Employment Protection and the Consequences for Displaced Workers: A Comparison of Belgium and Denmark. **AU** Albaek, Karsten; Van Audenrode, Marc; Browning, Martin. **AA** Albaek and Browning: University of Copenhagen. Van Audenrode: Universite Laval, Quebec. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/11; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 32. **PR** no charge. **JE** J63, J64. **KW** Displaced Workers. International Comparisons. Employment Protection. Unemployment.

AB We compare the wage and employment consequences of job displacement in Belgium and Denmark. These two countries both have generous unemployment insurance schemes but job protection laws vary dramatically between the two. Using comparable data we find that the incidence of displacement and the consequences for wages are similar in the two countries. The consequences for employment are very different with Danish workers experiencing much less unemployment after a displacement.

PD July 1999. **TI** The Rise in Danish Unemployment: Reallocation or Mismatch? **AU** Albaek, Karsten; Hansen, Henrik. **AA** Albaek: University of Copenhagen. Hansen: The Royal Veterinary and Agricultural University. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/15; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 14. **PR** no charge. **JE** J41, J61. **KW** Hiring Function. UV-Curve. Cointegrated VAR. Smooth Transition. Mismatch.

AB Two key relations in theoretical work on labor market flows are analyzed; the hiring function and the UV-curve. The relations are identified in a cointegrated VAR-model framework. The system comprising unemployment, vacancies and hiring is driven by stochastic trend in the vacancies, corresponding to the status of vacancies as the driving force in models of labor market flows. The drift in the relations is modeled by smooth transition functions and is identified as increased mismatch problems in the Danish labor market as opposed to increased structural change.

PD August 1999. **TI** An Evaluation of Paid Leave: Participation and Labor Market Tightness. **AA** University of Copenhagen. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/19; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 27. **PR** no charge. **JE** J29, J68. **KW** Labor Market Policy. Temporary Leave. Parental Leave. Sabbatical.

AB This paper analyzes a labor market program which enables workers to leave employment temporarily with a compensation financed by the taxpayers. The main aim of the program was to increase the chances of the unemployed finding

a job. However, the empirical analysis reveals a clear negative relationship between the unemployment rate and transition rates from employment into the paid leave scheme. Program participation is low, precisely in those labor market states, where the scheme has a potential to perform as a remedy by increasing the transition rate from unemployment to employment. Several possible explanations are discussed.

PD November 1999. **TI** Dimensions of the Wage-Unemployment Relationship in the Nordic Countries: Wage Flexibility Without Wage Curves. **AU** Albaek, Karsten; Asplund, Rita; Blomskog, Stig; Barth, Erling; Guomundsson, Bjorn Runar; Karlsson, Vifill; Madsen, Erik Strojler. **AA** Albaek: University of Copenhagen. Asplund: Research Institute of the Finnish Economy. Blomskog: University of Stockholm. Barth: Institute for Social Research and University of Tromso. Guomundsson: Ministry of Finance and National Institute of Iceland. Karlsson: Icelandic University College of Business Administration. Madsen: Aarhus Business School and Centre for Labour Studies. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/24; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 33. **PR** no charge. **JE** J31, J33. **KW** Wage Curve. Phillips Curve. Regional Unemployment. Wages.

AB This paper analyzes wage formation in the Nordic countries at the regional level by the use of micro-data. Our results deviate systematically from the main conclusions drawn by Blanchflower and Oswald (1994). We find no stable, negative relation fixed effects are accounted for. Wage formation at the regional level is characterized by considerable persistence, but unemployment exerts no immediate influence on wages at the regional level. There is no evidence of a wage curve, nor of a Phillips curve, at the regional level in the Nordic countries. The results are consistent with a theoretical model where central bargaining agents determine a national wage increment, and local bargaining agents determine wage drift.

Aldrich, John

PD April 2000. **TI** The Origins of Fixed X Regression. **AA** University of Southampton. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 0006; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton SO17 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 42. **PR** On application; annual subscription 40 pounds. **JE** B23, C10, C20. **KW** Pearson. Fisher. Bartlett. Regression. Ancillarity.

AB In 1922 R. A. Fisher introduced the fixed X regression model, synthesizing the regression theory of Pearson and Yule with the least squares theory of Gauss. The innovation was based on Fisher's realization that the distribution associated with the regression coefficient was unaffected by the distribution of X. Subsequently Fisher interpreted the fixed X assumption in terms of his notion of ancillarity. This paper considers these developments against the background of early twentieth century statistical theory.

Alesina, Alberto

PD July 1999. **TI** Fiscal Policy, Profits, and Investment. **AU** Alesina, Alberto; Ardagna, Silvia; Perotti, Roberto; Schiantarelli, Fabio. **AA** Alesina: Harvard University and NBER. Ardagna and Schiantarelli: Boston College. Perotti: Columbia University. **SR** National Bureau of Economic

Research Working Paper: 7207; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 28. PR \$5.00. JE E22, E31, E32. KW Fiscal Policy. Investment.

AB This paper evaluates the effects of fiscal policy on investment using a panel of OECD countries. In particular, we investigate how different types of fiscal policy affect profits, and as a result, investment. We find a sizable negative effect of public spending -- and in particular of its public wage component -- on business investment. This result is consistent with models which government employment creates wage pressure for the private sector. Various types of taxes also have negative effects on profits, but, increasingly, the effects of government spending on investment are larger than the effect of taxes. Our results have important implications for the so called "non- Keynesian" (i.e., expansionary) effects of fiscal adjustments.

Aloi, Marta

PD March 2000. **TI** Endogenous Business Cycles and Stabilization Policies. **AU** Aloi, Marta; Jacobsen, Hans Jorgen; Lloyd-Braga, Teresa. **AA** Aloi: University of Nottingham. Jacobsen: University of Copenhagen. Lloyd-Braga: Universidade Catolica Portuguesa. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 00/06; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. PG 26. PR no charge. **JE** D84, E32, E63. **KW** Business Cycles. Stabilization Policy. Expectations. **AB** We analyze the effects of simple stylized economic policy rules, or stabilization principles, when fluctuations in economic activity are created endogenously by self-fulfilling volatile expectations. We study a simple monetary competitive model with intertemporally optimizing agents and a government. We only depart from neoclassical orthodoxy by assuming that a cycle or a sunspot equilibrium, not necessarily a steady state, could be the descriptive dynamic rational expectations equilibrium. The government may then out of welfare concerns want to conduct systematic stabilization policy through transfers, expenditure, and taxation even though this has distortionary effects. We show that the policy rules that stabilize output in a way that is best for welfare involve countercyclical elements in government activity.

Alvarez, Fernando

PD March 1999. **TI** Money and Interest Rates With Endogeneously Segmented Markets. **AU** Alvarez, Fernando; Atkeson, Andrew; Kehoe, Patrick J. **AA** Alvarez: University of Chicago and NBER. Atkeson: University of Minnesota and NBER. Kehoe: University of Pennsylvania and NBER. **SR** National Bureau of Economic Research Working Paper: 7060; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 29. PR \$5.00. **JE** E43, E52. **KW** Interest Rates. Open Market Operations. Asset Markets. **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 endogeneously 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 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 nominal interest rates, steepen or even twist the yield curve, and lead to an upward-sloping yield curve on average.

Amir, Rabah

PD May 2000. **TI** Market Structure, Scale Economies and Industry Performance. **AA** University of Copenhagen. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 00/08; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. PG 25. PR no charge. **JE** D43, D60, L13, L40. **KW** Cournot Oligopoly. Returns to Scale. Entry. Comparative Statics. Economic Welfare.

AB We provide an extensive and general investigation of the effects on industry performance (profits and social welfare) of exogenously changing the number of firms in a Cournot framework. This amounts to an in-depth exploration of the well-known trade-off between competition and production efficiency. We establish that under scale economies, welfare is maximized by a finite number of firms. Our results shed light on several theoretical issues and policy debates in industrial organization, including the relationship between the Herfindahl index and social welfare, free versus socially optimal entry, concentration and profitability, destructive competition and natural monopoly. Our analytical approach combines simplicity with generality.

PD June 2000. **TI** Information Structure and the Tragedy of the Commons in Resource Extraction. **AU** Amir, Rabah; Nannerup, Niels. **AA** Amir: University of Copenhagen and University of Southern Denmark. Nannerup: University of Southern Denmark. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 00/09; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. PG 23. PR no charge. **JE** C73, D60, Q20. **KW** Dynamic Games. Open-Loop. Trigger Strategies. Natural Resources. Regulation.

AB This paper considers the well-known Levhari-Mirman model of resource extraction, and investigates the effects of the information structure of the dynamic game -- open-loop, Markovian or history-dependent -- on the equilibrium consumption path and the overall utility of the agents. The open-loop regime yields a Pareto-optimal outcome. The Markovian regime leads to the most pronounced version of the tragedy of the commons. History-dependent behavior yields an outcome set that is intermediate between the other two cases. The analysis suggests that in environments characterized by a dynamic (and no market) externality, forcing agents to commit to open-loop behavior would constitute welfare-improving regulation.

PD June 2000. **TI** Market Structure, Scale Economies and Industry Performance. **AA** CIE and University of Southern Denmark. **SR** University of Copenhagen, Centre for Industrial Economics Discussion Paper: 2000/03; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. Website: www.econ.ku.dk/cie/wpmast.htm. PG 25. PR no charge. **JE** D43, D60, L13, L40. **KW** Cournot Oligopoly. Returns to Scale. Entry. Comparative Statics. Industrial Organization.

AB See the abstract for Amir, Rabah. May 2000, "Market Structure, Scale Economies and Industry Performance".

University of Copenhagen, Institute of Economics Discussion Paper: 00/08; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk.

PD December 2000. **TI** Noncooperative R&D and Optimal R&D Cartels. **AU** Amir, Rabah; Evstigneev, Igor; Wooders, John. **AA** Amir: CIE and University of Southern Denmark. Evstigneev: Russian Academy of Sciences, Moscow. Wooders: University of Arizona. **SR** University of Copenhagen, Centre for Industrial Economics Discussion Paper: 2000/09; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. Website: www.econ.ku.dk/cie/wpmast.htm. **PG** 33. **PR** no charge. **JE** C72, L13, O31, O32. **KW** Oligopoly. Research and Development. Spillovers. Research Joint Ventures. Cartels.

AB This paper deals with a general version of a two-stage model of R&D and product market competition. We provide a thorough generalization of previous results on the comparative performance of noncooperative and cooperative R&D, dispensing in particular with ex-post symmetry and linear demand assumptions. We also characterize the structure of optimal R&D cartels where firms competing in a product market jointly decide R&D expenditure, as well as internal spillover, levels. We establish that the firms would essentially always prefer extremal spillovers. Within the context of a standard specification, we provide conditions for the optimality of minimal spillover.

PD December 2000. **TI** Second-Mover Advantage and Price Leadership in Bertrand Duopoly. **AU** Amir, Rabah; Stepanova, Anna. **AA** Amir: CIE and University of Southern Denmark. Stepanova: University of Southern Denmark. **SR** University of Copenhagen, Centre for Industrial Economics Discussion Paper: 2000/10; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. Website: www.econ.ku.dk/cie/wpmast.htm. **PG** 24. **PR** no charge. **JE** C72, D43, L13. **KW** Price Competition. Endogenous Timing. Second-Mover Advantage. Risk Dominance. Oligopoly.

AB We consider the issues of endogenous timing and first versus second-mover advantage in differentiated-product Bertrand duopoly with asymmetric linear costs. First, we provide a thorough set of results in the cases where prices are either strategic substitutes and/or complements, dispensing with some common extraneous assumptions. Second, with linear demand for substitute goods, the scope for second-mover advantage crucially depends on the unit cost difference. A natural endogenous timing scheme coupled with equilibrium selection according to risk-dominance yields a unique outcome with the low-cost firm as leader.

Amit, Raphael

PD February 2000. **TI** Value Drivers of E-Commerce Business Models. **AU** Amit, Raphael; Zott, Christoph. **AA** Amit: University of Pennsylvania. Zott: INSEAD. **SR** INSEAD Working Paper: 2000/06/ENT/SM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 39. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** G32, M21. **KW** Business Models. E-

Commerce. Transactions. Value Drivers. Virtual Markets.

AB The rapid emergence of e-commerce is radically transforming the business landscape. Startup firms are capturing new opportunities in the electronic market place through innovative business models. Established firms are racing to transform and adapt their old business models to the new environment. A business model depicts the way in which a company enables transactions that create value for all participants, including its partners, suppliers, and customers. Using data from 60 American and European e-commerce companies that have recently become publicly traded corporations, we develop a conceptual framework for assessing the value creation potential of e-commerce business models. Our "eValue" framework describes the value drivers of e-commerce business models. It facilitates a comparison of the value-creation potential of different e-commerce business models along four identified value drivers, namely, novelty, lock-in, complementarities, and efficiency. Our central claim is that a firm's business model is an important locus of innovation and a crucial source of value creation for all stakeholders. This value creation goes beyond the value that can be realized through the appropriate positioning of an enterprise within an industry or the exploitation of firm-specific core competencies.

Anderlini, Luca

PD February 2000. **TI** Structural Stability and Robustness to Bounded Rationality. **AU** Anderlini, Luca; Canning, David. **AA** Anderlini: University of Southampton. Canning: Queen's University of Belfast. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 0002; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 34. **PR** On application; annual subscription 40 pounds. **JE** C69, C79, D51, E19. **KW** Structural Stability. E-Equilibria. Bounded Rationality.

AB The introduction of a small amount of bounded rationality into a model sometimes has little effect, and sometimes has a dramatic impact on predicted behavior. We call a model robust to bounded rationality if small deviations from rationality result only in small changes in the equilibrium set. We also say that a model is structurally stable if the equilibrium set (given fully rational agents) varies continuously with the parameter values of the model. Our notions of a model and of rationality are quite broad, allowing us to cover cases in which bounded rationality refers to imperfect optimization, non-rational expectations, or arbitrary behavior by a subset of agents. We show that a model is robust to bounded rationality if and only if it is structurally stable. Thus, we can characterize which models will be robust to bounded rationality and which ones will not, independently of the exact form that bounded rationality takes. In addition, from our characterization it follows that introducing a small amount of bounded rationality will have large effects on predicted outcomes if and only if parameters are near a critical point where the equilibrium set changes in a discontinuous way.

PD October 1999. **TI** Costly Bargaining and Renegotiation. **AU** Anderlini, Luca; Felli, Leonardo. **AA** Anderlini: University of Southampton. Felli: London School of Economics. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 9910; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England.

Website: <http://www.soton.ac.uk>. **PG** 44. **PR** On application; annual subscription 40 pounds. **JE** C72, D23, D61, D83. **KW** Optional Bargaining Costs. Inefficient Bargaining Outcomes. Renegotiation. Imperfect Recall.

AB We identify the inefficiencies that arise when negotiation between two parties takes place in the presence of transaction costs. First, for some values of these costs it is efficient to reach an agreement but the unique equilibrium outcome is one in which agreement is never reached. Secondly, even when there are equilibria in which an agreement is reached, we find that the model always has an equilibrium in which agreement is never reached, as well as equilibria in which agreement is delayed for an arbitrary length of time. Finally, the only way in which the parties can reach an agreement in equilibrium is by using inefficient punishments for (some of) the opponent's deviations. We argue that this implies that, when the parties are given the opportunity to renegotiate out of these inefficiencies, the only equilibrium outcome which survives is the one in which agreement is never reached, regardless of the value of the transaction costs.

PD October 1999. **TI** Cooperation and Non-Halting Strategies. **AU** Anderlini, Luca; Sabourian, Hamid. **AA** Anderlini: University of Southampton. Sabourian: King's College. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 9911; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 26. **PR** On application; annual subscription 40 pounds. **JE** C72, C73, C79. **KW** Computability. Repeated Games. Cooperation. Non-Halting Strategies.

AB This note is a response to an unpublished paper by Evans and Thomas (1998). They take issue with a paper that we published some years back on 'Cooperation and Effective Computability' in repeated games (Anderlini and Sabourian 1995). In that paper we showed that it is only the cooperative equilibria of an infinitely repeated two-player common-interest game with no discounting that survive both the restriction that players' strategies must be computable, and appropriately computable trembles. Evans and Thomas (1998) assert that our results are seemingly not robust to changes in the set of computable strategies at the disposal of each player. In particular, they claim that our equilibrium selection result does not extend to the case in which players are allowed to choose strategies that halt on certain histories but do not halt on others. We present a modification of the set-up of our earlier paper in which the cooperative equilibria are selected when strategies that halt on certain histories and do not halt on others are allowed. Although extensive modifications are required, the proof of this extension of our earlier result runs along the same general line of argument as the original proof.

PD November 1999. **TI** Efficient Provision of Public Goods with Endogenous Redistribution. **AU** Anderlini, Luca; Siconolfi, Paolo. **AA** Anderlini: University of Southampton. Siconolfi: Columbia University. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 9912; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 46. **PR** On application; annual subscription 40 pounds. **JE** C79, H21, H31, H41. **KW** Public Goods. Endogenous Redistribution. Nash Implementation. Playable Games.

AB We study a continuous and balanced mechanism that is

capable of implementing in Nash equilibrium all the Pareto-efficient individually rational allocations for an economy with public goods. The Government chooses a set of weights directly related to the Lindahl prices corresponding to the Pareto-efficient allocation it wants to implement. The mechanism then guarantees that initial endowments are re-allocated so that the chosen vector of Lindahl prices is indeed a Lindahl equilibrium, and implements the corresponding Lindahl allocation. Previously known mechanisms that implement the Lindahl correspondence do not allow the Government to choose which point on the Pareto frontier should be implemented, unless it can also redistribute initial endowments in the appropriate way. By contrast, in our case the Government directly controls the distribution of welfare in the economy. Finally, besides being balanced and continuous, our mechanism is "simple". Each agent has to declare a desired increase in the amount of public good, and a vector of redistributive transfers of initial endowments (across other agents).

Andrews, Donald W. K.

PD February 2000. **TI** On the Number of Bootstrap Repetitions for BC sub a Confidence Intervals. **AU** Andrews, Donald W. K.; Buchinsky, Moshe. **AA** Andrews: Yale University. Buchinsky: Brown University. **SR** Yale Cowles Foundation Discussion Paper: 1250; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 13. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C12, C15. **KW** Bootstrap. Confidence Interval. Simulation.

AB This paper considers the problem of choosing the number bootstrap repetitions B to use with the BC sub a bootstrap confidence intervals introduced by Efron (1987). Because the simulated random variables are ancillary, we seek a choice of B that yields a confidence interval that is close to the ideal bootstrap confidence interval for which B is equal to infinity. We specify a three-step method of choosing B that ensures that the lower and upper lengths of the confidence interval deviate from those of the ideal bootstrap confidence interval by at most a small percentage with high probability.

PD May 2000. **TI** A Bias-Reduced Log-Periodogram Regression Estimator for the Long-Memory Parameter. **AU** Andrews, Donald W. K.; Guggenberger, Patrik. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1263; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 28. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C13, C14, C22. **KW** Asymptotic Bias. Asymptotic Normality. Bias Reduction. Frequency Domain. Long-Range Dependence. Optimal Rate. Rate of Convergence. Strongly Dependent Series.

AB In this paper, we propose a simple bias-reduced log-periodogram regression estimator, that eliminates the first and higher-order biases of the Geweke and Porter-Hudak (1983) GPH estimator. The bias-reduced estimator is the same as the GPH estimator except that one includes frequencies to the power $2k$ for $k = 1, \dots, r$, for some positive integer r , as additional regressors in the pseudo-regression model that yields the GPH estimator. The reduction in bias is obtained using assumptions on the spectrum only in a neighbourhood of the zero frequency, which is consistent with the semiparametric nature of the long-memory model under consideration. Some Monte Carlo simulation results for stationary Gaussian

ARFIMA(1, d, 1) models show that the bias-reduced estimators perform well relative to the standard log-periodogram estimator.

PD July 2000. **TI** Equivalence of the Higher-Order Asymptotic Efficiency of k-step and Extremum Statistics. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1269; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 19. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C12, C13. **KW** Asymptotics. Edgeworth Expansion. Extremum Estimator. Gauss-Newton. Higher-order Efficiency. Newton-Raphson.

AB It is well known that a one-step scoring estimator that starts from any $N^{1/2}$ -consistent estimator has the same first-order asymptotic efficiency as the maximum likelihood estimator. This paper extends this result to k-step estimators and test statistics for $K \geq 1$, higher-order asymptotic efficiency, and general extremum estimators and test statistics. The paper shows that a k-step estimator has the same higher-order asymptotic efficiency, to any given order, as the extremum estimator towards which it is stepping, provided (i) k is sufficiently large, (ii) some smoothness and moment conditions hold, and (iii) a condition on the initial estimator holds. For example, for the Newton-Raphson k-step estimator, we obtain asymptotic equivalence to integer order s provided $2^k \geq s + 1$. Thus, for $k = 1, 2, \text{ and } 3$, one obtains asymptotic equivalence to first, third, and seventh orders respectively. This means that the maximum differences between the probabilities that the ($N^{1/2}$ -normalized) k-step and extremum estimators lie in any convex set are $o(1)$, $o(N^{-3/2})$, and $o(N^{-3})$ respectively.

Annett, Anthony

PD April 2000. **TI** Social Fractionalization, Political Instability, and the Size of Government. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/82; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 21. **PR** not available. **JE** D74, E62, H50, J10, O23. **KW** Fractionalization. Political Economy. Size of Government. Conflict. Government Expenditures.

AB This paper explores the relationship between the degree of division or fractionalization of a country's population (along ethnolinguistic and religious dimensions) and both political instability and government consumption, using a neoclassical growth model. The principal idea is that greater fractionalization, proxying for the degree of conflict in society, leads to political instability, which in turn leads to higher government consumption aimed at placating the opposition. There is also a feedback mechanism whereby the higher consumption leads to less instability as government consumption reduces the risk of losing office. Empirical evidence based on panel estimation supports this hypothesis.

Appleton, Simon

PD 1999. **TI** Educational Expansion and Economic Decline: Returns to Education in Kenya 1978-1995. **AU** Appleton, Simon; Bigsten, Arne; Kulundu, Damiano Manda. **AA** Appleton: CSAE, University of Oxford. Bigsten: University of Gothenburg. Kulundu: University of Gothenburg and University of Nairobi. **SR** Centre for the Study of African Economies Working Paper: WPS/99/06; Centre for the Study of African Economies, University of Oxford, St. Cross

Building, Manor Road, Oxford, OX1 3UL, England. Website: www.csae.ox.ac.uk/. **PG** 24. **PR** 3 pounds or \$5.00; subscription 55 pounds or \$88.00. **JE** D84, I21, J24, O15. **KW** Education. Rates of Return. Kenya. Wages. Social Benefits.

AB Educational expansion followed by economic decline in Kenya has been associated with a decline in the social return to secondary education, conventionally calculated, from 20% in 1978 to 6% in 1995. Wage benefits from primary school have fallen but returns remain unchanged because of corresponding falls in costs. Returns to tertiary education have not fallen. The concept of expected returns to education is introduced to allow for effects of education on earnings from self-employment and on the probability of employment. These mirror conventionally calculated returns for men, but are higher for women due to large participation effects of education.

Arbatskaya, Maria

PD July 1999. **TI** On the Incidence and Variety of Low-Price Guarantees. **AU** Arbatskaya, Maria; Hviid, Morten; Shaffer, Greg. **AA** Arbatskaya: Emory University. Hviid: CIE, University of Copenhagen and University of Warwick. Shaffer: University of Rochester. **SR** University of Copenhagen, Centre for Industrial Economics Discussion Paper: 99/10; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. Website: www.econ.ku.dk/cie/wpmast.htm. **PG** 38. **PR** no charge. **JE** D43, L13, L41. **KW** Facilitating Practices. Low-Price Guarantees. Collusion. Price Discrimination.

AB We provide evidence of the widespread use and variety of low-price guarantees (how common are they; on what products and services are they observed; and what forms do they take), using data obtained from newspaper advertisements in thirty-seven metropolitan areas in the United States. We also consider why firms adopt LPGs. Is it to facilitate tacit collusion, to price discriminate, or do firms have other motivations? Do price-beating guarantees serve the same purpose as price-matching guarantees? We infer the answers to these questions from (a) the extent to which firms place restrictions on their LPGs; (b) whether LPGs apply to advertised prices or actual selling prices, and (c) whether firms with LPGs have higher or lower prices than firms without LPGs. We also uncover aspects of LPGs that have not previously been studied, e.g., 43 percent of LPGs allow post-sale search. Our findings suggest topics for future research.

Ardagna, Silvia

TI Fiscal Policy, Profits, and Investment. **AU** Alesina, Alberto; Ardagna, Silvia; Perotti, Roberto; Schiantarelli, Fabio.

Arino, Africa

TI Governance Changes in Strategic Alliances: Antecedents of Contractual Renegotiations. **AU** Reuer, Jeffrey J.; Arino, Africa.

Arnold, Michael A.

PD October 1999. **TI** The Analytics of Search With Posted Prices. **AU** Arnold, Michael A.; Lippman, Steven A. **AA** Arnold: University of Delaware. Lippman: UCLA. **SR** University of Delaware Department of Economics Working Paper: 99/08; Department of Economics, University of Delaware, Newark, DE 19716-2720. Website:

www.be.udel.edu/Econ_site/Working_Papers.html. **PG** 23. **PR** no charge. **JE** D41, D42, D83, L11. **KW** Posted Prices. Sequential Search. Hazard Rate. Reservation Prices. Perfect Competition.

AB This paper investigates the characteristics of the optimal posted price in the standard sequential search paradigm. Much of the intuition gleaned from the extensive sequential search literature in which the seller adopts a reservation price does not carry over to the posted price setting. For example, an increase in buyer valuations can lead to a reduction in the optimal posted price. We do, however, provide sufficient conditions on the hazard rate function h which ensure that an increase in demand induces an increase in the optimal posted price. As exhibited herein, the analysis of the posted price model depends critically upon analytical properties of h . Amongst the issues treated are the elasticity of demand, finite horizon, sale of multiple units, and competitive equilibrium.

Arocena, Pablo

PD July 1999. **TI** Generating Efficiency: Economic and Environmental Regulation of Public and Private Electricity Generators in Spain. **AU** Arocena, Pablo; Waddams Price, Catherine. **AA** Arocena: Universidad Publica de Navarra and University of Warwick. Waddams Price: CIE, University of Copenhagen and University of Warwick. **SR** University of Copenhagen. Centre for Industrial Economics Discussion Paper: 99/09; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. Website: www.econ.ku.dk/cie/wpmast.htm. **PG** 28. **PR** no charge. **JE** D24, L43, L51, L94, Q28. **KW** Price Caps. Total Factor Productivity. Electric Utilities. Regulation. Incentive Regulation.

AB Economic regulation of firms with market power has placed increasing emphasis on incentive-based regulation such as price caps. We focus on the effect of regulation as distinct from ownership, and identify the effect of two different regulatory schemes on both publicly and privately owned Spanish electricity generators. Publicly owned generators were more efficient under cost of service regulation; private (but not public) firms responded to incentive regulation by increasing efficiency, bringing their productivity to similar levels. We introduce some novelty in modeling efficiency, including three pollutants and declared plant availability as outputs, and we test for the effect of environmental regulation in reducing pollutants.

Asplund, Rita

TI Dimensions of the Wage-Unemployment Relationship in the Nordic Countries: Wage Flexibility Without Wage Curves. **AU** Albaek, Karsten; Asplund, Rita; Blomskog, Stig; Barth, Erling; Guomundsson, Bjorn Runar; Karlsson, Vifill; Madsen, Erik Strojfer.

Athey, Susan

PD June 1999. **TI** Information and Competition in U.S. Forest Service Timber Auctions. **AU** Athey, Susan; Levin, Jonathan. **AA** MIT and NBER. **SR** National Bureau of Economic Research Working Paper: 7185; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 38. **PR** \$5.00. **JE** D44, D81, D82, L73. **KW** Timber Auctions. Private Information.

AB This paper studies the bidding behavior of firms in U.S. Forest Service timber auctions in 1976-1990. When conducting timber auctions, the Forest Service publicly announces its estimates of the tract characteristics before the auction, and each bidder additionally has an opportunity to inspect the tract and form its own private estimates. We build a model that incorporates both differential information and the fact that bids placed in timber auctions are multidimensional. The theory predicts that bidders will strategically distort their bids based on their private information, a practice known as "skewed bidding." Using a dataset that includes both the public ex ante Forest Service estimates and the ex post realizations of the tract characteristics, we test our model and provide evidence that bidders do possess private information. Our results suggest that private information affects Forest Service revenue and creates allocational inefficiency. Finally, we establish that risk aversion plays an important role in bidding behavior.

Atkeson, Andrew

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

Aura, Saku

PD July 2000. **TI** Savings and Portfolio Choice in a Two-Period Two-Asset Model. **AU** Aura, Saku; Diamond, Peter; Geanakoplos, John. **AA** Aura and Diamond: MIT. Geanakoplos: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1268; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 8. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** D11, D91, E21, G11. **KW** Portfolio. Substitutes. Normal Demand. Saving.

AB We extend Arrow's analysis of portfolio choice in a one-period model to savings and portfolio choice in a two-period model.

Ayres, Robert U.

PD March 2000. **TI** Nitrogen Consumption in the United States. **AU** Ayres, Robert U.; Febre, L. A. **AA** INSEAD. **SR** INSEAD Working Paper: 2000/19/EPS/CMER; 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** Q24, Q25, Q31. **KW** Nitrogen Use. Ammonia Use. Environmental Emissions.

AB Nitrogen is one of the key component elements in biological systems, but it also plays an increasingly important part in other areas of a modern industrial system. The starting point for all N-based chemicals is ammonia. This paper presents 1996 production and use statistics for ammonia and its most important derivatives. It also characterizes the key production processes and environmental emissions. Finally, we summarize losses and emissions of nitrogen within the sector.

PD 1999. **TI** Static vs. Dynamic Double Dividends: Theory and Taxonomy. **AU** Ayres, Robert U.; Hourcade, Jean-Charles. **AA** Ayres: CMER, INSEAD. Hourcade: CIRED. **SR** INSEAD Working Paper: 99/79/EPS/CMER; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 18. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage

and VAT. **JE** O12, O13. **KW** Double Dividends. Dynamic Dividends.

AB This paper attempts to increase the level of rigor in the discussion of so-called "double dividends". We introduce an important distinction between double dividends (DDs) in a comparative static (actually quasi-static) framework, and a dynamic framework. The former category includes comparisons between hypothetical situations differing only in terms of responses to fiscal or other governmental policy, without allowing for technological responses. In all of these cases, it is assumed that the reference point is significantly sub-optimal, i.e. not on the efficiency frontier. The second category comprises comparisons not between situations, but between alternative development scenarios where different policy packages result in different rates and directions of technological progress, and consequently, different economic growth rates and environmental impacts. Dynamic double dividends may exist even when the reference point is initially on the efficiency frontier. The paper also derives some important implications for economic modeling.

PD October 1999. **TI** Feedback and Endogenous Economic Growth. **AA** INSEAD. **SR** INSEAD Working Paper: 99/66/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** O11, O33. **KW** Technical Progress. Structural Change. Knowledge Spillovers.

AB This paper discusses the role of feedback mechanisms in economic growth theory. A set of conditions is derived for perpetual growth at a constant rate, based on the feedback between experience-related cost reduction and price elasticity of demand. Constant growth requires continuous structural change as reflected by these two variables, and by the efficiency of physical resource (and energy) consumption/utilization. Technical progress and structural change can be interpreted in terms of these related variables. Perpetual growth is consistent with negative depreciation of capital (i.e. knowledge spillovers), increasing "commoditization" of the composite output, and monotonically declining physical resource consumption (and declining waste output) but not consistent with an unchanging composite product. This strong result means that the simple single-sector neoclassical model of productivity-based income allocation used to justify the selection constant output elasticities in the standard neoclassical production function approach is not applicable to a growing economy. Hence physical resource (energy) inputs can be much more productive than the simple model suggests. On the other hand, there is no a priori reason not to use a production function model with econometrically determined elasticities for all factors.

PD November 1999. **TI** Feedback and Endogenous Economic Growth. **AA** INSEAD. **SR** INSEAD Working Paper: 99/80/EPS/CMER; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 18. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** O12, O41. **KW** Economic Growth. Feedback Mechanisms.

AB See the abstract for Ayres, Robert U., October 1999. "Feedback and Endogenous Economic Growth". INSEAD Working Paper: 99/66/EPS; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau

Cedex, France. Website: www.insead.fr/research.

Azam, Jean-Paul

PD 1999. **TI** Aid Dependence Reconsidered. **AU** Azam, Jean-Paul; Devarajan, Shantayanan; O'Connell, Stephen A. **AA** Azam: University of Toulouse and CSAE, University of Oxford. Devarajan: The World Bank. O'Connell: Swarthmore College and CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/99/05; Centre for the Study of African Economies, University of Oxford, St. Cross Building, Manor Road, Oxford, OX1 3UL, England. Website: www.csae.ox.ac.uk/. **PG** 14. **PR** 3 pounds or \$5.00; subscription 55 pounds or \$88.00. **JE** F34, F35, O17, O19. **KW** Foreign Aid. Development. Institutions. Dependence.

AB If foreign aid undermines institutional development, aid recipients can exhibit the symptoms of 'dependence' -- a short-run benefit from aid, but increasing need for aid that is damaging in the long run. We show that this high-aid/weak-institutions state can be an equilibrium outcome even when donors and recipients fully anticipate the effect of aid on institutional development. However, a low-aid/strong-institutions outcome is also possible, so that the model encompasses the diverse foreign-aid experiences of countries like the Republic of Korea and Tanzania. When the development community ignores the effect of aid on institutions, the outcome depends strongly on initial conditions. Where institutions are already weak, institutional capacity collapses and foreign aid eventually finances the entire public budget. Where they are initially stronger, the result can be close to the institutions-sensitive equilibrium. The results suggest that foreign aid strategies, even for countries with similar per capita incomes, should be differentiated according to their institutional capacity; and that a short-run reduction in aid may increase a country's chances of graduating from aid.

Aziz, Jahangir

PD March 2000. **TI** Currency Crises: In Search of Common Elements. **AU** Aziz, Jahangir; Caramazza, Francesco; Salgado, Ranil. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/67; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 25. **PR** not available. **JE** E44, F31, F32, O16. **KW** Currency Crises. Financial Crises. Foreign Exchange. Capital Movements.

AB The paper seeks to identify common characteristics among a variety of macroeconomic and financial variables for a large sample of currency crises in industrial countries and emerging market economies. It covers crises which culminated in large currency depreciation as well as those in which there was a substantial loss of foreign reserves. The analysis involves comparing the monthly or annual pattern of movement of the various macroeconomic and financial variables around the time of crisis to their behavior during tranquil periods. The robustness of the results is tested by subdividing the sample into different types of currency crises and carrying out a similar analysis for each.

Bagwell, Kyle

PD April 1999. **TI** Multilateral Trade Negotiations, Bilateral Opportunism and the Rules of GATT. **AU** Bagwell, Kyle; Staiger, Robert W. **AA** Bagwell: Columbia University and NBER. Staiger: University of Wisconsin and NBER.

SR National Bureau of Economic Research Working Paper: 7071; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 44. **PR** \$5.00. **JE** F02, F13, F15. **KW** GATT. Reciprocal Market Access. Non Discrimination.

AB Trade negotiations occur through time and between the governments of many countries. An important issue is thus whether the value of concessions that a government wins in a current negotiation may be eroded in a future bilateral negotiation to which it is not party. In the absence of rules that govern the bilateral negotiation, we first show that the potential for opportunistic bilateral agreements is indeed severe. We next identify rules of negotiation that serve to protect the welfare of governments that are not participating in the bilateral negotiation. The "reciprocal market access" rule ensures that the market access of a non-participating country is unaltered, and we show that this rule eliminates the potential for opportunistic bilateral negotiations. Our main finding is that the two central rules of GATT -- non-discrimination (MFN) and reciprocity -- effectively mimic the reciprocal market access rule, and therefore offer a practical means through which to protect non-participant welfare and thereby eliminate the potential for opportunistic bilateral negotiations.

Baks, Klaas

PD April 1999. **TI** Bayesian Performance Evaluation. **AU** Baks, Klaas; Metrick, Andrew; Wachter, Jessica. **AA** Baks: Brown University. Metrick: Harvard University and NBER. Wachter: Harvard University. **SR** National Bureau of Economic Research Working Paper: 7069; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 44. **PR** \$5.00. **JE** G11, G14, G23. **KW** Bayesian method. Performance Evaluation.

AB This paper proposes a Bayesian method of performance evaluation for investment managers. We begin with a flexible set of prior beliefs that can be elicited without any reference to probability distributions or their parameters. We then combine these prior beliefs with a general multi-factor model and derive an analytical solution for the posterior expectation of "alpha", the intercept term from the model. We then apply our methodology to a sample of domestic diversified equity mutual funds and ask "what prior beliefs would imply zero investment in active managers?" To justify such a zero-investment strategy, we find that a mean-variance investor would need to believe that less than 1 out of every 100,000 managers has an expected alpha greater than 25 basis points per month. Overall, our analysis suggests that even when the average manager is expected to under-perform passive benchmarks, it requires very strong prior beliefs to imply zero investment in managers with the best past performance.

Ball, Laurence

PD July 1998. **TI** Policy Rules for Open Economies. **AA** John Hopkins University. **SR** Reserve Bank of Australia Research Discussion Paper: 9806; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. Website: <http://www.rba.gov.au>. **PG** 19. **PR** no charge. **JE** E52, F41. **KW** Monetary Policy Rules. Inflation Targeting.

AB This paper examines the choice of a monetary policy rule in a simple macroeconomic model. In a closed economy, the optimal policy is a "Taylor rule" in which the interest rate

depends on output and inflation. In an open economy, the optimal rule changes in two ways. First, the policy instrument is a "Monetary Conditions Index" -- a weighted average of the interest rate and the exchange rate. Second, on the right side of the rule, inflation is replaced by "long-run inflation", a variable that filters out the transitory effects of exchange-rate movements. The model also implies that pure inflation targeting is dangerous in an open economy, because it creates large fluctuations in exchange rates and output. Targeting long-run inflation avoids this problem and produces a close approximation to the optimal instrument rule.

Baraud, Yannick

PD June 1999. **TI** Model Selection for (Auto-) Regression with Dependent Data. **AU** Baraud, Yannick; Comte, Fabienne; Viennet, Gabrielle. **AA** Baraud: DMI. Comte: University Paris VI and CREST. Viennet: University Paris VII. **SR** Document de Travail du CREST: 9929; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. **PG** 19. **PR** no charge. **JE** C13, C14. **KW** Nonparametric Regression. Least-Squares Estimator. Adaptive Estimation. Autoregression. Mixing Processes.

AB In this paper, we study the problem of non parametric estimation of an unknown regression function from dependent data with sub-Gaussian errors. As a particular case, we handle the autoregressive framework. For this purpose, we consider a collection of finite dimensional linear spaces (e.g. linear spaces spanned by wavelets or piecewise polynomials on a possibly irregular grid) and we estimate the regression function by a least-squares estimator built on a data driven selected linear space among the collection. This data driven choice is performed via the minimization of a penalized criterion akin to the Mallows' CP. We state non asymptotic risk bounds for our estimator in some L2-norm and we show that it is adaptive in the minimax sense over a large class of Besov balls.

Barth, Erling

PD June 1999. **TI** Monopsonistic Discrimination and the Gender Wage Gap. **AU** Barth, Erling; Dale-Olsen, Harald. **AA** Institute for Social Research. **SR** National Bureau of Economic Research Working Paper: 7197; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 42. **PR** \$5.00. **JE** J16, J31, J42, J63, J71. **KW** Monopsony. Discrimination. Gender Differences.

AB Models of worker flows have revitalized the idea of monopsony in the labor market. We apply such a model to gender differences. We argue that monopsonistic discrimination may be a substantial factor behind the overall gender wage gap, in particular with respect to differences arising between occupations and establishments. Using matched employer-employee data from Norway, we investigate the wage structure within and between establishments, and present novel evidence that the establishments' excess turnover of employees is sensitive to the wage premium of men, but not to the wage premium of women. Furthermore, we show that male turnover is more wage-elastic than female turnover.

TI Dimensions of the Wage-Unemployment Relationship in the Nordic Countries: Wage Flexibility Without Wage Curves. **AU** Albaek, Karsten; Asplund, Rita; Blomskog, Stig; Barth, Erling; Guomundsson, Bjorn Runar; Karlsson, Vifill; Madsen,

Erik Strojer.

TI Dimensions of the Wage-Unemployment Relationship in the Nordic Countries: Wage Flexibility Without Wage Curves. **AU** Albaek, Karsten; Asplund, Rita; Blomskog, Stig; Barth, Erling; Guomundsson, Bjorn Runar; Karlsson, Vifill; Madsen, Erik Strojer.

Battellino, Ric

PD July 1997. **TI** The Implementation of Monetary Policy in Australia. **AU** Battellino, Ric; Broadbent, John; Lowe, Philip. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia Research Discussion Paper: 9703; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. Website: <http://www.rba.gov.au>. **PG** 32. **PR** no charge. **JE** E52, E58. **KW** Monetary Policy. Interest-Rate Adjustment.

AB In January 1990, the Reserve Bank of Australia (RBA) began announcing and explaining changes in the target cash rate. This has increased public understanding of monetary policy and, by increasing the attention given to changes in interest rates, has affected the way in which changes in policy are transmitted to the economy. In addition, the discipline of having to announce and explain changes in the target cash rate to the public has led to a clearer focus on the objectives of monetary policy within the RBA and improved the accountability of the Bank. It has also led to a substantial decline in the volatility of short-term interest rates and more rapid pass-through of changes in the target cash rate into deposit and lending rates. In Australia, as in many other countries, interest rates have tended to be adjusted in a series of steps in the same direction. In part, this can be explained in terms of the uncertainty that policy-makers face, and the costs involved in frequently reversing the direction of interest-rate changes.

Beaudry, Paul

PD January 1999. **TI** Is it Harmful to Allow Partial Cooperation? **AU** Beaudry, Paul; Cahuc, Pierre; Kempf, Hubert. **AA** Beaudry: University of British Columbia. Cahuc and Kempf: Universite de Paris I. **SR** Document de Travail du CREST: 9939; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. **PG** 13. **PR** no charge. **JE** C71, D62, L41. **KW** Partial Cooperation. Collusion.

AB Examples abound in economics, politics and society where agents can enter partial cooperation schemes, i.e. they can collude with a subset of agents. Several contributions devoted to specific settings have claimed that such partial cooperation actually worsens welfare compared to the no-cooperation situation. Our paper assesses this view by highlighting the forces that lead to such result. We find that the nature of strategic spillovers is central to determining whether partial cooperation is bad. Our propositions are then applied to various examples such as industry wage bargaining or local public goods.

Bebchuk, Lucian Arye

PD July 1999. **TI** A Rent-Protection Theory of Corporate Ownership and Control. **AA** Harvard Law School and NBER. **SR** National Bureau of Economic Research Working Paper: 7203; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website:

www.nber.org. **PG** 37. **PR** \$5.00. **JE** G34, K22. **KW** Corporate Ownership. Corporate Control.

AB This paper develops a rent-protection theory of corporate ownership structure -- and in particular, of the choice between concentrated and dispersed ownership of corporate shares and votes. The paper analyzes the decision of a company's initial owner whether to maintain a lock on control when the company goes public. This decision is shown to be very much influenced by the size that private benefits of control are expected to have. It is also shown that separation of cash flow rights and voting rights will tend to be used in conjunction with a controlling shareholder structure but not with a dispersed ownership structure. Finally, the paper analyzes why companies might make control partially contestable, as many US companies currently do by adopting anti-takeover arrangements. The results of the paper are consistent with the available evidence, can explain the observed patterns of corporate ownership, and yield testable predictions for future empirical work. The analysis also implies that a corporate law system that effectively limits private benefits of control can produce more efficient choices of ownership structure.

Belan, Pascal

PD May 1999. **TI** Labor Force Participation and Unemployment. **AU** Belan, Pascal; Michel, Philippe. **AA** Belan: Universite de Franche-Comte and CREST. Michel: GREQAM, Universite de la Mediterranee and IUF. **SR** Document de Travail du CREST: 9925; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. **PG** 14. **PR** no charge. **JE** E24, H55, J26. **KW** Social Security. Unemployment. Retirement.

AB We consider a simple static model with a population divided into workers and retirees. Taxes on wages finance pensions to retirees and other benefits. A minimum net wage constraint can induce unemployment. We assume that the tax rate fits in order to equilibrate contributions and benefits of the social insurance system. In this framework, labor force participation and employment affect unit labor cost. We state the existence of multiple equilibria. Moreover there exist unemployment equilibria where a rise in the minimum wage or in social benefits increases employment. We also analyze the effect of change in labor force participation on unemployment.

Bell, Brian

PD September 2000. **TI** Wage Equations, Wage Curves and All That. **AU** Bell, Brian; Nickell, Stephen; Quintini, Glenda. **AA** Bell: Tudor Proprietary Trading, LLC. Nickell and Quintini: CEP. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 472; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. **PG** 28. **PR** 5 pounds. **JE** E24, J23, J31, J41, R23. **KW** Wages. Unemployment. Labor Markets. Contracts. Regional Economics.

AB This paper is concerned with the relationship between wages and unemployment. Using UK regions and individuals as the basis for our analysis, the following questions are investigated. First, is the wage equation a relationship between unemployment and wages or wage changes? Second, can we identify the relationship completely by looking at regional

wages and regional unemployment or do regional wages depend on aggregate unemployment as well? Third, are wages influenced only by the current state of the labor market or do contracts lead to wages depending on labor market conditions in the last boom or upon entry into the job? Finally is the wage-unemployment relationship influenced by inflation, competition or the housing market?.

Benabou, Roland

PD May 1999. **TI** Tax and Education Policy in a Heterogeneous Agent Economy: What Levels of Redistribution Maximize Growth and Efficiency? **AA** New York University and NBER. **SR** National Bureau of Economic Research Working Paper: 7132; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** \$5.00. **JE** D31, D63, E62, H23, I22. **KW** Income Taxes. Educational Finance. Redistribution. Growth. Efficiency.

AB This paper studies the effects of progressive income taxes and education finance in a dynamic heterogeneous agent economy. Such redistributive policies entail distortions to labor supply and savings, but also serve as partial substitutes for missing credit and insurance markets. The resulting tradeoffs for growth and efficiency are explored, both theoretically and quantitatively, in a model which yields complete analytical solutions. Progressive education finance always leads to higher income growth than taxes and transfers, but at the cost of lower insurance. Overall efficiency is assessed using a new measure which properly reflects aggregate resources and idiosyncratic risks but, unlike a standard social welfare function, does not reward equality per se. Simulations using empirical parameter estimates show that the efficiency costs and benefits of redistribution are generally of the same order of magnitude, resulting in reasonable values for the optimal rates. Aggregate income and aggregate welfare provide only very crude lower and upper bounds around the true efficiency tradeoff.

Benge, Matt

PD February 1999. **TI** Marginal Excess Burdens of Taxes on Capital and on Labour Income in a Small Open Economy. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 364; Department of Economics, Australian National University, Canberra ACT 0200, Australia. **PG** 31. **PR** no charge. **JE** H21, H25. **KW** Labor Taxes. Capital Taxes. Marginal Excess Burden.

AB A well-known consequence of the Diamond and Mirrlees production efficiency theorem is that it is optimal for a small open economy to levy no tax on capital invested in its economy. This paper uses a simple one-sector general equilibrium model to compare the marginal excess burden of taxes on labor income and taxes on capital. It is shown that if there is a positive tax on capital, conventional measures of the marginal excess burden of taxes on labor income such as that of Browning (1987) will tend to understate the true marginal excess burden. It is also shown that the marginal excess burden of taxes on capital will be higher than that of taxes on labor income and that there is a very simple relationship between these two marginal excess burdens. The model developed in the paper is used to estimate the marginal excess burden of taxes on labor income and taxes on capital under Australian tax provisions. It is found that even low rates of tax on capital may cause the marginal excess burden of taxes on capital to be

substantially higher than that of taxes on labor income.

PD April 1999. **TI** Gains to Australian Shareholders from Perturbations in Corporate Financial Policy. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 369; Department of Economics, Australian National University, Canberra ACT 0200, Australia. **PG** 29. **PR** no charge. **JE** G32, H25. **KW** Full Imputation. Capital Gains Tax. Ralph Committee.

AB Benge (1997) examined the effects of the Australian full imputation company tax system and capital gains tax provisions on dividend policy and financial policy for an optimizing firm. However, there has been no attempt to quantify the financial policy biases that were identified in the earlier paper. The aim of this paper is to do so. In addition the paper examines the effects on financial policy biases of possible reforms being considered by the Ralph Committee. Finally, the paper provides a simplified method of exposing financial policy biases.

Benkard, C. Lanier

PD May 1999. **TI** Learning and Forgetting: The Dynamics of Aircraft Production. **AA** Stanford University and NBER. **SR** National Bureau of Economic Research Working Paper: 7127; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** \$5.00. **JE** D24, D83, L11, L16, L62. **KW** Commercial Aircraft. Learning. Production. Forgetting.

AB This paper introduces a new cost data set for a commercial aircraft firm and uses this data to analyze the dynamics of learning in commercial aircraft production. This data set is found to be inconsistent with the simple learning hypothesis, and particularly the prediction that a firm's unit cost must decline with its cumulative production. Instead, strong support is found for the hypothesis of organizational forgetting, a more general learning model where unit costs are similarly dependent on a firm's past production experience, but where that experience depreciates over time. Additionally, it is found that some, but not all, of a firm's production experience transfers from one generation of an aircraft to the next. This evidence adds to our understanding of productivity in industries with learning and thus has implications to many fields of economics.

Bennedsen, Morten

PD June 2000. **TI** Informational Lobbying and Political Contributions. **AU** Bennedsen, Morten; Feldman, Sven E. **AA** Bennedsen: CIE and Copenhagen Business School. Feldman: University of Chicago. **SR** University of Copenhagen, Centre for Industrial Economics Discussion Paper: 2000/02; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. Website: www.econ.ku.dk/cie/wpmast.htm. **PG** 30. **PR** no charge. **JE** D62, D72. **KW** Lobbying. Political Contributions. Political Processes. Interest Groups. Information Externalities.

AB Interest groups can influence political decisions in two distinct ways: by offering contributions to political actors and by providing them with relevant information that is favorable for the group. We analyze the conditions under which interest groups are more inclined to use one or the other channel of influence. First, we identify an indirect cost of searching for information in the form of an information externality that

increases the cost of offering contributions. We then show that an extreme interest group might find it beneficial to abandon information provision altogether and instead seek influence solely via contributions. Finally, we apply our model to cast doubt on the "conventional wisdom" that competition among information providers increases the amount of information provided: when the identified information externality is taken into account, we show that competition decreases information search. Thus, our analysis lends support to a rather cynical view of lobbying wherein lobby groups provide little or no useful information to the political process.

PD July 2000. **TI** Lobbying Legislatures. **AU** Bennedsen, Morten; Feldman, Sven E. **AA** Bennedsen: CIE and Copenhagen Business School. Feldman: University of Chicago. **SR** University of Copenhagen, Centre for Industrial Economics Discussion Paper: 2000/04; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. Website: www.econ.ku.dk/cie/wpmast.htm. **PG** 34. **PR** no charge. **JE** D72. **KW** Lobbying. Interest Groups. Legislatures. Vote of Confidence. Information. **AB** We analyze informational lobbying in the context of multi-member legislatures. We show that a single decision-maker and a decentralized majoritarian legislature provide widely different incentives for interest groups to acquire and transmit policy relevant information. The paper also shows a difference in the opportunity to affect policy through lobbying between a parliamentary legislature and a legislature with low voting cohesion, such as the U.S. Congress. We show that the incentives to lobby a parliamentary legislature are much lower than to lobby Congress. The results provide a rationale for why lobby groups are more active in the U.S. Congress. The key institutional feature to explain the different behavior of lobby groups is the vote of confidence procedure, which creates voting cohesion in a parliamentary system across policy issues. We show that the flexibility of creating majorities in the Congress creates an incentive for interest groups to play an active role in the design of policy in the congressional system, while the voting cohesion in the parliamentary system reduces interest group's incentive to engage in information provision.

Bensaou, Ben M.

PD November 1999. **TI** Collaboration Support Technologies in Interorganizational Relationships: An Empirical Exploration in Buyer-Supplier Joint Design Activities. **AA** INSEAD. **SR** INSEAD Working Paper: 99/78/TM/ABA; 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** L22, L23, M21. **KW** Collaboration. Coordination. Interorganizational Relationships.

AB First, we explore the conditions under which U.S. and Japanese automakers use computer-aided design (CAD), to coordinate their joint design activities with some suppliers but not others. We hypothesize greater use in relationships that most benefit from the technology's coordination enhancing capabilities. However, the investments in hardware and software, and in the human and social capital necessary to use CAD effectively introduce vulnerability into the relationship. Boundary permeability increases as suppliers gain electronic access to strategic information and knowledge. We therefore hypothesize lesser CAD use where it presents "transaction

costs" risks, unless safeguards are implemented. Second, we hypothesize that using CAD improves engineers' perception of the quality of inter-firm coordination, and we anticipate an interaction effect between technology and task characteristics. We test these hypotheses using original data from a sample of 194 relationships involving all automakers in the US and Japan.

Berg, Andrew

PD March 2000. **TI** The Pros and Cons of Full Dollarization. **AU** Berg, Andrew; Borensztein, Eduardo R. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/50; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 29. **PR** not available. **JE** E42, E58, F31, F33, F36. **KW** Dollarization. Exchange Rate Regimes. Currency Crises. Monetary Union. Currency Boards.

AB We analyze the costs and benefits of full dollarization compared to its closest alternative, a currency board, quantifying for Argentina where possible. Potential advantages include lower borrowing costs and deeper integration into world markets. One cost is the transfer of seigniorage to the United States. The country may also lose the "exit option" to devalue in the face of major shocks. Similarly, even a country with a currency board may lose some ability to act as lender of last resort to the banking system. We review how various country characteristics influence the balance of arguments.

Bergemann, Dirk

PD January 2000. **TI** Information Acquisition and Efficient Mechanism Design. **AU** Bergemann, Dirk; Valimaki, Juuso. **AA** Bergemann: Yale University. Valimaki: Northwestern University and University of Southampton. **SR** Yale Cowles Foundation Discussion Paper: 1248; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 34. **PR** no charge up to 3 papers: \$3.00 U.S.; 4.00 International. **JE** C72, D44, D78. **KW** Auctions. Mechanism Design. Information Acquisition.

AB We consider a general mechanism design setting where each agent can acquire (covert) information before participating in the mechanism. The central question whether a mechanism exists which provides the efficient incentives for information acquisition ex-ante and implements the efficient allocation conditional on the private information ex-post. It is shown that in every private value environment the Vickrey-Groves-Clark mechanism guarantees both ex-ante as well as ex-post efficiency. In contrast, with common values, ex-ante and ex-post efficiency cannot be reconciled in general. Sufficient conditions in terms of sub- and supermodularity are provided when (all) ex-post efficient mechanisms lead to private under- or over-acquisition of information.

Bernheim, B. Douglas

PD March 1999. **TI** Taxation and Saving. **AA** Stanford University and NBER. **SR** National Bureau of Economic Research Working Paper: 7061; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 90. **PR** \$5.00. **JE** E21, H21. **KW** Taxation. Personal Saving.

AB In this survey, I summarize and evaluate the extant literature concerning taxation and personal saving. I describe the theoretical models that economists have used to depict saving decisions, and I explore the positive and normative

implications of these models. The central positive question is whether and to what extent specific public policies raise or lower the rate of saving. The central normative question is whether and to what extent it is desirable to tax the economic returns to saving. I also examine empirical evidence on the saving effects of various tax policies. This evidence includes econometric studies of the generic relation between saving and the after-tax rate of return, as well as analyses of responses to the economic incentives that are imbedded in tax-deferred retirement accounts. Finally, I also discuss several indirect channels through which tax policy may affect household saving by altering the behavior of third parties, such as employers.

Berry, Steven T.

PD April 1999. **TI** Mergers, Station Entry, and Programming Variety in Radio Broadcasting. **AU** Berry, Steven T.; Waldfoegel, Joel. **AA** Berry: Yale University and NBER. Waldfoegel: University of Pennsylvania and NBER. **SR** National Bureau of Economic Research Working Paper: 7080; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** L11, L13, L82. **KW** Concentration. Radio Broadcasting. Differentiated Products.

AB Free entry into markets with decreasing average costs and differentiated products can result in an inefficient number of firms and suboptimal product variety. Because new firms and products draw their customers in part from existing products, concentration can affect incentives to enter as well as how to position products. This paper examines how product variety in the radio industry is affected by changes in ownership structure. While it is in general difficult to measure the effect of concentration on other factors such as the number of products and the extent of product variety, the 1996 Telecommunications Act substantially relaxed local radio ownership restrictions, giving rise to a major and exogenous consolidation wave. Between 1993 and 1997 the average Herfindahl index in major US media markets increased by almost 65 percent. Using a panel data set on 243 U.S. radio broadcast markets in 1993 and 1997, we find that concentration reduces entry and increases product variety. Our results are consistent with spatial preemption. Jointly owned stations broadcasting from the same market are more likely than unrelated stations -- and more likely than jointly owned stations in different markets -- to broadcast in similar formats.

TI Impacts of the Indonesian Economic Crisis: Price Changes and the Poor. **AU** Levinsohn, James; Berry, Steven T.; Friedman, Jed.

Besley, Timothy

PD April 1999. **TI** The Public Choice Critique of Welfare Economics: An Exploration. **AU** Besley, Timothy; Coate, Stephen. **AA** Besley: London School of Economics. Coate: Cornell University and NBER. **SR** National Bureau of Economic Research Working Paper: 7083; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 42. **PR** \$5.00. **JE** D60, D72, H11. **KW** Welfare Economic Approach. Government Intervention. Political Determination.

AB The welfare economic method for analyzing the case for government intervention is often criticized for ignoring the political determination of policies. While many economists accept the thrust of this critique, exactly when and how

political determination interferes with a welfare economic analysis is not well understood. This paper explores the logic of the critique in a specific context, demonstrating how political determination of policy affects the case for government intervention. We show that one form of intervention is likely to have an impact on others through the political process. These spillover effects may even provide a justification for interventions that the welfare economic approach would reject.

PD April 1999. **TI** Centralized versus Decentralized Provision of Local Public Goods: A Political Economy Analysis. **AU** Besley, Timothy; Coate, Stephen. **AA** Besley: London School of Economics. Coate: Cornell University and NBER. **SR** National Bureau of Economic Research Working Paper: 7084; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 44. **PR** \$5.00. **JE** D61, D72, H72. **KW** Decentralization. Public Goods Provision. Political Economy.

AB This paper takes a fresh look at the trade-off between centralized and decentralized provision of local public goods. The point of departure is to model a centralized system as one in which public spending is financed by general taxation, but districts can receive different levels of local public goods. In a world of benevolent governments, the disadvantages of centralization stressed in the existing literature disappear, suggesting that the case for decentralization must be driven by political economy considerations. Our political economy analysis assumes that under decentralization public goods are selected by locally elected representatives, while under a centralized system policy choices are determined by a legislature consisting of elected representatives from each district. We then study the role of taste heterogeneity, spillovers and legislative behavior in determining the case for centralization.

Betts, Julian R.

PD August 2000. **TI** Incentives and Equity Under Standards-Based Reform. **AU** Betts, Julian R.; Costrell, Robert M. **AA** Betts: University of California, San Diego. Costrell: University of Massachusetts, Amherst. **SR** University of California, San Diego, Department of Economics Working Paper: 2000/20; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: <http://econ.ucsd.edu/papers>. **PG** 63. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** I21, I28, J24. **KW** Education. Human Capital. Occupational Choice. Labor Productivity. School Reform.

AB The paper considers theoretical and empirical evidence on the impact of standards-based school reform. Our theoretical synthesis distinguishes between sorting and incentive effects of high standards, and spells out the potential tradeoffs and complementarities between enhancing efficiency and equity in student achievement. Differentiated credentials can be helpful in ameliorating tradeoffs, provided that distinct signals are clearly understood, especially between cognitive and non-cognitive skills. The paper reviews trends in state-level school accountability systems, and examines empirical evidence on the impact of increased standards and expectations on student achievement. Finally, the paper reviews some of the practical challenges facing the standards movement.

Bharucha, Nargis

PD July 1998. **TI** Inflation Targeting in a Small Open Economy. **AU** Bharucha, Nargis; Kent, Christopher. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia Research Discussion Paper: 9807; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. **Website:** <http://www.rba.gov.au>. **PG** 28. **PR** no charge. **JE** C61, E52, E58, F41. **KW** Inflation Targets. Open Economy. Non-traded Inflation. Forward-Looking Variables. Conditional Variance.

AB This paper investigates the merits of aggregate inflation targeting compared with non-traded inflation targeting using a model of a small open economy producing traded and non-traded goods. An important innovation of our approach is that we isolate the effects of exchange rate, supply and demand shocks by analyzing the conditional variance of macroeconomic variables. We show that monetary policy should be more activist in response to exchange rate shocks for a flexible aggregate inflation target than for a flexible non-traded inflation target. However, in response to demand and supply shocks monetary policy is more activist for a flexible non-traded inflation target. The result is robust to the inclusion of forward-looking expectations, gradual exchange rate pass-through, and discretionary policy. In order to avoid excessive volatility in product and financial markets, it may be preferable to target inflation over a medium-term horizon.

Bhaskar, V.

PD July 2000. **TI** Belief-Based Equilibria in the Repeated Prisoners' Dilemma with Private Monitoring. **AU** Bhaskar, V.; Obara, Ichiro. **AA** Bhaskar: University of Essex. Obara: University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/16; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **Website:** <http://www.econ.upenn.edu/CARESS>. **PG** 30. **PR** \$3.00 for U.S. and Canada; \$5.00 Foreign; make checks payable to University of Pennsylvania. **JE** C73, D82. **KW** Private Monitoring. Belief-Based Equilibria. Repeated Games. Grim Trigger Strategy. Prisoner's Dilemma.

AB We analyze infinitely repeated prisoner's dilemma games with imperfect private monitoring, and construct sequential equilibria where strategies are measurable with respect to players' beliefs regarding their opponents' continuation strategies. We show that, when monitoring is almost perfect, the symmetric efficient outcome can be approximated in any prisoner's dilemma game, while every individually rational feasible payoff can be approximated in a class of prisoner's dilemma games. We also extend the approximate efficiency result to n-player prisoner's dilemma games and to prisoner's dilemma games with more general information structures. Our results require that monitoring be sufficiently accurate but do not require very low discounting.

Bhattacharya, Rina

TI Demographic Transition in the Middle East: Implications for Growth, Employment, and Housing. **AU** Dhonte, Pierre; Bhattacharya, Rina; Yousef, Tarik.

Bianconi, Marcelo

TI Intertemporal Budget Policies and Macroeconomic Adjustment in a Small Open Economy. **AU** Fisher, Walter H.; Bianconi, Marcelo.

Bigsten, Arne

PD 1998. **TI** Contract Flexibility and Conflict Resolution: Evidence From African Manufacturing. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Odoro, Abena; Oostendorp, Remco; Pattillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert. **AA** Bigsten: University of Gothenburg. Collier: World Bank and CSAE, University of Oxford. Dercon, Fafchamps, Soderbom, Teal: CSAE, University of Oxford. Gauthier: Ecole des Hautes Etudes Commerciales, Montreal. Gunning and Oostendorp: Free University, Amsterdam. Odoro: University of Ghana, Legon. Pattillo: IMF. Zeufack: World Bank. **SR** Centre for the Study of African Economies Working Paper: WPS/98/21; Centre for the Study of African Economies, University of Oxford, St. Cross Building, Manor Road, Oxford, OX1 3UL, England. **Website:** www.csae.ox.ac.uk/. **PG** 30. **PR** 3 pounds or \$5.00; subscription 55 pounds or \$88.00. **JE** D23, K21, L14, O17. **KW** Contractual Risk. Market Institutions. Africa. Law. Contracts.

AB This paper examines the contractual practices of African manufacturing firms using survey data collected in Burundi, Cameroon, Ghana, Ivory Coast, Kenya, Zambia and Zimbabwe. Descriptive statistics and econometric results are presented. They show that contractual flexibility is pervasive and that relational contracting is the norm between manufacturers, their suppliers, and their clients. The existence of long-term relations between firms helps them deal with contract non-performance through negotiation. Confrontational methods such as lawyers and courts are used when negotiations fail. Whenever confrontation can be avoided, business is resumed.

TI Educational Expansion and Economic Decline: Returns to Education in Kenya 1978-1995. **AU** Appleton, Simon; Bigsten, Arne; Kulundu, Damiano Manda.

Bikhchandani, Sushil

PD March 2000. **TI** Herd Behavior in Financial Markets: A Review. **AU** Bikhchandani, Sushil; Sharma, Sunil. **AA** Bikhchandani: University of California, Los Angeles. Sharma: International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/48; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 28. **PR** not available. **JE** F40, G10, G20. **KW** Herd Behavior. Momentum Strategies. Financial Markets.

AB Policymakers often express concern that herding by financial market participants destabilizes markets and increases the fragility of the financial system. This paper provides an overview of the recent theoretical and empirical research on herd behavior in financial markets. It addresses the following questions: What precisely do we mean by herding? What could be the causes of herd behavior? What success have existing studies had in identifying such behavior? And what effect does herding have on financial markets?.

Binder, Michael

PD April 2000. **TI** Estimation and Inference in Short

Panel Vector Autoregressions with Unit Roots and Cointegration. AU Binder, Michael; Hsiao, Cheng; Pesaran, M. Hashem. AA Binder: University of Maryland. Hsiao: University of Southern California. Pesaran: University of Cambridge. SR University of Cambridge, DAE Working Paper: 0003; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. PG 45. PR US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. JE C12, C13, C33. KW Panel VAR's. Fixed Effects. Unit Roots. Cointegration.

AB This paper considers estimation and inference in panel vector autoregressions (PVARs) with fixed effects when the time dimension of the panel is finite, and the cross-sectional dimension is large. A Maximum Likelihood (ML) estimator based on a transformed likelihood function is proposed and shown to be consistent and asymptotically normally distributed irrespective of the unit root and cointegrating properties of the underlying PVAR model. The transformed likelihood framework is also used to derive unit root and cointegration tests in panels with short time dimension; these tests have the attractive feature that they are based on standard chi-squared and normal distributed statistics. Examining Generalized Method of Moments (GMM) estimation as an alternative to our proposed ML estimator, it is shown that conventional GMM estimators based on standard orthogonality conditions break down if the underlying time series contain unit roots.

Blejer, Mario I.

PD March 2000. TI Central Banks Use of Derivatives and Other Contingent Liabilities: Analytical Issues and Policy Implications. AU Blejer, Mario I.; Schumacher, Liliana. AA International Monetary Fund. SR International Monetary Fund Policy Working Paper: WP/00/66; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 16. PR not available. JE E52, E58, G13. KW Central Banks. Contingent Liabilities. Transparency.

AB Whereas some central bank derivatives and other contingent liabilities arise from anomalous circumstances, there are a number of positive reasons that explain their popularity. After analyzing the rationale for these operations, we stress that most of these operations, being off-balance sheet, increase the risk and reduce the transparency of central bank accounts. This in turn makes more difficult the assessment of the financial position of the monetary authority and, by implication, of the macroeconomic conditions of the country. To deal with this issue, we suggest a comprehensive portfolio approach that values, in an economic sense, all assets and liabilities of the central bank.

Blinder, Alan S.

PD June 1999. TI Central Bank Credibility: Why Do We Care? How Do We Build It? AA Princeton University and NBER. SR National Bureau of Economic Research Working Paper: 7161; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 21. PR \$5.00. JE E52, E58. KW Credibility. Precommitment.

AB Central bank credibility plays a pivotal role in much of the modern literature on monetary policy, yet it is difficult to measure or even assess objectively. A survey of central bankers was conducted to determine their attitudes on two important issues: why credibility matters, and how credibility can be

built. The central bankers' answers are compared with the responses of NBER-affiliated macro and monetary economists. The two groups agree much more than they disagree. They are particularly united in their evaluations of ways to make a central bank credible -- assigning high ratings to the central bank's track record and low ratings to theoretical ideas like precommitment and incentive-compatible contracts.

Blomskog, Stig

TI Dimensions of the Wage-Unemployment Relationship in the Nordic Countries: Wage Flexibility Without Wage Curves. AU Albaek, Karsten; Asplund, Rita; Blomskog, Stig; Barth, Erling; Guomundsson, Bjorn Runar; Karlsson, Vifill; Madsen, Erik Strojler.

Blundell, Richard

PD June 1999. TI Nonparametric Engel Curves and Revealed Preference. AU Blundell, Richard; Browning, Martin; Crawford, Ian. AA Blundell and Crawford: University College London and Institute for Fiscal Studies. Browning: University of Copenhagen and McMaster University. SR University of Copenhagen, Institute of Economics Discussion Paper: 99/07; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. PG 48. PR no charge. JE C43, D11. KW Consumer Demands. Nonparametric Regression. Revealed Preference.

AB This paper applies revealed preference theory to the nonparametric statistical analysis of consumer demand. It exploits the idea that price-taking individual households in the same market face the same relative prices, in order to smooth across the demands of individuals for each common price regime. This is shown to provide a stochastic structure within which to examine the consistency of household level data and revealed preference theory. An application is made to a long time series of repeated cross-sections from the 1974-1993 UK Family Expenditure Surveys. The consistency of this data with revealed preference theory is examined. Where rejections do occur, suitable adjustments to prices for quality or taste changes are explored. For periods of consistency with revealed preference bounds are placed on true cost of living indices.

Bode-Greuel, Kerstin

TI Expansion Options: Evaluating Strategic Opportunities From Research Projects. AU Loch, Christoph H.; Bode-Greuel, Kerstin.

Bogerd, Paul

TI The Impact of ERP on Supply Chain Management: Exploratory Findings From a European Delphi Study. AU Akkermans, Henk A.; Bogerd, Paul; Yucsan, Enver; Van Wassenhove, Luk N.

Boom, Jan-Tjeerd

PD December 2000. TI The Political Economy of International Emissions Trading Scheme Choice: Empirical Evidence. AU Boom, Jan-Tjeerd; Svendsen, Gert Tinggaard. AA Boom: University of Copenhagen. Svendsen: Aarhus School of Business. SR University of Copenhagen, Institute of Economics Discussion Paper: 00/19; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. PG 52. PR no charge. JE D72, F42, H41, Q25, Q28. KW Emissions

Trading. Kyoto. Public Choice. Interest Groups. Carbon Dioxide.

AB The Kyoto Protocol allows international emissions trading, which could take place in three different forms: government, permit, or credit trading. Which trading system is chosen is likely to depend on the preferences of several interest groups. In this paper, we give empirical evidence on the preferences of industry and environmental organizations for national environmental policy instrument and for international emissions trading scheme. Furthermore, we present data that gives an indication about the level of rent-seeking by these groups at the international level. The aim of this paper is to identify which instruments are politically most feasible.

Bordo, Michael D.

PD May 1999. **TI** Was Expansionary Monetary Policy Feasible During the Great Contraction? An Examination of the Gold Standard Constraint. **AU** Bordo, Michael D.; Choudhri, Ehsan U.; Schwartz, Anna J. **AA** Bordo: Rutgers University. Choudhri: Carleton University. Schwartz: NBER. **SR** National Bureau of Economic Research Working Paper: 7125; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 32. **PR** \$5.00. **JE** E32, E42, E52, F30, N12. **KW** Great Depression. Economic History. Monetary Policy. Gold Standard. International Finance.

AB The recent consensus view, that the gold standard was the leading cause of the worldwide Great Depression 1929-33, stems from two propositions: (1) Under the gold standard, deflationary shocks were transmitted between countries and, (2) for most countries, continued adherence to gold prevented monetary authorities from offsetting banking panics and blocked their recoveries. In this paper we contend that the second proposition applies only to small open economies with limited gold reserves. This was not the case for the US, the largest country in the world, holding massive gold reserves. The US was not constrained from using expansionary policy to offset banking panics, deflation, and declining economic activity. Simulations, based on a model of a large open economy, indicate that expansionary open market operations by the Federal Reserve at two critical junctures (October 1930 to February 1931; September 1931 through January 1932) would have been successful in averting the banking panics that occurred, without endangering convertibility. Indeed had expansionary open market purchases been conducted in 1930, the contraction would not have led to the international crises that followed.

PD June 1999. **TI** Was Adherence to the Gold Standard a "Good Housekeeping Seal of Approval" During the Interwar Period? **AU** Bordo, Michael D.; Edelstein, Michael; Rockoff, Hugh. **AA** Bordo and Rockoff: Rutgers University and NBER. Edelstein: Queens College. **SR** National Bureau of Economic Research Working Paper: 7186; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** \$5.00. **JE** N12, N22. **KW** Financial Rectitude. Gold Standard.

AB World War I dramatically altered the world's financial landscape. Most countries left the gold standard, and New York replaced London as the major lender in world capital markets. This paper discusses how the gold exchange standard was reconstructed in the 1920s. We show that the U.S. capital market viewed returning to the gold standard as a signal of financial rectitude, what we have referred to in other work as a

"Good Housekeeping Seal of Approval." When countries returned to gold, especially when they did so at the prewar parity, they were rewarded with the ability to borrow at substantially lower interest rates. Other signals of financial rectitude, such as small fiscal deficits, apparently carried little weight with lenders.

PD June 1999. **TI** Is Globalization Today Really Different than Globalization a Hundred Years Ago? **AU** Bordo, Michael D.; Eichengreen, Barry; Irwin, Douglas A. **AA** Bordo: Rutgers University and NBER. Eichengreen: University of California, Berkeley and NBER. Irwin: Dartmouth College. **SR** National Bureau of Economic Research Working Paper: 7195; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 58. **PR** \$5.00. **JE** E32, F13, F21, F15, N20. **KW** International Integration. Globalization.

AB This paper pursues the comparison of economic integration today and pre 1914 for trade as well as finance, primarily for the United States but also with reference to the wider world. We establish the outlines of international integration a century ago and analyze the institutional and informational impediments that prevented the late nineteenth century world from achieving the same degree of integration as today. We conclude that the world today is different: commercial and financial integration before World War I was more limited. Given the integration today is even more pervasive than a hundred years ago, it is surprising that trade tensions and financial instability have not been worse in recent years. In the conclusion we point to the institutional innovations that have taken place in the past century as an explanation. This in turn suggests the way forward for national governments and multilaterals.

Borenstein, Severin

PD April 1999. **TI** Do Stock Price Movements Reveal Profit Dissipation? **AU** Borenstein, Severin; Farrell, Joseph. **AA** Borenstein: UC Berkeley and NBER. Farrell: UC Berkeley. **SR** National Bureau of Economic Research Working Paper: 7075; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** D21, D24. **KW** Cost Minimization. Profit Maximization.

AB Conventional economic theory assumes that firms always minimize costs given the output they produce. News articles and interviews with executives, however, indicate that firms from time to time engage in cost-cutting exercises. If so, it is natural to ask why they do this and when. One common belief is that firms cut costs when they are in financial or economic distress, and grow fat when they are relatively wealthy. We explore this hypothesis by studying the response of the stock market values of gold mining companies to changes in gold prices. The value of a cost-minimizing, profit-maximizing firm is convex in the price of a competitively supplied input or output, but we find that the stock values of many gold mining companies are concave in the price of gold. We show that this is consistent with the possibility that fat accumulates when a firm grows wealthy. We then address a number of potential alternative explanations and discuss where fat in these companies might reside.

Borensztein, Eduardo R.

TI The Pros and Cons of Full Dollarization. **AU** Berg,

Andrew: Borensztein, Eduardo R.

Boss, Michael

TI Empirical Performance of the Czech and Hungarian Index Options Under Jump. **AU** Lee, Gabriel S.; Boss, Michael; Klisz, Chris.

Boyarchenko, Svetlana

PD January 2001. **TI** Capital Accumulation under Non-Gaussian Processes and the Marshallian Law. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 01/03; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: <http://www.econ.upenn.edu/CARESS>.

PG 24. **PR** \$3.00 for U.S. and Canada; \$5.00 Foreign; make checks payable to University of Pennsylvania. **JE** C61, D21, D81, E22, G31. **KW** Investment Threshold. Non-Gaussian Processes. Capital Stock. Price Process.

AB We consider a risk-neutral, price-taking and value-maximizing firm under demand uncertainty. The firm chooses optimal investment strategies; the investment is irreversible. For a wide family of non-Gaussian processes, we derive an explicit formula for the boundary of the inaction region by using the Wiener-Hopf factorization method. As an application of the method, we suggest a Marshallian-like form for the investment rule. It is applicable when the price can move in both directions, and uses the infimum process of the price instead of the price process itself. We also write down an analytic formula for the expected level of the capital stock in terms of the infimum and supremum processes. Both results are new even for the Gaussian case.

PD January 2001. **TI** Arrow's Equivalency Theorem in a Model with Neoclassical Firms. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 01/08; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 23. **PR** \$3.00 for U.S. and Canada; \$5.00 Foreign; make checks payable to University of Pennsylvania. **JE** C60, D51, D60, G10. **KW** Financial Equilibrium. General Equilibrium. Financial Markets. Neoclassical Firms.

AB In this paper we consider a two-period general equilibrium model with uncertainty and real assets as financial instruments. The novelty of the analysis is that real assets are the stocks of neoclassical firms, so that both returns and yields depend on anticipated spot goods prices (and, of course, the yield matrix may change rank with prices). Assuming that financial markets are potentially complete, we establish generic existence of financial equilibrium and prove that there exists a dense set of economies such that financial equilibria are efficient.

Brainard, William C.

PD August 2000. **TI** How to Compute Equilibrium Prices in 1891. **AU** Brainard, William C.; Scarf, Herbert E. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1272; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 16. **PR** no charge up to 3

papers; \$3.00 U.S.; 4.00 International. **JE** B13, B31, C63, D58. **KW** Fisher. General Equilibrium. Hydraulic Apparatus. Equilibrium Prices. Computable GE. GE Algorithms.

AB Irving Fisher's Ph.D. thesis, submitted to Yale University in 1891, contains a fully articulated general equilibrium model presented with the broad scope and formal mathematical clarity associated with Walras and his successors. In addition, Fisher presents a remarkable hydraulic apparatus for calculating equilibrium prices and the resulting distribution of society's endowments among the agents in the economy. In this paper we provide an analytical description of Fisher's apparatus, and report the results of simulating the mechanical/hydraulic "machine," illustrating the ability of the apparatus to "compute" equilibrium prices and also to find multiple equilibria.

Branstetter, Lee

TI Do Stronger Patents Induce More Innovation? Evidence From the 1988 Japanese Patent Law Reforms. **AU** Sakakibara, Mariko; Branstetter, Lee.

Broadbent, John

TI The Implementation of Monetary Policy in Australia. **AU** Battellino, Ric; Broadbent, John; Lowe, Philip.

Broseta, Bruno

TI Cognition and Behavior in Normal-Form Games: An Experimental Study. **AU** Costa-Gomes, Miguel; Crawford, Vincent P.; Broseta, Bruno.

Brown, Donald J.

PD April 2000. **TI** Asymptotics in Minimum Distance from Independence Estimation. **AU** Brown, Donald J.; Wegkamp, Marten H. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1252; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 20. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C13, C14. **KW** Asymptotic Normality. Bootstrap. Empirical Processes. Jackknife. Nonlinear Models. Simultaneous Equations.

AB In this paper we introduce a family of minimum distance from independence estimators, suggested by Manski's minimum mean square from independence estimator. We establish strong consistency, asymptotic normality and consistency of resampling estimates of the distribution and variance of these estimators. For Manski's estimator we derive both strong consistency and asymptotic normality.

Brown, Jeffrey R.

PD June 1999. **TI** Private Pensions, Mortality Risk, and the Decision to Annuitize. **AA** Harvard University and NBER. **SR** National Bureau of Economic Research Working Paper: 7191; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 38. **PR** \$5.00. **JE** H55, J14, J26. **KW** Annuity Decisions. Retirement Wealth.

AB This paper examines household decisions about whether or not to annuitize retirement resources. A life-cycle model of consumption, implemented with the use of dynamic programming techniques, is used to construct a utility-based measure of annuity value for individuals and couples in the Health and Retirement Survey. Variation in the calculated "annuity equivalent wealth" arises from differences in mortality

risk, marital status, risk aversion, and the presence of pre-existing annuities such as Social Security. I find that a one-percentage point increase in the annuity equivalent wealth leads to nearly a one-percentage point increase in the ex ante probability of annuitizing balances in defined contribution pension plans. However, because much of the variation in the expected annuity decision is left unexplained by the life-cycle model, other factors are also analyzed. Health status and an individual's time horizon for financial decision making are significant determinants of the decision. There is no evidence that bequest motives are an important factor in making marginal annuity decisions.

PD June 1999. **TI** Are the Elderly Really Over-Annuitized? **AA** Harvard University and NBER. **SR** National Bureau of Economic Research Working Paper: 7193; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 34. **PR** \$5.00. **JE** H55, J14. **KW** Annuity Decisions. Retirement Wealth.

AB This paper provides evidence against the hypothesis that elderly individuals with strong bequest motives purchase term life insurance to offset mandatory annuitization by the existing Social Security system. Using new data on elderly households, this study is able to examine ownership of pure term life insurance separately from whole life, or cash-value, policies. This is an important distinction in the "Annuity Offset Model" because the central implication is that term insurance is purchased in order to "undo" excessive government annuitization in the form of Social Security, while whole life policies among the elderly primarily consist of tax deferred savings. Evidence is presented that many households simultaneously choose to hold privately purchased annuities and term life insurance, a choice that is inconsistent with the notion that these individuals are over-annuitized. Previous empirical results appear to have been overly favorable to the Annuity Offset Model due to the inability to adequately account for the strong correlation between whole life insurance ownership and Social Security benefits, a correlation that can be attributed to tax-deferred savings and attempts to protect human capital during one's younger working life.

PD June 1999. **TI** Joint Life Annuities and Annuity Demand by Married Couples. **AU** Brown, Jeffrey R.; Poterba, James M. **AA** Brown: Harvard University and NBER. Poterba: MIT and NBER. **SR** National Bureau of Economic Research Working Paper: 7199; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** \$5.00. **JE** H55, J14. **KW** Life Annuities. Joint Life Annuities.

AB This paper explores the value of purchasing joint life annuities for married couples. It describes the existing market for joint life annuities, and summarizes the range of annuity products that are currently available to couples. It then considers the value that married couples would place on access to an actuarially fair annuity market, and defines a measure of willingness-to-pay for annuities. This calculation differs from the analogous one for a single individual for two reasons. First, joint-and-survivor life tables differ from individual life tables. The life expectancy of the second-to-die in a married couple is substantially greater than that for a single individual. Second, joint life annuities provide time-varying payouts, because survivor benefit options permit the payout when both members of a couple are alive to differ from that when one member has died. The paper develops a new annuity valuation model and

applies it to evaluate a married couple's utility gain from annuitization. The findings suggest that previous estimates overstate the benefits of annuitization for married couples. Since most potential annuity buyers are married, these findings may help to explain the limited size of the private market for single premium annuities.

Browning, Martin

TI Nonparametric Engel Curves and Revealed Preference. **AU** Blundell, Richard; Browning, Martin; Crawford, Ian.

PD June 1999. **TI** Modelling Commodity Demands and Labour Supply with m-Demands. **AA** University of Copenhagen. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/08; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 25. **PR** no charge. **JE** D11, D12, J22. **KW** Consumer Demands. Labor Supply. Slutsky Conditions.

AB In the empirical modelling of demands and labor supply we often lack data on a full set of goods. The usual response is to invoke separability assumptions. Here we present an alternative based on modelling demands as a function of prices and the quantity of a reference good rather than total expenditure. We term such demands m-demands. The advantage of this approach is that we make maximum use of the data at hand without invoking implausible separability assumptions. In the theory section quasi-Slutsky conditions are derived and some structural and separability conditions are presented. We also derive functional forms for empirical work. Finally an empirical illustration on Canadian expenditure data is given. This illustrates both the implementation of the ideas presented in the theory section and the empirical costs of not having a full set of data.

TI Local Disaggregation of Demand and Excess Demand Functions: A New Question. **AU** Chiappori, Pierre-Andre; Ekeland, Ivar; Browning, Martin.

PD June 1999. **TI** Micro Data and General Equilibrium Models. **AU** Browning, Martin; Hansen, Lars Peter; Heckman, James J. **AA** Browning: University of Copenhagen. Hansen and Heckman: University of Chicago. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/10; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 104. **PR** no charge. **JE** C59,D58. **KW** Calibration. General Equilibrium. Microeconometrics.

AB We survey methods for using micro data in the calibration of dynamic general equilibrium models.

TI Employment Protection and the Consequences for Displaced Workers: A Comparison of Belgium and Denmark. **AU** Albaek, Karsten; Van Audenrode, Marc; Browning, Martin.

Buchinsky, Moshe

TI On the Number of Bootstrap Repetitions for BC sub a Confidence Intervals. **AU** Andrews, Donald W. K.; Buchinsky, Moshe.

Buiter, Willem H.

PD July 2000. **TI** Optimal Currency Areas: Why Does the Exchange Rate Regime Matter? With an Application to UK

Membership in EMU. AA London School of Economics, University of Cambridge, CEPR and NBER. SR London School of Economics, Centre for Economic Performance Discussion Paper: 462; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. PG 40. PR 5 pounds. JE F31, F33, F33, F41, F42. KW European Union. Asymmetric Shocks. National Sovereignty. Exchange Rates. Optimal Currency Areas.

AB Microeconomic efficiency and market transparency argue in favor of UK membership in EMU and for Scotland's membership in the UK monetary union and also in EMU. UK seigniorage would be boosted by EMU membership. Lender of last resort arrangements would not be substantially affected by UK membership in EMU. The UK is too small and too open to be an optimal currency area. The same point applies even more emphatically to Scotland. The 'one-size-fits-all', 'asymmetric shocks' and 'cyclical divergence' objections to UK membership are based on the misapprehension that independent national monetary policy, and the associated nominal exchange rate flexibility, can be used effectively to offset or even neutralize asymmetric shocks. This 'fine tuning delusion' is compounded by a failure to understand that, under a high degree of international financial integration, market-determined exchange rates are primarily a source of shocks and instability. The economic arguments for immediate UK membership in EMU, at an appropriate entry rate, are overwhelming. It is essential that this transfer of national sovereignty be perceived as legitimate by those affected by it.

PD August 2000. TI Monetary Misconceptions. AA University of Cambridge, European Bank for Reconstruction and Development, CEP and LSE. SR London School of Economics, Centre for Economic Performance Discussion Paper: 469; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. PG 35. PR 5 pounds. JE E30, E52, E58, E61, F40. KW Monetary Policy. Inflation Targeting. New Paradigm. Stabilization Policy. Central Banks.

AB The paper identifies a number of misconceptions about the monetary policy process and the monetary transmission mechanism in the UK. Among the misconceptions about the process are the alleged lack of regional and sectoral representativeness of the Monetary Policy Committee and the view that operational central bank independence means that monetary and fiscal policy are not properly coordinated. Among the transmission mechanism misconceptions, the "New Paradigm" figures prominently. Among the New Paradigm changes in the British economy that have been given prominence are the following: increasing openness; lower global inflation; lower profit margins, reflecting stronger competitive pressures; buoyant stock markets; a lower natural rate of unemployment; and a higher trend rate of growth of productivity. I argue that the New Paradigm has been over-hyped and misunderstood as regards its implications for monetary policy. Other misconceptions include the "death of inflation", the "end of boom and bust", a couple of Neanderthal Keynesian fallacies and the monetary fine tuning fallacy.

Burgess, Simon

PD November 2000. TI Unemployment Dynamics,

Duration and Equilibrium: Evidence from Britain. AU Burgess, Simon; Turon, Helene. AA Burgess: CEP, University of Bristol and CEPR. Turon: University of Bristol. SR London School of Economics, Centre for Economic Performance Discussion Paper: 474; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. PG 52. PR 5 pounds. JE E24, E32, J64. KW Unemployment Dynamics. Unemployment Duration. Unemployment Flows. Nonlinear Dynamics. Persistence.

AB This paper challenges the consensus on the nature of unemployment dynamics in Britain. We show that the argument that changes in unemployment arise mostly from changes in the duration of unemployment (rather than in the chance of becoming unemployed) is flawed. In fact, while shocks to the outflow do have a part to play up to the late 1970s, the huge changes in unemployment over the last two decades have been mostly driven by inflow shocks. Our model also provides a new explanation of aggregate unemployment persistence based on externalities at a market level rather than individual-level persistence.

Burgin, Mark

TI Enhanced Banzhaf Power Index and It's Mathematical Properties. AU Shapley, Lloyd S.; Burgin, Mark.

Butucea, Cristina

PD September 1999. TI Exact Asymptotics for Nonparametric Density Estimation from Dependent Data. AU Butucea, Cristina; Neumann, Michael H. AA Butucea: CREST. Neumann: Humboldt-Universitat zu Berlin. SR Document de Travail du CREST: 9942; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. PG 34. PR no charge. JE C13, C14. KW Density Estimation. Dependent Data. Exact Asymptotics. Minimax Risk.

AB We derive sharp asymptotic minimax bounds (that is, bounds which concern the exact asymptotic constant of the risk) for nonparametric density estimation based on weakly dependent observations. We study two particular problems for which there already exist such results in the case of independent and identically distributed observations, namely, minimax density estimation in Sobolev classes with L-loss and in Holder classes with L-loss. We derive independently lower and upper bounds for the asymptotic minimax risks and show that they coincide with the classical efficiency bounds. It is proven that these bounds can be attained by usual kernel density estimators. The lower bounds are obtained by analyzing the problem of estimating the marginal density in certain families of processes, which are shrinking neighborhoods of any almost arbitrary central process, in the sense that the set of densities forms a shrinking neighborhood centered around f.

Cahuc, Pierre

TI Is it Harmful to Allow Partial Cooperation? AU Beaudry, Paul; Cahuc, Pierre; Kempf, Hubert.

Campbell, Frank

PD July 1998. TI What Moves Yields in Australia? AU Campbell, Frank; Lewis, Eleanor. AA Reserve Bank of Australia. SR Reserve Bank of Australia Research

Discussion Paper: 9808; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. Website: <http://www.rba.gov.au>. PG 37. PR no charge. JE E44, E58, G14. KW News. Economic Announcements. Financial Markets. Interest Rates.

AB In this paper, we measure how the fixed-interest market in Australia assesses and responds to new economic information. We use high-frequency data, precise announcement times and market-based forecasts to measure the reaction of bill and bond yields to news. The period covered is from January 1994 to September 1997. We find that announcements about US economic news have had a large impact on yields in Australia - especially bond yields. Of the domestic announcements, the market responds to: monetary policy announcements, the CPI, the labor force and AWOTE, as well as a range of other economic statistics. We also find that the fixed-interest market seems to distinguish between the information contained in different economic announcements and that traders systematically respond to the size and direction of any unanticipated component of these announcements. The results suggest that the market perceives that information on prices, employment and wages is more important in the Reserve Bank's decisions about monetary policy than are other indicators of economic activity. Taken in sum, the results also suggest some consistency of response to news in the fixed-interest market in Australia.

Canhoto, Ana Maria

PD January 2000. TI A Non-Parametric Evaluation of Banking Efficiency in Portugal, New vs. Old Banks. AU Canhoto, Ana Maria; Dermine, Jean. AA Canhoto: Universidade Catolica Portuguesa. Dermine: INSEAD. SR INSEAD Working Paper: 2000/03/FIN; 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 G14, G21. KW Portugal. Portugese Banks. Bank Efficiency.

AB The efficiency of Portuguese banks is evaluated for the period 1990 to 1995. Portugal provides a unique case to study the relative efficiency of new banks, a significant segment of the banking industry, as well as to study the improvement in efficiency overtime following a period of rapid and substantial deregulation.

Canning, David

TI Structural Stability and Robustness to Bounded Rationality. AU Anderlini, Luca; Canning, David.

Caramazza, Francesco

PD March 2000. TI Trade and Financial Contagion in Currency Crises. AU Caramazza, Francesco; Ricci, Luca; Salgado, Ranil. AA International Monetary Fund. SR International Monetary Fund Policy Working Paper: WP/00/55; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 35. PR not available. JE F31, F32, F34, F41, G15. KW Currency Crises. Emerging Markets. Contagion. Trade. Financial Spillovers.

AB This paper investigates empirically the relevance of external, domestic, and financial weaknesses as well as trade and financial linkages in inducing financial crises for a sample of 61 emerging market and industrial countries. A panel probit

estimation finds these economic indicators to be significant for emerging market countries during the Mexican, Asian, and Russian crises. In particular, the indicators of vulnerability to international financial spillover (common creditor) and of financial fragility (reserve adequacy) are highly significant and appear to explain the apparent regional concentration of these crises. Exchange rate regimes and capital controls, however, do not seem to matter.

TI Currency Crises: In Search of Common Elements. AU Aziz, Jahangir; Caramazza, Francesco; Salgado, Ranil.

Carmichael, Lorne

PD November 1999. TI Caring About Sunk Costs: A Behavioral Solution to the Hold-Up Problem. AU Carmichael, Lorne; MacLeod, W. Bentley. AA Carmichael: Queen's University. MacLeod: University of Southern California. SR University of Western Ontario. Papers in Political Economy: 95; Department of Economics, University of Western Ontario, London, Ontario N6A 5C2, Canada. PG 25. PR no charge. JE A13, D11, D23, D80, L20. KW Sunk Costs. Decision Making. Incentives. Economic Behavior. Culture.

AB Economics students need to be taught that opportunity costs are important for optimal decision-making but that sunk costs are not. Why should this be? Presumably these students have been making optimal decisions all their lives, and the concepts should be easy for them. We show that this behavior may be part of a cultural mechanism for dealing with the incentive problems associated with team production in a complex environment. The approach has applications to the modeling of economic behavior and to the theory of incentives in organizations.

Carrasco, Marine

PD August 1999. TI Beta-Mixing and Moment Properties of Various GARCH, Stochastic Volatility and ACD Models. AU Carrasco, Marine; Chen, Xiaohong. AA Carrasco: CREST. Chen: London School of Economics. SR Document de Travail du CREST: 9941; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. PG 20. PR no charge. JE C32. KW Geometric Ergodicity. Markov Process. Random Coefficient. Stationarity.

AB This paper first provides some useful results on a generalized random coefficient autoregressive model and a Markov plus i.i.d. noise model. These results simultaneously imply strict stationarity, existence of higher-order moments, geometric ergodicity and beta-mixing with exponential decay rates, which are important properties for statistical inference. As applications, we then provide easy-to-verify sufficient conditions to ensure beta-mixing and finite higher order moments for various linear and nonlinear GARCH(1,1), linear GARCH(p,q), stochastic volatility, and autoregressive conditional duration models. For all these models, our sufficient conditions for existence of second moments and exponential beta-mixing are also necessary. For several GARCH(1,1) models, our sufficient conditions for existence of higher-order moments again coincide with the necessary ones in He and Terasvirta (1999).

Carson, Richard T.

PD August 2000. TI Public Preferences Toward

Environmental Risks: The Case of Trihalomethanes. AU Carson, Richard T.; Mitchell, Robert Cameron. AA Carson: University of California, San Diego. Mitchell: Clark University. SR University of California, San Diego, Department of Economics Working Paper: 2000/21; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: <http://econ.ucsd.edu/papers>. PG 21. PR \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. JE D81, H40, Q25, Q26. KW Contingent Valuation. Statistical Life. Drinking Water. Willingness to Pay. Risk.

AB We present the results of an in-depth study in a small Southern Illinois town looking at the public's preferences with respect to reducing trihalomethanes (THMs) in their public drinking water system. THMs are an interesting environmental risk to study. They are a low-level risk created as a byproduct (via chlorination) of reducing the much larger risk of bacterial contamination. A number of different issues related to the properties of THMs are considered in the context of designing a survey to elicit maximum willingness to pay (WTP) for a reduction in THMs. The key survey design question involves how to communicate low-level risks of different magnitudes to respondents. Respondents were randomly assigned to different risk levels and statistical tests reject the hypothesis that WTP estimates are insensitive to the risk levels assigned. Our value of a statistical life estimates are quite low relative to most estimates in the literature. After allowing for discounting using commonly used rates due to the long latency period for cancer risks, however, our value of a statistical life estimates are well within the range commonly found in the literature for WTP to avoid current period fatal accidents.

Cashin, Paul

PD April 2000. TI Terms of Trade Shocks in Africa: Are They Short-Lived or Long-Lived? AU Cashin, Paul; Pattillo, Catherine. AA International Monetary Fund. SR International Monetary Fund Policy Working Paper: WP/00/72; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 37. PR not available. JE C22, F41, O11, O13, Q17. KW Terms of Trade. Shock Persistence. Sub-Saharan Africa. Open Economy. Time Series. AB This paper examines the persistence of shocks to the terms of trade, using annual data on 42 Sub-Saharan African countries between 1960-96. We find that the persistence of terms of trade shocks varies widely – for about half the countries such shocks are short-lived, while for one-third of the countries such shocks are long-lived. The countries experiencing long-lived terms of trade shocks are typically those that have large shares of petroleum imports in total imports, small shares of nonfuel commodity exports in total exports, and are highly concentrated in exportable commodities with long-lived price shocks.

Cass, David

PD April 2000. TI On Trees and Logs. AU Cass, David; Pavlova, Anna. AA University of Pennsylvania. SR University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/01; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104- 6297. Website: <http://www.econ.upenn.edu/CARESS>. PG 18.

PR \$3.00 for U.S. and Canada; \$5.00 Foreign; make checks payable to University of Pennsylvania. JE D50, G11, G12. KW Lucas Tree Model. Asset Pricing. Financial Equilibrium. Nonuniqueness. Portfolio Constraints.

AB This paper critically examines the main workhorse model in asset pricing theory, the Lucas (1978) tree model (LT-Model) extended to include heterogeneous agents and multiple goods, and contrasts it to the benchmark model in financial equilibrium theory, the real assets model (RA-Model). At the outset, one would expect the two models to deliver similar implications since the LT-Model can be transformed into a special case of the RA-Model. We demonstrate that this is simply not correct: results obtained in the context of the LT-Model can be strikingly different from those in the RA-Model. Indeed, specifying households' preferences in the LT-Model to be additively separable log-linear, we show that the only possible equilibria are very peculiar: there is no trade on the bond market after the initial period, while the stock market is completely degenerate -- and yet, allocations are Pareto optimal. An equilibrium is either unique, or there is a continuum of equilibria. Finally, we investigate the effects of various portfolio constraints.

Cassidy, Colleen

PD November 1997. TI Measuring Traded Market Risk: Value-at-Risk and Backtesting Techniques. AU Cassidy, Colleen; Gizycki, Marianne. AA Reserve Bank of Australia. SR Reserve Bank of Australia Research Discussion Paper: 9708; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. Website: <http://www.rba.gov.au>. PG 35. PR no charge. JE G21, G28. KW Market Risk Measurement. Value-at-Risk. Capital Adequacy. Backtesting.

AB Value-at-risk measures the potential loss on a portfolio for a specified level of confidence if adverse movements in market prices were to occur. This paper examines the VaR measure and some of the techniques available for assessing the performance of a VaR model. The first section illustrates three of the approaches used in the calculation of a VaR measure: variance-covariance, historical simulation and Monte-Carlo simulation. It is concluded that, although VaR is a very useful tool, it is not without its shortcomings and so should be supplemented with other risk-management techniques. The second section focuses on the use of backtesting -- the comparison of model-generated VaR numbers with actual profits and losses -- for assessing the accuracy of a VaR model. The paper concludes that, although the tests are not sufficiently precise to form the basis of regulatory treatment of banks' VaR results, the tests do provide useful diagnostic information for evaluating model performance.

Catao, Luis

PD March 2000. TI Banks and Monetary Shocks in Emerging Markets: How Far Can We Go With the "Credit View"? AU Catao, Luis; Rodriguez, Sergio L. AA Catao: International Monetary Fund. Rodriguez: UCLA. SR International Monetary Fund Policy Working Paper: WP/00/68; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 28. PR not available. JE E44, E51, E52, F41, G21. KW Bank Credit. Interest Rate Spreads. Monetary Policy. Emerging Markets. Financial Crises.

AB This paper examines the propagation of monetary shocks

in a two-good optimizing macromodel where domestic banking activity is costly and the non-tradable sector is highly dependent on domestic bank credit, as in most emerging market economies. The model develops the Bernanke-Blinder "credit view" of the monetary transmission mechanism along classical lines, with no Keynesian rigidities being imposed and the only sources of "imperfection" arising from deposit and credit-in-advance constraints. Using numerical simulations, we show that such a relatively simple model goes a long way toward explaining some key "stylized facts" of recent financial crises.

Cavendish, William

PD 1999. **TI** The Complexity of the Commons: Environmental Resource Demands in Rural Zimbabwe. **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/99/08; Centre for the Study of African Economies, University of Oxford, St. Cross Building, Manor Road, Oxford, OX1 3UL, England. Website: www.csae.ox.ac.uk/. **PG** 53. **PR** 3 pounds or \$5.00; subscription 55 pounds or \$88.00. **JE** H41, I32, Q12, Q20. **KW** Environmental Change. Agricultural Households. Natural Resources. Commons.

AB This paper considers the relationship between households and the environment, the poverty-environment relationship. It begins by presenting a model which integrates a multiple-use environmental resource system within the standard agricultural household model. The authors demonstrate the theoretical importance of examining the way in which multifarious environmental goods interact with the household's other production and consumption decisions. Environmental goods are significantly differentiated in economic terms, so that environmental resources can be affected very differently by changes in an exogenous parameter. It is this that endows the commons with its complexity: the range of environmental resources is wide and the set of possible responses by each resource to perturbations is large, so that characterizing the poverty-environment relationship in terms of a single function, as is so often done, is wholly inadequate. The authors then turn to empirical analysis using a purpose-collected data set from 29 villages in Shindi Ward, Chivi District, south-eastern Zimbabwe. They find that the econometric results from their environmental demand regressions support the theoretical conclusions.

Cerra, Valerie

PD March 2000. **TI** Alternative Methods of Estimating Potential Output and the Output Gap: An Application to Sweden. **AU** Cerra, Valerie; Saxena, Sweta Chaman. **AA** Cerra: International Monetary Fund. Chaman: University of Pittsburgh. **SR** International Monetary Fund Policy Working Paper: WP/00/59; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 30. **PR** not available. **JE** C22, C32, E23, E32. **KW** Business Cycles. Output Gap. Potential Output. Production Functions. Vector Autoregression.

AB This paper reviews a number of different methods that can be used to estimate potential output and the output gap. Measures of potential output and the output gap are useful to help identify the scope for sustainable noninflationary growth and to allow an assessment of the stance of macroeconomic policies. The paper then compares results from some of these methods to the case of Sweden, showing the range of estimates.

PD March 2000. **TI** Contagion, Monsoons, and Domestic

Turmoil in Indonesia: A Case Study in the Asian Currency Crisis. **AU** Cerra, Valerie; Saxena, Sweta Chaman. **AA** Cerra: International Monetary Fund. Saxena: University of Pittsburgh. **SR** International Monetary Fund Policy Working Paper: WP/00/60; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 15. **PR** not available. **JE** C32, F31, F32, F41, F42. **KW** Currency Crises. Contagion. Indonesia. Markov-Switching Models. Foreign Exchange.

AB This paper investigates whether Indonesia's recent currency crisis was due to domestic fundamentals, common external shocks ("monsoons"), or contagion from neighboring countries. Markov-switching models attribute speculative pressure on Indonesia's currency to domestic political and financial factors and contagion from speculative pressures in Thailand and Korea. In particular, the results from a time-varying transition probability Markov-switching model (which overcomes some drawbacks of previous methods) show that inclusion of exchange rate pressures from Thailand and Korea in the transition probabilities improves the conditional probabilities of crisis in Indonesia. There is also evidence of contagion in the stock market.

Chadha, Jagjit S.

PD November 1999. **TI** Monetary Policy Loss Functions: Two Cheers for the Quadratic. **AU** Chadha, Jagjit S.; Schellekens, Philip. **AA** Chadha: University of Cambridge. Schellekens: London School of Economics. **SR** University of Cambridge, DAE Working Paper: 9920; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae/>. **PG** 23. **PR** US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. **JE** E42, E52, E61. **KW** Loss Functions. Uncertainty. Optimal Rules. Monetary Policy.

AB The authors examine the implications for the optimal interest rate rule that follow from relaxing the assumption that the policy-maker's loss function is quadratic. They investigate deviations from quadratics for both symmetric and asymmetric preferences for a single target and find that (i) other characterizations of risk aversion than implied by the quadratic only affect dead-weight losses, unless there is multiplicative uncertainty; and (ii) asymmetries affect the optimal rule under both additive and multiplicative uncertainty but result in interest rate paths observationally similar, and in some cases equivalent, to those implied by a shifted quadratic. The results suggest that in the context of monetary policy-making the convenient assumption of quadratic losses may not be that drastic after all.

PD November 1999. **TI** Inflation Targeting, Transparency and Interest Rate Volatility: Ditching "Monetary Mystique" in the UK. **AU** Chadha, Jagjit S.; Nolan, Charles. **AA** Chadha: University of Cambridge. Nolan: University of Reading. **SR** University of Cambridge, DAE Working Paper: 9921; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae/>. **PG** 20. **PR** US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. **JE** E42, E43, E52. **KW** Monetary Regimes. Inflation Targeting. Interest Rate Volatility.

AB Monetary authorities often seem reluctant to discuss the conduct of monetary policy. There is a concern that greater

openness in monetary policy-making may lead to volatility in financial markets, and specifically in interest rates. To date there is very little direct empirical evidence; however, recent changes in the monetary policy framework in the UK provide an opportunity to gain some insight on this issue. First, the authors present a model of monetary policy showing that the volatility that would otherwise occur to aggregate prices is transmitted to the rate of interest in a tightly specified nominal regime. Under some circumstances, information flows may add to volatility; if volatility is harmful, then central bankers may be right to be reticent. However, the evidence suggests that even though volatility has risen in the recent past, there is no evidence that this volatility is directly attributable to increased information flows *per se*.

Chai, Jingqing

TI Assessing Financial System Vulnerabilities. **AU** Johnston, R. Barry; Chai, Jingqing; Schumacher, Liliana.

Chalk, Nigel

PD April 2000. **TI** Assessing Fiscal Sustainability in Theory and Practice. **AU** Chalk, Nigel; Hemming, Richard. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/81; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 24. **PR** not available. **JE** E61, E62, H61, H62, H63. **KW** Deficit. Debt. Budget Constraints. Sustainability Indicators. Public Finance.

AB The main purpose of this paper is to provide an overview of approaches to assessing fiscal sustainability. It summarizes the general analytical background, focusing on the present value budget constraint, which is the benchmark against which solvency is determined, tests of sustainability (including sustainability indicators), and sustainability and uncertainty. The paper then looks at the way in which fiscal sustainability has been assessed in different types of IMF work. Finally the link between fiscal and external sustainability is discussed.

Chaloupka, Frank

TI State Drug Control Spending and Illicit Drug Participation. **AU** Saffer, Henry; Chaloupka, Frank.

Chandon, Pierre

PD March 2000. **TI** A Benefit Congruency Framework of Sales Promotion Effectiveness. **AU** Chandon, Pierre; Wansink, Brian; Laurent, Gilles. **AA** Chandon: INSEAD. Wansink: University of Illinois at Urbana-Champaign. Laurent: Groupe HEC. **SR** INSEAD Working Paper: 2000/22/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** D11, M31, M37. **KW** Sales Promotions. Consumer Benefits. Benefit Congruency.

AB Are monetary savings the only explanation for consumer response to a sales promotion? If not, how do the different consumer benefits of a sales promotion influence its effectiveness? To address the first question, this research builds a framework of the multiple consumer benefits of a sales promotion. Through a series of measurement studies, we find that monetary and non-monetary promotions provide consumers with different levels of three hedonic benefits (opportunities for value-expression, entertainment, and

exploration), and three utilitarian benefits (savings, higher product quality, and improved shopping convenience). To address the second question, this research develops a benefit congruency framework which argues that a sales promotion's effectiveness is determined by the utilitarian or hedonic nature of the benefits it delivers, and the congruence these benefits have with the promoted product. Among other results, two choice experiments show that, as predicted for high-equity brands, monetary promotions are more effective for utilitarian products than for hedonic products. We then discuss the implications the multi-benefit and the benefit congruency frameworks have for understanding consumer responses to sales promotions, for the debate about the value of everyday-low-price policies, and for designing more effective sales promotions.

Chandra, Naveen

TI The Lags of Monetary Policy. **AU** Gruen, David; Romalis, John; Chandra, Naveen.

TI Financial Aggregates as Conditioning Information for Australian Output and Inflation. **AU** Tallman, Ellis W.; Chandra, Naveen.

Chanel, Olivier

PD September 1999. **TI** The Declining Price Effect in Sequential Auctions: What Theory Does Not Predict. **AU** Chanel, Olivier; Vincent, Stephanie. **AA** Chanel: GREQAM, CNRS. Vincent: CIE, University of Copenhagen. **SR** University of Copenhagen, Centre for Industrial Economics Discussion Paper: 99/13; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. Website: www.econ.ku.dk/cie/wpmast.htm. **PG** 35. **PR** no charge. **JE** C15, C43, D44. **KW** Multiple Unit Auctions. Price Decline. Index Numbers. Bootstrap Simulations. Sequential Auctions.

AB This paper studies different explanations given for the "price decline anomaly" in sequential auctions, a phenomenon also known as the "afternoon effect". It surveys the dedicated theoretical models and then explores the influence of the institutional or market characteristics (of the sale) on the price trend. Next, it presents different methods used for measuring price trends and analytically identifies the differences between them. Finally, data from wine auctions are used to show that different methods may lead to opposite trends from the same data and that the number of identical objects being sold influences the price trend.

Chang, Yoosoon

PD January 2000. **TI** Bootstrap Unit Root Tests in Panels With Cross-Sectional Dependency. **AA** Rice University. **SR** Yale Cowles Foundation Discussion Paper: 1251; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 20. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C12, C15, C32, C33. **KW** Panels. Cross-Sectional Dependency. Unit Root Tests. Sieve Bootstrap. AR Approximation.

AB We apply bootstrap methodology to unit root tests for dependent panels with N cross-sectional units and T time series observations. More specifically, we let each panel be driven by a general linear process which may be different across cross-sectional units, and approximate it by a finite order

autoregressive integrated process of order increasing with T . As we allow the dependency among the innovations generating the individual panels, we construct our unit root tests from the estimation of the system of the entire N panels. The limit distributions of the tests are derived by passing T to infinity, with N fixed. We then apply the bootstrap method to the approximated autoregressions to obtain the critical values for the panel unit root tests, and establish the asymptotic validity of such bootstrap panel unit root tests under general conditions. We find that our bootstrap panel unit root tests perform well relative to the t -bar statistics, especially when N is small.

Chen, Xiaohong

TI Beta-Mixing and Moment Properties of Various GARCH, Stochastic Volatility and ACD Models. **AU** Carrasco, Marine; Chen, Xiaohong.

Chesher, Andrew

PD June 1999. **TI** Bartlett Identities Tests. **AU** Chesher, Andrew; Dhaene, Geert; Gourieroux, Christian; Scaillet, Olivier. **AA** Chesher: University of Bristol. Dhaene: Universite de Mons-Hainaut and CORE. Gourieroux: CREST and CEPREMAP. Scaillet: Universite Catholique de Louvain. **SR** Document de Travail du CREST: 9932; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. **PG** 16. **PR** no charge. **JE** C12, C52. **KW** Bartlett Identities. Information Matrix Test. Specification Test.

AB In this note we propose a general testing procedure for parametric models based on Bartlett Identities. A well-known example is the Information Matrix test, which is based on the Bartlett Identity of order 1. The Identities are shown to induce a sequence of testable restrictions on the data generating process. When all the restrictions are considered jointly, they are often complete, in the sense that they are satisfied if and only if the model is correctly specified. We show that this is the case for normal, exponential and Poisson models. A test of the joint validity of an arbitrarily chosen subset of restrictions is proposed, and its first order asymptotic properties are presented. An interpretation of the test as a score test for neglected parameter heterogeneity is also given.

Chiappori, Pierre-Andre

PD June 1999. **TI** Local Disaggregation of Demand and Excess Demand Functions: A New Question. **AU** Chiappori, Pierre-Andre; Ekeland, Ivar; Browning, Martin. **AA** Chiappori: University of Chicago. Ekeland: Universite Paris- Dauphine. Browning: University of Copenhagen. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/09; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 11. **PR** no charge. **JE** D11, E21, E30. **KW** Aggregation. Market Demand.

AB The literature on the characterization of aggregate excess and market demand has generated three types of results: global, local, or "at a point". In this note, we study the relationship between the last two approaches. We prove that within the class of functions satisfying standard conditions and whose Jacobian matrix is negative semi-definite, only $n/2 + 1$ agents are needed for the "at" decomposition. We ask whether, within the same class, the "around" decomposition also requires only $n/2 + 1$ agents.

Chinn, Menzie D.

PD March 2000. **TI** Medium-Term Determinants of Current Accounts in Industrial and Developing Countries: An Empirical Exploration. **AU** Chinn, Menzie D.; Prasad, Eswar S. **AA** Chinn: University of California, Santa Cruz and NBER; Prasad: International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/46; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 23. **PR** not available. **JE** F32, F41. **KW** Current Account Variation. Structural Determinants. Macroeconomic Determinants. Saving. Investment.

AB This paper provides an empirical investigation of the medium-term determinants of current accounts for a large sample of industrial and developing countries. The analysis is based on a structural approach that highlights the roles of the fundamental macroeconomic determinants of saving and investment. Cross-section and panel regression techniques are used to characterize the properties of current account variation across countries and over time. Current account balances are positively correlated with government budget balances and initial stocks of net foreign assets. Among developing countries, measures of financial deepening are positively correlated while indicators of openness to international trade are negatively correlated with current account balances.

Chone, Philippe

PD 1999. **TI** Allocating and Funding Universal Service Obligations in a Competitive Network Market. **AU** Chone, Philippe; Flochel, Laurent; Perrot, Anne. **AA** Chone: INSEE and CREST. Flochel: Universite d'Evry-Val d'Essonne and Universite Paris I. Perrot: CREST and Universite Paris I. **SR** Document de Travail du CREST: 9955; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. **PG** 22. **PR** no charge. **JE** D63, D78. **KW** Universal Service. Pay or Play. Regulation.

AB We examine, in a network market open to competition, various mechanisms of allocation and funding for "universal service obligations". The obligations we consider are geographic "ubiquity" and non discrimination. We analyze, both from an efficiency and an equity point of views the respective advantages of a restricted entry system, where the entrant is not allowed to serve high costs consumers and the "pay or play" system at work for instance in Australia. We show that the pay for play regulation always dominates the restricted entry regulation when the ubiquity constraint is imposed alone. This result no longer holds when the regulator imposes also the non discrimination constraint.

Choudhri, Ehsan U.

TI Was Expansionary Monetary Policy Feasible During the Great Contraction? An Examination of the Gold Standard Constraint. **AU** Bordo, Michael D.; Choudhri, Ehsan U.; Schwartz, Anna J.

Chu, Ke-young

PD March 2000. **TI** Income Distribution and Tax and Government Social Spending Policies in Developing Countries. **AU** Chu, Ke-young; Davoodi, Hamid; Gupta, Sanjeev. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/62; International

Monetary Fund, 700 19th Street, Washington, DC 20431. PG 37. PR not available. JE D31, H22, H23, H53, O15. KW Income Distribution. Tax Incidence. Government Expenditures. Economic Development. Transition Economies. AB This paper reviews income distribution in developing (and transition) countries in recent decades. On average, before-tax income distribution in developing countries is less unequal than in industrial countries. However, unlike industrial countries, developing countries in general have not been able to use tax and transfer policies effectively to reduce income inequality. During the 1980s and 1990s, many developing countries experienced an increase in income inequality. The government health care and primary and secondary education programs in developing countries are not well targeted, but their incidence tends to be progressive.

Clarida, Richard

PD April 1999. TI Fiscal Stance and the Real Exchange: Some Empirical Estimates. AU Clarida, Richard; Prendergast, Joe. AA Clarida: Columbia University and NBER. Prendergast: Credit Suisse First Boston. SR National Bureau of Economic Research Working Paper: 7077; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 10. PR \$5.00. JE E31, E62, F31. KW Real Exchange Rate. G3 Countries. Fiscal Policy.

AB This paper presents some empirical results on the dynamic relationship between fiscal policy and the real exchange rate in the G3 countries since advent of floating exchange rates. This subject is of some interest given the recent shift to fiscal surpluses in the US, the annual announcement of yet another fiscal stimulus package in Japan, and Maastricht limits on fiscal deficits in Germany and the rest of Euroland. To the extent that the foreign exchange market anticipates that fiscal "contractions will follow expansions," as would be required by the government's intertemporal budget constraint when holding constant the present value of tax collections, it is possible that the exchange rate response to any contemporaneous index of fiscal stance will depend upon exactly what stage the government's "fiscal cycle" is (thought to be) in. We find a similarity across the G3 countries in their estimated dynamic responses to a fiscal shock. At first, and for several years thereafter, the real exchange rate appreciates in response to an expansionary fiscal shock. However, eventually, the process is reversed; the real exchange rate overshoots and actually depreciates relative to its level prevailing before the fiscal shock.

Coate, Stephen

TI The Public Choice Critique of Welfare Economics: An Exploration. AU Besley, Timothy; Coate, Stephen.

TI Centralized versus Decentralized Provision of Local Public Goods: A Political Economy Analysis. AU Besley, Timothy; Coate, Stephen.

Cochrane, John H.

PD June 1999. TI New Facts in Finance. AA University of Chicago and NBER. SR National Bureau of Economic Research Working Paper: 7169; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 38. PR \$5.00. JE G11, G12, G14, G15. KW Financial Markets. CAPM. Factor Models. Risk Premia. Sluggish

Adjustment.

AB The last 15 years have seen a revolution in the way financial economists understand the world around us. We now recognize that stock and bond returns have a substantial predictable component at long horizons; that average returns of many investment opportunities cannot be explained by the CAPM; and that risk premia in bond and foreign exchange markets as well as in stock markets are time-varying. Once, we thought that mutual fund average returns were well explained by the CAPM. Now, we recognize "value" and other high return strategies in funds, and slight persistence in fund performance. In this article, I survey these new facts. I show how they are related. Each case uses price variables to infer market expectations of future returns; each case notices the absence or sluggishness of offsetting adjustment. Each case suggests that financial markets offer rewards in the form of average returns for holding risks related to recessions and financial distress, in addition to the risks represented by overall market movements.

PD June 1999. TI Portfolio Advice for a Multifactor World. AA University of Chicago and NBER. SR National Bureau of Economic Research Working Paper: 7170; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 30. PR \$5.00. JE G11, G12. KW Asset Returns. Portfolio Choice. Multifactor World. CAPM.

AB Asset returns, it turns out, do not follow the Capital Asset Pricing Model, and are somewhat predictable over time. I survey and interpret the large body of recent work that adapts traditional portfolio theory to answer, what should an investor do about these new facts in finance? I survey the extension of the famous "2-fund" theorem to an "N-fund" theorem in which investors either hedge or assume the additional, non-market, sources of priced risk; I survey the burgeoning literature on time-varying portfolio rules and the Bayesian literature that advocates a great deal of caution. In a survey, I emphasize the risk-sharing nature of asset markets, I note the likelihood that many supposed anomalies will not last, and I emphasize the fact that the average investor must hold the market so portfolio decisions must be driven by differences between an investor and the average investor.

Coe, Patrick

PD May 2000. TI The Cost Efficiency of UK Debt Management: A Recursive Modelling Approach. AU Coe, Patrick; Pesaran, M. Hashem; Vahey, Shaun P. AA Coe: University of Calgary. Pesaran and Vahey: University of Cambridge. SR University of Cambridge, DAE Working Paper: 0005; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. PG 17. PR US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. JE E17, E44, G12, H63. KW Public Debt Management. Cost Minimization. Recursive Models.

AB This paper presents an empirical analysis of the efficiency of the UK debt management authorities' (DMA) behavior from a cost minimization perspective over the period January 1985 to March 1995. During this period, the maturity structure of the government's bond portfolio was subject to frequent fine-tuning, aimed principally at lowering interest costs. The authors examine the efficiency of the DMA's behavior from a cost minimization perspective. Using a bi-variate version of the

recursive modelling procedure applied to forecasting stock returns by Pesaran and Timmermann (1995, 2000), it is shown that bond returns are forecastable but that the predictive power of macroeconomic variables is time-dependent. The impact of adjusting the bond portfolio in response to these forecasts is simulated. The simulated average interest costs are lower than those resulting from the DMA's actual real-time behavior. However, a substantial reduction in interest costs requires large monthly changes in the portfolio's maturity structure.

Colby, Hunter

PD July 1999. **TI** Sources of Growth and Supply Response: A Cross-Commodity Analysis of China's Grain Sector. **AU** Colby, Hunter; Diao, Xinshen; Somwaru, Agapi. **AA** Diao: University of Minnesota. Colby and Somwaru: USDA, Economic Research Service. **SR** University of Minnesota Economic Development Center Bulletin: 99/02; Department of Economics, 1035 Management and Economics Building, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **Website:** <http://www.econ.umn.edu/econlib>. **PG** 21. **PR** no charge. **JE** O47, O53, Q11. **KW** Supply Response. Economic Growth. Productivity. China.

AB A growth accounting method is used to analyze the sources of growth in rice, wheat, corn and soybeans, the four most important crops in China's grain sector, during 1978-97. A large TFP contribution to growth in grain production is found in the period immediately following China's rural economic reform (1978-85). In recent years the growth rate of TFP falls sharply, contributing less than 20 percent of growth in grain production, as increased use of inputs became the major engine of growth. If the current government policy environment remains unchanged, China's grain production will become increasingly costly and constrain future growth and competitiveness in world grain markets. The supply response of the four grains is estimated using a multiproduct framework. The parametric approach shows a joint production system in China's grain sector and gross complementarity in the effect of a price change on the supply of outputs and demand for inputs.

Cole, Harold L.

PD May 2000. **TI** Investment and Concern for Relative Position. **AU** Cole, Harold L.; Mailath, George J.; Postlewaite, Andrew. **AA** Cole: Federal Reserve Bank of Minneapolis. Mailath and Postlewaite: University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/06; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **Website:** www.econ.upenn.edu/CARESS. **PG** 22. **PR** no charge. **JE** C78, D11, D41, D51, G10. **KW** Relative Position. Tournaments. Investment. Matching. Home Country Bias.

AB Economists typically analyze individuals' market behavior in isolation from their nonmarket decisions. While this research strategy has generally been successful, it can lead to systematic errors when agents' nonmarket behavior affects their market choices. In this paper we analyze how individuals' investment behavior changes as a result of nonmarket behavior. Specifically, we analyze a model in which individuals must decide how to allocate their initial endowment between two random investments, where the returns are perfectly correlated

across individuals for the first investment but independent across individuals for the second. We consider an environment in which men and women match, with wealthier individuals more successful in matching. We show how individuals' concern about relative wealth can affect their investment decisions, and we provide conditions under which individuals bias their investments either toward or away from the investment with correlated returns. A modification of the model is used to explain why agents investments might exhibit a home country bias.

PD June 2000. **TI** Efficient Non-Contractible Investments in Large Economies. **AU** Cole, Harold L.; Mailath, George J.; Postlewaite, Andrew. **AA** Cole: Federal Reserve Bank of Minneapolis. Mailath and Postlewaite: University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/05; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **Website:** www.econ.upenn.edu/CARESS. **PG** 26. **PR** no charge. **JE** C78, D41, D51. **KW** Hold-Up Problem. Bargaining. Stable Matching. Investments. Two-Sided Matching.

AB Do investors making complementary investments face the correct incentives, especially when they cannot contract with each other prior to their decisions? We present a two-sided matching model in which buyers and sellers make investments prior to matching. Once matched, buyer and seller bargain over the price, taking into account outside options. Efficient decisions can always be sustained in equilibrium. We characterize the inefficiencies that can arise in equilibrium, and show that equilibria will be constrained efficient. We also show that the degree of diversity in a large market has implications for the extent of any inefficiency.

PD August 2000. **TI** Efficient Non-Contractible Investments in a Finite Economy. **AU** Cole, Harold L.; Mailath, George J.; Postlewaite, Andrew. **AA** Cole: Federal Reserve Bank of Minneapolis. Mailath and Postlewaite: University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/10; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **Website:** www.econ.upenn.edu/CARESS. **PG** 27. **PR** no charge. **JE** C78, D41, D51. **KW** Hold Up Problem. Bargaining. Stable Matching. Investments. General Equilibrium.

AB Investors making complementary investments typically do not have incentives to invest efficiently when they cannot contract with each other prior to their decisions because of the hold-up problem: when they bargain over the surplus generated by their investments, they will usually not obtain the full fruits of the investment. Intuitively, the hold-up problem should be ameliorated if, in the bargaining stage, each agent has alternatives to the partner he is bargaining with. We characterize the matching and division of surplus in finite economies for any initial investment decisions. We provide conditions on those decisions that guarantee that each agent will capture the change in the aggregate social surplus that results from any investment change he makes. We further show that for any given problem, there exists a bargaining rule by which pairs split their surplus that will support efficient investment choices in equilibrium. We also show, however, that

over-investment or under-investment can occur for natural bargaining rules.

Cole, Melvyn G.

PD August 2000. **TI** Efficient Job Allocation. **AU** Cole, Melvyn G.; Eeckhout, Jan. **AA** Cole: University of Essex. Eeckhout: University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/17; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104- 6297. Website: www.econ.upenn.edu/CARESS. **PG** 24. **PR** no charge. **JE** C78, D40, D83, J41. **KW** Matching. Directed Search. Direct Mechanisms. Supermodularity. Truthful Equilibrium.

AB This paper considers equilibrium directed search with a finite number of heterogeneous workers and firms, where firms compete in direct mechanisms. Unlike previous findings, Nash equilibrium here does solve the problem of coordination failure. Restricting the match value function to be supermodular, and that firms use truthful strategies also imply positive assortative matching and decentralized trading prices which are consistent with the stable (cooperative equilibrium) outcome. The equilibrium mechanism is not an auction. Instead, to attract better skilled workers, firms post a fixed wage rule and hire the most skilled applicant who applies.

Collard, Fabrice

PD May 1999. **TI** Output Dynamics and the Workweek of Capital. **AU** Collard, Fabrice; Dupaigne, Martial. **AA** Collard: CNRS-CEPREMAP. Dupaigne: Universite de Cergy-Pontoise. **SR** Document de Travail du CREST: 9928; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. **PG** 18. **PR** no charge. **JE** C51, C52, E22, E32. **KW** Capital Operating Time. Factor Utilization. Business Cycle. Simulated GMM. Output Dynamics. Persistence.

AB This paper develops a RBC model amended for variable utilization of capital and weak complementarity of capital and labor inputs. We show that variable utilization magnifies the instantaneous impact of an aggregate shock on factor inputs and output, and provides the model with a strong propagation mechanism. The model is estimated using a Simulated Moment Method, and its ability to replicate output dynamics is tested within this methodology on US data. We find that the model is able to generate enough persistence in output growth, and replicate the hump- shape in the impulse response function of the trend-reverting component of output found in the data. The model thus solves two puzzles identified by Cogley and Nason (1995).

Collier, Paul

TI Contract Flexibility and Conflict Resolution: Evidence From African Manufacturing. **AU** Bigsten, Arne; Collier, Paul; Dercion, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Odoro, Abena; Oostendorp, Remco; Patillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert.

Coltman, Tim

PD February 2000. **TI** E-Business: Revolution, Evolution

or Hype? **AU** Coltman, Tim; Devinney, Timothy M.; Latukefu, Alopi S.; Midgley, David F. **AA** Coltman, Devinney and Latukefu: Australian School of Management. Midgley: INSEAD. **SR** INSEAD Working Paper: 2000/08/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** M11, M21. **KW** E-Business. Business Evolution.

AB In this paper we seek to move beyond the hyperbole in the popular press by questioning whether "e-business" truly represents a revolution in the way firms operate or whether it is a more normal evolution in the operations of certain firms. In order to answer this question we examine where this revolution (or evolution) is concentrated, and why this revolution (evolution) is occurring as it is. In contrast to views in the popular press, we find that e-business is growing most rapidly in business-to-business markets and for the purchasing of routine items. Moreover, in these markets it is occurring as an evolutionary development of previous technologies (telex, fax, EDI, etc.) in established relationships between purchasers and suppliers. We then examine the claims that "e-business" is different from previous forms of business. For each of these claims we find that there are countervailing arguments and, despite the claims of technological "visionaries," E- business has not suspended the laws of economics. Overall, we argue that e-business is no silver bullet, rather it will be a useful tool for some firms and some tasks.

PD March 2000. **TI** International Perspectives on the State of the E-Business Revolution. **AU** Coltman, Tim; Devinney, Timothy M.; Latukefu, Alopi S.; Midgley, David F. **AA** Coltman, Devinney and Latukefu: University of New South Wales. Midgley: INSEAD. **SR** INSEAD Working Paper: 2000/26/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** F02, F23, O32. **KW** E-Business. Neo-Institutional Economics. Global Integration.

AB A common belief emanating from the US is that information and network-based systems herald a "new economy" -- revolutionizing the way business is conducted. In this paper, we advance an international perspective that questions whether e-business truly represents a revolution in the way firms' operate or whether it is a more normal evolution driven by technology -- i.e., whether it is simply a variation on a theme. Our paper builds on neo-institutional economic thinking and a recent theory of international business structure to examine the three core determinants of the performance of multinational firms-the supply- based pressures for global integration, the demand-based pressures for local responsiveness, and the contracting pressures for transactional completeness-in an e-business setting. The role that networking technology plays in determining the structure and strategy of multinational enterprises in an e-business environment is likely to be more of a variation on a theme than a revolution once one accounts for the transactional changes that are occurring. Finally, we extend our perspective on e-business to assist global managers dealing with the all-important issues of how to build and change institutions to better exploit the potential of e-business.

Comte, Fabrenne

TI Model Selection for (Auto-) Regression with Dependent Data. **AU** Baraud, Yannick; Comte, Fabrenne; Viennet, Gabrielle.

Constantinides, George M.

PD May 1998. **TI** Junior Can't Borrow: A New Perspective on the Equity Premium Puzzle. **AU** Constantinides, George M.; Donaldson, John B.; Mehra, Rajnish. **AA** Constantinides: University of Chicago and NBER. Donaldson: Columbia University. Mehra: University of California, Santa Barbara. **SR** University of California, Santa Barbara, Working Papers in Economics: 98/21; Department of Economics, Working Paper Coordinator. University of California, Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. **PG** 34. **PR** no charge for domestic orders; for non-U.S. orders, U.S. \$3 per paper, personal check or money order made out to "Regents of the University of California". **JE** D91, G11, G12. **KW** Asset Pricing. Portfolio Choice. Overlapping Generations. Borrowing Constraints. Equity Premium.

AB Ongoing questions on the historical mean and standard deviation of the return on equities and bonds and on the equilibrium demand for these securities are addressed in the context of a stationary, overlapping-generations economy in which consumers are subject to a borrowing constraint. The key feature captured by the OLG economy is that the bulk of the future income of the young agents is derived from their wages forthcoming in their middle age, while the bulk of the future income of the middle-aged agents is derived from their savings in equity and bonds. The young would like to borrow and invest in equity but the borrowing constraint prevents them from doing so. The middle-aged choose to hold a diversified portfolio that includes positive holdings of bonds and this explains the demand for bonds. Without the borrowing constraint the young borrow and invest in equity, thereby decreasing the mean equity premium and increasing the rate of interest.

Cook, Philip J.

TI The Benefits of Reducing Gun Violence: Evidence from Contingent- Valuation Survey Data. **AU** Ludwig, Jens; Cook, Philip J.

Corbett, Michaelyn

TI Managed Health Care Effects: Medical Care Costs and Access to Health Insurance. **AU** Frech, H. E., III.; Langenfeld, James; Corbett, Michaelyn.

Corneo, Giacomo

PD November 2000. **TI** Working in Public and Private Firms. **AU** Corneo, Giacomo; Rob, Rafael. **AA** Corneo: University of Osnabruck and CEPR. Rob: University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/19; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 19. **PR** no charge. **JE** J24, J33, J45, L32, L33. **KW** Public Enterprise. Privatization. Incentive Schemes. Labor Productivity. Compensation.

AB We develop a theoretical framework for comparing the

style of work in public and private enterprises. We incorporate "socializing," an activity which yields utility for workers and affects a firm's output, into a simple multitask model of work organization. In contrast with previous models, we establish the two following results. First, the optimal workers' compensation policy displays a larger incentive intensity in the private firm than in the public firm. Second, labor productivity in the private firm may be higher or lower than in the public firm. Both results fit well with the findings of empirical work.

Corradi, Valentina

TI Consensus, Contagion and Clustering in a Space-Time Model of Public Opinion Formation. **AU** Ianni, Antonella; Corradi, Valentina.

PD May 2000. **TI** A Simple Locally Interactive Model of Ergodic and Nonergodic Growth. **AU** Corradi, Valentina; Ianni, Antonella. **AA** Corradi: Queen Mary & Westfield College. Ianni: University of Southampton. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 0010; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton SO17 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 24. **PR** On application; annual subscription 40 pounds. **JE** O33, O41. **KW** Ergodic Growth. Nonergodic Growth. Clusters.

AB In this paper we propose a locally interactive model which explains both the cross sectional dynamics as well as the possibility of multiple long run equilibria. Firms can choose between two technologies say 1 and 0; the number of neighboring firms using it affects the returns from technology 1; the returns from technology 0 are independent of neighboring firms technological choices. Durlauf (1993) explains nonergodic growth via strong technological choices. Durlauf (1993) explains nonergodic growth via strong technological complementarities. By modelling in a different way the transmission of the spillover effects, we show that in presence of technological complementarities of intermediate strength we have either two or infinitely many long run equilibria. The basin of attraction of these equilibria depends on the initial conditions. On the other hand when the technological complementarities are either very weak or very strong then we have unique long run equilibrium. As for the dynamic behavior, we shall explain the formation of large connected areas, clusters. As the cluster size grows at a rate slower than t , such areas seem to be stationary along the dynamics.

TI Ergodicity and Clustering in Opinion Formation. **AU** Ianni, Antonella; Corradi, Valentina.

Corsetti, Giancarlo

PD August 2000. **TI** Does One Soros Make a Difference? A Theory of Currency Crises with Large and Small Traders. **AU** Corsetti, Giancarlo; Dasgupta, Amil; Morris, Stephen; Shin, Hyun Song. **AA** Corsetti: Bologna University and Yale University. Dasgupta and Morris: Yale University. Shin: Oxford University. **SR** Yale Cowles Foundation Discussion Paper: 1273; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 29. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** D82, F31. **KW** Currency Attack. Unique Equilibrium. Speculation. **AB** Do large investors increase the vulnerability of a country to speculative attacks in the foreign exchange markets? To

address this issue, we build a model of currency crises where a single large investor and a continuum of small investors independently decide whether to attack a currency based on their private information about fundamentals. Even abstracting from signaling, the presence of the large investor does make all other traders more aggressive in their selling. Relative to the case in which there is no large investors, small investors attack the currency when fundamentals are stronger. Yet, the difference can be small, or null, depending on the relative precision of private information of the small and large investors. Adding signaling makes the influence of the large trader on small traders' behavior much stronger.

Costa-Gomes, Miguel

PD July 2000. **TI** Cognition and Behavior in Normal-Form Games: An Experimental Study. **AU** Costa-Gomes, Miguel; Crawford, Vincent P.; Broseta, Bruno. **AA** Costa-Gomes: Harvard Business School and University of York. Crawford: University of California, San Diego. Broseta: University of Arizona and Organismo Publico Valenciano de Investigacion. **SR** University of California, San Diego, Department of Economics Working Paper: 2000/02R; Working Paper Coordinator, Department of Economics, 0508. University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. **Website:** <http://econ.ucsd.edu/papers>. **PG** 39. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C51, C72, C92. **KW** Noncooperative Games. Experimental Economics. Strategic Sophistication. Cognition.

AB This paper reports experiments designed to study strategic sophistication, the extent to which behavior in games reflects attempts to predict others' decisions, taking their incentives into account. We studied subjects' initial responses to normal-form games with various patterns of iterated dominance and unique pure-strategy equilibria without dominance, using a computer interface that allowed them to search for hidden payoff information, while recording their searches. Monitoring subjects' information searches along with their decisions allows us to better understand how their decisions are determined, and subjects' deviations from the search patterns suggested by equilibrium analysis help to predict their deviations from equilibrium decisions.

Costrell, Robert M.

TI Incentives and Equity Under Standards-Based Reform. **AU** Betts, Julian R.; Costrell, Robert M.

Crafts, Nicholas

PD March 2000. **TI** Globalization and Growth in The Twentieth Century. **AA** London School of Economics. **SR** International Monetary Fund Policy Working Paper: WP/00/44; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 52. **PR** not available. **JE** F43, N10, O10, O40. **KW** Growth. Convergence. Globalization. Economic History. Economic Development.

AB This paper reviews the experience of economic growth during the twentieth century with a view to highlighting implications for both growth economists and policy-makers. The unprecedented divergence in income levels between the OECD economies and many developing countries is documented but so too is a more optimistic picture of widespread progress in terms of the Human Development Index. Various aspects of the changes in economic structure are

explored in terms of their implications for growth performance both in retrospect and prospect. The possibility that the growth process will lead to another globalization backlash reminiscent of the 1930s is analyzed.

Crawford, Ian

TI Nonparametric Engel Curves and Revealed Preference. **AU** Blundell, Richard; Browning, Martin; Crawford, Ian.

Crawford, Vincent P.

TI Cognition and Behavior in Normal-Form Games: An Experimental Study. **AU** Costa-Gomes, Miguel; Crawford, Vincent P.; Broseta, Bruno.

Crepon, Bruno

PD March 1999. **TI** Working 40 Hours or Not-Working 39: Lessons from the 1981 Mandatory Reduction of Weekly Working Hours. **AU** Crepon, Bruno; Kramarz, Francis. **AA** INSEE-CREST. **SR** Document de Travail du CREST: 9912; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. **Website:** www.ensae.fr/crest. **PG** 15. **PR** no charge. **JE** J23, J31. **KW** Hours Reduction. Minimum Wage. Unemployment.

AB We use longitudinal individual wage, hours, and employment data to investigate the effect of the 1981 mandatory reduction of weekly working hours in France. A few months after Francois Mitterrand's election of May 1981, the government, applying its program decided first to increase the minimum wage by 5% and, second, to reduce weekly working hours -- from 40 to 39 -- together with mandatory stability of monthly earnings of minimum wage workers and strong recommendation for stability of monthly earnings for other workers (indeed followed by 90% of the firms). We show that workers directly affected by these changes, those working 40 hours in March 1981, lost their jobs between 1981 and 1983 more often than workers not affected by the changes, those working 39 hours in March 1981; their year-to-year job loss probability increased from roughly 10% to 12.5%. Moreover, workers affected by both minimum wage changes and hours reduction were even more strongly hit; their year-to-year job loss probability increased from roughly 10% to 26%.

Cres, Herve

PD November 2000. **TI** Ordering Pareto-Optima Through Majority Voting. **AU** Cres, Herve; Tvede, Mich. **AA** Cres: HEC School of Management. Tvede: University of Copenhagen. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 00/15; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. **Website:** www.econ.ku.dk. **PG** 34. **PR** no charge. **JE** D31, D72. **KW** Pareto-Optimal Allocations. Majority Voting. Pareto Optimality. Allocative Efficiency.

AB A commodity is shared between some individuals: there is an initial allocation; some selection procedures are used to choose an alternative allocation and; individuals decide between keeping the initial allocation or shifting to the alternative allocation. The selection procedures are supposed to involve an element of randomness in order to reflect uncertainty about economic, social and political processes. It is shown that for every allocation, x , there exists a number, $i(x)$ in $[0,1]$ such that, if the number of individuals tends to infinity, then the probability that a proportion of the population smaller

(resp. larger) than $i(x)$ prefers an allocation chosen by the selection procedure converges to 1 (resp. 0). The index $i(x)$ yields a complete order in the set of Pareto optimal allocations. Illustrations and interpretations of the selection procedures are provided.

Cressie, Noel

PD June 1999. **TI** Spatial Statistics Applied to Environmental Problems in the Life and Medical Sciences. **AA** CREST and Ohio State University. **SR** Document de Travail du CREST: 9934; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. **PG** 8. **PR** no charge. **JE** C11, Q20. **KW** Environmental Science. Spatial Statistics.

AB Many problems in the environmental sciences have a spatial component. This is particularly true when questions arise about how species act and interact at community and regional levels, in response to environmental changes. I make the case of Bayesian hierarchical models to play a dominant role in solving these problems in the next millennium.

Cullen, Julie Berry

PD June 1999. **TI** The Impact of Fiscal Incentives on Student Disability Rates. **AA** University of Michigan and NBER. **SR** National Bureau of Economic Research Working Paper: 7173; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** \$5.00. **JE** H71, H72, H73. **KW** Fiscal Incentives. Student Disability Rates. Education.

AB Student disability rates have grown by over 50 percent over the past two decades and are continuing to rise. Policy discussion has linked this trend to state funding formulas that reward local school districts for identifying additional students with special needs. However, there is little empirical evidence on the role of these fiscal parameters in explaining student disability rates, or, more generally, on the responsiveness of local program take-up rates to intergovernmental fiscal incentives. In order to estimate the elasticity of student disability rates with respect to the generosity of state reimbursements, I use variation in the state aid generated by serving a disabled student across local school districts in Texas from 1991-92 through 1996-97. The take-up response is identified from sharp changes in the relative treatment of districts of differing wealth that arise from court-mandated changes in the structure of school finance equalization. My central estimates imply that fiscal incentives can explain over 35 percent of the recent growth in student disability rates in Texas. The magnitude of the institutional response varies by district size and enrollment concentration, student race/ethnicity composition, and the level of fiscal constraint.

Cutler, David M.

PD June 1999. **TI** The Anatomy of Health Insurance. **AU** Cutler, David M.; Zeckhauser, Richard J. **AA** Harvard University and NBER. **SR** National Bureau of Economic Research Working Paper: 7176; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 74. **PR** \$5.00. **JE** D82, I11. **KW** Health Insurance. Coinsurance. Adverse Selection.

AB This article describes the anatomy of health insurance. It begins by considering the optimal design of health insurance policies. Optimal coinsurance arrangements make patients pay

for care up to the point where the marginal gains from less risk sharing are just offset by the marginal benefits from less wasteful care being provided. Coinsurance based on expenditure places no direct incentives on physicians, who are responsible for most expenditure decisions. Choice in health insurance is a mixed blessing because of adverse selection -- the tendency of the sick to choose more generous insurance than the healthy. When sick and healthy enroll in different plans, plans disproportionately composed of poor risks have to charge more than they would if they insured an average mix of people. The welfare losses from adverse selection are large in practice. Added to them are further losses from having premiums vary with observable health status. The article concludes by relating health insurance to the central goal of medical care expenditures -- better health. Studies to date are not clear on which approaches to health insurance promote health in the most cost-efficient manner. Resolving this question is the central policy concern in health economics.

Dabrowski, Marek

PD September 2000. **TI** Whence Reform? A Critique of the Stiglitz Perspective. **AU** Dabrowski, Marek; Gomulka, Stanislaw; Rostowski, Jacek. **AA** Dabrowski: Centre for Social and Economic Research. Gomulka: Centre for Social and Economic Research, CEP and LSE. Rostowski: Centre for Social and Economic Research and Central European University, Budapest. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 471; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. **PG** 26. **PR** 5 pounds. **JE** E63, L32, L33, P11, P52. **KW** Transition Economies. Third Model Economies. Reform. Stabilization. Development.

AB This paper discusses the key hypotheses which Joseph Stiglitz proposed, in his wide-ranging critique of the 'Washington Consensus', with regard to transition reforms and economic policies in China and Russia. The primary purpose is to evaluate the Stiglitz perspective in the light of empirical evidence, including the experience of countries outside China and Russia. Although some of the points Stiglitz makes are important for understanding what has happened in the transition, this paper argues that his perspective misinterprets the key facts of the Chinese transition, mis-describes the facts of the Russian transition and fails to consider the theoretical and policy implications of the success of a "third model", which is represented by some Central European and Baltic transitions.

Dale-Olsen, Harald

TI Monopsonistic Discrimination and the Gender Wage Gap. **AU** Barth, Erling; Dale-Olsen, Harald.

Darby, Michael R.

PD June 1999. **TI** Stakes and Stars: The Effect of Intellectual Human Capital on the Level and Variability of High-Tech Firms' Market Values. **AU** Darby, Michael R.; Liu, Qiao; Zucker, Lynne G. **AA** Darby and Zucker: UCLA and NBER. Liu: UCLA. **SR** National Bureau of Economic Research Working Paper: 7201; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** \$5.00. **JE** G12, M41, O31. **KW** High-tech Firms. Intangible Assets. Option Pricing.

AB High-tech firms are built much more on the intellectual capital of key personnel than on physical assets, and firms built around the best scientists are most likely to be successful in commercializing breakthrough technologies. As a result, such firms are expected to have higher market values than similar firms less well endowed. In this paper we develop and implement an option-pricing based technique for valuing these and similar intangible assets by examining the effect of ties to star scientists on the market value of new biotech firms. Since firms with more star ties are likely to have a greater probability per unit time of making a commercially valuable R&D breakthrough, we argue and confirm empirically that both the value of the firm and the likelihood of jumps in the value are increasing in the number of star ties. These effects can be financially as well as statistically significant: for two firms with mean values for other variables, the predicted increase in market value of a firm with one article written by a star as or with a firm employee is 7.3% or 16 million 1984 dollars compared to a firm with no articles.

Dasgupta, Amil

TI Does One Soros Make a Difference? A Theory of Currency Crises with Large and Small Traders. **AU** Corsetti, Giancarlo; Dasgupta, Amil; Morris, Stephen; Shin, Hyun Song.

Davila, Julio

PD June 2000. **TI** Reducing Overlapping Generations Economies to Finite Economies. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/08; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 26. **PR** no charge. **JE** D51, D82, D84, D90, E32. **KW** Overlapping Generations. Sunspots. Cycles. Asymmetric Information. Uncertainty.

AB This paper establishes in a general way the existence of a connection between the stationary equilibria of an infinite horizon economy and the equilibria of a naturally related finite economy. More specifically, the connection is established first between the cycles of a stationary overlapping generations economy and the equilibria of a related finite economy with a cyclical structure. Then the connection is shown to hold also when extrinsic uncertainty (a sunspot) is introduced in the models. The connection holds in this case between a kind of sunspot equilibria called here sunspot cycles, and the correlated equilibria of the finite economy when there is asymmetric information about the extrinsic uncertainty. Incidentally, the sunspot cycles constitute a class of sunspot equilibria that are able to generate time series fluctuating in the recurrent but irregular way characteristic of some economic time series.

PD July 2000. **TI** Time and Uncertainty in Overlapping Economies. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/09; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 19. **PR** no charge. **JE** D50, D82, D84, D90. **KW** Overlapping Generations. Reversibility. Sunspot Equilibria. Perfect Foresight. Expectations.

AB This paper shows the general reversibility of every perfect foresight equilibrium of an overlapping generations economy. It then shows and characterizes the existence of reversible sunspot equilibria in these economies as well, which seems to be at odds with our intuition about the irreversibility of a tree of events. Although the paper establishes also that such reversible stochastic equilibria constitute a negligible subset of all the equilibria of their class, their mere existence may be considered somewhat puzzling for this intuition.

PD May 2001. **TI** Multiplicity, Instability and Sunspots in Games. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 01/16; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 21. **PR** \$3.00 for U.S. and Canada; \$5.00 Foreign; make checks payable to University of Pennsylvania. **JE** C72. **KW** Indeterminacy. Rationalizability. Correlated Equilibria. Noncooperative Games. Game Theory.

AB This paper considers a game for which a similar and high enough responsiveness of each player's strategy to the other player's strategy around a Nash equilibrium implies (i) the existence of other Nash equilibria; (ii) the non local uniqueness of this Nash equilibrium as rationalizable strategies; and (iii) the existence of local nontrivial correlated equilibria around this Nash equilibrium. Although a similar result follows from Milgrom and Roberts (1990) for supermodular games, this game is not necessarily supermodular, which makes clear that supermodularity is not driving it. This simultaneous emergence of multiplicity, instability and vulnerability to sunspots parallels patterns observed in other frameworks (e.g. OG economies and economies with asymmetric information), and hints at an underlying relation between different avatars of the indeterminacy that goes beyond the boundaries of any specific framework and may be common to every decision-making problem faced by simultaneous, independent and interrelated optimizers.

Davoodi, Hamid

TI Income Distribution and Tax and Government Social Spending Policies in Developing Countries. **AU** Chu, Ke-young; Davoodi, Hamid; Gupta, Sanjeev.

De Blasio, Guido

PD April 2000. **TI** Seasonality and Capacity: An Application to Italy. **AU** De Blasio, Guido; Mini, Federico. **AA** De Blasio: International Monetary Fund. Mini: The World Bank. **SR** International Monetary Fund Policy Working Paper: WP/00/80; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 15. **PR** not available. **JE** C22, C49, E23, E32. **KW** Business Cycles. Seasonality. Capacity. Manufacturing. Italy.

AB Information on seasonal frequencies can provide valuable insights for understanding economic fluctuations. This is particularly true for Italy, where the variability of production in manufacturing is extremely high and almost entirely due to seasonal factors. This paper discusses the option of exogenous seasonality resulting from changes in underlying technology and preferences, versus the possibility of endogenous seasonality arising because of synergies across agents. It then highlights the size of the seasonally driven capacity slack and

discusses its relevance from a welfare standpoint.

de Brouwer, Gordon

PD February 1998. **TI** Forward-Looking Behaviour and Credibility: Some Evidence and Implications for Policy. **AU** de Brouwer, Gordon; Ellis, Luci. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia Research Discussion Paper: 9803; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. Website: <http://www.rba.gov.au>. **PG** 33. **PR** no charge. **JE** C61, D84, E52, E58. **KW** Expectations. Inflation. Credibility. Monetary Policy.

AB The first half of this paper provides three pieces of information about inflation expectations -- that survey measures of expectations are inconsistent with rational expectations, but less so for financial markets than households-, that actual and expected inflation interact with each other-, and that the foreign exchange market anticipates tighter monetary policy when inflation is higher than expected. The second half of the paper explores some policy implications. First, the variability of inflation and output is lower when policy-makers respond to model-based forecasts, rather than just current values, of inflation and output. Second, model-consistent behavior elsewhere in the economy stabilizes inflation and output, given that the model includes a central bank reaction function that the public believes the bank will adhere to. When inflation expectations differ between groups, the *ex ante* real interest rates that affect output and the exchange rate differ from each other, and this can induce oscillations or overshooting in the exchange rate, with consequences for the variability of inflation and output. Third, 'optimal' policy cannot fully compensate for the greater variability in inflation and output associated with extrapolative expectations.

PD August 1998. **TI** Estimating Output Gaps. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia Research Discussion Paper: 9809; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. Website: <http://www.rba.gov.au>. **PG** 27. **PR** no charge. **JE** E32, O56. **KW** Output Gap. Potential Output.

AB The output gap, defined as actual less potential output, is an important variable in its own right and as an indicator of incipient changes in inflation. This paper reviews five methods of estimating it for Australian GDP data, including linear time trends, Hodrick-Prescott (HP) filter trends, multivariate HP filter trends, unobservable components models and a production function model. Estimates of the gap vary with the method used and are sensitive to changes in model specification and sample period. While gap estimates at any particular point in time are imprecise, the broad profile of the gap is similar across the range of methods examined. Inflation equations are substantially improved when any measure of the gap is included, and output gaps generally explain innovations in inflation better than output growth.

De Meyer, Arnoud

TI Manufacturing Management Quality and Factory Performance. **AU** Loch, Christoph H.; De Meyer, Arnoud; Van der Heyden, Ludo.

De Zeeuw, Maarten

TI Welfare Effects of Uzbekistan's Foreign Exchange Regime. **AU** Rosenberg, Christoph B.; De Zeeuw, Maarten.

Deacon, Robert T.

PD May 1999. **TI** The Political Economy of Environment-Development Relationships: A Preliminary Framework. **AA** University of California, Santa Barbara and Resources for the Future. **SR** University of California, Santa Barbara, Working Papers in Economics: 99/11; Department of Economics, Working Paper Coordinator. University of California, Santa Barbara, Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. **PG** 25. **PR** no charge for domestic orders; for non-U.S. orders, U.S. \$3 per paper, personal check or money order made out to "Regents of the University of California". **JE** D72, H41, H50, P50, Q20. **KW** Environment. Political Economy. Public Goods. Form of Government. Inclusiveness.

AB Countries governed by democratic governments arguably will provide public goods at different levels than dictatorships. A simple theory that characterizes the form of government using a concept of inclusiveness is developed. A government's inclusiveness depends on the degree to which public good decisions are based on costs and benefits accruing to the entire population, rather than only an elite subset. The theory implies that public consumption goods (as opposed to public inputs) will be underprovided by less inclusive governments. Cross country data on forms of government and provision of public goods are used to test the theory for a set of public goods. The form of government is represented by combining data on the method of selecting government executives and representatives, the degree of power exercised by the legislature vs. the executive, the degree to which nominating processes are competitive, the practice of excluding political groups and parties, and other criteria. Empirical results indicate that, after controlling for differences in income and other factors, the least democratic governments in the sample provide public goods at levels 30%-60% below the most democratic governments.

Debelle, Guy

PD October 1997. **TI** Is the Phillips Curve a Curve? Some Evidence and Implications for Australia. **AU** Debelle, Guy; Vickery, James. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia Research Discussion Paper: 9706; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. Website: <http://www.rba.gov.au>. **PG** 27. **PR** no charge. **JE** E24, E31, E52. **KW** Phillips Curve. Monetary Policy. Unemployment. Kalman Filter.

AB The Phillips curve has generally been estimated in a linear framework. This paper investigates the possibility that the Phillips curve is indeed a curve, and shows that a convex short-run Phillips curve may be a more accurate representation of reality than the traditionally used linear specification. The paper also discusses the policy implications of convexity in the Phillips curve. These include the need for policy to be forward-looking and to act preemptively. Convexity provides a strong rationale for stabilization policy, and it reinforces the need for policy-makers to proceed cautiously. It also implies that deep recessions may have only a marginally greater disinflationary impact than shallower ones, unless they induce large credibility bonuses.

PD February 1998. **TI** Labour Market Adjustment: Evidence on Interstate Labour Mobility. **AU** Debelle, Guy; Vickery, James. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia Research Discussion Paper:

9801: Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. Website: <http://www.rba.gov.au>. PG 31. PR no charge. JE E24, J61. KW Labor Mobility. Migration. Unemployment.

AB In this paper, we investigate the behavior of the Australian state labor markets, focusing on the role of geographic labor mobility. We find that interstate migration does play an important role in reducing differences in labor market conditions between states, although permanent (or very persistent) differences between state unemployment rates remain. We also find that out-migration from a state resulting from a relative downturn in its labor market occurs slowly and steadily. Most of the migration takes place, on average, within four years, and the process of adjustment is complete after seven years.

PD April 1998. TI Stylised Facts of the Australian Labour Market. AU Debelle, Guy; Swann, Troy. AA Reserve Bank of Australia. SR Reserve Bank of Australia Research Discussion Paper: 9804; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. Website: <http://www.rba.gov.au>. PG 32. PR no charge. JE E24, J21. KW Employment. Participation Rate. Unemployment.

AB This paper examines some stylized facts of trends in employment and unemployment over the past 30 years. The most noteworthy development has been the rise in the aggregate unemployment rate over that period. The main factor accounting for this rise has been the increase in the unemployment rate for full-time male workers, which in turn has reflected slower employment growth in the industries that employ predominantly male full-time workers. While employment growth for females has been stronger than that for full-time males, it has not been sufficient to offset the rapid rise in the participation rate, resulting in a rise in the female unemployment rate. The paper also compares labor market developments in the 1990s recovery with the 1980s recovery. Finally, the sectors that were engines of employment growth in the 1980s, particularly the finance and insurance and retail and wholesale trade sectors, have experienced substantially slower employment growth in the 1990s.

Delecroix, Michel

PD September 1999. TI Optimal Smoothing in Semiparametric Index Approximation of Regression Functions. AU Delecroix, Michel; Hristache, Marian; Patilea, Valentin. AA Delecroix and Hristache: ENSAI and CREST. Patilea: Universite d'Orleans. SR Document de Travail du CREST: 9952; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. PG 11. PR no charge. JE C13, C14. KW Regression Approximation. L-type Projection.

AB The problem of approximating a general regression function $m(x) = E(Y|X = x)$ is addressed. As in the case of the classical L-type projection pursuit regression considered by Hall (1989), we propose to approximate $m(x)$ through a regression of Y given an index, that is a unidimensional projection of X . The orientation vector defining the projection of X is taken to be the optimum of a Kullback-Leibler type criterion. The first step of the classical projection pursuit regression and the single-index models (SIM) are obtained as particular cases. We define a kernel-based estimator of the

'optimal' orientation vector and we suggest a simple empirical bandwidth selection rule. Finally, the true regression function $m(\cdot)$ is approximated through a kernel regression of Y given the estimated index. Our methodology could be extended to more accurate multi-index approximations.

den Haan, Wouter J.

PD December 2000. 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, CEPR and NBER. Ramey and Watson: University of California, San Diego. SR University of California, San Diego, Department of Economics Working Paper: 99/07R; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: econ.ucsd.edu/papers. PG 22. PR \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. JE E32, E44, G21, G24, G32. KW Liquidity. Entrepreneurship. Financial Intermediaries. Business Fluctuations. Asset Flows.

AB This paper develops a macroeconomic model in which investable assets flow to entrepreneurs through long-term relationships with lenders. Low asset flows cause relationships to break up due to insufficient liquidity. Multiple Pareto ranked steady states emerge from complementarity between financial intermediation, reflected by the number of relationships, and households' incentives to provide assets. This complementarity also serves as a mechanism for propagating aggregate shocks. Financial collapse may become inescapable if a shock destroys sufficiently many relationships.

Deneault, Dominic

PD February 2000. TI An Evolutionary Theory of Firm Orientation: From its Behavioral to its Strategic Manifestations. AU Deneault, Dominic; Gatignon, Hubert. AA Deneault: Deloitte & Touche. Gatignon: INSEAD. SR INSEAD Working Paper: 2000/09/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 M14, M21. KW Firm Orientation. Evolutionary Framework. Market Orientation. Technological Orientation.

AB Over the last decade, an evolutionary framework has been evolving in the firm orientation literature. However, because firm orientation is multi-faceted and has been studied from many perspectives, confusion exists around fundamental concepts. The authors propose that firm orientation (e.g., market orientation, technological orientation, etc.) comprises collective knowledge in the form of both business subcultures and organizational competencies. This paper also displays the vital interactions between the behavioral (i.e., organizational capabilities) and strategic (i.e., strategic orientation) manifestations of firm orientation. In fact, the identification of various strategic options are presented as direct implications of the distinction among the constructs related to firm orientation. Finally, the authors make recommendations for orienting future research, especially in terms of concept measurement.

Dennis, Richard

PD January 1999. TI Conditionally Optimal Rules in a Simple Closed Economy Model Under Discretion and

Commitment. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 361; Department of Economics, Australian National University, Canberra ACT 0200, Australia. **PG** 26. **PR** no charge. **JE** E47, E52. **KW** Taylor Rule. Henderson and McKibbin Rule. Discretionary Policy. Commitment.

AB Using a simple dynamic, closed economy macroeconomic model, this paper compares optimal commitment rules and optimal discretionary rules with the Taylor rule and the Henderson and McKibbin rule. For some parameter values discretionary policy is found to lead to instability. This paper also explores the stabilizing properties of conditionally optimal rules -- rules that use a limited state variable set to minimize the monetary authority's objective function. We find that the existence of conditionally optimal rules depends in part on how inflation expectations are formed. Interestingly, for plausible parameter values, we find that the Taylor rule, which applies suboptimal coefficients to an optimal state variable set, generally out-performs conditionally optimal rules, which apply optimal coefficients to a suboptimal state variable set.

PD January 1999. **TI** Optimal and Conditionally Optimal Targeting Rules for Small Open Economies. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 362; Department of Economics, Australian National University, Canberra ACT 0200, Australia. **PG** 32. **PR** no charge. **JE** E47, E52. **KW** Numerical Optimization. Targeting Rules.

AB This paper uses numerical optimization to uncover optimal policy reaction functions for a stylized small open economy model under a number of targeting regimes. These policy reaction functions are presented as feedback relationships making evident the dominant state variables in the rule. Conditionally optimal rules -- rules that exploit a reduced information set to optimize the policy objective function -- are explored to assess how much is lost by excluding some information from the optimal rule. For the model of this paper we find that some conditionally optimal rules can approximate reasonably well the fully optimal rule. Knowing which variables underpin the performance of the optimal rule is important for agencies wishing to predict central bank behavior, but who do not have access to the full information set available to the central bank, and also for developing simple robust rules with good stabilizing properties.

Dercon, Stefan

TI Contract Flexibility and Conflict Resolution: Evidence From African Manufacturing. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Oduro, Abena; Oostendorp, Remco; Pattillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert.

Dermine, Jean

TI A Non-Parametric Evaluation of Banking Efficiency in Portugal, New vs. Old Banks. **AU** Canhoto, Ana Maria; Dermine, Jean.

Devarajan, Shantayanan

TI Aid Dependence Reconsidered. **AU** Azam, Jean-Paul; Devarajan, Shantayanan; O'Connell, Stephen A.

Devinney, Timothy M.

TI E-Business: Revolution, Evolution or Hype? **AU** Coltman, Tim; Devinney, Timothy M.; Latukefu, Alopi S.; Midgley, David F.

PD March 2000. **TI** The Optimal Performance of the Global Firm: Formalizing and Extending the Integration-Responsiveness Framework. **AU** Devinney, Timothy M.; Midgley, David F.; Venaik, Sunil. **AA** Devinney and Venaik: University of New South Wales. Midgley: INSEAD. **SR** INSEAD Working Paper: 2000/23/MKT; 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** D23, F02, F23. **KW** International Business. Organizational Forms. Integration- Responsiveness.

AB This paper provides an expanded approach to thinking about the organizational forms and linkages that exist in international business operations. Building on the popular integration-responsiveness framework of international strategic orientation, we develop a more expansive approach that is better able to account for the diversity of organizational forms and strategic choices open to managers. By adding a third set of environmental pressures, incorporating the beliefs of managers, and by employing the idea of efficient frontiers, we reformulate the integration-responsiveness framework, making it more consistent with modern economic models of the firm. Our integration-responsiveness-completeness (IRC) model argues that global firms can respond to these fundamental and competing pressures by configuring themselves in a variety of ways-rather than normatively prescribing that the transnational form is optimal. In addition, our model has methodological ramifications. Its formal structure suggests that empirical techniques that focus on the best rather than average performance are necessary to adequately investigate the performance differences among alternative organizational forms. This may explain the paradoxical lack of empirical support for a link between organizational form and performance.

TI International Perspectives on the State of the E-Business Revolution. **AU** Coltman, Tim; Devinney, Timothy M.; Latukefu, Alopi S.; Midgley, David F.

Dhaene, Geert

TI Bartlett Identities Tests. **AU** Chesher, Andrew; Dhaene, Geert; Gourieroux, Christian; Scaillet, Olivier.

Dhar, Ravi

PD August 1999. **TI** Consumer Choice between Hedonic and Utilitarian Goods. **AU** Dhar, Ravi; Wertenbroch, Klaus. **AA** Dhar: Yale University. Wertenbroch: INSEAD. **SR** INSEAD Working Paper: 99/61/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** D11, D12. **KW** Hedonic Choice. Utilitarian Choice. Reference Dependence. Loss Aversion.

AB This article examines how consumer choice between hedonic and utilitarian goods is influenced by the nature of the decision task. Building on research on elaboration, we propose that the relative salience of hedonic dimensions is greater when

consumers decide which of several items to give up (forfeiture choices) than when they decide which item to acquire (acquisition choices). The resulting hypothesis that a hedonic item is relatively more preferred over the same utilitarian item in forfeiture choices than in acquisition choices was supported in two choice experiments. In a subsequent experiment, these findings were extended to hypothetical choices where the acquisition and forfeiture conditions were created by manipulating initial attribute-level reference states instead of ownership. Finally, consistent with our experimental findings, a field survey showed that owners of relatively hedonic cars value their vehicles higher relative to market prices than owners of relatively utilitarian cars. We discuss theoretical implications of these reference-dependent preference asymmetries and explore consequences for marketing managers and other decision makers.

Dhonte, Pierre

PD March 2000. **TI** Demographic Transition in the Middle East: Implications for Growth, Employment, and Housing. **AU** Dhonte, Pierre; Bhattacharya, Rina; Yousef, Tarik. **AA** Dhonte and Bhattacharya: International Monetary Fund. Yousef: Georgetown University. **SR** International Monetary Fund Policy Working Paper: WP/00/41; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 22. **PR** not available. **JE** J10, J21, O15, O40, R31. **KW** Demographics. Growth. Housing. Labor Force. Employment.

AB The working age population is expected to grow faster in the Middle East than in any other region in the world between now and 2015 -- rising annually by 2.7 percent, or 10 million people. This demographic explosion presents the region with a major challenge in terms of providing jobs, incomes, and housing for the growing population, but the expanding labor force can also be seen as an opportunity to generate higher per capita income growth on a sustainable basis. The paper concludes by emphasizing the importance of market-friendly institutions in turning the challenge into opportunity.

Diamond, Peter

PD June 2000. **TI** Social Security Investment in Equities in an Economy with Short-Term Production and Land. **AU** Diamond, Peter; Geanakoplos, John. **AA** Diamond: MIT. Geanakoplos: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1259; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 36. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** D51, D61, D91, G11, G28, H55. **KW** Private Accounts. Trust Fund. Diversification. Heterogeneity. Overlapping Generations.

AB This paper explores the general equilibrium impact of social scrutiny portfolio diversification into private securities, either through the trust fund or via private accounts. The analysis depends critically on heterogeneity in saving, in production, in assets, and in taxes. Under fairly general assumptions we show that limited diversification increases a neutral social welfare function, increases interest rates, reduces the expected return on short-term equity (and thus the equity premium), decreases safe investment and increases risky investment. However, the effect on aggregate investment, long-term capital values, and the utility of young savers hinges on delicate assumptions about technology. Aggregate

investment and long-term asset values often move in the opposite direction. Thus social security diversification might reduce long-term equity value while it increases aggregate investment.

TI Savings and Portfolio Choice in a Two-Period Two-Asset Model. **AU** Aura, Saku; Diamond, Peter; Geanakoplos, John.

Diao, Xinshen

PD November 1998. **TI** The Effect of Sequencing Trade and Water Market Reform on Interest Groups in Irrigated Agriculture: An Intertemporal Economy-Wide Analysis of the Moroccan Case. **AU** Diao, Xinshen; Roe, Terry. **AA** University of Minnesota. **SR** University of Minnesota Economic Development Center Bulletin: 98/05; Department of Economics, 1035 Management and Economics Building, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. Website: <http://www.econ.umn.edu/econlib>. **PG** 34. **PR** no charge. **JE** F13, O41, Q15, Q25. **KW** Water Markets. Trade Reform. General Equilibrium.

AB Using an intertemporal general equilibrium model, the paper analyzes the economy-wide effects of the linkages between trade reform and the reform of water markets in irrigated agriculture. We find a strong investment and growth response to the trade reform, and a reallocation of resources to the production of fruit and vegetable crops for which Morocco has a strong comparative advantage. Trade reform is found to actually create an opportunity to introduce water pricing reforms. Creating a water user-rights market post trade reform not only compensates partially for the decline in rents to protected crops, but also raises the efficiency of water allocation and hence benefits the economy as a whole.

TI Sources of Growth and Supply Response: A Cross-Commodity Analysis of China's Grain Sector. **AU** Colby, Hunter; Diao, Xinshen; Somwaru, Agapi.

Dierker, Egbert

PD October 2000. **TI** Objectives of an Imperfectly Competitive Firm: A Surplus Approach. **AU** Dierker, Egbert; Dierker, Hildegaard; Grodal, Birgit. **AA** Dierker, E. and Dierker, H.: University of Vienna. Grodal: CIE and University of Copenhagen. **SR** University of Copenhagen, Centre for Industrial Economics Discussion Paper: 2000/06; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. Website: www.econ.ku.dk/cie/wpmast.htm. **PG** 23. **PR** no charge. **JE** D43, D51, D61, L13, L21. **KW** Imperfect Competition. Firm Objectives. Real Wealth Maximization. Social Surplus. General Equilibrium.

AB We consider a firm acting strategically on behalf of its shareholders. The price normalization problem arising in general equilibrium models of imperfect competition can be overcome by using the concept of real wealth maximization. This concept is based on shareholders' aggregate demand and does not involve any utility comparisons. We explore the efficiency properties of real wealth maxima for the group of shareholders. A strategy is called S-efficient (S stands for shareholders) if there is no other strategy such that shareholders' new total demand can be redistributed in a way that all shareholders will be better off. Our main result states that the set of real wealth maximizing strategies coincides with the set of S-efficient strategies provided that shareholders' social surplus is concave. The concavity assumption is shown

to be independent of the commodity bundle used to normalize prices and measure wealth.

PD October 2000. **TI** Nonexistence of Constrained Efficient Equilibria when Markets are Incomplete. **AU** Dierker, Egbert; Dierker, Hildegaard; Grodal, Birgit. **AA** Dierker, E. and Dierker, H.: University of Vienna. Grodal: CIE and University of Copenhagen. **SR** University of Copenhagen, Centre for Industrial Economics Discussion Paper: 2000/07; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. Website: www.econ.ku.dk/cie/wpmast.htm. **PG** 15. **PR** no charge. **JE** D21, D52, G10, L20. **KW** Incomplete Markets. Production. Constrained Efficiency. Dreze Equilibria. General Equilibrium.

AB We consider economies with incomplete markets, production, and a given distribution of initial endowments. The main purpose of the paper is to present a robust example of an economy with only one firm and one good per state in which no production decision entails a constrained efficient outcome. In particular, the unique Dreze equilibrium is dominated by every other production decision.

PD April 1999. **TI** Incomplete Markets and the Firm. **AU** Dierker, Egbert; Dierker, Hildegaard; Grodal, Birgit. **AA** Dierker, E. and Dierker H.: University of Vienna. Grodal, University of Copenhagen. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/03; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 28. **PR** no charge. **JE** D43, D52, D61, L22. **KW** Incomplete Markets. Firm's Objectives. Dreze Equilibria. Efficiency.

AB In this paper we analyze the welfare properties of the set of Dreze equilibria for economies with incomplete markets and firms. The well-known fact that a Dreze equilibrium need not be constrained Pareto optimal is often attributed to a lack of coordination between firms. We show that there are economies with a single firm in which no Dreze equilibrium is constrained Pareto efficient. Even a unique Dreze equilibrium need not be constrained Pareto efficient.

Dierker, Hildegaard

TI Objectives of an Imperfectly Competitive Firm: A Surplus Approach. **AU** Dierker, Egbert; Dierker, Hildegaard; Grodal, Birgit.

TI Nonexistence of Constrained Efficient Equilibria when Markets are Incomplete. **AU** Dierker, Egbert; Dierker, Hildegaard; Grodal, Birgit.

TI Incomplete Markets and the Firm. **AU** Dierker, Egbert; Dierker, Hildegaard; Grodal, Birgit.

Dilling-Hansen, Mogens

TI R&D and Productivity in Danish Firms: Some Empirical Evidence. **AU** Smith, Valdemar; Dilling-Hansen, Mogens; Eriksson, Tor; Madsen, Erik Strojter.

Donaldson, John B.

TI Junior Can't Borrow: A New Perspective on the Equity Premium Puzzle. **AU** Constantinides, George M.; Donaldson, John B.; Mehra, Rajnish.

Dougherty, Christopher

PD November 2000. **TI** Numeracy, Literacy, and Earnings: Evidence from the National Longitudinal Survey of Youth. **AA** CEP and LSE. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 478; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. **PG** 17. **PR** 5 pounds. **JE** I21, J24, J31. **KW** Numeracy. Literacy. Earnings. Education. Human Capital.

AB The analysis is concerned with the contributions of numeracy and literacy to earnings, for three reasons: first, no clear pattern emerges from existing findings relating to the contributions of different types of ability, and numeracy and literacy appear to be a natural basic starting point; second, measures to improve numeracy and literacy are often given priority in policies intended to help those with lowest educational attainment; and third, with the growth of the knowledge-based economy, and the increasing importance of digital technology, it is of interest to compare the levels and rates of change of the contributions of numeracy and literacy as reflected in earnings. The results suggest that numeracy has a highly significant effect on earnings, mostly through its effect on college attainment, but also directly, controlling for attainment, and interactively with attainment, and its effect is subject to increasing returns. While the magnitude of the effect is small in absolute terms, it is substantial when compared with other effects, and it appears to be increasing at a rate of 6 percent per year. Literacy also has a highly significant effect on earnings, but it would appear to be indirectly through its effect on attainment.

Driscoll, John C.

PD June 1999. **TI** Sticky Prices, Coordination and Collusion. **AU** Driscoll, John C.; Ito, Harumi. **AA** Brown University and NBER. **SR** National Bureau of Economic Research Working Paper: 7165; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 12. **PR** \$5.00. **JE** D43, E12, E31, L13. **KW** Sticky Prices. Punishment Game.

AB New Keynesian models of price setting under monopolistic competition involve two kinds of inefficiency: the price level is too high because firms ignore an aggregate demand externality, and when there are costs of changing prices, price stickiness may be an equilibrium response to changes in nominal money even when all agents would be better off if all adjusted prices. This paper models the consequences of allowing firms to coordinate, enforcing the coordination by punishing deviators; this is equivalent to modeling firms as an implicit cartel playing a punishment game. We show that coordination can partially or fully eliminate the first kind of inefficiency, depending on the magnitude of the punishment, but cannot always remove the second. The response of prices to a monetary shock will depend on the magnitude of the punishment, and may be asymmetric. Implications for the welfare cost of fluctuations also differ from the standard monopolistic competition case.

Dubey, Pradeep

PD April 2000. **TI** Optimal Scrutiny in Multi-Period Promotion Tournaments. **AU** Dubey, Pradeep; Haimanko, Ori. **AA** Dubey; Center for Game Theory in Economics. Haimanko: Yale University. **SR** Yale Cowles Foundation

Discussion Paper: 1254; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. PG 25. PR no charge up to 3 papers; \$3.00 U.S.; 4.00 International. JE C72, D82, J41. KW Promotion Tournaments. Subgame Perfect Equilibria. Undominated Sample Size.

AB Consider a principal who hires heterogeneous agents to work for him over T periods, without prior knowledge of their respective skills, and intends to promote one of them at the end. In each period the agents choose effort levels and produce random outputs, independently of each other, and are fully informed of the past history of outputs. The principal's major objective is to maximize the total expected output, but he may also put some weight on detecting the higher-skilled agent for promotion. To this end, he randomly samples n out of the T periods and awards the promotion to the agent who produces more on the sample. This determines an extensive form game (T,N), which we analyze for its subgame perfect equilibria in behavioral strategies. We show that the principal will do best to always choose a small sample size n . More precisely, if (T) is the maximal optimal sample size, then $(T)/T \rightarrow 0$ as T .

PD May 2000. **TI** Competitive Prizes: When Less Scrutiny Induces More Effort. **AU** Dubey, Pradeep; Wu, Chien-Wei. **AA** Center for Game Theory in Economics. **SR** Yale Cowles Foundation Discussion Paper: 1255; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 40. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C72, D82, J41. **KW** Competitive Prizes. Extensive Form Games. Information Patterns. Strategic Equilibria. Optimal Sample-Size.

AB We consider a principal who is keen to induce his agents to work at their maximal effort levels. To this end, he samples n days at random out of the T days on which they work, and awards a prize of B dollars to the most productive agent. The principal's policy (B, n) induces a strategic game (B, n) between the agents. We show that to implement maximal effort levels weakly (or, strongly) as a strategic equilibrium (or, as dominant strategies) in (B, n) , at the least cost B to himself, the principal must choose a small sample size n . Thus, less scrutiny by the principal induces more effort from the agents. The need for reduced scrutiny becomes more pronounced when agents have information of the history of past plays in the game. There is an inverse relation between information and optimal sample size. As agents acquire more information (about each other), the principal -- so to speak -- must "undo" this by reducing his information (about them) and choosing the sample size n even smaller.

PD May 2000. **TI** Inside and Outside Money, Gains to Trade, and IS-LM. **AU** Dubey, Pradeep; Geanakoplos, John. **AA** Dubey: State University of New York. Geanakoplos: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1257; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 52. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** D51, E44, E52, E58. **KW** Banking. Gains to Trade. Inside Money. IS-LM. Outside Money.

AB We build a one-period general equilibrium model with money. Equilibrium exists, and fiat money has positive value, as long as the ratio of outside money to inside money is less than the gains to trade available at autarky. We show that the nominal effects of government fiscal and monetary policy can

be completely described by a diagram identical in form to the IS-LM curves introduced by Hicks to describe Keynes' general theory. IS-LM analysis is thus not incompatible with full market clearing, multiple commodities, and heterogeneous households. We show that as the government deficit approaches a finite threshold, hyperinflation sets in (prices converge to infinity and real trade collapses). If the government surplus is too large, the economy enters a liquidity trap in which nominal GNP sinks and monetary policy is ineffectual.

Dubois, Pierre

PD January 1999. **TI** Moral Hazard, Land Fertility and Sharecropping in a Rural Area of the Philippines. **AA** CREST. **SR** Document de Travail du CREST: 9930; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. **PG** 26. **PR** no charge. **JE** D23, D82, Q12, Q15, Q24. **KW** Sharecropping. Moral Hazard. Incentive Contracts. Land Value. Soil Conservation. Contract Theory.

AB Introducing concerns about land fertility for the landlords in a Principal-Agent model of sharecropping with moral hazard, we show that the optimal contract under limited commitment reflects a trade-off between production and land quality maintenance. Using Philippines data, a model where the leasing out and contract choices are simultaneous is estimated and avoids the selectivity bias of observed contracts. Landowners prefer to use more incentive contracts for more fertile plots and less incentive ones when crop choices induce land overuse. Empirical tests reject the model of pure risk sharing in production as well as a risk neutral version of the present model where only the endogenous transaction cost due to incomplete contracting matters.

Dumas, Bernard

PD January 2000. **TI** Are Common Swings in International Stock Returns Justified by Subsequent Changes in National Outputs? **AU** Dumas, Bernard; Harvey, Campbell R.; Ruiz, Pierre. **AA** Dumas: INSEAD. Harvey: Duke University. Ruiz: HEC School of Management. **SR** INSEAD Working Paper: 2000/02/FIN; 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** F02, G12, G15. **KW** Integrated Markets. Fully-Segmented Markets. Pricing Kernel.

AB In an integrated world capital market, the same pricing kernel is applicable to all securities. If the kernel is excessively volatile, as has been found in some studies, it should translate into an excessive degree of correlation in the returns of different equities. In this paper, we apply this idea to the stock returns of different countries. First, we determine, for a given, measured degree of commonality of country outputs, what should be the degree of correlation of national stock returns. We then match the correlations of the combined model containing the statistical model for output and the financial model for stock returns. We find that actual correlations are not excessive and, in fact, are about what they should be in a unified market but that they are much larger than they should be in fully segmented financial markets.

PD July 1999. **TI** Global Diversification, Growth and Welfare with Imperfectly Integrated Markets for Goods.

AU Dumas, Bernard; Uppal, Raman. **AA** Dumas: INSEAD and University of Pennsylvania. Uppal: University of British Columbia and MIT. **SR** INSEAD Working Paper: 99/63/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** F36, F41, G15. **KW** Capital Flows. Trade Barriers. Tariffs. General Equilibrium. Recursive Utility.

AB In this article, we examine the effect of the imperfect mobility of goods on international risk sharing and, through that, on the investment in risky projects, welfare and growth. We find that the welfare gain of financial market openness is non-monotonic with respect to investors' risk aversion and the aggregate volatility of output growth. Our main result is that the welfare gain from integration is not greatly reduced by the presence of goods market imperfections, modeled as a cost of transferring goods from one country to the other. The policy implication to be drawn is that financial market integration is a worthwhile goal to pursue even when full goods mobility has not been achieved.

Dupaigne, Martial

TI Output Dynamics and the Workweek of Capital.
AU Collard, Fabrice; Dupaigne, Martial.

Dupont, Dominique Y.

PD January 2001. **TI** The Endowment Effect, Status Quo Bias and Loss Aversion: Rational Alternative Explanation.
AU Dupont, Dominique Y.; Lee, Gabriel S. **AA** Dupont: EURANDOM, The Netherlands. Lee: Institute for Advanced Studies, Vienna. **SR** Institute for Advanced Studies, Economics Series Working Paper: 92; Institute for Advanced Studies, Library, Stumpergasse 56, A-1060 Vienna. Website: www.ihs.ac.at/Library/libhome.html. **PG** 22.

PR Individuals: ATS 80.00 -- EUR 5.81; Institutions: ATS 250.00 -- EUR 18.17. Prices subject to change without notice.
JE D81, D82, G10, G22. **KW** Endowment Effect. Status Quo Bias. Loss Aversion. Asymmetric Information. Bid Ask Spread.

AB The endowment effect, status quo bias, and loss aversion are robust and well documented results from experimental psychology. They introduce a wedge between the prices at which one is willing to sell or buy a good. The objective of this paper is to address this wedge. We show that the presence of asymmetric information in a rational-agent framework can account for the endowment effect, status quo bias and loss aversion as well as psychology-based explanations proposed in the past.

Dziobek, Claudia

PD March 2000. **TI** Toward a Framework for Systemic Liquidity Policy. **AU** Dziobek, Claudia; Hobbs, J. Kim; Marston, David. **AA** Dziobek and Marston: International Monetary Fund. Hobbs: Independent Consultant. **SR** International Monetary Fund Policy Working Paper: WP/00/34; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 37. **PR** not available.
JE E42, E44, F31, G21, G28. **KW** Financial Architecture. Liquidity Management. Creditor Rights. Microstructure.

AB International policy efforts to strengthen financial systems have highlighted the role of liquidity. This paper explores a framework to assess arrangements for market

liquidity and lays out elements of systemic liquidity policy. Robust arrangements for liquidity provide confidence to market participants that liquidity can be mobilized on demand in a predictable and transparent manner. These are crucial to resilience and effective monetary operations. Arrangements include several prudential and institutional elements and national authorities have an important role in promoting their adoption. A survey of 14 countries and two in-depth studies of Mexico and Argentina are included for illustration.

Edelstein, Michael

TI Was Adherence to the Gold Standard a "Good Housekeeping Seal of Approval" During the Interwar Period?
AU Bordo, Michael D.; Edelstein, Michael; Rockoff, Hugh.

Eeckhout, Jan

TI Efficient Job Allocation. **AU** Cole, Melvyn G.; Eeckhout, Jan.

PD August 2000. **TI** Competing Norms of Cooperation. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/18; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 36. **PR** no charge.
JE A13, C71, C72, C78, D23. **KW** Social Norms. Endogenous Matching. Repeated Games. Stratification. Authority.

AB A key question concerning social norms is whether norms, that are bad for its members, can survive. This paper provides a theory of non-market interactions within organizations in the presence of competition. The main finding is that in equilibrium, organizations differ, and that they have norms or corporate cultures that can be Pareto ranked. When identical agents have the outside option to join a competing organization, good norms can exist only in the presence of bad norms. With non contractible effort, agents cannot credibly commit to cooperation when all outside options are equally good. When prices are endogenized, price competition naturally gives rise to authority relations within firms: seniors extract higher rents than entering juniors. However, authority is limited by competition and does not eradicate the stratification of norms.

Eichengreen, Barry

PD March 2000. **TI** The International Monetary System in the (Very) Long Run. **AU** Eichengreen, Barry; Sussman, Nathan. **AA** Eichengreen: University of California at Berkeley. Sussman: Hebrew University. **SR** International Monetary Fund Policy Working Paper: WP/00/43; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 38. **PR** not available. **JE** E42, E44, F33, N20. **KW** Monetary System. Globalization. Money. Economic History. International Finance.

AB This paper takes stock of the evolution of the international monetary system over the last thousand years. Several points stand out from the analysis. One is the reluctance of governments to embrace radical changes in international monetary relations. Another is the conflict between external and domestic objectives over the cycle, which has been a source of significant tension in the industrial core through much of this century, is now becoming a significant

issue for developing countries. Finally, recent developments represent a return to the more market-driven international monetary system that characterized the better part of the preceding millennium.

PD May 1999. **TI** Lending Booms, Reserves and the Sustainability of Short-Term Debt: Inferences From the Pricing of Syndicated Bank Loans. **AU** Eichengreen, Barry; Mody, Ashoka. **AA** Eichengreen: University of California at Berkeley. Mody: The World Bank. **SR** National Bureau of Economic Research Working Paper: 7113; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** \$5.00. **JE** D82, F32, F34, G15, G21. **KW** Banks. Lending. Emerging Markets. International Finance. Asymmetric Information.

AB This paper analyzes the determinants of spreads on syndicated bank lending to emerging markets, treating the loan-extension and pricing decisions as jointly determined. Compared to the bond market, our findings highlight the role of international banks in providing credit to smaller borrowers about whom information is least complete and, more generally, support the interpretation of bank finance as dominating that segment of international financial markets characterized by the most pronounced information asymmetries. Domestic lending booms and low reserves in relation to short-term debt have been priced in the expected manner by international banks. The high level of short-term debt in East Asia was supported by high growth rates but was characterized by a knife-edge quality.

TI Is Globalization Today Really Different than Globalization a Hundred Years Ago? **AU** Bordo, Michael D.; Eichengreen, Barry; Irwin, Douglas A.

Ekeland, Ivar

TI Local Disaggregation of Demand and Excess Demand Functions: A New Question. **AU** Chiappori, Pierre-Andre; Ekeland, Ivar; Browning, Martin.

Ellickson, Bryan

PD September 1998. **TI** Clubs and the Market. **AU** Ellickson, Bryan; Grodal, Birgit; Scotchmer, Suzanne; Zame, William R. **AA** Ellickson and Zame: UCLA. Grodal: University of Copenhagen. Scotchmer: University of California, Berkeley. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/04; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 41. **PR** no charge. **JE** D24, D51, H41. **KW** Clubs. Continuum Models. Public Goods. Core. Club Equilibrium.

AB This paper defines a general equilibrium model with exchange and club formation. Agents trade multiple private goods widely in the market, can belong to several clubs, and care about the characteristics of the other members of their clubs. The space of agents is a continuum, but clubs are finite. It is shown that (i) competitive equilibria exist, and (ii) the core coincides with the set of equilibrium states. The central subtlety is in modeling club memberships and expressing the notion that membership choices are consistent across the population.

PD January 1999. **TI** Clubs and the Market: Large Finite Economies. **AU** Ellickson, Bryan; Grodal, Birgit; Scotchmer, Suzanne; Zame, William R. **AA** Ellickson and Zame: UCLA. Grodal: University of Copenhagen. Scotchmer: University of

California, Berkeley. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/05; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 41. **PR** no charge. **JE** D24, D51, H41. **KW** Clubs. E-Cores. Approximate Equilibrium. Decentralization.

AB We study large finite club economies in which agents can belong to several clubs, and care about the characteristics of the other club members. Club memberships must be integer consistent in aggregate. We show that states in the approximate core can approximately be decentralized by prices for private goods and for club memberships, that the approximate core is nonempty, and that approximate club equilibria exist. Our arguments use the convexification tools used for private goods economies, but we also develop a new tool to address the consistency requirement on memberships that are special to club economies. This tool allows us to overcome the integer consistency problems that are avoided in our (1999) paper by assuming a continuum of agents.

Elliott, Graham

PD July 2000. **TI** Confidence Intervals for Autoregressive Coefficients Near One. **AU** Elliott, Graham; Stock, James H. **AA** Elliott: University of California, San Diego. Stock: Harvard University. **SR** University of California, San Diego, Department of Economics Working Paper: 2000/19; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: <http://econ.ucsd.edu/papers>. **PG** 19. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C32. **KW** Unit Roots. Confidence Intervals. Point Optimal Tests.

AB Often we are interested in the largest root of an autoregressive process. Available methods rely on inverting t -tests to obtain confidence intervals. However, for large autoregressive roots, t -tests do not approximate asymptotically uniformly most powerful tests and do not have optimality properties when inverted for confidence intervals. We exploit the relationship between the power of tests and accuracy of confidence intervals, and suggest methods which are asymptotically more accurate than available interval construction methods. One interval, based on inverting the $P(T)$ or $Q(T)$ statistic, has good asymptotic accuracy and is easy to compute.

Ellis, Luci

TI Forward-Looking Behaviour and Credibility: Some Evidence and Implications for Policy. **AU** de Brouwer, Gordon; Ellis, Luci.

Ellman, Matthew

PD October 1998. **TI** Electoral Competition under the Threat of Political Unrest. **AU** Ellman, Matthew; Wantchekon, Leonard. **AA** Yale University. **SR** University of Western Ontario, Papers in Political Economy: 88; Department of Economics, University of Western Ontario, London, Ontario N6A 5C2, Canada. **PG** 53. **PR** no charge. **JE** C70, D72, D82. **KW** Political Processes. Private Information. Commitment. Threats. Elections.

AB This paper investigates how threats of strikes, military coups, terrorism, riots and capital flight affect electoral

outcomes. We show that with no pre-electoral platform commitment, the "threatened party" is likely to win the election when the threat is observable because the threat credibly causes it to compromise towards the center. However, when the threat is private information, fear of political unrest may cause voters to lean towards the party favored by the threatening actor. When platform commitment is possible, our main result is that the threatening party, or the party favored by the threatening actor, may adopt an extremist platform, hoping to convince voters that the threat of disruption is serious. Such posturing leads to political polarization.

Emery, J. C. Herbert

PD October 1999. **TI** Some Regions are More Equal than Others: Evidence on the Sources of Regional Income Differentials from the Canadian Labour Market Before 1930. **AA** University of Calgary. **SR** University of Western Ontario, Papers in Political Economy: 94; Department of Economics, University of Western Ontario, London, Ontario N6A 5C2, Canada. **PG** 41. **PR** no charge. **JE** D31, J31, N31, N32, R23. **KW** Wage Differentials. Regional Economics. Labor Markets. Income Distribution.

AB The existence of income differentials across Canada's regions and provinces has been a persistent feature of the Canadian economy since at least 1890 (Green 1971). Given the existence of regional income differentials, an important contribution towards an understanding of the proximate reasons for the differentials would be to develop better information about the structure and operations of Canadian labor markets early in Canadian economic development. To that end, this paper develops real wage series for several occupations in 11 Canadian cities over the period 1901 to 1926 to determine the geographic extents of Canadian labor markets. Did Canada have a national labor market? If it was not a national labor market, how integrated were the regional labor markets with one another, and what tendencies towards convergence in real wages are apparent? Answering these questions provides vital information about the source of regional income disparities in Canada.

Engel, Charles

PD April 1999. **TI** On the Foreign Exchange Risk Premium in Sticky-Price General Equilibrium Models. **AA** University of Washington and NBER. **SR** National Bureau of Economic Research Working Paper: 7067; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 15. **PR** \$5.00. **JE** F31, F36, F41. **KW** Risk Premium. Foreign Exchange. GE Models.

AB This paper investigates the behavior of the foreign exchange risk premium in two recent two-country intertemporal-optimizing general equilibrium models with sticky nominal prices: Obstfeld-Rogoff (1998) and Devereux-Engel (1998). The foreign exchange risk premium in any general equilibrium model arises from the correlation of the exchange rate with consumption. In flexible price models, that requires correlation of monetary and output supply shocks. In sticky-price models, the correlation arises endogenously because monetary shocks cause output and consumption to change. The size of the risk premium depends on how prices are set (in producers' currencies versus consumers' currencies), and on the form of the money demand function. In some cases, the risk premium generated by the model is quite large.

Eriksson, Tor

TI R&D and Productivity in Danish Firms: Some Empirical Evidence. **AU** Smith, Valdemar; Dilling-Hansen, Mogens; Eriksson, Tor; Madsen, Erik Strojler.

TI R&D and Productivity in Danish Firms: Some Empirical Evidence. **AU** Smith, Valdemar; Dilling-Hansen, Mogens; Eriksson, Tor; Madsen, Erik Strojler.

Evstigneev, Igor

TI Noncooperative R&D and Optimal R&D Cartels. **AU** Amir, Rabah; Evstigneev, Igor; Wooders, John.

Fafchamps, Marcel

TI Contract Flexibility and Conflict Resolution: Evidence From African Manufacturing. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Oduro, Abena; Oostendorp, Remco; Pattillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert.

TI Contract Flexibility and Conflict Resolution: Evidence From African Manufacturing. **AU** Bigsten, Arne; Collier, Paul; Dercon, Stefan; Fafchamps, Marcel; Gauthier, Bernard; Gunning, Jan Willem; Oduro, Abena; Oostendorp, Remco; Pattillo, Cathy; Soderbom, Mans; Teal, Francis; Zeufack, Albert.

Fair, Ray C.

PD May 2000. **TI** Estimated, Calibrated, and Optimal Interest Rate Rules. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1258; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 37. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** E52, E58. **KW** Interest Rate Rules. Optimal Control.

AB Estimated, calibrated, and optimal interest rate rules are examined for their ability to dampen economic fluctuations caused by random shocks. A tax rate rule is also considered. The results show that the estimated interest rate rule used in the paper is stable for the period beginning in 1954 except for the early Volcker period, although more observations, especially high inflation ones, are needed before much confidence can be placed on the results. The models used for the stabilization results are large scale structural macroeconomic models, and some of the results differ from those based on small models. For example, rules with inflation coefficients less than one are not destabilizing, and rules with large inflation coefficients, such as the Taylor rule, achieve small reduction in inflation variability at a cost of large increase in interest rate variability.

Fairlie, Robert W.

PD June 1999. **TI** Trends in Self-Employment Among White and Black Men: 1910-1990. **AU** Fairlie, Robert W.; Meyer, Bruce D. **AA** Fairlie: University of California, Santa Cruz. Meyer: Northwestern University and NBER. **SR** National Bureau of Economic Research Working Paper: 7182; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** \$5.00. **JE** J15, J21, J23. **KW** Self-Employment. Labor Market.

AB We examine trends in self-employment among white and black men from 1910 to 1990 using Census and CPS microdata. Self-employment rates fell over most of the century and then

started to rise after 1970. For white men, we find that the decline was due to declining rates within industries, but was counterbalanced somewhat by a shift in employment towards high self-employment industries. We find that the trends in self-employment average returns do not easily explain the decline in self-employment from 1950 to 1970, nor the increase from 1970 to 1990. We also find that changes in tax rates, social security benefits, and immigration patterns do not explain the recent upturn in self-employment. For black men, we find that the self-employment rate remained at a level of roughly one-third the white rate from 1910 to 1990. We also find that absent continuing forces holding down black self-employment, a simple inter-generational model of self-employment suggests that black and white rates would converge quickly.

Falaris, Evangelos M.

PD October 1999. **TI** Survey Attrition in the Peruvian Living Standards Measurement Surveys. **AA** University of Delaware. **SR** University of Delaware Department of Economics Working Paper: 99/09; Department of Economics, University of Delaware, Newark, DE 19716-2720. Website: www.be.udel.edu/Econ_site/Working_Papers.html. **PG** 13. **PR** no charge. **JE** C50, C81, I31, O15. **KW** Development. Surveys. Attrition. Living Standards. Peru. **AB** In recent years the World Bank has been conducting household surveys in several developing countries. In the case of Peru, follow-up surveys have been conducted in which the same dwellings that were visited in an earlier survey are visited again, and if the same people live there as during an earlier survey and agree to be interviewed, they will be interviewed yielding longitudinal information. This paper aims to find out whether the same regressions apply to people who are interviewed repeatedly as to those who are interviewed at only one point in time. I assess the effect of survey attrition in the 1991 and 1994 Living Standards Measurement Surveys of Peru. This survey design is a low cost way to collect longitudinal information but how does the inability to reinterview people who move affect regression estimates? I find evidence that survey attrition does not affect the estimates of equations of schooling attainment, labor force participation, self employment, and wages for both men and women. In all these cases I find no evidence of attrition bias and conclude that the survey design is a cost-effective way to gather longitudinal survey data in a developing country.

Farrell, Joseph

TI Do Stock Price Movements Reveal Profit Dissipation?
AU Borenstein, Severin; Farrell, Joseph.

Febre, L. A.

TI Nitrogen Consumption in the United States.
AU Ayres, Robert U.; Febre, L. A.

Felcher, E. Marla

PD 2000. **TI** Taxonomic Versus Goal-Derived Product Categorization: Effects on Within and Across Category Choice Processes. **AU** Felcher, E. Marla; Malaviya, Prashant; McGill, Ann L. **AA** Felcher: Northwestern University. Malaviya: INSEAD. McGill: University of Chicago. **SR** INSEAD Working Paper: 2000/15/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** D11, M21, M39. **KW** Consumer Choice. Goal Derived Categories. Taxonomic Categories. **AB** Consumers often make choices from among products that may belong to a single or to several different product categories. In this paper, we compare these within- and across-category choice processes on the basis of the distinction between taxonomic and goal-derived categorization. In our first study, we investigate differences in the mental representation of products in taxonomic and goal-derived categories. Our findings indicate that taxonomic categorization processes differ from goal-derived categorization processes in terms of the ease with which the features shared between members of the category are accessible in memory and the type of features that are used to represent the members. In turn, these differences influence consumer learning, memory, and generation of additional alternatives when making within- and across-category product comparisons. Results of this first study also support the hypothesis that judgments of similarity are influenced by type of common feature in addition to number of common features. In our second study, we examine conditions that favor the construction of choice sets composed of within-category versus across-category items. Results indicate that subjects who are more familiar with a consumption situation are likely to construct more narrowly defined, within-category choice sets.

Feldman, Sven E.
TI Informational Lobbying and Political Contributions.
AU Bennedsen, Morten; Feldman, Sven E.

TI Lobbying Legislatures. **AU** Bennedsen, Morten; Feldman, Sven E.

Feldman, Sven E.

TI Informational Lobbying and Political Contributions.
AU Bennedsen, Morten; Feldman, Sven E.

TI Lobbying Legislatures. **AU** Bennedsen, Morten; Feldman, Sven E.

Feldstein, Martin

PD April 1999. **TI** The Economics of Bequests in Pensions and Social Security. **AU** Feldstein, Martin; Rangelova, Elena. **AA** NBER. **SR** National Bureau of Economic Research Working Paper: 7065; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 32. **PR** \$5.00. **JE** E21, H55. **KW** Social Security. Bequeathable Assets.

AB Experience in private pension plans and recent policy discussions about investment-based reforms of Social Security suggest that some form of bequest is likely to be part of any such reform that is enacted. This paper provides a first examination of the potential magnitudes of such bequests and of their effect on retirement annuities and asset accumulation. The most likely form of bequest, the "preretirement bequest" made when employees die before normal retirement age, reduces the funds available for post-retirement annuities by about 16 percent or, equivalently, requires a one-sixth increase in the Personal Retirement Account saving rate to maintain the same level of post-retirement annuities. We also analyze a variety of post-retirement bequest options. We analyze the size distribution of bequests that would result under different bequest rules and consider the implications for aggregate capital accumulation.

Felli, Leonardo

PD March 2000. **TI** Endogenous Lobbying. **AU** Felli, Leonardo; Merlo, Antonio. **AA** Felli: London School of Economics. Merlo: New York University and CEPR.

SR University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/03; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104- 6297. Website: www.econ.upenn.edu/CARESS. **PG** 26. **PR** no charge. **JE** D72, H11. **KW** Lobbying. Elections. Political Processes. Citizen-Candidate Models.

AB In this paper we endogenize the number and characteristics of lobbies in a citizen-candidate model of representative democracy where citizens can lobby an elected policy-maker. We find that lobbying always matters. That is, lobbying always affects equilibrium policy outcomes. Moreover, only one policy outcome emerges in equilibrium. An "extremist" candidate is elected and implements a "centrist" policy that differs from the one most preferred by the median voter. These results are in contrast with the ones obtained in the context of a citizen-candidate model where lobbies are exogenous.

PD April 2000. **TI** Does Competition Solve the Hold-Up Problem? **AU** Felli, Leonardo; Roberts, Kevin. **AA** Felli: London School of Economics. Roberts: Nuffield College, Oxford. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/04; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104- 6297. Website: www.econ.upenn.edu/CARESS. **PG** 35. **PR** no charge. **JE** C78, D43, D83, L13. **KW** Hold-Up Problem. Bertrand Competition. Coordination Problems. Two-Sided Matching. Oligopoly.

AB In an environment in which both buyers and sellers can undertake match specific investments, the presence of market competition for matches may solve hold-up and coordination problems generated by the absence of complete contingent contracts. In particular, this paper shows that when matching is assortative and sellers' investments precede market competition then investments are constrained efficient. One equilibrium is efficient with efficient matches but also there can be equilibria with coordination failures. Different types of inefficiency arise when buyers undertake investment before market competition. These inefficiencies lead to buyers' underinvestments due to a hold-up problem but, when competition is at its peak, there is a unique equilibrium of the competition game with efficient matches -- no coordination failures -- and the aggregate hold-up inefficiency is small in a well defined sense independent of market size.

TI Costly Bargaining and Renegotiation. **AU** Anderlini, Luca; Felli, Leonardo.

Feltkamp, Vincent

TI A Bayesian Approach to Uncertainty Aversion. **AU** Halevy, Yoram; Feltkamp, Vincent.

Fernandez, Raquel

PD May 1999. **TI** Equity and Resources: An Analysis of Education Finance Systems. **AU** Fernandez, Raquel; Rogerson, Richard. **AA** Fernandez: New York University. Rogerson: University of Pennsylvania. **SR** National Bureau of Economic Research Working Paper: 7111; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 35.

PR \$5.00. **JE** D63, H40, H52, I22. **KW** Education. Educational Finance. Government Policy. Equity.

AB Over the last few decades many US states have made large changes to their systems of financing K-12 education with the explicit objective of providing more equitable educational opportunities. There has been relatively little accompanying analysis, however, examining how these changes might affect the total sum of resources dedicated to education and whether indeed increased equality is a likely outcome. The authors analyze five different education finance systems: local, State, foundation, power equalizing with recapture (PER) and power equalizing without recapture (PEN). They find that finance systems can have very large effects on both resources devoted to education and equity. Their calibration suggests that total spending on education may differ by as much as 25% across systems. The trade-off between equity and resources, however, is not monotone. Although spending in a local system is typically greater than that in either the State system or PER, total spending is typically highest for the foundation and PEN systems, both of which reduce inequality of educational resources substantially relative to a local system. The authors also rank systems in welfare terms by carrying out an expected utility calculation.

Ferrara, Laurent

PD May 1999. **TI** Estimation and Applications of Gegenbauer Processes. **AU** Ferrara, Laurent; Guegan, Dominique. **AA** Ferrara: Universite Paris. Guegan: Universite de Reims. **SR** Document de Travail du CREST: 9927; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. **PG** 23. **PR** no charge. **JE** C14, C22, R41. **KW** Long Memory. Gegenbauer Process. Whittle's Estimator. Urban Transport Data.

AB This paper presents the long memory Gegenbauer process which allows to take into account the periodic behavior of a time series with long-range dependence. We investigate the pseudo-maximum likelihood Whittle's method to estimate simultaneously all the parameters of the Gegenbauer model. We provide a result of asymptotic convergence for the Whittle's estimator and use Monte-Carlo simulations to validate our result. We propose an application to data of urban transport traffic, which points out the efficiency of the Gegenbauer model, especially in the long-term forecasting domain.

Ferrero, Mario

PD November 1998. **TI** The Political Enterprise and the Choice of Extremist Policies. **AA** University of Turin. **SR** University of Western Ontario, Papers in Political Economy: 89; Department of Economics, University of Western Ontario, London, Ontario N6A 5C2, Canada. **PG** 44. **PR** no charge. **JE** D71, D72, D82, J54, L20. **KW** Political Extremism. Labor-Managed Firms. Revolution. Organizational Behavior.

AB This paper tries to explain three kinds of extremist political behavior: extremism displayed by young political organizations as they grow up (infantile extremism), by mature organizations as a reaction to success, such as the conquest of power (mature extremism), and by declining organizations as a reaction to failure (senile extremism). The authors focus on organizations' policy choices and define extremism at the margin as the choice of a more difficult or distant goal or

platform. This may be productive up to a point as it enhances support or resources, while it necessarily implies a harder work task which reduces the supply of labor to the organization. By balancing out these two effects the young organization finds its equilibrium degree of extremism given market parameters. The young organization is viewed as a volunteer enterprise whose members engage in unpaid work in the expectation of future returns from political action, and for reasons of incentives and asymmetric information it typically takes the form of a producer cooperative. The model is then tested on a broad sample of cases of revolutionary regimes and found to fit reasonably well with the evidence.

Ferris, J. Stephen

PD February 1999. **TI** Searching for Keynes. **AU** Ferris, J. Stephen; Winer, Stanley L. **AA** Carleton University. **SR** University of Western Ontario, Papers in Political Economy: 93; Department of Economics, University of Western Ontario, London, Ontario N6A 5C2, Canada. **PG** 40. **PR** no charge. **JE** D72, D78, E12, E62, H30. **KW** Keynesianism. Liquidity Constraints. Stabilization. Probabilistic Voting. Size of Government. **AB** Keynes' General Theory of Employment, Interest and Prices (1936) has substantially influenced both macroeconomic theory and popular opinion about what governments can and should do. However, the extent to which counter-cyclical stabilization has actually been attempted remains an open question. Investigation of this issue requires the construction of a counterfactual describing what the relationship between fiscal policy and transitory macroeconomic shocks would have been like 'after Keynes', if Keynesian stabilization was not implemented. This counterfactual must allow for the possibility that after Keynes, as well as before, political pressure exerted by voters who found themselves in adverse circumstances may have led to the adoption of fiscal policies that look Keynesian, but are not. The authors estimate such a counterfactual for Canada using consistent budgetary data for the period from 1870 to 1995 constructed by Irwin Gillespie (and updated by the authors), and use it to test for the presence of Keynesian elements in the fiscal policy choices of the Government of Canada. The estimating equations are based on an intertemporal probabilistic voting framework in which parties compete for support from two types of voters.

Finkelstein, Amy

PD June 1999. **TI** Selection Effects in the Market for Individual Annuities: New Evidence from the United Kingdom. **AU** Finkelstein, Amy; Poterba, James M. **AA** Finkelstein: MIT. Poterba: MIT and NBER. **SR** National Bureau of Economic Research Working Paper: 7168; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** G14, H55, J26. **KW** Adverse Selection. Annuity Markets. Annuity Products.

AB This paper presents new evidence on the importance of adverse selection in individual annuity markets. Two empirical regularities support standard models of adverse selection. First, the expected present value of the annuity payout stream from a typical voluntary annuity is thirteen percent higher for a typical 65-year-old male voluntary annuitant than for a typical 65-year-old male in the U.K. population. This is simply the result of differential mortality between the annuitant population and the population at large. Second, annuitants select across

different types of annuity products with different payout profiles. In addition to providing evidence on adverse selection, the U.K. annuity market can also be used to study how the price of an insurance product is related to the quantity of insurance purchased. Prices per annuity unit are lower for larger annuity policies than for smaller policies. Some theoretical models of insurance demand, which suggest that poorer risks should purchase more insurance and do not consider the fixed costs of issuing annuity or insurance policies, are inconsistent with this result.

Fisher, Walter H.

PD November 2000. **TI** Public Policy for Efficient Education. **AU** Fisher, Walter H.; Keuschnigg, Christian. **AA** Fisher: Institute for Advanced Studies, Vienna. Keuschnigg: University of Saarland. **SR** Institute for Advanced Studies, Economics Series Working Paper: 90; Institute for Advanced Studies, Library, Stumpergasse 56, A-1060 Vienna. Website: www.ihs.ac.at/Library/libhome.html. **PG** 26. **PR** Individuals: ATS 80.00 -- EUR 5.81; Institutions: ATS 250.00 -- EUR 18.17. Prices subject to change without notice. **JE** H21, H42, H52, I21, I28. **KW** Education. Human Capital. Optimal Policy. Congestion. Home Study.

AB This paper studies the role of public policy to promote efficiency in human capital accumulation in the representative agent framework. Agents accumulate human capital by spending time in home study and in publicly provided schools. The individual faces an aggregate externality in the accumulation of skills. In addition, the return to time spent in school is subject to congestion. To correct these distortions, a tuition fee combined with personal stipends is required, which shifts education in schools and universities to noninstitutional forms of learning such as home study. The dynamic effects of shifts in education policy as well as their welfare implications are also calculated in the paper.

PD February 2001. **TI** Intertemporal Budget Policies and Macroeconomic Adjustment in a Small Open Economy. **AU** Fisher, Walter H.; Bianconi, Marcelo. **AA** Fisher: Institute for Advanced Studies, Vienna. Bianconi: Tufts University. **SR** Institute for Advanced Studies, Economics Series Working Paper: 96; Institute for Advanced Studies, Library, Stumpergasse 56, A-1060 Vienna. Website: www.ihs.ac.at/Library/libhome.html. **PG** 31.

PR Individuals: ATS 80.00 -- EUR 5.81; Institutions: ATS 250.00 -- EUR 18.17. Prices subject to change without notice. **JE** E50, E62, E63, F41, H61. **KW** Government Budget. Taxation. Nominal Assets. Current Account. Open Economy.

AB This paper analyzes the role of nominal assets in ranking intertemporal budget policies in a growing open economy. The budget policies are ranked in terms of the public's intertemporal stock of tax liabilities. Our main result is that, in a small open economy, the valuation of private and public assets is in terms of the exogenous foreign price level under purchasing power parity. This constraint limits the scope of government to influence the real value of assets using fiscal and monetary policy shocks.

Fishman, Gideon

TI The Burglar as a Rational Economic Agent. **AU** Shachmurove, Yochanan; Fishman, Gideon; Hakim, Simon.

Flochel, Laurent

TI Allocating and Funding Universal Service Obligations in a Competitive Network Market. **AU** Chone, Philippe; Flochel, Laurent; Perrot, Anne.

Florent-Treacy, Elizabeth

TI Authentizotic Organizations: Global Leadership From A to Z. **AU** Kets de Vries, Manfred F. R.; Florent-Treacy, Elizabeth.

Foros, Oystein

PD April 2000. **TI** Access Pricing, Quality Degradation, and Foreclosure in the Internet. **AU** Foros, Oystein; Kind, Hans Jarle; Sorgard, Lars. **AA** Foros: Telenor Research and Development. Kind: Norwegian Research Centre in Organization and Management. Sorgard: Norwegian School of Economics and Business Administration. **SR** University of California, Santa Barbara, Working Papers in Economics: 00/07; Department of Economics, Working Paper Coordinator. University of California, Santa Barbara. Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. **PG** 30. **PR** no charge for domestic orders; for non-U.S. orders, U.S. \$3 per paper, personal check or money order made out to "Regents of the University of California". **JE** L13, L51, L52, L96. **KW** Access Price. Quality Degradation. Regulation. Foreclosure. Internet.

AB Access to both a local and a global network is needed in order to get complete connection to the Internet. The purpose of this article is to examine the interplay between those two networks and how it affects the domestic public policy towards a domestic provider of local access. We find that a cost-oriented regulation is detrimental to domestic welfare, because it shifts profit to the foreign provider of global access. The optimal policy would be that the regulator commits itself to set an access price above costs, possibly the same price as in an unregulated market economy. A regulation of the global access price has a non-monotonic effect on domestic welfare, and there is a potential conflict between international and domestic public policy.

Frachot, Antoine

PD March 1999. **TI** Distributions implicites anormales des taux de change. **AU** Frachot, Antoine; Laurent, Jean-Paul; Pichot, Olivier. **AA** Frachot: Direction de la Prevision. Laurent and Pichot: CREST. **SR** Document de Travail du CREST: 9913; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. **PG** 14. **PR** no charge. **JE** C40, C51, G13. **KW** State Price densities. Risk-Neutral Densities. Bayesian Estimation. Forex Options. Volatility Smile.

AB We consider the informational content of a set of USD/DEM forex options with different exercise dates and strikes. We recall how state price densities and European options' prices are related and estimation methods based upon a discrete set of observed options prices. After describing the dataset used, we exhibit some multimodal distributions for future exchange rates at 30, 60, 90, 182, and 270 days' time horizons. High and low probability regions might be explained by non linearities in the local volatility of exchange rates or by the presence of jumps. We look in detail at the robustness of our results with respect to the chosen methodology.

Francis, Johanna

PD December 1998. **TI** Uzawa's Transformation and Optimal Control Problems with Variable Rates of Time Preference. **AU** Francis, Johanna; Kompas, Tom. **AA** Francis: The Fraser Institute. Kompas: Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 354; Department of Economics, Australian National University, Canberra ACT 0200, Australia. **PG** 14. **PR** no charge. **JE** C61, D91, F30. **KW** Time Preference Rates. Uzawa's Transformation. Control Problems. Life-Cycle Models.

AB Uzawa (1968) first introduced a simple and appealing method for reducing problems with variable rates of time preference to single-state systems by transforming the time scale from t to β , a utility discount factor. This transformation has been used extensively, particularly in models of international trade and finance (e.g., Obstfeld (1981a, 1981b, 1982) and Engel and Kletzer (1989)), where the use of a variable rate of time preference avoids some of the "disturbing implications" drawn from typical open-economy Ramsey models. The purpose of this paper is to show that Uzawa's transformation is valid only when the underlying system to be analyzed is autonomous. Unfortunately, except for the simplest control problems, this is rarely the case. In particular, systems with non-autonomous transition equations imply that the correspondence between β and t is no longer unique, and thus Uzawa's transformation is not applicable. Papers that employ this technique, such as those listed above generate errors in first-order conditions and resulting optimal paths.

Frech, H. E., III.

PD November 2000. **TI** Managed Health Care Effects: Medical Care Costs and Access to Health Insurance. **AU** Frech, H. E., III.; Langenfeld, James; Corbett, Michaelyn. **AA** Frech: University of California, Santa Barbara. Langenfeld: LECG, LLC and American Antitrust Institute. Corbett: LECG, LLC. **SR** University of California, Santa Barbara, Working Papers in Economics: 00/12; Department of Economics, Working Paper Coordinator. University of California, Santa Barbara. Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. **PG** 26. **PR** no charge for domestic orders; for non-U.S. orders, U.S. \$3 per paper, personal check or money order made out to "Regents of the University of California". **JE** G22, I11, I18, H51, K32. **KW** Health Insurance. Managed Care. Class Action Litigation. Health Care.

AB This paper summarizes a longer paper, written for the American Association of Health Plans. That paper extensively surveys the research on the savings due to managed care and quantifies the costs of eliminating specific managed care practices in terms of both dollars and in terms of increasing the number of uninsured consumers. This issue is of immediate policy interest because managed care has recently come under legislative and legal attack that would eliminate or hinder the various managerial actions and contractual practices that constitute its essence.

Freeman, Richard B.

PD April 1999. **TI** Area Economic Conditions and the Labor Market Outcomes of Young Men in the 1990s Expansion. **AU** Freeman, Richard B.; Rodgers, William M., III. **AA** Freeman: NBER. Rodgers: College of William and Mary. **SR** National Bureau of Economic Research Working

Paper: 7073; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 20. PR \$5.00. JE J15, J18, J31. KW Young Men. Labor Market Outcomes. Youth Unemployment.

AB The current expansion has shattered the length of the previous longest peace-time boom and brought unemployment rates below four percent in 44 percent of metropolitan areas. We estimate the expansion's impact on the labor market outcomes of less-educated men. We find that young men, especially young African American men in tight labor markets experienced a boost in employment and earnings. Adult men had no gains, and their earnings barely changed even in areas with unemployment rates below 4 percent. Youths have higher earnings and employment in low crime states and poorer labor market outcomes in states where incarcerations are high.

French, Stephen

TI Why Does Performance Pay De-Motivate? Financial Incentives versus Performance Appraisal. AU Marsden, David; French, Stephen; Kubo, Katsuyuki.

Friedberg, Leora

PD June 1999. **TI** The Labor Supply Effects of the Social Security Earnings Test. AA University of California, San Diego and NBER. SR National Bureau of Economic Research Working Paper: 7200; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 23. PR \$5.00. JE H55, J14, J22. KW Earnings Test. Labor Supply.

AB The Social Security earnings test reduces benefits at a 33-50% rate once earnings pass a threshold amount -- among the highest marginal tax rates in the economy. Previous research dismissed the importance of the earnings test but failed to take advantage of three changes in the earnings test rules in order to identify its impact. Each change applied to some age groups and not others -- which make them useful for identifying the effect of tax rules on the labor supply of working beneficiaries. Beneficiaries in the Current Population Survey satisfy the strongest prediction: many keep their earnings just below the exempt amount, and this bunching shifts with the earnings test rule changes. The rule changes are then incorporated into an econometric model of labor supply to identify income and substitution elasticities. The resulting elasticity estimates suggest considerable deadweight loss suffered by working beneficiaries. Simulations predict a substantial boost to labor supply from eliminating the earnings test, and at a minimal fiscal cost. However, a slight decrease in labor supply is predicted from the recently legislated increase in the exempt amount.

Friedman, Jed

TI Impacts of the Indonesian Economic Crisis: Price Changes and the Poor. AU Levinsohn, James; Berry, Steven T.; Friedman, Jed.

Friedman, Joseph

PD March 1997. **TI** Using Vector Autoregression Models to Analyze the Behavior of the European Community Stock Markets. AU Friedman, Joseph; Shachmurove, Yochanan. AA Friedman: Temple University. Shachmurove: University of Pennsylvania. SR University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS)

Working Paper: 97/04; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. PG 10. PR no charge. JE C30, C50, F36, G14, G15. KW Vector Autoregression. European Community. Dynamic Interrelations. Stock Markets. Market Efficiency.

AB This paper examines the behavior of European Community stock markets in light of decreased barriers to international investments and improved accessibility to information. The Vector Autoregression (VAR) model is able to identify the main channels of interactions and simulate the responses of a given market to innovations in other markets. The daily returns are expressed in terms of German Marks, reflecting the outlook of European investors. This paper hypothesizes that an innovation in one market is directly, rather than serially, transmitted to all other markets. The research shows that no market is found to be completely isolated from the others; however, these patterns of transmittal are still consistent with international market efficiency.

Fuhrer, Jeffrey C.

PD September 1998. **TI** An Optimising Model for Monetary Policy Analysis: Can Habit Formation Help? AA Federal Reserve Bank of Boston. SR Reserve Bank of Australia Research Discussion Paper: 9812; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. Website: <http://www.rba.gov.au>. PG 35. PR no charge. JE E43, E52. KW Consumer Behavior. Habit Formation. Monetary Policy.

AB This paper discusses a rigorous empirical standard for monetary policy models. The motivation for this discussion is that, if one wishes to conduct welfare analysis, one must be reasonably confident that the model provides a good approximation to underlying consumer and firm behavior over the monetary policy horizon, i.e. in the short run. The paper examines a specific alternative to the standard consumption model in which consumers' utility depends in part on current consumption relative to past consumption. This formulation of habit formation allows one to nest habit formation, life-cycle consumption, and Campbell and Mankiw's 'rule of thumb' consumers within a more general model. The empirical tests developed in this paper show that one can reject the hypothesis of no habit formation with tremendous confidence. This result suggests that models that are unable to produce a hump-shaped response will be strongly rejected empirically.

Fukuyama, Francis

PD April 2000. **TI** Social Capital and Civil Society. AA George Mason University. SR International Monetary Fund Policy Working Paper: WP/00/74; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 16. PR not available. JE A13, D64, Z10. KW Institutions. Social Capital. Economic Policy. Second Generation Reforms. Cooperation.

AB Social capital is an instantiated informal norm that promotes cooperation between individuals. In the economic sphere it reduces transaction costs, and in the political sphere it promotes the kind of associational life that is necessary for the success of limited government and modern democracy. Although social capital often arises from iterated Prisoner's Dilemma games, it also is a byproduct of religion, tradition,

shared historical experience, and other types of cultural norms. Thus whereas awareness of social capital is often critical for understanding development, it is difficult to generate through public policy.

Gagnon, Joseph E.

PD May 1997. **TI** Inflation Regimes and Inflation Expectations. **AA** United States Department of the Treasury. **SR** Reserve Bank of Australia Research Discussion Paper: 9701; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. Website: <http://www.rba.gov.au>. **PG** 24. **PR** no charge. **JE** E31, E58. **KW** Central Bank. Credibility. Inflation Target. Monetary Policy.

AB There has been much talk in the popular press about the difficulty of attaining credibility in the bond markets for the low-inflation policies that have been adopted by a number of central banks in recent years. This credibility problem is particularly severe for those countries that have a history of high inflation. Gaining credibility is often viewed in the context of learning by the public about the central bank's true intentions. However, this paper argues that a more important aspect of credibility - at least for long-term inflation expectations - may be public views about how future changes in personnel, electoral results, or economic shocks may affect central bank behaviour. In other words, there is always a positive probability that the current regime will end. Views about the nature of possible future regimes are likely to be influenced by observed past regimes.

Galenson, David W.

PD May 1999. **TI** Age and the Quality of Work: The Case of Modern American Painters. **AU** Galenson, David W.; Weinberg, Bruce A. **AA** Galenson: University of Chicago and NBER. Weinberg: Ohio State University. **SR** National Bureau of Economic Research Working Paper: 7122; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 16. **PR** \$5.00. **JE** A12, J24, J31. **KW** Human Capital. Productivity. Art. Painting.

AB Psychologists have found that the age at which successful practitioners typically do their best work varies across professions, but they have not considered whether these peak ages change over time, as economic models suggest they might. Using auction records, we estimate the relationship between artists' ages and the value of their paintings for two successive cohorts of modern American painters. We find that a substantial decline occurred over time in the age at which these artists produced their most valuable -- and most important -- work, and argue that this was caused by a shift in the nature of the demand for modern art during the 1950s.

Galunic, Charles

PD 2000. **TI** Social Capital and Productive Exchange: Structural and Relational Embeddedness and Managerial Performance Link. **AU** Galunic, Charles; Moran, Peter. **AA** Galunic: INSEAD. Moran: London Business School. **SR** INSEAD Working Paper: 2000/07/OB; 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** J24, M11, M12, M14. **KW** Social Capital.

Structural Embeddedness. Relational Embeddedness.

AB This paper examines the extent to which two dimensions of an individual's social capital -- the structure (structural embeddedness) and quality (relational embeddedness) of their network of work relationships -- influence managerial performance. Based on a sample of 139 product and sales managers in a Fortune 100 pharmaceutical firm, this paper presents evidence indicating that both elements of social capital influence managerial performance, although in distinct ways: while structural embeddedness plays a stronger role in explaining execution-oriented tasks (managerial sales performance), relational embeddedness plays a stronger role in explaining innovation-oriented tasks (managerial performance in product and process innovation). One implication that flows from this study is that multi-dimensional measures of social capital may be necessary to gain understanding of how social networks work to lubricate productive resource exchanges.

PD February 2000. **TI** Intraorganizational Ecology. **AU** Galunic, Charles; Weeks, John. **AA** INSEAD. **SR** INSEAD Working Paper: 2000/12/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** M14, M21. **KW** Interorganizational Ecology. Routines. Routines. Reproduced. Death of Routines.

AB What is "intraorganizational ecology?" Foremost, it is a view of human organization that applies ecological concepts and processes. Positing that taken-for-granted routines play an analogous role in organizations that genes play in biological systems, intraorganizational ecology describes organizational behavior as resulting from the interaction of these "genetic" structures and the environment. This paper will first outline the small set of seminal works in this area, then review the much larger number of studies that address one or more of the basic ecological processes. First we will look at how routines are born and how they reproduce. Second we will turn to how routines interact within organizations-focusing particularly on competition and complementarity-and how those interactions shape processes of organizational change and adaptation. Finally, we will explore why routines experience death. We will then discuss the links between intraorganizational ecology and other domains in organization theory. Intraorganizational ecology is an exciting, but relatively new and underexplored, area and we will conclude by considering some of many avenues for future research that it opens.

Garber, Alan M.

PD June 1999. **TI** Advances in Cost-Effectiveness Analysis of Health Interventions. **AA** Stanford University and NBER. **SR** National Bureau of Economic Research Working Paper: 7198; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 45. **PR** \$5.00. **JE** D61, H43, I11, I18. **KW** Cost-Effectiveness. Health Interventions.

AB In this paper, I explore conditions under which decision-making based on cost-effectiveness (CE) analysis, carried out in a specific way, leads to a distribution of resources that has desirable social welfare properties. The first section describes the basics of CE analysis and how it can be applied to aid decisions about the allocation of health resources. The paper then turns to the potential welfare economic foundations of CE analysis, and addresses specific issues in carrying out CE

analysis, such as which costs to include, whose perspective matters in the analysis, and how health outcomes are measured. It demonstrates how a welfare economic foundation can help resolve ambiguities and uncertainties about the application of CE analysis. The paper also discusses the limitations of such an approach, which indeed reflect limitations of CE analysis as an analytic framework. Finally, it addresses unresolved issues such as the difficulties in using the results of CE analysis to make health policy at the societal or group level.

Garcia, Gillian

PD March 2000. **TI** Deposit Insurance and Crisis Management. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/57; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 72. **PR** not available. **JE** G18, G21, G22, G28, G30. **KW** Deposit Insurance. Comprehensive Guarantee. Financial Crises. Banking. **AB** A well-designed deposit insurance system (DIS) will provide incentives for citizens to keep the financial system sound. However, a poorly designed DIS can foster a financial crisis. This paper, therefore, makes recommendations for creating and running a limited, incentive-compatible DIS. The paper also examines factors in the decision to grant, temporarily, a comprehensive guarantee, and the design of that guarantee, should a systemic financial crisis nevertheless occur. It concludes with guidance on the removal of that guarantee.

Garratt, Anthony

PD May 2000. **TI** Forecast Uncertainties in Macroeconometric Modelling: An Application to the UK Economy. **AU** Garratt, Anthony; Lee, Kevin; Pesaran, M. Hashem; Shin, Yongcheol. **AA** Garratt and Pesaran: University of Cambridge. Lee: University of Leicester. Shin: University of Edinburgh. **SR** University of Cambridge, DAE Working Paper: 0004; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. **Website:** <http://www.econ.cam.ac.uk/dae>. **PG** 25. **PR** US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. **JE** C32, C53, E17. **KW** Probability Forecasting. Long-Run Structural VARs. Macroeconometric Modelling. Probability Forecasts of Inflation. Interest Rates and Output Growth.

AB This paper argues that probability forecasts convey information on the uncertainties that surround macroeconomic forecasts in a manner which is straightforward and which is preferable to other alternatives, including the use of confidence intervals. Probability forecasts relating to UK output growth and inflation, obtained using a small macroeconomic model, are presented. The authors discuss in detail the probability that inflation will fall within the Bank of England's target range and that recession will be avoided, both as separate single events and jointly. The probability forecasts are also used to provide insights on the interrelatedness of output growth and inflation outcomes at different horizons.

Garratt, Rod

PD October 1999. **TI** A Characterization of Robust Sunspot Equilibria. **AU** Garratt, Rod; Keister, Todd. **AA** Garratt: University of California, Santa Barbara. Keister: Centro de Investigacion Economica, ITAM. **SR** University of California, Santa Barbara, Working Papers in Economics:

99/12; Department of Economics, Working Paper Coordinator. University of California, Santa Barbara. Santa Barbara, CA 93106. **Website:** www.econ.ucsb.edu. **PG** 10. **PR** no charge for domestic orders; for non-U.S. orders, U.S. \$3 per paper, personal check or money order made out to "Regents of the University of California". **JE** D51, D84. **KW** Sunspot Equilibria. Extrinsic Uncertainty. Refinement. Robustness. General Equilibrium.

AB In nonconvex environments, a sunspot equilibrium can sometimes be destroyed by the introduction of new extrinsic information. We provide a simple test for determining whether or not a particular equilibrium survives, or is robust to, all possible refinements of the state space. We use this test to provide a characterization of the set of robust sunspot-equilibrium allocations of a given economy: it is equivalent to the set of equilibrium allocations of the associated lottery economy.

Gatignon, Hubert

TI An Evolutionary Theory of Firm Orientation: From its Behavioral to its Strategic Manifestations. **AU** Deneault, Dominic; Gatignon, Hubert.

Gaynor, Martin

PD May 1999. **TI** Antitrust and Competition in Health Care Markets. **AU** Gaynor, Martin; Vogt, William B. **AA** Carnegie Mellon University. **SR** National Bureau of Economic Research Working Paper: 7112; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **Website:** www.nber.org. **PG** 60. **PR** \$5.00. **JE** I11, L12, L13, L31, L44. **KW** Health Care. Antitrust Policy. Market Structure. Monopoly.

AB In this paper we review issues relating to antitrust and competition in health care markets. The paper begins with a brief review of antitrust legislation. We then discuss whether and how health care is different from other industries in ways that might affect the optimality of competition. The paper then focuses on the main areas in which antitrust has been applied to health care: hospital mergers, monopsony, and foreclosure. In each of these sections we review the relevant antitrust cases, discuss the issues that have arisen in those cases, and then review the relevant economics literature and suggest some new methods for analyzing these issues.

Geanakoplos, John

TI Inside and Outside Money, Gains to Trade, and IS-LM. **AU** Dubey, Pradeep; Geanakoplos, John.

TI Social Security Investment in Equities in an Economy with Short-Term Production and Land. **AU** Diamond, Peter; Geanakoplos, John.

TI Savings and Portfolio Choice in a Two-Period Two-Asset Model. **AU** Aura, Saku; Diamond, Peter; Geanakoplos, John.

Gelos, Gaston

PD April 2000. **TI** Financial Market Spillovers in Transition Economies. **AU** Gelos, Gaston; Sahay, Ratna. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/71; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 38. **PR** not available. **JE** E44, F31, F36, G15, P34. **KW** Stock Markets. Contagion. Transition Economies. Speculative Attacks. Foreign Exchange.

AB This paper examines financial market comovements across European transition economies and compares their experience to that of their regions. Correlations in monthly indices of exchange market pressures can partly be explained by direct trade linkages, but not by measures of other fundamentals. Higher-frequency data during three crisis periods reveals the presence of structural breaks in the relationship between exchange, but not stock, markets. While the reaction of markets during the Asian and Czech crises is muted, the pattern of high-frequency spillovers during the Russian crisis looks very similar to that observed in other regions during turbulent times.

Genesove, David

PD April 1999. **TI** The Adoption of Offset Presses in the Daily. **AA** Hebrew University of Jerusalem and NBER. **SR** National Bureau of Economic Research Working Paper: 7076; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** L82, O31, O32, O33. **KW** Adoption Timing. Preemption Models. Hazard Analysis.

AB This paper shows that the move to offset printing from letterpress in the U.S. daily newspaper publishing industry was determined, in part, by the structure of the local market. Although in monopoly markets, low circulation papers were quicker to adopt than high circulation papers, the ranking was reversed within duopoly markets. In such markets, the smaller firms adopted four years later than the larger one did. This result is partially consistent with preemption models of adoption. Hazard analysis further shows that in markets in which one firm has exited, the remaining duopolist is less likely to adopt than otherwise, consistent with preemption, and at odds with a declining industry explanation. Further analysis shows that the adoption was determined, at least in part, at the firm rather than the newspaper level, although, on the whole, newspaper chains adopted neither earlier nor later than non-chain newspapers. *Ceteris paribus*, adoption occurred more quickly in non-industrial states.

Gennari, Elena

TI Dynamic Modeling and Structural Shift: Monetary Transmission Mechanisms in Italy before and after EMS. **AU** Juselius, Katarina; Gennari, Elena.

Ghiglino, Christian

PD October 1999. **TI** Optimal Policy in OG Models. **AU** Ghiglino, Christian; Tvede, Mich. **AA** Ghiglino: Copenhagen Business School. Tvede: University of Copenhagen. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/23; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 24. **PR** no charge. **JE** D51, D91, E32, E52. **KW** Overlapping Generations. OLG. Economic Policy. Turnpike Property. Discounting.

AB In the present paper general stationary overlapping generations economies with many commodities in every period and many different consumers in every generation are considered. A government maximizes a utilitarian social welfare function, that is the sum of weighted averages of utilities for generations, through fiscal policy, i.e. monetary transfers and taxes. Both situations with and without time

discounting are considered. It is shown that if the discount factor is sufficiently close to one then the optimal policy stabilizes the economy, i.e. the equilibrium path has the turnpike property. Moreover the fiscal policy is shown to be time-consistent.

Gillman, Max

PD November 1999. **TI** Inflation, Growth, and Credit Services. **AU** Gillman, Max; Kejak, Michal; Valentinyi, Akos. **AA** Gillman: Central European University. Kejak: CERGE-EI & Institute for Advanced Studies Vienna. Valentinyi: University of Southampton and CEPR. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 9913; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 36. **PR** On application; annual subscription 40 pounds. **JE** E31, O11. **KW** Economic Growth. Inflation. Costly Credit.

AB The empirical evidence suggests that there is a significant, negative relationship between inflation and economic growth. Conventional monetary growth models, however, predict a significantly smaller growth effect. This paper proposes a monetary growth model with an explicit credit service sector to explain the observed magnitude. Since credit services are assumed costly to produce, the consumers equate the opportunity cost of holding money with the marginal cost of credit. Therefore the technology of the financial sector influences the velocity of money, and consequently, how inflation affects leisure, the time spent accumulating human capital, and the growth rate of output. The calibration shows that the model generates an inflation-growth effect whose magnitude falls in the range found by the empirical studies. Moreover, in contrast to previous works, we are also able to explain an inflation-growth effect that becomes increasingly weak as the inflation rate rises, as the evidence seems to suggest. Analysis of the welfare cost of inflation further illuminates the inflation-growth effect and how the model compares to the literature.

Giovanetti, Emanuele

PD August 1999. **TI** On the Evolution of Regional Asymmetries. **AA** University of Cambridge. **SR** University of Cambridge, DAE Working Paper: 9916; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. **PG** 22. **PR** US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. **JE** L13, O31, R12. **KW** Leap Frogging. Convergence. Local Interaction. Technological Adoption. Intra-Distribution Mobility.

AB The paper models the evolution of regional asymmetries, and the associated intra-distribution mobility, as the outcome of adoption decisions taken by firms at different locations. The following equilibria are characterized: Persistent asymmetry where nobody adopts, Leapfrogging where low-quality firms adopt, Forging ahead where high-quality firms adopt, and Catching up where everybody adopts. The paper studies the impact of economic integration on these equilibria and the evolution of technological asymmetries as well as intra-distribution mobility. In equilibrium, the regional intra-distribution mobility is described by fluctuations between periods of Leapfrogging, Forging ahead and Catching up.

Gizycki, Marianne

TI Measuring Traded Market Risk: Value-at-Risk and Backtesting Techniques. **AU** Cassidy, Colleen; Gizycki, Marianne.

Glied, Sherry

PD July 1999. **TI** The Value of Reductions in Child Injury Mortality in the U.S. **AA** Columbia School of Public Health and NBER. **SR** National Bureau of Economic Research Working Paper: 7204; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 19. **PR** \$5.00. **JE** 112, 118. **KW** Child Injury. Child Mortality.

AB Child injury mortality rates have declined steadily over time and across causes of death. This paper investigates alternative explanations for this decline and evaluates their value. I assess changes in children's living circumstances, changes in the professional child injury knowledge base, changes in the information imparted to parents, and changes in the regulation of childhood behavior and, in the context of a model of health production, explore how each of these changes might have been expected to affect child safety. These hypotheses are then tested empirically using data from the National Mortality Detail Files on the number of child deaths by age, cause, and state and combine this information with data from the Current Population Survey on the characteristics of children and their families by state. I find that changes in children's living circumstances can explain little, if any of the change in child health. I find limited evidence that regulatory interventions intended to change behavior have been important. I find substantial evidence suggesting that changes in the knowledge available to parents about child health have become increasingly important, while parents' time has become less important in producing health.

PD July 1999. **TI** Managed Care. **AA** Columbia School of Public Health and NBER. **SR** National Bureau of Economic Research Working Paper: 7205; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 41. **PR** \$5.00. **JE** 111, L10. **KW** Managed Care. Health Care.

AB This paper reviews managed care mechanisms, which, in addition to the methods employed by traditional insurance plans, include the selection and organization of providers, the choice of payment methods (including capitation and salary payment), and the monitoring of service utilization. Managed care has a long history. For an extended period, this form of organization was discouraged by a hostile regulatory environment. Since the early 1980s, however, managed care has grown dramatically. The growth of managed care may be due to this organizational form's relative success in responding to underlying market failures in the health care system – asymmetric information about health risks, moral hazard, limited information on quality, and limited industry competitiveness. The paper explores managed care's response to each of these problems then turns to empirical research on managed care. Managed care plans appear to attract a population that is somewhat lower cost than that enrolled in conventional insurance. This complicates analysis of the effect of managed care on utilization. Nonetheless, many studies suggest that managed care plans reduce the rate of health care utilization somewhat. Less evidence exists on their effect on overall health care costs and cost growth.

Gokhale, Jagadeesh

PD June 1999. **TI** Simulating the Transmission of Wealth Inequality via Bequests. **AU** Gokhale, Jagadeesh; Kotlikoff, Laurence J.; Sefton, James; Weale, Martin. **AA** Gokhale: Federal Reserve Bank of Cleveland. Kotlikoff: Boston University and NBER. Sefton and Weale: National Institute of Economic and Social Research. **SR** National Bureau of Economic Research Working Paper: 7183; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 42. **PR** \$5.00. **JE** D31. **KW** Wealth Inequality. Bequests. OLG Model.

AB This paper develops, calibrates, and simulates a dynamic 88-period OLG model to study the intergenerational transmission of U.S. wealth inequality via bequests. The model features marriage, realistic fertility patterns, random death, assortative mating based on skills, heterogeneous skill endowments, heterogeneous rates of return, skill inheritability, progressive income taxation, and resource annuitization via social security. All bequests arise from imperfect annuitization. Nonetheless, the model generates a realistic ration of aggregate wealth to aggregate labor income, a realistic bequest flow relative to the stock of wealth, and a realistic wealth distribution at retirement. Skill differences, assortative mating, social security, and the time preference are the primary determinants of wealth inequality. Bequests do propagate wealth inequality, but only in the presence of social security, which disproportionately disinherits the lifetime poor. Intergenerational wealth immobility, also considered here, is primarily determined by the inheritance of skills from one's parents and the magnification of the impact of this inheritance by marital sorting.

Goldberg, Linda S.

PD June 1999. **TI** International Trade and Factor Mobility: An Empirical Investigation. **AU** Goldberg, Linda S.; Klein, Michael W. **AA** Goldberg: Federal Reserve Bank of New York and NBER. Klein: Tufts University and NBER. **SR** National Bureau of Economic Research Working Paper: 7196; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** \$5.00. **JE** F14, F21, F23. **KW** Rybczynski Theorem. Trade Flows. Capital Flows.

AB Foreign Direct Investment (FDI) has been growing rapidly, at a pace far exceeding the growth in international trade. Thus, a full understanding of the relationship between trade in goods and FDI is important for obtaining a complete picture of the extent and sources of international linkages. We investigate whether FDI serves as a complement to trade or a substitute for trade based on the effects identified by the Rybczynski theorem whereby an increase in a factor of production used intensively in one sector affects production both in that sector and in other sectors. Using detailed data on bilateral capital and trade flows between the United States and individual Latin American countries, we examine the linkages between FDI into particular sectors of Latin American economies and the net exports of those and other manufacturing sectors. We find that FDI from the United States can lead to significant, and varied, shifts in the composition of activity in many Latin American countries and across many manufacturing industries.

Goldin, Claudia

PD May 1999. **TI** The Returns to Skill in the United

States Across the Twentieth Century. **AU** Goldin, Claudia; Katz, Lawrence F. **AA** Harvard University and NBER. **SR** National Bureau of Economic Research Working Paper: 7126; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** \$5.00. **JE** D31, D63, J24, J31, N30. **KW** Skill Premia. Human Capital. Wages. Economic History. Returns to Schooling.

AB Economic inequality is higher today than it has been since 1939, as measured by both the wage structure and wealth inequality. But the comparison between 1939 and 1999 is largely made out of necessity; the 1940 U.S. population census was the first to inquire of wage and salary income and education. We address what the returns to skill were prior to 1940 and piece together the first century long history of skill premiums, the dispersion of the wage structure, and returns to formal schooling. We use the 1915 Iowa State Census, a remarkable and unique document, as well as several less obscure but untapped reports. Using all of these sources, we find that the wage structure narrowed at several moments in the first half of the 20th century, not just in the 1940s, both coinciding with major economic disruptions brought about by war. The returns to education were in fact higher in 1914 than in 1939, and the enormous expansion in secondary schooling beginning in the 1910s was a contributing factor to the decrease in educational returns. Inequality and the returns to education across the entire century, therefore, first declined before their more recent and steep ascent.

Goldstein, Morris

PD May 1998. **TI** The Origin of the Asian Financial Turmoil. **AU** Goldstein, Morris; Hawkins, John. **AA** Goldstein: Institute for International Economics. Hawkins: Reserve Bank of Australia. **SR** Reserve Bank of Australia Research Discussion Paper: 9805; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. Website: <http://www.rba.gov.au>. **PG** 34. **PR** no charge. **JE** F31, N25. **KW** Asia. Exchange Rates.

AB In the second half of 1997 many Asian emerging economies suffered large declines in both their currency and equity markets. This Asian financial turmoil arose primarily from three interrelated sets of factors, namely: shortcomings in the financial sector at a time when global liquidity conditions were accommodative, concerns about balance of payments developments, and contagion across economies. The major channel of contagion appears to have been the sudden realization by the market -- after the sharp depreciation of the Thai baht -- that a number of other Asian economies had vulnerabilities similar to those in Thailand.

Gomes, Armando

PD December 2000. **TI** Externalities and Renegotiations in Three-Player Coalitional Bargaining. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 01/07; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 23. **PR** \$3.00 for U.S. and Canada; \$5.00 Foreign; make checks payable to University of Pennsylvania. **JE** C71, C72, C78, D62, L14. **KW** Coalitional Bargaining. Contracts.

Externalities. Conditional Offers. Unconditional Offers.

AB We study strategic three-player coalitional bargaining problems in an environment with externalities where contracts forming coalitions can be written and renegotiated. The theory yields a unique stationary subgame perfect Nash equilibrium outcome (the coalitional bargaining value). This solution has an intuitive economic interpretation using credible outside options, and it can either be the Nash bargaining solution, for games where the worth of all pairwise coalitions is less than a third of the grand coalition value; the Shapley value, for games where the sum of the values created by all pairwise coalitions is greater than the grand coalition value; or the nucleolus, for games where only the 'natural coalition' among two 'natural partners' creates significant value, and those where only the two pairwise coalitions including a 'pivotal player' create significant value.

PD January 2001. **TI** Sharing of Control as a Corporate Governance Mechanism. **AU** Gomes, Armando; Novaes, Walter. **AA** Gomes: University of Pennsylvania. Novaes: University of Washington. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 01/06; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 28. **PR** \$3.00 for U.S. and Canada; \$5.00 Foreign; make checks payable to University of Pennsylvania. **JE** C78, G31, G32, G34. **KW** Sharing of Control. Corporate Governance. Monitoring. Investment Decisions. Bargaining.

AB This paper identifies a new corporate governance mechanism: sharing control. We show that bargaining problems among multiple controlling shareholders may prevent inefficient investment decisions that harm minority shareholders. The same bargaining problems may block efficient investment decisions, though. By solving this trade-off, we show that the likelihood that shared control is efficient increases with three firm characteristics: over-investment problems, the cost of verifying cash flows, and financing requirements. The model provides testable implications for the role that large shareholders play in corporate governance, contrasting shared control and monitoring as alternative governance mechanisms.

PD March 2001. **TI** Takeovers, Freezeouts, and Risk Arbitrage. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 01/12; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 46. **PR** \$3.00 for U.S. and Canada; \$5.00 Foreign; make checks payable to University of Pennsylvania. **JE** C78, D82, G34. **KW** Takeovers. Freezeouts. Arbitrage. Hold-Out Power. Tender Offers.

AB This paper develops a dynamic model of tender offers in which there is trading on the target's shares during the takeover, and bidders can freeze out target's shareholders (compulsorily acquire remaining shares not tendered at the bid price), features that prevail on almost all takeovers. We show that trading allows for the entry of arbitrageurs with large blocks of shares who can hold off a freezeout -- a threat that forces the bidder to offer a high preemptive bid. There is also a

positive relationship between the takeover premium and arbitrageurs' accumulation of shares before the takeover announcement, and the less liquid the target stock, the stronger this relationship is. Moreover, freezeouts eliminate the free-rider problem, but front-end loaded bids, such as two-tiered and partial offers, do not benefit bidders because arbitrageurs can undo any potential benefit and eliminate the coerciveness of these offers. Similarly, the takeover premium is also largely unrelated to the bidder's ability to dilute the target's shareholders after the acquisition, also due to potential arbitrage activity.

PD September 1999. **TI** A Theory of Negotiation and Formation of Coalition. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 99/12; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104- 6297. Website: <http://www.econ.upenn.edu/CARESS>. **PG** 33. **PR** \$3.00 for U.S. and Canada; \$5.00 Foreign; make checks payable to University of Pennsylvania. **JE** C71, C72, C78, D62. **KW** Coalitional Bargaining. Uniqueness. Externalities. Conditional Offers. Unconditional Offers.

AB This paper proposes a new solution concept to three-player coalitional bargaining problems where the underlying economic opportunities are described by a partition function. This classic bargaining problem is modeled as a dynamic non-cooperative game in which players make conditional or unconditional offers, and coalitions continue to negotiate as long as there are gains from trade. The theory yields a unique stationary perfect equilibrium outcome -- the negotiation value -- and provides a unified framework that selects an economically intuitive solution and endogenous coalition structure. For such games as pure bargaining games the negotiation value coincides with the Nash bargaining solution, and for such games as zero-sum and majority voting games the negotiation value coincides with the Shapley value. However, a novel situation arises where the outcome is determined by pairwise sequential bargaining sessions in which a pair of players forms a natural match. In addition, another novel situation exists where the outcome is determined by one pivotal player bargaining unconditionally with the other players, and only the pairwise coalitions between the pivotal player and the other players can form.

Gomulka, Stanislaw

PD August 2000. **TI** A Simple Model of the Transformational Recession Under a Mobility Restraint. **AU** Gomulka, Stanislaw; Lane, John. **AA** Gomulka: CEP and LSE. Lane: LSE. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 466; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. **PG** 18. **PR** 5 pounds. **JE** C13, E24, E32, O11. **KW** Recessions. Business Cycles. Contractionary Impact. Relative Prices. Transition Economies.

AB This paper considers the impact on sectoral outputs and employments of rapid and large changes in relative prices, such as those which occurred in transition economies during the 1990s. A simple general equilibrium model is developed in which price changes are induced by a tax reform and resource mobility is restricted. The reform is designed to improve the

quality of the price system, but is shown to cause a recession the size of which is proportional to the initial tax distortion. It is also demonstrated that wage flexibility would moderate the magnitude of the recession, but this gain would be obtained at a cost in longer term efficiency, and would be, in any case, unsustainable.

TI Whence Reform? A Critique of the Stiglitz Perspective. **AU** Dabrowski, Marek; Gomulka, Stanislaw; Rostowski, Jacek.

PD November 2000. **TI** Macroeconomic Policies and Achievements in Transition Economies, 1989-1999. **AA** CEP and LSE. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 475; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. **PG** 25. **PR** 5 pounds. **JE** E42, E62, E63, O21, P21. **KW** Transition Economies. Sequencing. Growth Convergence. Exchange Rate Regimes. Disinflation.

AB The paper discusses the reasons for the observed variation in the sequencing, speed and content of reform policies, in the 1990s, among 25 post-socialist countries of Central Europe and the Former Soviet Union. It argues that these differences, while considerable in the early 1990s, did not amount to as substantially different reform strategies as it was often claimed and, in any case, have for most countries narrowed down considerably in the second half of the 1990s. The transformational recession is interpreted to have been of the stagflation type, related largely to initial, pre-reform crisis conditions. The paper reviews macroeconomic policies and evaluates the progress which the 25 countries have made in terms of a set of criteria proposed for the purpose of such an evaluation, and it discusses the reasons which distinguish the more successful from the less successful. The potential contribution to growth of the technological convergence (catching-up) factor during the first half of the 21st century is also estimated for key transition economies.

PD November 2000. **TI** Pension Problems and Reforms in the Czech Republic, Hungary, Poland and Romania. **AA** CEP, LSE and CASE. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 480; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. **PG** 14. **PR** 5 pounds. **JE** G23, H55, P21, P52. **KW** Public Pensions. Transition Economies. Reform. Debt. Pension Funds.

AB The focus of this paper is pension developments and reforms in the FOUR transition countries: the Czech Republic, Hungary, Poland and Romania, during the 1990s. In terms of key pension statistics, Poland and Romania are clear outliers not just among the FOUR, but also in Europe. The greater pension expenditures in Hungary and, especially, Poland are in part inherited from the socialist system and in part caused by the more radical restructuring reforms which have been adopted since the collapse of that system in 1988-1990. These greater expenditures have prompted these two countries to start replacing gradually their PAYG-DB system with a three-pillar mixed system, in which private pension funds are intended to become a large, eventually the dominant, component. This chapter gives an account of the main aims and principles of the reform measures which came into force in Hungary in 1998 and in Poland in 1999. Also reported are estimates of the public

debt implicit in the obligation of the pre-reform state pension system to pay benefits to current pensioners and to current workers. These estimates are found to be, for Hungary, Poland and the Czech Republic, significantly higher than in main European Union countries.

Goodhart, Charles A. E.

PD April 2000. **TI** A Simple Model of an International Lender of Last Resort. **AU** Goodhart, Charles A. E.; Huang, Haizhou. **AA** Goodhart: London School of Economics and Bank of England. Huang: International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/75; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 11. **PR** not available. **JE** E58, F33, F42, G21, G28. **KW** Lender of Last Resort. Banking Crises. Currency Crises. Central Banks. Contagion. **AB** This paper develops a simple model of an international lender of last resort (ILOLR). The world economy consists of many open economies, each with a banking system and a central bank operating under a pegged exchange rate regime. The fragility of the banking system and the limited ability of a domestic central bank to provide international liquidity together can cause currency and banking crises. An international interbank market can help an economy with the needed international liquidity, but with potential costs of international financial contagion. An ILOLR can play a useful role in providing international liquidity and reducing international contagion.

Gordon, Roger H.

PD May 1999. **TI** Government as a Discriminating Monopolist in the Financial Market: The Case of China. **AU** Gordon, Roger H.; Li, Wei. **AA** Gordon: University of Michigan. Li: Duke University. **SR** National Bureau of Economic Research Working Paper: 7110; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** \$5.00. **JE** G28, H25. **KW** Financial Markets. Capital Controls. Regulation. Social Welfare. Business Taxes. **AB** To date, China has maintained a variety of restrictions on its financial markets. In addition to imposing capital controls and regulating interest rates, the government controls both the set of firms that can sell equity on the domestic or foreign stock markets, and the amount they can sell. China is unique in that foreigners pay much less than domestic investors for intrinsically identical shares. In this paper, we show that these characteristics of the Chinese financial market are consistent with a government choosing regulations to maximize a standard type of social welfare function. The observed policy of charging much higher prices for equity sold to domestic than to foreign investors can simply reflect the more inelastic demand for equity by domestic investors. Under certain conditions, these regulations are equivalent to income taxes on business and interest income. The pattern of tax rates is not qualitatively different from those commonly observed elsewhere, particularly in other countries with capital controls. Given the ease with which firms and individuals can evade income taxes, however, indirect taxation through restrictions on the financial market may serve as an effective alternative.

Gorgens, Tue

PD November 1999. **TI** Semiparametric Estimation of Single-Index Transition Intensities. **AA** University of

Copenhagen. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/25; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 24. **PR** no charge. **JE** C14, C24, C41. **KW** Semiparametric Estimation. Kernel Regression. Duration Analysis. Competing Risks. Censoring.

AB This research develops semiparametric-kernel-based estimators of state-specific conditional transition intensities for duration models with right-censoring and/or multiple destinations (competing risks). Both discrete and continuous duration data are considered. The maintained assumptions are that $h_s(y|x)$ depends on x only through an index $x'Bs$. In contrast to existing semiparametric estimators, proportional intensities is not assumed. The new estimators are asymptotically normally distributed. The estimator of B_s is root- n consistent. The estimator of $h_s(y|x)$ achieves the one-dimensional rate of convergence. Thus the single-index assumption eliminates the "curse of dimensionality". The estimators perform well in Monte Carlo experiments.

Gorton, Gary

PD May 1999. **TI** Blockholder Identity, Equity Ownership Structures, and Hostile Takeovers. **AU** Gorton, Gary; Kahl, Matthias. **AA** Gorton: University of Pennsylvania and NBER. Kahl: University of California, Los Angeles. **SR** National Bureau of Economic Research Working Paper: 7123; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 35. **PR** \$5.00. **JE** D82, G32, G34. **KW** Ownership Structure. Takeovers. Corporate Governance. Agency Problems. Institutional Investors. **AB** The authors determine firms' equity ownership structures and provide a theory of hostile takeovers by distinguishing the roles of two types of blockholders: rich investors and institutional investors. The authors also distinguish the roles of two types of stock markets: the block market and the market with small investors. Rich investors have their own money at stake while institutional investors are run by professional managers and hence face agency conflicts. Because rich investors face no agency problems they are better at monitoring managers. If their wealth is insufficient to control all corporations, then "agency-cost free" capital is scarce. The authors investigate the allocation of this scarce resource. A hostile takeover is the consequence of a state-contingent allocation of agency-cost free capital. The authors show that only rich investors engage in hostile takeovers. Institutional investors instead are either permanent blockholding monitors or facilitate takeovers by selling blocks to rich investors. Even though all firms are ex ante identical, some may rely on the takeover mechanism while others rely on permanent institutional monitoring. The authors characterize the ownership structure of firms.

Gourieroux, Christian

TI Bartlett Identities Tests. **AU** Chesher, Andrew; Dhaene, Geert; Gourieroux, Christian; Scaillet, Olivier.

TI Bartlett Identities Tests. **AU** Chesher, Andrew; Dhaene, Geert; Gourieroux, Christian; Scaillet, Olivier.

Granger, Clive W. J.

PD May 1999. **TI** Economic and Statistical Measures of Forecast Accuracy. **AU** Granger, Clive W. J.; Pesaran, M.

Hashem. AA Granger: University of California, San Diego. Pesaran: University of Cambridge. SR University of Cambridge. DAE Working Paper: 9910; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. PG 31. PR US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. JE C12, C52. KW Decision Theory. Forecast Evaluation. Probabilistic Forecasts. Forecast Accuracy. Stock Market. Predictability.

AB This paper argues in favor of a closer link between decision and forecast evaluation problems. Although the idea of using decision theory for forecast evaluation appears early in the dynamic stochastic programming literature, and has continued to be used in meteorological forecasts, it is hardly mentioned in standard academic textbooks on economic forecasting. Some of the main issues involved are illustrated in the context of a two-state, two-action decision problem as well as in a more general setting. Relationships between statistical and economic methods of forecast evaluation are discussed and useful links between Kuipers score, used as a measure of forecast accuracy in the meteorology literature, and the market timing tests used in finance, are established. An empirical application to the problem of stock market predictability is also provided, and the conditions under which such predictability could be exploited in the presence of transaction costs are discussed.

Grant, Simon

PD January 1999. TI Public Investment and the Risk Premium for Equity. AU Grant, Simon; Quiggin, John. AA Grant: Australian National University. Quiggin: James Cook University. SR Australian National University Working Paper in Economics and Econometrics: 360; Department of Economics, Australian National University, Canberra ACT 0200, Australia. PG 14. PR no charge. JE E62, H11, H42, L33. KW Equity Premium. Uninsurable Labor Income. Public Investment.

AB Analysis of the equity premium puzzle has focused on private sector capital markets. However, the existence of an anomalous equity premium raises important issues in the evaluation of public sector investment projects. In the present paper, these issues are explored. We begin by formalizing the argument that an equity premium may arise where problems of adverse selection prevent individuals from insuring against systematic risk in labor income, modeled as the return to human capital. Next we consider the possibility of public ownership of equity and show that, other things being equal, increases in public ownership will improve welfare, up to the point where the equity premium is eliminated. Finally, we consider policy implications and argue that, in practice the optimal extent of public ownership will be determined by a trade-off between the advantages of risk spreading associated with public ownership and the superior operating efficiency associated with private ownership in the absence of externality and other problems requiring regulation.

PD April 1999. TI The Risk Premium for Equity: Implications for Clinton's Proposed Diversification of the Social Security Trust Fund. AU Grant, Simon; Quiggin, John. AA Grant: Australian National University. Quiggin: James Cook University. SR Australian National University Working Paper in Economics and Econometrics: 368; Department of Economics, Australian National University,

Canberra ACT 0200, Australia. PG 11. PR no charge. JE E62, H55. KW Social Security. Equity Premium. Uninsurable Labor Income.

AB Any meaningful reform of the US Social Security system must deal with the system's current outstanding accumulated unfunded liabilities. We model these as a once-off financial liability payable 'tomorrow'. We show that if the equity premium puzzle arises from adverse selection problems which prevent risk-spreading through market transactions, then the government can improve the ex ante welfare of the young today by acquiring equity today to assist in financing its obligations to meet social security payments to the old tomorrow.

Green, Francis

PD August 2000. TI Working on the Chain Gang? An Examination of Rising Effort Levels in Europe in the 1990s. AU Green, Francis; McIntosh, Steven. AA Green: University of Kent, Canterbury and LSE. McIntosh: LSE. SR London School of Economics, Centre for Economic Performance Discussion Paper: 465; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. PG 30. PR 5 pounds. JE J22, J24, J51. KW Work Effort. International Comparisons. Trade Unions. Labor Supply. Computers.

AB This paper presents evidence that, across many European countries, the 1990s have witnessed an intensification of labor effort, and investigates explanations for this process. Using data drawn from The European Survey on Working Conditions, we construct an index of work effort and show that it has reasonable properties in relation to other variables. We find that Britain has experienced the fastest rise in work effort, while in western Germany, Denmark and Greece there has been very little intensification of work effort. We show that work effort is higher in jobs that use computers more frequently, and in jobs that are more open to competitive pressures. Work effort has increased faster in countries where trade union density has declined the most. These factors are able to explain a large portion of the variation in the change of work effort between countries, but there remains a significant shift in work effort that is not accounted for by available explanatory variables.

Green, Richard

PD April 1999. TI (1) Modelling RETAA Model of Forward Trading and the Balancing Mechanism and (2) Rebidding in the Balancing Mechanism: An Economic Analysis. AU Green, Richard; McDaniel, Tanga. AA Green: University of Hull. McDaniel: University of Cambridge. SR University of Cambridge, DAE Working Paper: 0002; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. PG 22. PR US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. JE L94, L98. KW Bidding. Generation. RETA. Pay-Bid. SMP.

AB The authors solve a two-stage model of electricity trading, with a forward market and a pay-bid balancing mechanism. They derive balancing mechanism strategies for generators that have sold forward and been scheduled to run, and for those which have not. Given these strategies, we can derive arbitrage conditions on the forward prices at which buyers and generators would be willing to trade. The market equilibrium implies that the expected level of output would be

sold forward, and the expected price in the balancing mechanism would be equal to the marginal cost of this level of output. And (2) Generators compete to sell extra power to the system operator in a balancing mechanism. The quantity required is equal to the sum of two random shocks. If bids are made before either shock is known, the average price paid will rise with the quantity demanded, but by much less than marginal cost. If those bidders who have not been scheduled after the first shock are allowed to change their bids, the expected average price paid will be more responsive to the quantity demanded (without changing any generator's expected revenues), but the correlation between price and quantity will be.

Greenwood, Jeremy

PD June 1999. **TI** More on Marriage, Fertility, and the Distribution of Income. **AU** Greenwood, Jeremy; Guner, Nezih; Knowles, John. **AA** Greenwood: University of Rochester. Guner: Pennsylvania State University. Knowles: University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 99/05; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104- 6297. Website: www.econ.upenn.edu/CARESS. **PG** 41. **PR** no charge. **JE** D31, E60, H31, J12, J13. **KW** Fertility. Marriage. Divorce. Nash Bargaining. Income Distribution.

AB According to Pareto, the distribution of income depends on "the nature of the people comprising a society, on the organization of the latter, and, also, in part, on chance." An overlapping generations model of marriage, fertility and income distribution is developed here. The "nature of the people" is captured by attitudes toward marriage, divorce, fertility, and children. Singles search for mates in a marriage market. They are free to accept or reject marriage proposals. Married agents make their decisions through bargaining about work, and the quantity and quality of children. They can divorce. Social policies, such as child tax credits or child support requirements, reflect the "organization of the (society)." Finally, "chance" is modeled by randomness in income, opportunities for marriage, and marital bliss.

Griffith, Rachel

PD May 2000. **TI** Mapping the Two Faces of R&D: Productivity Growth in a Panel of OECD Industries. **AU** Griffith, Rachel; Redding, Stephen; Van Reenen, John. **AA** Griffith: Institute of Fiscal Studies and CEPR. Redding: London School of Economics, Institute for Fiscal Studies and CEPR. Van Reenen: University College London, Institute for Fiscal Studies and CEPR. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 458; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. **PG** 73. **PR** 5 pounds. **JE** O14, O15, O31, O32, O40. **KW** Research and Development. Human Capital. Total Factor Productivity. Convergence. Growth.

AB Many writers have claimed that R&D has two 'faces'. In addition to the conventional role of stimulating innovation, R&D enhances technology transfer by improving the ability of firms to learn about advances in the leading edge ('absorptive capacity'). In this paper we document that there has been

convergence of TFP within a panel of industries across thirteen OECD countries since 1970. Furthermore, we find evidence that both R&D and human capital appear statistically and economically important in this catch up process as well as stimulating innovation directly. Trade, by contrast, plays a more modest role in productivity growth.

Grodal, Birgit

PD September 2000. **TI** Walras Equilibrium with Coordination. **AU** Grodal, Birgit; Vind, Karl. **AA** University of Copenhagen. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 00/18; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 15. **PR** no charge. **JE** C51, C52, D11, D50, D62. **KW** Walras Equilibrium. Coordination. Social System. Households. Incomplete Markets.

AB We consider a pure exchange economy with private ownership in which consumers have interdependent preferences. Hence, consumers' preferences are defined on the states of the economy. In a Walras equilibrium for such an economy, it may, of course, be possible for two or more consumers to simultaneously change their net trades and thereby obtain a preferred state. We use the concept of coordination introduced by Vind (1983) to define an exogenously given coordination structure in the economy and define a new equilibrium concept, Walras equilibrium with coordination. In such an equilibrium individual consumers take prices and initial endowments as given, and consumers do not expect to be able to obtain a preferred state when they coordinate their choice of net trades. By using the existence theorem for an equilibrium in a social system with coordination, we set conditions for the existence of a Walras equilibrium with coordination.

TI Objectives of an Imperfectly Competitive Firm: A Surplus Approach. **AU** Dierker, Egbert; Dierker, Hildegaard; Grodal, Birgit.

TI Nonexistence of Constrained Efficient Equilibria when Markets are Incomplete. **AU** Dierker, Egbert; Dierker, Hildegaard; Grodal, Birgit.

TI Clubs and the Market. **AU** Ellickson, Bryan; Grodal, Birgit; Scotchmer, Suzanne; Zame, William R.

TI Clubs and the Market: Large Finite Economies. **AU** Ellickson, Bryan; Grodal, Birgit; Scotchmer, Suzanne; Zame, William R.

TI Incomplete Markets and the Firm. **AU** Dierker, Egbert; Dierker, Hildegaard; Grodal, Birgit.

Grossman, Michael

PD April 1999. **TI** The Human Capital Model of the Demand for Health. **AA** NBER. **SR** National Bureau of Economic Research Working Paper: 7078; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 98. **PR** \$5.00. **JE** I12, J24. **KW** Health Production. Health Demand. Human Capital.

AB This paper contains a detailed treatment of the human capital model of the demand for health. Empirical research that tests the predictions of the model or studies causality between years of formal schooling completed and good health is surveyed. The model views health as a durable capital stock

that yields an output of healthy time. Individuals inherit an initial amount of this stock that depreciates with age and can be increased by investment. The household production function model of consumer behavior is employed to account for the gap between health as an output and medical care as one of many inputs into its production. In this framework the "shadow price" of health depends on many variables besides the price of medical care. It is shown that the shadow price rises with age if the rate of depreciation on the stock of health rises over the life cycle and falls with education if more educated people are more efficient producers of health. An important result is that, under certain conditions, an increase in the shadow price may simultaneously reduce the quantity of health demanded and increase the quantities of health inputs demanded.

PD May 1999. **TI** Alcohol Regulation and Violence on College Campuses. **AU** Grossman, Michael; Markowitz, Sara. **AA** Grossman: City University of New York and NBER. Markowitz: New Jersey Institute of Technology and NBER. **SR** National Bureau of Economic Research Working Paper: 7129; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 19. **PR** \$5.00. **JE** D12, I10, L51. **KW** Regulation. Alcohol. Violence. Price Variation.

AB This study focuses on the effects of variations in alcoholic beverage prices among states of the United States on violence on college campuses. The principal hypothesis tested is that the incidence of violence is negatively related to the price of alcohol. This hypothesis is derived from two well-established relationships: the positive relationship between alcohol and violence and the negative relationship between the use of alcohol and its price. The data employed in the study are the 1989, 1990, and 1991 Core Alcohol and Drug Surveys of College Students. They contain almost 120,000 college students from approximately 200 colleges and universities throughout the United States and have measures of alcohol use and the adverse consequences of its use. These adverse consequences include the following indicators of violence: getting in trouble with the police, residence hall, or other college authorities; damaging property or pulling a fire alarm; getting into an argument or a fight; and taking advantage of another person sexually or having been taken advantage of sexually. The principal finding is that the incidence of each of these four acts of violence is inversely related to the price of beer in the state in which the student attends college.

Groth, Christian

PD January 2000. **TI** Can Nonrenewable Resources Alleviate the Knife-Edge Character of Endogenous Growth? **AU** Groth, Christian; Schou, Poul. **AA** University of Copenhagen. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 00/02; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 17. **PR** no charge. **JE** O41, Q30. **KW** Semi-Endogenous Growth. Optimal Growth. Knife-Edge. Robustness. Nonrenewable Resources.

AB Can the knife-edge restriction on technology imposed by standard endogenous growth models be relaxed by allowing for nonrenewable resources entering the technology? To answer this question we examine whether stable endogenous growth is compatible with increasing returns to scale with respect to producible inputs when nonrenewable resources are a necessary input into the growth engine. In a one-sector optimal growth

model, we find that the existence and stability of a steady state is compatible with a wide range of parameter values, including cases with increasing returns to capital and/or the natural resource. However, in all cases, population growth turns out to be necessary for stable growth in per capita consumption. Thus, under these circumstances, (strictly) endogenous stable growth is not possible, not even as a knife-edge case. But semi-endogenous growth is an attractive alternative allowing a rich set of determinants of long-run growth.

Grubb, Farley

PD May 2000. **TI** Creating the U.S. Currency Union, 1761-1811: A Quest for Monetary Stability or a Grab for Sovereignty? **AA** University of Delaware. **SR** University of Delaware Department of Economics Working Paper: 00/02; Department of Economics, University of Delaware, Newark, DE 19716-2720. Website: www.be.udel.edu/Econ_site/Working_Papers.html. **PG** 18. **PR** no charge. **JE** E61, E63, F33, N11, N41. **KW** Monetary Union. Sovereign Power. Economic History. Currency.

AB The U.S. constitution, ratified by the states and adopted by Congress in 1789, forbade states from issuing their own currency, a practice in which the states had been engaged for many decades. Exchange rate and price evidence from 1761 through 1811 indicates that this transition did not improve monetary performance, nor is this evidence consistent with the anti-state-currency rhetoric presented at the Constitutional Convention. Offered as a solution to economic ills that were known to be phantoms or mis-specified, this constitutionally created U.S. dollar currency union was a grab for additional federal sovereign power.

Gruen, David

PD June 1997. **TI** The Lags of Monetary Policy. **AU** Gruen, David; Romalis, John; Chandra, Naveen. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia Research Discussion Paper: 9702; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. Website: <http://www.rba.gov.au>. **PG** 30. **PR** no charge. **JE** E52, E58. **KW** Monetary Policy. Transmission Lags. Policy Lags.

AB The length of the transmission lags from monetary policy to output has been the subject of much research over the years, but there are serious problems in isolating the lags with any precision. This paper uses a simple model of Australian output to estimate the length of the lags, and then examines how attempts to grapple with the estimation problems might change the results. We estimate that output growth falls by about one-third of one per cent in both the first and second years after a one percentage point rise in the short-term real interest rate, and by about one-sixth of one per cent in the third year. This implies an average lag of about five or six quarters in monetary policy's impact on output growth. Each of these estimates is, however, subject to considerable uncertainty. We discuss the implications for policy of these relatively long and uncertain lags. Finally, we find no evidence that the average lag from monetary policy to output growth has become any shorter in the 1990s.

Guegan, Dominique

TI Estimation and Applications of Gegenbauer Processes. **AU** Ferrara, Laurent; Guegan, Dominique.

Guell, Maia

PD July 2000. **TI** Fixed-Term Contracts and Unemployment: An Efficiency Wage Analysis. **AA** Princeton University. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 461; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. **PG** 35. **PR** 5 pounds. **JE** E24, J32, J38, J41, J65. **KW** Unemployment. Firing Costs. Two-Tier System. Permanent Contracts. Fixed-Term Contracts.

AB During the 1980s, many European countries introduced fixed-term contracts to fight high and persistent levels of unemployment. Although these contracts have been widely used, unemployment has remained about the same after fifteen years. This paper builds a theoretical model to reconcile these facts. We analyze the labor market effect of the introduction of fixed term contracts and the firm's choice of contracts are studied. Permanent contracts are the standard way to offer incentives, but fixed-term contracts are cheaper. This generates an externality, which can make employment higher in the system with only permanent contracts. As a consequence, from a social point of view, the share of fixed-term contracts is too large. Increases in the renewal rate of fixed-term contracts into permanent contracts lead to higher employment levels. Finally, the model highlights the interactions between different rigidities in the labor market. Aggregate employment and the share of temporary contracts are affected in the same way by the firing costs and the flexibility of wages.

PD July 2000. **TI** Employment Protection and Unemployment in an Efficiency Wage Model. **AA** LSE and Princeton University. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 463; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. **PG** 13. **PR** 5 pounds. **JE** D82, J32, J41, J64, K31. **KW** Unemployment. Firing Costs. Efficiency Wage Models. Effort. Moral Hazard.

AB Firing costs are often blamed for unemployment. This paper investigates this well spread belief. The main points are two. First, firing costs are modeled in an efficiency wage model to capture their effects on employment through wages. Secondly, dismissal conflicts are modeled explicitly. In the context of imperfectly observable effort, a double moral hazard problem can arise and in turn firing costs reduced employment because they increase the rent to be paid to workers. The determinants of the double moral hazard problem such as the imprecise definition of dismissal causes are analyzed. The main policy conclusion is that focus should move onto the clarification of the different causes of dismissal to minimize the room for interpretation. If so, then high enough severance payments in case of "unfair" dismissals can actually have a punishment role and prevent the double moral hazard problem.

Guerre, Emmanuel

PD April 1999. **TI** An Alpha-Level Adaptive Test for Regression Models via Regressogram Selection. **AU** Guerre, Emmanuel; Lieberman, Offer. **AA** Guerre: LSTA and CREST. Lieberman: Technion-Institute of Technology. **SR** Document de Travail du CREST: 9924; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex,

France. Website: www.ensae.fr/crest. **PG** 16. **PR** no charge. **JE** C12, C22. **KW** Adaptive Testing. Data Driven Bin Width Selection. Minimax Hypothesis Testing. Nonparametric Regression.

AB We propose a nonparametric test for the white noise hypothesis in a regression model. The test is based on a regressogram estimate, which bin width is selected using a penalty method similar to the AIC, BIC and C's Mallows criteria. The effect of the penalty sequence is investigated, both under the null and alternative hypotheses. The order of the optimal penalty sequence is $\log^{1/2} \log n$ where n is the sample size, and is apparently new in the literature. Corresponding optimal tests are described, and can detect alternatives going to 0 at optimal adaptive rate. Some inequalities suggest that the accuracy of the approximation of the level of the test, and the order of the alternatives, which can be detected, are inversely related.

Guggenberger, Patrik

TI A Bias-Reduced Log-Periodogram Regression Estimator for the Long- Memory Parameter. **AU** Andrews, Donald W. K.; Guggenberger, Patrik.

Guillaume, Dominique

PD 1999. **TI** Making and Breaking Monetary Policy Rules: The Experience of African Countries. **AU** Guillaume, Dominique; Stasavage, David. **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/99/02; Centre for the Study of African Economies, University of Oxford, St. Cross Building, Manor Road, Oxford, OX1 3UL, England. Website: www.csae.ox.ac.uk/. **PG** 39. **PR** 3 pounds or \$5.00; subscription 55 pounds or \$88.00. **JE** E52, E63, F33, F36, F42. **KW** Monetary Policy. Monetary Union. Credibility. Commitment. Institutions.

AB This paper analyzes the experience with rule-based monetary policy in African countries which have participated in monetary unions (CFA Franc Zone, Eastern African Currency Board and Rand Monetary Area). We show that African countries have generally lacked the domestic political institutions which would allow individual governments to tie their hands by establishing such rules. Monetary unions have proved to be an alternative possibility for credible commitment to sound macroeconomic policies, but only in cases where exit from a union is made costly by the provision of side-payments (or sanctions) in other areas of regional co-operation, and only when governance structures have been designed so as to maximize chances for the enforcement of monetary rules. We conclude by making suggestions about the design of African monetary unions.

Guner, Nezh

TI More on Marriage, Fertility, and the Distribution of Income. **AU** Greenwood, Jeremy; Guner, Nezh; Knowles, John.

Gupta, Sanjeev

TI Income Distribution and Tax and Government Social Spending Policies in Developing Countries. **AU** Chu, Ke-young; Davoodi, Hamid; Gupta, Sanjeev.

Gustman, Alan L.

PD June 1999. **TI** Employer Provided Pension Data in the

NLS Mature Women's Survey and in the Health and Retirement Study. AU Gustman, Alan L.; Steinmeier, Thomas L. AA Gustman: Dartmouth College and NBER. Steinmeier: Texas Tech University. SR National Bureau of Economic Research Working Paper: 7174; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 35. PR \$5.00. JE D31, J14, J16, J26, J32. KW Pension Wealth. Pension Incentives.

AB We compute pension wealth from employer provided pension plan descriptions matched to respondent surveys to the National Longitudinal Survey of Mature Women (NLS-MW) and the Health and Retirement Study (HRS). These calculations provide detailed information on the level and distribution of pension wealth and a variety of incentives from pensions. Differences between the pensions of men and women are largely explained by differences in earnings. However, there also are differences in the shapes of the pension accrual profiles of defined benefit plans that are likely to reflect tenure of women. Pension coverage is lower in the NLS-MW than in the HRS. As a result, wealth is lower in the NLS-MW than in the HRS. But the difference in coverage is not due to the effects of pension matching. Pension values for covered respondents are similar between the NLS-MW and HRS surveys. Systematic differences between the surveys in the rate at which pensions were matched do not have a major effect on findings as to the levels and distributions of pension wealth between the surveys.

Gyntelberg, Jacob

PD July 1999. TI Ownership Structure as a Signal of Managerial Ability. AU Gyntelberg, Jacob; Kyhl, Soren. AA University of Copenhagen. SR University of Copenhagen, Institute of Economics Discussion Paper: 99/17; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. PG 25. PR no charge. JE G32, G34. KW Ownership Structure. Signaling. Corporate Finance. Incomplete Contracts.

AB This paper develops a signaling model of an entrepreneur's decision to go public when he continues as a manager. The entrepreneur takes his firm public in order to cash in on his initial investment. Assuming that the entrepreneur can design the ownership structure when going public, we show that the ownership structure can be used to signal the entrepreneur's ability to outside investors. The presence of asymmetric information is shown to have the following consequences: ownership structure will be more concentrated, ex-post the manager will show less initiative in his search for new projects, and the equity value of the company will be higher.

Hahn, Jinyong

PD May 1999. TI Evaluating the Effect of an Antidiscrimination Law Using a Regression-Discontinuity Design. AU Hahn, Jinyong; Todd, Petra; Van der Klaauw, Wilbert. AA Hahn: University of Pennsylvania, Todd: University of Pennsylvania and NBER. Van der Klaauw: University of North Carolina. SR National Bureau of Economic Research Working Paper: 7131; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 23. PR \$5.00. JE C14, C51, J71, J78. KW Regression Discontinuity. Treatment Effects. Discrimination. Nonparametric Methods. Estimation.

AB The regression discontinuity (RD) data design is a quasi-experimental design with the defining characteristic that the probability of receiving treatment changes discontinuously as a function of one or more individual characteristics. This data design occasionally arises in economic and other applications but is only infrequently exploited in evaluating the effects of a treatment. We consider the problem of identification and estimation of treatment effects under a RD data design. We offer an interpretation of the IV or so-called Wald estimator as a regression discontinuity estimator. We propose nonparametric estimators of treatment effects and present their asymptotic distribution theory. Then we apply the estimation method to evaluate the effect of EEOC-coverage on minority employment in small U.S. firms.

Haimanko, Ori

TI Optimal Scrutiny in Multi-Period Promotion Tournaments. AU Dubey, Pradeep; Haimanko, Ori.

Hakim, Simon

PD September 2000. TI Knowing Your Odds: Home Burglary and the Odds Ratio. AU Hakim, Simon; Rengert, George F.; Shachmurove, Yochanan. AA Hakim and Rengert: Temple University. Shachmurove: City University of New York and University of Pennsylvania. SR University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/14; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. PG 17. PR no charge. JE C20, D11, D61, K42, R10. KW Utility Maximization. Criminal Behavior. Odds Ratio. Cost Benefit. Burglary.

AB This paper analyzes the utility maximization of a burglar who anticipates the revenue generated by his action along with the associated costs. The benefits are the value of the loot. Costs include the location of the home, the physical appearance, the demographic characteristics, and the security precautions present. When combined, they will either attract or detract criminal activity. A survey relating characteristics of Greenwich, Connecticut homes to burglary rates is used. The Logit model and the odds ratio integrate the above home characteristics to determine the likelihood of the home being victimized. The odds ratio calculates the probabilities of the home being victimized as a function of its characteristics. The results suggest the relative importance of each factor in contributing to the home becoming a target of burglary. The model can be used to predict the chances of homes being burgled depending on its specific attributes.

TI The Burglar as a Rational Economic Agent. AU Shachmurove, Yochanan; Fishman, Gideon; Hakim, Simon.

Hakonsen, Lars

TI Comparing the Cost of Emission Reductions in First and Second-Best Economies. AU Mathiesen, Lars; Hakonsen, Lars.

Halevy, Yoram

PD April 1999. TI A Bayesian Approach to Uncertainty Aversion. AU Halevy, Yoram; Feltkamp, Vincent. AA Halevy: University of Pennsylvania. Feltkamp: Statistics

Netherlands. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 99/03; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 14. **PR** no charge. **JE** C70, D81. **KW** Ellsberg Paradox. Rule Rationality. Ambiguity Aversion. Subjective Probability. Expected Utility.

AB The Ellsberg paradox demonstrates that people's belief over uncertain events might not be representable by subjective probability. We relate this paradox to other commonly observed anomalies, such as a rejection of the backward induction prediction in the one-shot Ultimatum Game. We argue that the pattern common to these observations is that the behavior is governed by "rational rules". These rules have evolved and are optimal within the repeated and concurrent environments that people usually encounter. When an individual relies on these rules to analyze one-shot or single circumstances, paradoxes emerge. We show that when a risk averse individual has a Bayesian prior and uses a rule which is optimal for simultaneous and positively correlated ambiguous risks to evaluate a single vague circumstance, his behavior will exhibit uncertainty aversion. Thus, the behavior predicted by Ellsberg may be explained within the Bayesian expected utility paradigm.

Hall, Bronwyn H.

PD March 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 and NBER. Ham: Berkeley. **SR** National Bureau of Economic Research Working Paper: 7062; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** \$5.00. **JE** O31, O32, O33. **KW** Semiconductor Industry. Patents. Technological Change. **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 U.S. patent rights in the early 1980's. 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 U.S. 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.

Hall, Robert E.

PD June 1999. **TI** The Stock Market and Capital Accumulation. **AA** Stanford University and NBER. **SR** National Bureau of Economic Research Working Paper: 7180; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** E22, O16. **KW** Capital Quantity. Intangible Capital.

AB If firms purchase capital up to the point where there is no further marginal benefit, and the firms' securities are equal in value to the capital, then the market value of securities measures the quantity of capital. I explore the implications of this hypothesis using data from U.S. non-farm, non-financial

corporations over the past 50 years. The hypothesis implies that corporations have formed large amounts of intangible capital, especially in the past decade. The resources for expanding capital have come from the output of existing capital. An endogenous growth model can explain the basic facts about corporate performance, with only a modest increase in the productivity of capital in the 1990s.

PD June 1999. **TI** Reorganization. **AA** Stanford University and NBER. **SR** National Bureau of Economic Research Working Paper: 7181; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** \$5.00. **JE** E22, E24. **KW** Reorganization. Organizational Capital. Unemployment.

AB One of the productive activities engaging the work force is reorganizing. When factors of production are better matched, productivity is higher. The probabilistic matching model of Diamond, Mortensen, and others provides a way to make the idea of reorganization precise. Because the flow of organizational effort generates benefits lasting well into the future, it is appropriate to think of organizational capital. Unemployment -- job seeking -- is one of the inputs to organization. The flow of organizational effort represented by unemployment is analogous to the flow of physical investment. When an adverse technology shock causes job destruction, the economy substitutes the formation of new organizational capital for the flow of output. An increase in the interest rate can cause intertemporal substitution toward lower job destruction and less reorganization, but this effect may not come into play for a brief unexpected increase, and may be overwhelmed by intertemporal substitution in physical capital.

Hall, Stephen

PD December 1999. **TI** Modelling Economies in Transition: An Introduction. **AU** Hall, Stephen; Mizon, Grayham E.; Welfe, Aleksander. **AA** Hall: London Business School. Mizon: University of Southampton. Welfe: University of Lodz. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 9917; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton SO17 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 27. **PR** On application; annual subscription 40 pounds. **JE** C32, C52. **KW** Transition Economies. Structural Breaks. Cointegration. Identification.

AB This paper considers the implications of structural breaks, such as have occurred in many transition economies, for econometric modelling based on the multivariate cointegration paradigm. It outlines recent developments on the identification of linear cointegrated systems, discusses some practical problems, and presents an extension to non-linear systems. This is followed by a discussion of the impact of structural breaks on the identification and estimation of such systems. Finally, it relates these issues to the other papers in this volume.

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 June 1999. **TI** Dress for Success -- Does Primping Pav? **AU** Hamermesh, Daniel S.; Meng, Xin; Zhang, Junsen.

AA Hamermesh: University of Texas and NBER. Meng: Australian National University. Zhang: Chinese University of Hong Kong. **SR** National Bureau of Economic Research Working Paper: 7167; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 17. **PR** \$5.00. **JE** J16, J71. **KW** Image Expenditures. Returns to Image.

AB A unique survey of Shanghai residents in 1996 that combined labor-market information, appraisals of respondents' beauty, and household expenditures allows us to examine the relative magnitudes of the investment and consumption components of women's spending on beauty-enhancing goods and services. We find that beauty raises women's earnings (and to a lesser extent, men's) adjusted for a wide range of controls. Additional spending on clothing and cosmetics has a generally positive but decreasing marginal impact on a woman's perceived beauty. The relative sizes of these effects demonstrate that such purchases pay back at most 10 percent of each unit of expenditure in the form of higher earnings. Most such spending represents consumption.

Hamilton, James D.

PD September 2000. **TI** A Re-Examination of the Predictability of Economic Activity Using the Yield Spread. **AU** Hamilton, James D.; Kim, Dong Heon. **AA** Hamilton: University of California, San Diego. Kim: University of Manchester. **SR** University of California, San Diego, Department of Economics Working Paper: 2000/23; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: [WS http://econ.ucsd.edu/papers](http://econ.ucsd.edu/papers). **PG** 20. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** E32, E37, E43, O40. **KW** Term Structure. Business Cycles. Yield Spread. Interest Rates. Forecasting.

AB This paper revisits the yield spread's usefulness for predicting future real GDP growth. We show that the contribution of the spread can be decomposed into the effect of expected future changes in short rates and the effect of the term premium. We find that both factors are relevant for predicting real GDP growth but the respective contributions differ. We investigate whether the cyclical behavior of interest rate volatility could account for either or both effects. We find that while volatility displays important correlations with both the term structure of interest rates and GDP, it does not appear to account for the yield spread's usefulness for predicting GDP growth.

Hansen, Claus Thustrup

PD May 1999. **TI** Optimal Workfare in Unemployment Insurance. **AU** Hansen, Claus Thustrup; Tranaes, Torben. **AA** University of Copenhagen. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/06; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 24. **PR** no charge. **JE** D63, D82, J65. **KW** Workfare. Unemployment Insurance. Insurance.

AB Most workers are only partially insured against unemployment. One reason is that high unemployment compensation creates a free rider problem when monitoring of job search behavior is limited; people who do not seek employment (non-workers) may nevertheless collect unemployment compensation. We show that unproductive

workfare for unemployed workers may improve unemployment insurance if workers and non-workers value leisure differently. If they differ only with respect to productivity workfare has to be based on a productivity related task requirement (task workfare); a simple time requirement (time workfare) is not enough. Task workfare is simply a better screening device, also implying that task workfare Pareto dominates time workfare. Finally, we show that the scope for using workfare is larger the smaller are the transfers from workers to non-workers.

Hansen, Henrik

TI The Rise in Danish Unemployment: Reallocation or Mismatch? **AU** Albaek, Karsten; Hansen, Henrik.

Hansen, Lars Peter

TI Micro Data and General Equilibrium Models. **AU** Browning, Martin; Hansen, Lars Peter; Heckman, James J.

Hanson, Gordon H.

PD April 1999. **TI** The Rybczynski Theorem, Factor-Price Equalization, and Immigration: Evidence From U.S. States. **AU** Hanson, Gordon H.; Slaughter, Matthew J. **AA** Hanson: University of Michigan and NBER. Slaughter: Dartmouth College and NBER. **SR** National Bureau of Economic Research Working Paper: 7074; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** F16, F22, J31, J61. **KW** Rybczynski Theorem. Heckscher-Ohlin Model.

AB Recent literature on the labor-market effects of U.S. immigration tends to find little correlation between regional immigrant inflows and changes in relative regional wages. In this paper we examine whether immigration, or endowment shocks more generally, altered U.S. regional output mixes as predicted by the Rybczynski Theorem of Heckscher-Ohlin (HO) trade theory. This theorem describes how regions can absorb endowment shocks via changes in output mix without any changes in relative regional factor prices. Treating U.S. states as HO regions, we search for evidence of regional output-mix effects using a new data set that combines state endowments, outputs, and employment in 1980 and 1990. We have two main findings. First, state output-mix changes broadly match state endowment changes. Second, variation in state unit factor requirements is consistent with relative factor-price equalization (FPE) across states, which is a sufficient condition for our output-mix hypothesis to hold. Overall, these findings suggest that states absorb regional endowment shocks through mechanisms other than changes in relative regional factor prices.

Hanushek, Eric A.

PD April 1999. **TI** Do Higher Salaries Buy Better Teachers? **AU** Hanushek, Eric A.; Kain, John; Rivkin, Steven G. **AA** Hanushek: University of Rochester and NBER. Kain: University of Texas at Dallas. Rivkin: Amherst College. **SR** National Bureau of Economic Research Working Paper: 7082; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 45. **PR** \$5.00. **JE** I21, J41, J44. **KW** Teacher Salaries. Teacher Quality. Texas School Project. **AB** Important policy decisions rest on the relationship between teacher salaries and the quality of teachers, but the

evidence about the strength of any such relationship is thin. This paper relies upon the matched panel data of UTD Texas School Project to investigate how shifts in salary schedules affect the composition of teachers within a district. The panel data permit separation of shifts in salary schedules from movement along given schedules, and thus the analysis is much more closely related to existing policy proposals. In analyses both of teacher mobility and of student performance, teacher salaries are shown to have a modest impact. Teacher mobility is more affected by characteristics of the students (income, race, and achievement) than by salary schedules. Salaries are also weakly related to performance on teacher certification tests -- appearing to be relevant only in districts doing high levels of hiring, but preliminary examination shows that the certification tests are not significantly related to student achievement. The only significant relationship between salaries and student achievement holds (implausibly) for existing experienced teachers and not for new hires or for probationary teachers.

Haque, Nadeem U.

PD January 1999. **TI** Neglected Heterogeneity and Dynamics in Cross-Country Savings Regressions. **AU** Haque, Nadeem U.; Pesaran, M. Hashem; Sharma, Sunil. **AA** Haque and Sharma: International Monetary Fund. **SR** University of Cambridge, DAE Working Paper: 9904; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. **PG** 22. **PR** US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. **JE** C23, E21. **KW** Savings Behavior. Slope Heterogeneity. Dynamics. Panel Data.

AB This paper examines the extent to which the conclusions of cross-country studies of private savings are robust to allowing for the possible heterogeneity of savings behavior across countries and for the inclusion of dynamics. It reviews the econometric implications of neglected slope heterogeneity and dynamics for the fixed effects estimators routinely used in such studies, and illustrates the nature and extent of the biases involved by a re-examination of time series data from 21 OECD countries. The paper shows that neglecting heterogeneity and dynamics in cross-country savings regressions can lead to misleading inferences about the key determinants of savings behavior. The results indicate that among the many variables considered in the literature only the fiscal variables -- the general government surplus as a proportion of GDP and the ratio of government consumption to GDP -- seem to be the key determinants of private savings rates in the industrial countries in the post-World War II period.

Harrison, Mark

PD December 1998. **TI** Quantity Competition with Access Fees. **AU** Harrison, Mark; Kline, J. Jude. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 358; Department of Economics, Australian National University, Canberra ACT 0200, Australia. **PG** 16. **PR** no charge. **JE** D21, L13. **KW** Oligopoly. Two Part Pricing.

AB We analyze an oligopoly model where firms choose both quantities and access fees. Per unit prices are determined endogenously to equate quantity demanded with quantity supplied at each firm. In a Nash equilibrium of the game played

by firms, the per unit prices equal marginal cost and access fees may or may not extract all consumer surplus. As the number of firms increases, access fees fall below net consumer surplus and toward zero. Existence is guaranteed if Marshallian consumer surplus is not too concave. With open entry, quantity competition with access fees may be less efficient than without access fees.

Harvey, Andrew

TI Tests of Common Stochastic Trends. **AU** Nyblom, Jukka; Harvey, Andrew.

Harvey, Campbell R.

TI Are Common Swings in International Stock Returns Justified by Subsequent Changes in National Outputs? **AU** Dumas, Bernard; Harvey, Campbell R.; Ruiz, Pierre.

Havrylyshyn, Oleh

PD March 2000. **TI** Institutions Matter in Transition, but so do Policies. **AU** Havrylyshyn, Oleh; van Rooden, Ron. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/70; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 22. **PR** not available. **JE** E31, E63, H30, O40, P21. **KW** Transition Economies. Growth. Stabilization. Reforms. Institutions.

AB This paper analyzes the importance of developing market-enhancing institutions for restoring economic growth in transition economies during 1991-98. The paper's main finding is that the development of an institutional framework has indeed a significant positive impact on growth, but that progress in achieving macroeconomic stabilization and implementing broad-based economic reforms remain the key determinants of growth in transition economies.

Hawkins, John

TI The Origin of the Asian Financial Turmoil. **AU** Goldstein, Morris; Hawkins, John.

He, Dong

PD April 2000. **TI** Emergency Liquidity Support Facilities. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/79; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 29. **PR** not available. **JE** D82, E58, E63, G21, G28. **KW** Lender of Last Resort. Liquidity Support. Stabilization. Central Banks. Moral Hazard. **AB** This paper discusses operational aspects of official emergency liquidity support to individual institutions under stress. It argues that properly designed lending procedures, clearly laid-out authority and accountability, as well as disclosures rules, will promote financial stability, reduce moral hazard, and protect the lender of last resort from undue political pressure. Although there may well be good reasons to maintain ambiguity over the conditions for assistance, there are important advantages for developing, and for transition economies to follow a rule-based approach by setting out ex ante the necessary conditions for support, while maintaining that meeting such conditions is not sufficient for receiving support.

Heckman, James J.

TI Micro Data and General Equilibrium Models.

AU Browning, Martin; Hansen, Lars Peter; Heckman, James J.

Helliwell, John F.

PD May 1999. TI Education and Social Capital. AU Helliwell, John F.; Putnam, Robert D. AA Helliwell: University of British Columbia and NBER. Putnam: Harvard University. SR National Bureau of Economic Research Working Paper: 7121; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 23. PR \$5.00. JE D72, H10, I21, J11, J24. KW Education. Political Participation. Social Participation. Trust.

AB Education is usually the most important predictor of political and social engagement. Over the last half century, educational levels in the United States have risen sharply, yet levels of political and social participation have not. Norman Nie, Jane Junn, and Kenneth Stehlik-Barry (NJS-B) have offered an elegant resolution to this paradox based on a distinction between the "relative" and "absolute" effects of education, with only relative education having positive effects on participation. Using a broad range of evidence, including the data used by NJS-B, this paper shows that increases in average education levels improve trust and do not reduce participation levels. The contrast with the NJS-B participation results is found to be due to the definition of the educational environment. We use a changing regional comparison group, theoretically preferable to NJS-B's static national measure. Our results point to a more optimistic conclusion about the consequences of increases in average education levels, while leaving open the puzzle of sluggish participation.

Hemming, Richard

PD March 2000. TI A Framework for Assessing Fiscal Vulnerability. AU Hemming, Richard; Petrie, Murray. AA Hemming: International Monetary Fund. Petrie: New Zealand. SR International Monetary Fund Policy Working Paper: WP/00/52; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 19. PR not available. JE E61, E62, H10, H60. KW Fiscal Risk. Sustainability. Vulnerability. Fiscal Policy.

AB Fiscal vulnerability describes a situation where a government is exposed to the possibility of failure to meet its aggregate fiscal policy objectives. The suggested framework for assessing vulnerability highlights four macro-fiscal aspects of vulnerability: incorrect specification of the initial fiscal position; sensitivity of short-term fiscal outcomes to risk; threats to longer-term fiscal sustainability; and structural or institutional weaknesses affecting the design and implementation of fiscal policy. Fiscal vulnerability indicators are suggested.

TI Assessing Fiscal Sustainability in Theory and Practice. AU Chalk, Nigel; Hemming, Richard.

Hendry, David F.

PD December 2000. TI Explaining Cointegration Analysis: Part II. AU Hendry, David F.; Juselius, Katarina. AA Hendry: Oxford University. Juselius: University of Copenhagen. SR University of Copenhagen, Institute of Economics Discussion Paper: 00/20; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. PG 33. PR no charge. JE C32, C51, E31. KW Vector Autoregression.

Deterministic Components. Rank Determination. Gasoline Prices. Cointegration.

AB We describe the concept of cointegration, its implications in modeling and forecasting, and discuss inference procedures appropriate in integrated-cointegrated vector autoregressive processes (VARs). Particular attention is paid to the properties of VARs, to the modeling of deterministic terms, and to the determination of the number of cointegration vectors. The analysis is illustrated by empirical examples.

PD December 1999. TI On Selecting Policy Analysis Models by Forecast Accuracy. AU Hendry, David F.; Mizon, Grayham E. AA Hendry: Nuffield College, Oxford. Mizon: University of Southampton and European University Institute. SR University of Southampton, Discussion Papers in Economics and Econometrics: 9918; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton SO17 1BJ, England. Website: http://www.soton.ac.uk. PG 35. PR On application; annual subscription 40 pounds. JE C32, C52, E17, E66. KW Forecasting. Policy Analysis. Structural Change. Regime Shift. Model Selection.

AB The value of selecting the best forecasting model as the basis for empirical economic policy analysis is questioned. When no model coincides with the data generation process, non-causal statistical devices may provide the best available forecasts: examples from recent work include intercept corrections and differenced-data VARs. However, the resulting models need have no policy implications. A "paradox" may result if their forecasts induce policy changes that can be used to improve the statistical forecast. This suggests correcting statistical forecasts by using the econometric model's estimate of the "scenario" change. An application to UK consumers' expenditure illustrates the analysis.

Hibon, Michele

PD October 1999. TI M3 -- Competition. AU Hibon, Michele; Makridakis, Spyros. AA INSEAD. SR INSEAD Working Paper: 99/70/TM; 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 C32, C53. KW Forecasting Competition. M-Competition. Forecasting Accuracy.

AB The major aims of the M3-Competition are to extend and replicate the findings of the M- and M2-ones. The extension involves the inclusion of more researchers, more methods (in particular in the area of neural networks and expert systems) and most importantly more series as the database of the M3-Competition has been enlarged to include 3003 time series. In terms of replication our purpose is to determine whether the four major conclusions of previous studies hold for this case. The conclusions tested are (1) Statistically sophisticated or complex methods do not necessarily produce more accurate forecasts than simpler ones. (2) The rankings of the performance of the various methods vary according to the accuracy measure being used. (3) The accuracy of the combination of various methods outperforms, on average, the Individual methods being combined and does well in comparison with other methods; (4) The performance of the various methods depends upon the length of the forecasting horizon.

Hilaire, Alvin D. L.

PD April 2000. **TI** Caribbean Approaches to Economic Stabilization. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/73; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 31. **PR** not available. **JE** E63, F15, F41, N16, O54. **KW** Caribbean. Stabilization. Structural Adjustment. Fiscal Policy. Monetary Policy.

AB In the late 1980s Barbados, Guyana, Jamaica, and Trinidad and Tobago found themselves in severe economic difficulties. Their ensuing economic strategies were all market-based and featured fiscal contraction and trade liberalization, multilateral support loans and, later on, tax and financial sector reforms. However, exchange rate, monetary and public sector wage policies varied greatly. Choice of exchange rate regime was not as fundamental to successful stabilization as was fiscal action, complemented by, but without undue reliance on, monetary policy. The policies employed to reduce debt and to diversify the economic bases also helped to lessen vulnerabilities to future economic shocks.

Himmelberg, Charles P.

PD July 1999. **TI** Understanding the Determinants of Managerial Ownership and the Link Between Ownership and Performance. **AU** Himmelberg, Charles P.; Hubbard, R. Glenn; Palia, Darius N. **AA** Himmelberg and Palia: Columbia University. Hubbard: Columbia University and NBER. **SR** National Bureau of Economic Research Working Paper: 7209; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** \$5.00. **JE** G32, G34. **KW** Managerial Ownership. Firm Performance.

AB Both managerial ownership and performance are endogenously determined by exogenous (and only partly observed) changes in the firm's contracting environment. We extend the cross-sectional results of Demsetz and Lehn (1985) and use panel data to show that managerial ownership is explained by key variables in the contracting environment in ways consistent with the predictions of principal-agent models. A large fraction of the cross-sectional variation in managerial ownership is explained by unobserved firm heterogeneity. Moreover, after controlling both for observed firm characteristics and firm fixed effects, we cannot conclude (econometrically) that changes in managerial ownership affect firm performance.

Hirshleifer, Jack

PD November 2000. **TI** Appeasement: Can it Work? **AA** UCLA. **SR** University of California, Los Angeles, Department of Economics Working Paper: 798; Department of Economics, UCLA, Box 951477, Los Angeles, CA 90095-1477. Website: www.econ.ucla.edu. **PG** 15. **PR** \$5.00. **JE** H56. **KW** Appeasement. War. Conflict. Strategy.

AB At Munich in 1938, Britain and France attempted to appease Germany by sacrificing their Czechoslovak ally. The internal debate among western policy-makers as to the wisdom of that policy involved different beliefs about German preferences. Was Nazi Germany really "peace-loving", or was she unequivocally aggressive? Under either of these assumptions, analysis reveals, appeasement will not work. In the former case there is no need to grant concessions, in the latter case concessions will only strengthen the aggressor.

Appeasement can be rational only if one's hostile opponent becomes less so in consequence of being strengthened or enriched, i.e., if her hostility is a kind of inferior good. Appeasement is warranted against an opponent who is hostile to you, but in an appeasable way, and who has an effective yet costly punishment opportunity: she can punish you, though at some sacrifice. Although the western powers erred in believing that Germany's hostility was appeasable, they were correct that Germany would not be able to exercise her punishment opportunity without undue cost to herself. The war occurred because the German leaders -- though skillfully playing upon western misperceptions of their intentions -- were themselves mistaken about their military opportunities.

PD December 2000. **TI** Game-Theoretic Interpretation of Commitment. **AA** UCLA. **SR** University of California, Los Angeles, Department of Economics Working Paper: 799; Department of Economics, UCLA, Box 951477, Los Angeles, CA 90095-1477. Website: www.econ.ucla.edu. **PG** not available. **PR** \$5.00. **JE** C72, D81, D84. **KW** Commitment. Rational Choice. Emotions. Pre-Emotion. Threats and Promises.

AB Two types of commitment need to be distinguished. Pre-emptive commitment corresponds to taking the opening move in sequential play. Reactive commitment occurs when the decision-maker who will be acting last pledges to respond, in a specified contingent way, to the opponent's earlier choice. Both types of commitment can be regarded as pre-play moves, as distinguished from the parties' actual execution moves that generate payoffs. Having the first move is not always desirable. There is a first-move advantage when the parties' interests are relatively harmonious, as in intra-alliance negotiations, but a second-move advantage when strong opposition of interests exists. There are rational and non-rational mechanisms of commitment. Rational commitments take the form of unilaterally reducing one's own payoffs from the options not to be chosen. On the nonrationalistic level, a psychic predisposition toward impulsiveness supports making pre-emptive commitments (taking the first move), whereas avoiding the first move can be aided by a predisposition toward dithering and procrastination.

PD July 1999. **TI** Truth and the Legal Battle. **AU** Hirshleifer, Jack; Osborne, Evan. **AA** Hirshleifer: UCLA. Osborne: Wright State University. **SR** University of California, Los Angeles, Department of Economics Working Paper: 790; Department of Economics, UCLA, Box 951477, Los Angeles, CA 90095-1477. Website: www.econ.ucla.edu. **PG** 33. **PR** \$5.00. **JE** K41. **KW** Litigation. Truth. Law and Economics. Conflict. Fault.

AB In lawsuits, relative success depends upon two main factors: (1) the true degree of fault, and (2) the litigation efforts on each side. We make use of a Litigation Success Function (LSF) that displays this dependence while satisfying certain other essential properties. Under two different protocols, Nash-Cournot and (a generalized version of) Stackelberg, solutions are obtained for litigation effort, degree of success achieved, and value of the lawsuit on each side. Outcomes are evaluated in terms of two normative criteria: (i) achieving 'justice' (defined as equality between Defendant fault and relative Plaintiff success) and (ii) minimizing aggregate litigation cost. Achievement of these aims is hampered mainly by high decisiveness of litigation effort, that is, when the LSF attaches heavy weight to the effort factor as opposed to the truth factor.

Hjertholm, Peter

PD March 2000. **TI** Analytical History of Heavily Indebted Poor Country (HIPC) Debt Sustainability Targets. **AA** University of Copenhagen. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 00/03; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 37. **PR** no charge. **JE** F34, O10. **KW** Foreign Debt. Development. Poor Countries. World Bank. Debt Relief.

AB This paper traces the origins of World Bank indicators of debt-distress and their employment as HIPC sustainability targets. These targets are interpreted as "switching values", below which countries are (on average) expected to avoid debt service problems, but as such, they do not take into account that countries encounter debt service problems for a variety of reasons and at different levels of debt. It is likely that the "true" switching value of the debt to export ratio of several HIPCs lies below the lower bound of the present target range. Regarding the "fiscal window", the lack of analytical basis for a 280 percent target for the debt to revenue ratio is noted, and the consistency problems raised by the added "openness-tax" condition are discussed. Moreover, the implications for economic performance of the pursuit of a sustainable debt position remain a concern. It seems uncertain whether the development needs of HIPC countries can be accommodated within sustainable debt paths, as envisioned. The paper concludes that the sustainability targets, as presently applied, are not well supported in analytical terms. The rationale for adopting an average target range for the debt indicators involved remains weak.

PD March 2000. **TI** Survey of Foreign Aid: History, Trends and Allocation. **AU** Hjertholm, Peter; White, Howard. **AA** Hjertholm: University of Copenhagen. White: University of Sussex. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 00/04; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 62. **PR** no charge. **JE** F13, F34, F35, N70, O10. **KW** Foreign Aid. Aid Allocation. Development. Economic History.

AB This paper (i) traces the historical origins of foreign aid, (ii) investigates trends in the volume, composition, allocation and quality of aid flows, and (iii) reviews the empirical literature on aid allocation. The paper concludes that, historically, aid has served a multitude of objectives. For some donors, the allocation and quality of aid have been largely shaped by concern for the development needs of recipients. By contrast, the foreign aid of some larger donors has been used principally as a foreign and commercial policy tool. Yet while this particular character of aid flows may well have impaired the effectiveness of aid, there is no automatic contradiction between donor and recipient objectives. Perhaps the most important change in the aid picture is the reversal after 1992 of the historic upward trend in aid volumes. This may not be a problem when smaller aid flows are compensated by private flows, as has happened in several developing countries. Yet it may be a problem in low-income countries without access to private capital that continue to rely on aid for financial resources. The underlying premises of donor-recipient cooperation are very different when aid resources become more limited.

PD March 2000. **TI** Macroeconomic Issues in Foreign Aid. **AU** Hjertholm, Peter; Laursen, Jytte; White, Howard. **AA** Hjertholm: University of Copenhagen. Laursen: Danish Ministry of Foreign Affairs. Howard: University of Sussex. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 00/05; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 41. **PR** no charge. **JE** F34, F35, F41, O11, O19. **KW** Foreign Aid. Gap Models. Aid Fungibility. Fiscal Response Models. Foreign Debt.

AB The macroeconomic rationale for aid relates to its ability to supplement savings, foreign exchange and government revenue, thus contributing to growth. This process presumes a simple Harrod-Domar context in which growth is driven by physical capital formation. However, the macroeconomic reality of aid is more complicated. Three areas of complication are discussed: (i) the effects of aid on fiscal behavior, (ii) debt problems and (iii) Dutch disease effects. In the long run, rather than merely filling gaps, aid should help close gaps, since reliance on future aid and foreign borrowing is thus diminished and economic policy autonomy is increased. Closing the savings gap entails financial and technical support for mobilization of domestic savings. Closing the trade gap entails supporting a macro environment conducive to export growth, helping to expand and improve physical infrastructure and direct support for export activities, notably those of a non-traditional nature. Closing the fiscal gap entails support for increasing government revenue and improving expenditure management.

Hlouskova, Jaroslava

PD January 2001. **TI** Legal Restrictions on Portfolio Holdings: Some Empirical Results. **AU** Hlouskova, Jaroslava; Lee, Gabriel S. **AA** Institute for Advanced Studies, Vienna. **SR** Institute for Advanced Studies, Economics Series Working Paper: 93; Institute for Advanced Studies, Library, Stumpergasse 56, A-1060 Vienna. Website: www.ihs.ac.at/Library/libhome.html. **PG** 25.

PR Individuals: ATS 80.00 -- EUR 5.81; Institutions: ATS 250.00 -- EUR 18.17. Prices subject to change without notice.

JE C61, G11, K22. **KW** Upper Bound Constraint. Portfolio Holdings. Quadratic Programming. Portfolio Choice. Law.

AB This article investigates the sensitivity analysis of mean-variance portfolio holdings to changes in the upper bounds. The optimization problem studied in this paper is, thus, constrained by a restriction that no more than a certain portion of wealth can be invested in any one security. Our empirical results show that for both risk tolerant as well as for risk averse investors, the performance and expected returns of mean-variance efficient portfolios under the legal restrictions are lower and the variances are higher than the corresponding ones without the restriction.

Hobbs, J. Kim

TI Toward a Framework for Systemic Liquidity Policy. **AU** Dziobek, Claudia; Hobbs, J. Kim; Marston, David.

Hoddinott, John

TI Investing in Development or Investing in Relief: Quantifying the Poverty Tradeoffs Using Zimbabwe Household Panel Data. **AU** Owens, Trudy; Hoddinott, John.

Hoel, Michael

PD April 2000. **TI** Transboundary Environmental Problems with a Mobile Population: Is There a Need for Central Policy? **AU** Hoel, Michael; Shapiro, Perry. **AA** Hoel: University of Oslo. Shapiro: University of California, Santa Barbara. **SR** University of California, Santa Barbara, Working Papers in Economics: 00/05; Department of Economics, Working Paper Coordinator. University of California, Santa Barbara. Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. **PG** 20. **PR** no charge for domestic orders; for non-U.S. orders, U.S. \$3 per paper, personal check or money order made out to "Regents of the University of California". **JE** D60, F42, H77, Q28, R23. **KW** Transboundary Pollution. Population Mobility. Federalism. Policy Coordination. Regulation.

AB It is a widely held view that efficient environmental policies regulating transboundary pollution will be adopted only if there is interjurisdictional coordination. Efficient policies can be adopted as a result of interstate treaties or mandated by a central authority. However, if the policies of states are chosen to maximize the same function of own-citizen welfare, and if individuals migrate freely between states, constrained-efficient environmental regulatory policies are a non-cooperative equilibrium. The policies are constrained-efficient in equilibrium, the policy choices are the same as those found by maximizing the social welfare function subject to a policy feasibility constraint.

Hofer, Helmut

PD February 2001. **TI** Wage and Mobility Effects of Trade and Migration on the Austrian Labour Market. **AU** Hofer, Helmut; Huber, Peter. **AA** Hofer: Institute for Advanced Studies, Vienna. Huber: Austrian Institute of Economic Research (WIFO). **SR** Institute for Advanced Studies, Economics Series Working Paper: 97; Institute for Advanced Studies, Library, Stumpergasse 56, A-1060 Vienna. Website: www.ihs.ac.at/Library/libhome.html. **PG** 20. **PR** Individuals: ATS 80.00 -- EUR 5.81; Institutions: ATS 250.00 -- EUR 18.17. Prices subject to change without notice. **JE** F15, F22, F41, J31, J62. **KW** Wages. Migration. Trade. Sectoral Mobility. Open Economy.

AB This study analyzes the effect of trade and migration on wages and labor market mobility. We estimate wage growth equations and a multinomial logit mobility equation on an individual data set for 1991 to 1994. We find substantial differences in the reactions of white and blue-collar workers' wages and mobility to trade and migration. In Austria exports have a positive and imports a negative impact on wage growth only for blue-collar workers. Migrants also reduce only blue-collar workers' wage growth. Our results indicate that higher imports and an inflow of migrants reduce sectoral mobility of all types of workers. The risk of being out of work by contrast is increased by migration and imports for only blue-collar workers, but reduced by exports for all types of workers. In general, our results suggest enlargement of the EU would have only small effects on the Austrian labor market.

Hoffmann, Mathias

PD March 2000. **TI** The Relative Dynamics of Investment and the Current Account in the G7-Economics. **AA** University of Southampton. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 0005; Discussion Paper Secretary, Department

of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 18. **PR** On application; annual subscription 40 pounds. **JE** F41, F43. **KW** Current Account. Cointegration. Excess Sensitivity. Investment.

AB This paper contributes to the empirics of the intertemporal approach to the current account. We use a cointegrated VAR framework to identify permanent and transitory components of country-specific and global shocks. Our approach allows us to empirically investigate the sensitivity to persistence implied by many forward-looking models and our results shed new light on the excess volatility of investment encountered by Glick and Rogoff (JME 1995). In G7 data, we find the relative current-account and investment response to be in line with the intertemporal approach.

PD November 1999. **TI** International Macroeconomic Fluctuations and the Current Account. **AA** University of Southampton. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 9915; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 13. **PR** On application; annual subscription 40 pounds. **JE** F15, F32, F41. **KW** Global Shocks. Country-Specific Shocks.

AB Intertemporal models of the current account generally assume that global shocks do not affect the current account. We use this assumption to identify global and country-specific shocks in a bivariate VAR. We test the quality of the identification using evidence from G7-data. In accordance with the theory, we observe a link between the global shock and a measure of the world real interest rate. We also find that long-term output growth is driven by global factors in most countries, that country-specific shocks are less persistent in smaller economies and generally less volatile than global shocks.

PD November 1999. **TI** The Feldstein-Horioka Puzzle and a New Measure of International Capital Mobility. **AA** University of Southampton. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 9916; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 22. **PR** On application; annual subscription 40 pounds. **JE** C32, F21, F32. **KW** Capital Mobility. Feldstein-Horioka Puzzle. Current Account. Cointegration. (P-T) Decompositions.

AB In intertemporal optimization models of current account dynamics, the budget constraint will induce high degrees of positive comovement in the levels of savings and investment and the two variables are likely to be cointegrated. Error correction will then also influence the correlations of the cyclical components that will therefore be uninformative about capital mobility. As an alternative we suggest a new measure of long-run capital mobility based on Johansen's (1988) procedure. We apply our method to historical British and US data and find surprisingly high levels of long-run capital mobility throughout the century.

Hopenhayn, Hugo A.

PD April 1999. **TI** Innovation Fertility and Patent Design. **AU** Hopenhayn, Hugo A.; Mitchell, Matthew F. **AA** Hopenhayn: University of Rochester. Mitchell:

University of Minnesota. **SR** National Bureau of Economic Research Working Paper: 7070; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** \$5.00. **JE** O31, O32, O33. **KW** Heterogeneous Fertility. Patent Obsolescence. **AB** It may be advantageous to provide a variety of kinds of patent protection to heterogeneous innovations. Innovations that benefit society largely through their use as building blocks to future inventions may require a different scope of protection in order to be encouraged. We model the problem of designing an optimal patent menu (scope and length) when the fertility of an innovation in generating more innovations cannot be observed. The menu of patent scope can be implemented with mandated buyout fees. Evidence of heterogeneous fertility and patent obsolescence, keys to the model, are presented using patent data from the US.

Hoppe, Heidrun C.

PD February 2000. **TI** Entry Deterrence in Durable-Goods Monopoly. **AU** Hoppe, Heidrun C.; Lee, In Ho. **AA** Hoppe: University of Hamburg. Lee: University of Southampton. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 0001; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 32. **PR** On application; annual subscription 40 pounds. **JE** L12, L16, L41. **KW** Durable Goods. Industry Leadership. Monopoly. **AB** There are industries that tend to remain monopolized, with successive generations of a good being introduced by an incumbent monopolist. This paper investigates the tendency of persistent leadership in durable goods industry. In particular it explores the implications of the durability of a good on the pricing and innovation behavior of both the incumbent monopolist and a potential entrant. It is shown that the durability of the good either acts as an entry barrier itself or creates an opportunity for the incumbent firm to deter entry by limit pricing. Moreover, we demonstrate that entry deterrence by limit pricing may cause under investment in innovation.

Hougaard, Jens Leth

PD April 2000. **TI** On the Welfare Economic Foundations of Health Status Measures. **AU** Hougaard, Jens Leth; Keiding, Hans. **AA** Hougaard: Copenhagen Business School. Keiding: University of Copenhagen. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 00/07; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 17. **PR** no charge. **JE** D60, I12, I31. **KW** Consumer Characteristics. General Equilibrium. Health Status. Economic Welfare. Medical Care. **AB** Measures of health status, such as e.g. the QALY (Quality Adjusted Life Years) measure, have been proposed as a tool in the economic assessment of new medical technologies, and its possible foundations in individual utility theory have been discussed in the literature. However, the problems of aggregation or interpersonal utility comparison inherent in the application of such measures has gone largely unnoticed. In the present work, we consider a general equilibrium model of a society, where different aspects of health are identified as Lancasterian characteristics. In this model, we consider the welfare theoretical basis for evaluation of changes of allocation from a Pareto optimum, and in particular, we investigate

conditions on the economy under which the individuals will have the same marginal rates of substitution between characteristics, which is a precondition for a meaningful measurement of health status. It turns out that this equality will obtain only under very restrictive conditions of separability in characteristics production.

Hourcade, Jean-Charles

TI Static vs. Dynamic Double Dividends: Theory and Taxonomy. **AU** Ayres, Robert U.; Hourcade, Jean-Charles.

Hoynes, Hilary

PD June 1999. **TI** The Employment, Earnings, and Income of Less Skilled Workers Over the Business Cycle. **AA** University of California, Davis. **SR** National Bureau of Economic Research Working Paper: 7188; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** E24, E32, J21. **KW** Business Cycle. Less Skilled Workers.

AB In this paper, I examine the effect of business cycles on the employment, earnings, and income of different demographic groups. I classify individuals by sex, education, and race. The analysis uses data from the Current Population Survey's Outgoing Rotation Group file, covering the period 1979-1992, and March Annual Demographic files (ADF) covering the period 1975-1997. The outcome measures considered include: employment to population ratios, weekly earnings, hourly earnings, annual hours, annual earnings, family earnings, family transfer income, and total family income. The regression model is specified such that the key parameters measure how the labor market outcomes of less skilled workers vary with the business cycle relative to the variability for high skill groups. The analysis uses variation across MSAs in the timing and severity of shocks. The results consistently show that individuals with lower education levels, nonwhites, and low skill women experience greater cyclical fluctuation than high skill men. Government transfers and the earnings of other family members decrease the differences between groups, as business cycles have more skill-group neutral effects on family income than individual earnings.

Hristache, Marian

TI Optimal Smoothing in Semiparametric Index Approximation of Regression Functions. **AU** Delecroix, Michel; Hristache, Marian; Patilea, Valentin.

Hsaio, Cheng

TI Estimation and Inference in Short Panel Vector Autoregressions with Unit Roots and Cointegration. **AU** Binder, Michael; Hsaio, Cheng; Pesaran, M. Hashem.

Huang, Haizhou

TI A Simple Model of an International Lender of Last Resort. **AU** Goodhart, Charles A. E.; Huang, Haizhou.

Hubbard, R. Glenn

TI Understanding the Determinants of Managerial Ownership and the Link Between Ownership and Performance. **AU** Himmelberg, Charles P.; Hubbard, R. Glenn; Palia, Darius N.

Huber, Peter

TI Wage and Mobility Effects of Trade and Migration on the Austrian Labour Market. **AU** Hofer, Helmut; Huber, Peter.

Huberman, Bernardo A.

PD December 1999. **TI** Status as a Valued Resource. **AU** Huberman, Bernardo A.; Loch, Christoph H.; Onculer, Ayse. **AA** Huberman: Xerox Research Center. Loch and Onculer: INSEAD. **SR** INSEAD Working Paper: 99/83/TM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 8. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** C82, C91, C92. **KW** Status. Experimental Economics. Rent Seeking Experiment.

AB While the striving for status has long been recognized in animals and in humans, there is ambiguity about the role that status plays among people in terms of their utility calculations and social interactions. We present results of a rent seeking experiment with human subjects which show that people regard status as a valued resource in itself, rather than a means to an end. Participants in the experiment played a two-stage game in which they tried to win a risky all-or-none rent. An analysis of the data established that the subjects valued status independently of any monetary consequence and were willing to trade-off some material gain in order to obtain it. Moreover, the amount of status seeking observed was different among men and women. These results help explain departures from the Nash equilibrium predicted by economic theory observed in other rent seeking experiments, and provide a natural explanation for the existence of positional goods.

Huchzermeier, Arnd

PD January 2000. **TI** Introducing Euro Notes and Coins to the Public. **AU** Huchzermeier, Arnd; Van der Heyden, Ludo. **AA** Huchzermeier: WHU, Germany. Van der Heyden: INSEAD. **SR** INSEAD Working Paper: 2000/20/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** F33, F36. **KW** Euro Introduction. Retailer Transaction Data.

AB The introduction of Euro bank notes and coins on January 1st 2002 is an operation of unprecedented magnitude in the financial and monetary world. Different scenarios, based on retailer transaction data, projected forward to the early days of January 2002, allow the exploration of the amounts of coins and notes required by retailers in these early days of the new Euro currency. In particular, the policy of no-frontloading of Euro coins and notes leads to a dramatic (and underestimated) explosion in the inventory requirements for retailers of both coins and notes. Shortages in the supply of the new Euro currency can therefore be expected to occur in the early days of January 2002. These scenarios illustrate the material and immaterial costs that might be borne by retailers in the change-over operation, and the difficulties that might arise should consumers face an insufficient amount of the new currency, or go to stores with an excessive number of large notes. Concerning the actual introduction of coins and notes, the study underlines the dramatic increase in the use of 5 and 10 Euro notes compared with either larger denomination notes, or coins of smaller denomination.

Hunt, Jennifer

PD May 1999. **TI** Determinants of Non-Employment and Unemployment Durations in East Germany. **AA** Yale University and NBER. **SR** National Bureau of Economic Research Working Paper: 7128; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 19. **PR** \$5.00. **JE** J23, J31, J51, J64, P20. **KW** Employment. Unemployment. Transition Economies. Human Capital. Wages.

AB Following monetary union with the west in June 1990, the employment rate for east German 18-54 year olds fell from 89% to 73% in six years, and the decline for women was considerably larger. This employment fall is possibly the worst of any European transition economy, yet one might have expected the east German transition to have been the most successful. The author seeks insight into the problem by examining the determinants of transitions between non-employment (or unemployment) and employment, using the 1990-1996 survey years of the German Socio-Economic Panel. Individuals over fifty and women have much longer non-employment durations, but the presence of children, and hence child care, does not appear to be important. More skilled individuals, as measured by their education and 1990 wage, have shorter non-employment spells. The author also presents results for employment duration. The most important similarity between the duration of non-employment and employment is the influence of the 1990 wage. The most important difference is that the addition of covariates, particularly the 1990 wage, explains most of the gender gap in employment duration but little in non-employment duration.

Hviid, Morten

PD March 2000. **TI** Countervailing Power and Price Transparency. **AU** Hviid, Morten; Mollgaard, H. Peter. **AA** Hviid: CIE, University of Copenhagen. Mollgaard: CIE and Copenhagen Business School. **SR** University of Copenhagen, Centre for Industrial Economics Discussion Paper: 2000/01; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. Website: www.econ.ku.dk/cie/wpmast.htm. **PG** 29. **PR** no charge. **JE** C70, D40, L10, L20, L40. **KW** Intermediate Prices. Countervailing Power. Price Transparency.

AB We investigate whether increased transparency about prices may increase the countervailing power exercised by buyers of an intermediate good and whether this will lead to a decrease of intermediate goods prices. We show that, even in a non-cooperative, one-shot model, the most likely outcome of improved transparency is a price increase: improved transparency will lead sellers to take tougher bargaining stands since more is at stake. The results are related to the experience of the Danish Competition Authority's practice in the 1990s.

TI On the Incidence and Variety of Low-Price Guarantees. **AU** Arbatskaya, Maria; Hviid, Morten; Shaffer, Greg.

Ianni, Antonella

PD May 2000. **TI** Consensus, Contagion and Clustering in a Space-Time Model of Public Opinion Formation. **AU** Ianni, Antonella; Corradi, Valentina. **AA** Ianni: University of Southampton. Corradi: Queen Mary and Westfield College. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 0009; Discussion Paper Secretary, Department of Economics,

University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. PG 43. PR On application; annual subscription 40 pounds. JE D72, D82, C44. KW Ergodicity. Consensus. Clustering. Local Interaction. Voter Model. Electoral Poll. Electoral Campaign. AB We study a simple model of public opinion formation that posits that interaction between neighboring agents leads to bandwagons in the dynamics of individual opinions, as well as in that of the aggregate process. We show that in different specifications of the model, there is a tendency for the process to show consensus on one of the two competing opinions. We show how a publicly available poll of current public opinion may lead to a form of contagion, by which public opinion tends to agree with the poll. We point out that, in the absence of a poll, the process displays the feature that, after long time spans, a sequence of states occur which, when viewed locally, remain almost stationary and are characterized by large clusters of individuals of the same opinion. The running metaphor we use is that of a model of pre-electoral public opinion formation, with two candidates running. We provide some heuristic considerations on the implication that these findings could have in terms of space-time allocation of funding in an electoral campaign.

TI A Simple Locally Interactive Model of Ergodic and Nonergodic Growth. AU Corradi, Valentina; Ianni, Antonella.

PD May 2000. TI Ergodicity and Clustering in Opinion Formation. AU Ianni, Antonella; Corradi, Valentina. AA Ianni: University of Southampton. Corradi: University of Pennsylvania. SR University of Southampton, Discussion Papers in Economics and Econometrics: 0011; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. PG 33. PR On application; annual subscription 40 pounds. JE D72, D82, C44. KW Ergodicity. Clustering. Local Interaction. Voter Model. AB We study a simple model of pre-electoral opinion formation that posits that interaction between neighboring voters leads to bandwagons in dynamics of the individual process, as well as in that of the aggregate process. We show that in different specifications of the model, there is a tendency for the process to show consensus, i.e. to approach a configuration of homogeneous support for one candidate, out of the two who run the electoral campaign. We point out that the process displays the feature that, after long time spans, a sequence of states occur which, when viewed locally, remain almost stationary and are characterized by large clusters of individuals of the same opinion.

PD May 2000. TI Learning Correlated Equilibria in Potential Games. AA University of Southampton. SR University of Southampton, Discussion Papers in Economics and Econometrics: 0012; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. PG 34. PR On application; annual subscription 40 pounds. JE C72, C73. KW Population Games. Learning Dynamics. Potential Games. Correlated Equilibria.

AB The paper develops a framework for the analysis of finite n-player games, recurrently played by randomly drawn n-tuples of players, from a finite population. We first relate the set of equilibria of this game to the set of correlated equilibria of the

underlying game, and then focus on learning processes modelled as Markovian adaptive dynamics. For the class of potential games, we show that any myopic-best reply dynamics converges (in probability) to a correlated equilibrium. We also analyze noisy best reply dynamics, where players' behavior is perturbed by payoff dependent mistakes, and explicitly characterize the limit distribution of the perturbed game in terms of the correlated equilibrium payoff of the underlying game.

Inchauste, Gabriela

PD March 2000. TI Educational Choices and Educational Constraints: Evidence from Bolivia. AA International Monetary Fund. SR International Monetary Fund Policy Working Paper: WP/00/42; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 29. PR not available. JE H52, I21, I22, I28. KW Education. Cash Transfers. Educational Finance. Hazard Model. Bolivia. AB Recent efforts at poverty alleviation emphasize increasing government spending on education. However, even if spending were perfectly targeted, it is not evident that spending by itself will lead to higher educational attainment. Bolivian household data is used in this paper to ascertain the probability of an individual quitting school due to financial or other reasons. Simulations show that government cash transfers can help to improve educational attainment somewhat. However, nonmonetary limitations must also be addressed if educational attainment is to improve significantly, in particular, for indigenous women who have the lowest levels of education in the country.

Irwin, Douglas A.

TI Is Globalization Today Really Different than Globalization a Hundred Years Ago? AU Bordo, Michael D.; Eichengreen, Barry; Irwin, Douglas A.

Ito, Harumi

TI Sticky Prices, Coordination and Collusion. AU Driscoll, John C.; Ito, Harumi.

Ito, Takatoshi

PD May 1999. TI Capital Flows in Asia. AA Hitotsubashi University and NBER. SR National Bureau of Economic Research Working Paper: 7134; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 29. PR \$5.00. JE F21, F23, F32, F33, F36. KW Capital Flows. Currency Crises. Foreign Direct Investment. Portfolio Investment. Lending.

AB This paper characterizes the capital flows in Asia before and after the Asian currency crisis of 1997. Differences in foreign direct investment, portfolio investment, and bank lending are emphasized. There are common factors and idiosyncratic factors to the role of capital flows in the currency crises in different countries, especially Thailand, Indonesia, and Korea where IMF programs were needed. Some lessons from the currency crises are also drawn. Some representative models that explain a currency crisis are suggested, and lessons are very different depending on models that are believed to be applicable.

Iyer, Ganesh

PD November 1999. TI "Hands Off" or "Hands On" The

Marketing of Service Innovations. AU Iyer, Ganesh; Soberman, David A. AA Iyer: Washington University. Soberman: INSEAD. SR INSEAD Working Paper: 99/77/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 L22, L23, O31. KW Vertical Integration. Service Markets. Service Innovations. Threat Potential. Dis-Intermediation.

AB In recent years, competition in the service sector has been characterized by the introduction of cost saving innovations. The primary characteristic of innovations that is captured in this paper is their role in reducing the cost of a strategic downstream decision namely non-recoverable investments to provide a given level of service. This paper examines the manner in which an independent innovator should market a cost saving service innovation. A traditional approach for the innovator is to act as a "hands off" supplier and sell the innovation outright to the downstream firms. An alternate approach is for the innovator to act as a "hands on" 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. The outright sale of the innovation can lead to high investments in service, the benefits of which are competed away by subsequent price competition between the downstream service providers. However, when the innovator acts as a middleman and takes control of the service decision, this is mitigated. The second effect is "threat potential" that is imposed on a potential non-buyer of the innovation.

Jacobsen, Hans Jorgen

TI Endogenous Business Cycles and Stabilization Policies. AU Aloï, Marta; Jacobsen, Hans Jorgen; Lloyd-Braga, Teresa.

PD September 1999. TI Evolutionary Learning in Signalling Games. AU Jacobsen, Hans Jorgen; Jensen, Mogens; Sloth, Birgitte. AA Jacobsen and Sloth: CIE and University of Copenhagen. Jensen: University of Copenhagen. SR University of Copenhagen, Centre for Industrial Economics Discussion Paper: 99/14; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. Website: www.econ.ku.dk/cie/wpmast.htm. PG 34. PR no charge. JE C72, D82, D83. KW Signaling Games. Intuitive Criterion. Riley Equilibrium. Evolutionary Learning. Separating Equilibrium.

AB We study equilibrium selection by evolutionary learning in monotone signaling games. The learning process is a development of that introduced by Young for static games extended to deal with incomplete information and sequential moves; it thus involves stochastic trembles. For vanishing trembles the process gives rise to strong selection among sequential moves equilibria. If the game has separating equilibria, then in the long run only play according to a specific separating equilibrium, the so-called Riley equilibrium, will be observed frequently. This selection is stronger than, and only partly in accordance with, traditional selection based on restrictions on "out-of-equilibrium" beliefs.

Jaffe, Adam B.

PD April 1999. TI Privatizing R&D: Patent Policy and

the Commercialization of National Laboratory Technologies. AU Jaffe, Adam B.; Lerner, Josh. AA Jaffe: Brandeis University and NBER. Lerner: Harvard Business School and NBER. SR National Bureau of Economic Research Working Paper: 7064; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 28. PR \$5.00. JE O31, O32. KW Patents. R&D Expenditures. National Laboratories.

AB Despite their magnitude and potential economic impact, federal R&D expenditures outside of research universities have been little scrutinized by economists. This paper examines whether the series of initiatives since 1980 that have sought to encourage the patenting and technology transfer at the national laboratories have had a significant impact, and how the features of these facilities affected their success in commercialization. Employing both case studies of and databases about the U.S. Department of Energy's laboratories, we challenge much of the conventional wisdom. The policy changes of the 1980's had a substantial impact on the patenting activity by the national laboratories, which have gradually reached parity in patents per R&D dollar with research universities. Using citation data, we show that, unlike universities, the quality of the laboratory patents has remained constant or even increased as their numbers have grown. The cross-sectional patterns are generally consistent with theoretical suggestions regarding the impact and determinants of the decision to privatize government functions.

Jebjerg, Lars

PD March 1999. TI Debt as a Regulatory Constraint. AA University of Copenhagen. SR University of Copenhagen, Institute of Economics Discussion Paper: 99/02; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. PG 14. PR no charge. JE D21, G38, L51. KW Regulation. Financial Structure. Hold-Up Problems.

AB This paper is about using specific investments and secured debt to shield a firm from exploitation by a regulatory authority. It is shown that specific investments and secured debt constrain the regulatory authority in its choice of regime, by providing a credible threat of bankruptcy.

PD April 1999. TI Credit Market Structure and Product Market Competition. AA University of Copenhagen. SR University of Copenhagen, Institute of Economics Discussion Paper: 99/14; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. PG 28. PR no charge. JE G21, G28, L51. KW Financial Markets. Regulation. Banks.

AB This paper relates credit market structure to efficiency in product markets. It is shown that debt financing with limited liability mute the borrower's incentives. The main theorem compares "industry banking" to independent financing of firms. When firms' effort levels are strategic substitutes and costs are convex, independent financing Pareto-dominates industry financing. The contract offered by an industry bank both compensates for the externality between firms and incorporates an element of rent-extraction. The cumulative effect yields a suboptimal level of effort. When firms are sufficiently strong at bargaining, banks will be held down to their breakeven payoff, and the outcome on the product market only depends on the riskless rate of interest.

PD July 1999. **TI** The Choice Between Bank Debt and Equity. **AU** Jebjerg, Lars; Kyhl, Soren. **AA** University of Copenhagen. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/18; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 24. **PR** no charge. **JE** G21, G32. **KW** Corporate Finance. Capital Structure. Banks.

AB This paper develops a model of financing choice by an entrepreneur about to undertake a project. The entrepreneur is essential for the project but cash-constrained. Thus, he must sell part of the project to outside investors, while remaining in control as a manager. To finance the project he can sell shares to outside equity holders or approach a bank for a loan. The optimal financial structure trades-off an efficient project choice and efficient effort levels. Equity financing does not directly distort the project choice but has a distortionary effect on effort, which in turn may lead to an inefficient choice of project. Bank financing may lead to an inefficient project choice but creates only little effort distortion for a given project. It is shown that the optimal financial structure varies with project characteristics and the external financing requirement.

Jensen, Martin Kaae

TI Endogenous Growth and Competitive Markets. **AU** Tvede, Mich; Jensen, Martin Kaae.

Jensen, Mogens

TI Evolutionary Learning in Signalling Games. **AU** Jacobsen, Hans Jorgen; Jensen, Mogens; Sloth, Birgitte.

Johnston, R. Barry

PD April 2000. **TI** Assessing Financial System Vulnerabilities. **AU** Johnston, R. Barry; Chai, Jingqing; Schumacher, Liliana. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/76; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 32. **PR** not available. **JE** B40, C40, E44, F36, G15. **KW** Asymmetric Information. Incentive Structure. Risk Models. Financial Systems. Financial Crises.

AB Recent financial crises have highlighted the potentially significant macroeconomic costs of financial system instability, and the potential for the instability in the financial system of one country to have broader implications for the stability of financial systems and macroeconomic performance in other countries. This paper reviews the different analytical approaches to assessing vulnerabilities in the financial systems and the benefits and limitations of the different approaches, and suggests enhancements that could help strengthen financial system stability assessments.

Jones, Larry E.

PD April 1999. **TI** Technology (and Policy) Shocks in Models of Endogenous Growth. **AU** Jones, Larry E.; Manuelli, Rodolfo E.; Stacchetti, Ennio. **AA** Jones: Northwestern University and NBER. Manuelli: University of Wisconsin and NBER. Stacchetti: University of Michigan. **SR** National Bureau of Economic Research Working Paper: 7063; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** \$5.00. **JE** E31, E32, O11. **KW** Mean Growth. Economic Fluctuations.

AB Is there a trade-off between fluctuations and growth? The empirical evidence is mixed, with some studies (Kormendi and Meguire (1985)) finding a positive relationship, while others (Ramey and Ramey (1995)) finding a negative one. Our objective in this paper is to understand how fundamental uncertainty can affect the long run growth rate, and what are the factors that determine the nature (positive or negative) of the relationship. Qualitatively, we show that the relationship between volatility in fundamentals and policies and mean growth can be either positive or negative. We identify the curvature of the utility function as a key parameter that determines the sign of the relationship. Quantitatively, we find that when we move from a world of perfect certainty to one with uncertainty that resembles the average uncertainty in a large sample of countries, growth rates increase somewhere between 0.17% and 0.80%, with 0.20% being a "reasonable" estimate. However, we find that differences in the curvature of preferences have very substantial effects on the estimated variability of stationary objects like the consumption/output ratio and hours worked.

PD April 1999. **TI** Volatile Policy and Private Information: The Case of Monetary Policy. **AU** Jones, Larry E.; Manuelli, Rody. **AA** Jones: Northwestern University and NBER. Manuelli: University of Wisconsin and NBER. **SR** National Bureau of Economic Research Working Paper: 7072; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** \$5.00. **JE** D82, E52, E58. **KW** Monetary Policy. Policy Volatility.

AB In this paper we study how volatility in monetary policy affects economic performance in the presence of endogenously chosen information structures. To isolate the effects produced by the interaction of uncertainty in monetary policy and (possibly) asymmetric information, we consider a model in which in the absence of either one of these features the equilibrium would be efficient. The equilibria that we find, with volatility and asymmetry of information, are inefficient for two reasons: first, in some cases, economic agents fail to trade, even though it is always efficient to do so; second, to capture the rents associated with being informed, agents spend resources acquiring socially useless information. Thus, in addition to the more standard effects of volatile inflation, our model calls attention to two types of costs associated with monetary uncertainty: the cost of not trading, and the cost of allocating resources to wasteful activities. The model implies that if monetary policy is not volatile all agents are symmetrically informed and hence, the outcome is efficient. Alternatively, making policy "transparent," i.e. guaranteeing that all agents share the same information, serves the same purpose.

Jones, Tracy

TI A Picture of Job Insecurity Facing British Men. **AU** Nickell, Stephen; Jones, Tracy; Quintini, Glenda.

Jonsson, Gunnar

PD March 2000. **TI** Dynamic Gains from Trade: Evidence from South Africa. **AU** Jonsson, Gunnar; Subramanian, Arvind. **AA** Jonsson: International Monetary Fund. Subramanian: Harvard University. **SR** International Monetary Fund Policy Working Paper: WP/00/45; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 30. **PR** not available. **JE** F13, F14, F43, O40. **KW** Openness. Trade Liberalization. Growth. Total Factor

Productivity.

AB This paper examines the empirical relationship between trade and total factor productivity (TFP) in South Africa. It uses (i) a time series approach where trade is defined in terms of aggregate outcomes, i.e., as the share of imports plus exports in GDP, and (ii) a cross sectional approach, where trade is defined in terms of trade policy, i.e., as actual trade protection across different manufacturing sectors. The results indicate that there is a significant positive relationship between trade and TFP growth both over time and across sectors.

Jumah, Adusei

PD January 2001. **TI** The Effects of Exchange-Rate Exposures on Equity Asset Markets. **AU** Jumah, Adusei; Kunst, Robert M. **AA** Institute for Advanced Studies, Vienna. **SR** Institute for Advanced Studies, Economics Series Working Paper: 94; Institute for Advanced Studies, Library, Stumpergasse 56, A-1060 Vienna. Website: www.ihs.ac.at/Library/libhome.html. **PG** 26.

PR Individuals: ATS 80.00 -- EUR 5.81; Institutions: ATS 250.00 -- EUR 18.17. Prices subject to change without notice. **JE** C32, C53, F31, G13, G15. **KW** Exchange Rate Futures. Index Futures. Heteroskedasticity. Forecasting. Asset Pricing.

AB This paper analyzes the relationship between stock returns and exchange rate changes in international markets and examines how well exchange rate volatility explains movements in stock market returns. The model-based predictions are evaluated on several cost functions. Results from such analysis can be used to appraise the need for hedging. Of the three examined stock indexes, the FTSE was found to be the only robust index, while the S&P 500 and the Nikkei indexes reacted to the dollar/yen exchange rates. The dollar/yen rate also improved risk prediction for the Standard&Poor futures, while the gains in forecasting from using bivariate models remained small otherwise.

Juselius, Katarina

PD September 2000. **TI** International Parity Relationships Between Germany and the United States: A Joint Modelling Approach. **AU** Juselius, Katarina; MacDonald, Ronald. **AA** Juselius: University of Copenhagen. MacDonald: University of Strathclyde. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 00/10; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 54. **PR** no charge. **JE** E31, E43, F31, F32. **KW** Purchasing Power Parity. Interest Rates. Term Structure. Exchange Rates. International Finance.

AB This paper examines the interrelations between the purchasing power parity, uncovered interest parity, the term structure of interest rates and the Fisher real interest rate parity using cointegration analysis. Dynamic adjustment and feedback effects are estimated jointly in a full system of equations. An important finding is that the very slow, though significant, price adjustment towards sustainable levels of real exchange rates has been compensated by corresponding changes in the spread of the long-term bond rates. Related to this is the strong empirical support for the weak exogeneity of the long-term bond rates, signifying the importance of the large US trade deficits (i.e. the low levels of US savings) and, hence, their linkage to international finance. Altogether, the results suggest that the transmission mechanisms over the post Bretton Woods period have been significantly different from standard

theoretical assumptions.

PD October 2000. **TI** Interest Rate and Price Linkages Between the USA and Japan: Evidence from the Post-Bretton Woods Period. **AU** Juselius, Katarina; MacDonald, Ronald. **AA** Juselius: University of Copenhagen. MacDonald: University of Strathclyde. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 00/13; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 38. **PR** no charge. **JE** E31, E43, F31, F32, F41. **KW** Purchasing Power Parity. Exchange Rates. Interest Rates. Term Structure. Monetary Policy.

AB In this paper we investigate the extent to which a number of key parity conditions hold within and between the USA and Japan. Previous research has demonstrated that the nonstationarity of the "simple" parity conditions was related to the nonstationarity of the real exchange rate, reflecting the very slow adjustment to fundamental real exchange rates. The need to finance the resulting trade deficits seemed to have caused similar nonstationary movements in the long-term bond differential. Support for this proposition is also given in this paper. Furthermore, our results point to a reversal of the linkages partly in the term structure from the long to the short end of the market, partly in the Fisher parities from the nominal interest rate to inflation rate. These results might be important for the conduct of monetary policy which works on the economy through short-term interest rates.

TI Explaining Cointegration Analysis: Part II. **AU** Hendry, David F.; Juselius, Katarina.

PD June 1999. **TI** Dynamic Modeling and Structural Shift: Monetary Transmission Mechanisms in Italy before and after EMS. **AU** Juselius, Katarina; Gennari, Elena. **AA** Juselius: University of Copenhagen. Gennari: European University Institute, Italy. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/12; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 30. **PR** no charge. **JE** C32, C51, E51, E52. **KW** I(2) Analysis. Regime Shift. Price Homogeneity. Money Demand. IS-LM. Monetary Policy.

AB The focus is on nominal transmission mechanisms in Italy with special reference to monetary effects and how they have changed with the increased economic integration in Europe and the increased independence of Italian Central Bank. The empirical model investigates the dynamic determination of money, income, prices, and interest rates based on the cointegrated VAR model. The choice of price measurements and its consequences for the empirical results are given special attention. We provide empirical results on the macroeconomic effects of joining the ERM and of capital deregulation.

PD June 1999. **TI** Models and Relations in Economics and Econometrics. **AA** University of Copenhagen and European University Institute. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/13; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 35. **PR** no charge. **JE** B41, C51, E51, E52. **KW** I(2). Price Homogeneity. Money Market. Cointegrated VAR.

AB Based in a money market analysis the paper discusses possible pitfalls in macroeconomic inference related to inadequate stochastic model formulation. A number of

questions related to concepts such as empirical and theoretical steady-states, speed of adjustment, feed-back and interaction effects, and driving forces are addressed within the framework of the cointegrated VAR model. The economic notion of anticipated and unanticipated shocks to a system is discussed from an econometric point of view.

PD October 1999. **TI** The Effect of Joining the EMS: Monetary Transmission Mechanisms in Spain. **AU** Juselius, Katarina; Toro, Juan. **AA** Juselius: University of Copenhagen. Toro: European University Institute. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/22; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 40. **PR** no charge. **JE** C32, C51, E51, E52. **KW** Cointegration. Long-Run Impact. Money Demand. IS-LM. Monetary Policy. Capital Liberalization.

AB This paper presents a cointegrated VAR analysis of monetary transmission mechanisms and changes to such mechanisms after Spain joined the EMS in 1989. Analyses of long-run price homogeneity within the I(2) model turned out to be crucial for understanding the joint behavior of money, income, prices, and interest rates. The empirical results provide new insight on the macroeconomic effects of joining the EMS and financial deregulation.

Kahl, Matthias

TI Blockholder Identity, Equity Ownership Structures, and Hostile Takeovers. **AU** Gorton, Gary; Kahl, Matthias.

Kain, John

TI Do Higher Salaries Buy Better Teachers? **AU** Hanushek, Eric A.; Kain, John; Rivkin, Steven G.

Kapetanios, George

PD January 1999. **TI** Threshold Models for Trended Time Series. **AA** University of Cambridge. **SR** University of Cambridge, DAE Working Paper: 9905; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. **PG** 22. **PR** US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. **JE** C22, C53. **KW** Nonlinearity. Threshold Models. EDTAR Models. Forecasting.

AB This paper presents the theoretical development of new threshold autoregressive models based on trended time series. The theoretical arguments underlying the models are outlined and a nonlinear economic model is used to derive the specification of the empirical econometric models. Estimation and testing issues are considered and analyzed. Additionally, the models are applied to the empirical investigation of US GDP. The results are encouraging and warrant further research.

PD January 1999. **TI** Model Selection in Threshold Models. **AA** University of Cambridge. **SR** University of Cambridge, DAE Working Paper: 9906; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. **PG** 13. **PR** US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. **JE** C15, C44, C52. **KW** Nonlinearity. Model Selection. Information Criteria. Threshold Models.

AB This paper considers information criteria as model

evaluation tools for nonlinear threshold models. Results concerning the consistency of information criteria in selecting the lag order of linear autoregressive models are extended to nonlinear autoregressive threshold models. Extensive Monte Carlo evidence of the small sample performance of a number of criteria is presented.

Kaplan, David S.

TI Executive Compensation: Six Questions the Need Answering. **AU** Abowd, John M.; Kaplan, David S.

Karatzas, Ioannis

PD June 2000. **TI** Information and the Existence of Stationary Markovian Equilibrium. **AU** Karatzas, Ioannis; Shubik, Martin; Sudderth, William D. **AA** Karatzas: Columbia University. Shubik: Yale University. Sudderth: University of Minnesota. **SR** Yale Cowles Foundation Discussion Paper: 1261; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 17. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C72, C73, D82. **KW** Information. Stochastic Process. Money. Disequilibrium.

AB We describe conditions for the existence of a stationary Markovian equilibrium when total production or total endowment is a random variable. Apart from regularity assumptions, there are two crucial conditions: (i) low information -- agents are ignorant of both total endowment and their own endowments when they make decisions in a given period, and (ii) proportional endowments -- the endowment of each agent is in proportion, possibly a random proportion, to the total endowment. When these conditions hold, there is a stationary equilibrium. When they do not hold, such equilibrium need not exist.

PD June 2000. **TI** A Stochastic Overlapping Generations Economy with Inheritance. **AU** Karatzas, Ioannis; Shubik, Martin; Sudderth, William D. **AA** Karatzas: Columbia University. Shubik: Yale University. Sudderth: University of Minnesota. **SR** Yale Cowles Foundation Discussion Paper: 1262; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 24. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C72, C73. **KW** Overlapping Generations. Inheritance. Stochastic Process. Life Span.

AB An overlapping generations model of an exchange economy is considered, with individuals having a finite expected life-span. Conditions concerning birth, death, inheritance and bequests are fully specified. Under such conditions, the existence of stationary Markov equilibrium is established in some generality, and several explicitly solvable examples are treated in detail.

Katz, Lawrence F.

TI The Returns to Skill in the United States Across the Twentieth Century. **AU** Goldin, Claudia; Katz, Lawrence F.

Kaufmann, Daniel

PD March 2000. **TI** "Does 'Grease Money' Speed Up the Wheels of Commerce?" **AU** Kaufmann, Daniel; Wei, Shang-Jin. **AA** Kaufmann: World Bank. Wei: Harvard University. **SR** International Monetary Fund Policy Working Paper: WP/00/64; International Monetary Fund, 700 19th

Street, Washington, DC 20431. **PG** 19. **PR** not available. **JE** D23, D73, L50, O12. **KW** Bribery. Corruption. Red Tape. Speed Money. Grease Payment.

AB In a general equilibrium in which bribe-extracting bureaucrats can endogenously choose regulatory burden and delay, the effective (not just nominal) red tape and bribery can be positively correlated across firms. Using data from three worldwide firm surveys, this paper finds evidence consistent with this hypothesis. Firms that pay more in bribes are also likely to spend more, not less, management time with bureaucrats in negotiating regulations. They also face a higher, not lower, cost of capital.

Kavadias, Stylianos K.

PD February 2000. **TI** A Dynamic Resource Allocation Policy in Multiproject Environments. **AU** Kavadias, Stylianos K.; Loch, Christoph H. **AA** INSEAD. **SR** INSEAD Working Paper: 2001/10/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** L23, M21. **KW** Project Resource Allocation. Delay Penalties.

AB We develop a dynamic prioritization policy to optimally allocate a scarce resource among K projects, only one of which can be worked on at a time. A project is represented by a Markov decision process, with states corresponding to the technical quality of the project output. Payoffs accrue at the end of each project, depending on the quality of its output. In the absence of delay penalties, the problem is a "multi-armed bandit". When maximizing the expected payoff of the entire project portfolio, it is optimal to work on the project with the highest expected value. The presence of switching costs leaves the structure of the policy intact, while discouraging the scarce resource from changing projects mid-course unless the value from switching exceeds the switching cost. When delays cause payoff losses, the decomposition property of the multi-armed bandit problem is lost. In the resulting "restless bandit" problem, we are able to find the optimal policy if the delay loss is an increasing fraction of the potential payoff. It is optimal to work on the project with the highest expected delay loss as if the other project were completely finished first.

Kayworth, Timothy R.

TI Leadership Effectiveness in Global Virtual Teams. **AU** Leidner, Dorothy; Kayworth, Timothy R.; Mora-Tavarez, Manuel.

PD October 1999. **TI** The Global Virtual Manager: A Prescription for Success. **AU** Kayworth, Timothy R.; Leidner, Dorothy. **AA** Kayworth: Baylor University. Leidner: INSEAD. **SR** INSEAD Working Paper: 99/67/TM; 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** L22, M11, M12, M14. **KW** Global Teams. Virtual Teams. Project Management.

AB Global virtual teams have emerged in response to the growing demands placed upon organizations to rapidly coordinate individuals located in geographically dispersed locations. Virtual teams promise to improve cycle time, reduce travel costs, and reduce redundancies across organizational

units. Moreover, the use of global virtual teams provides an opportunity to coordinate complex business tasks across a potentially far-flung confederation of organizations. However, virtual teams are beset with a range of challenges inherent to their dispersed, and often impersonal, nature. This field-based research study was undertaken to assess the core issues and challenges faced by a group of twelve culturally diverse global virtual teams with members from Europe, Mexico, and the United States. Our findings suggest that global virtual teams face significant challenges in four areas: communication, culture, technology, and project management (leadership). Drawing from the members' assessments of their virtual team experiences, each area of challenge is discussed in detail. This is followed by a set of managerial prescriptions that outline specific critical success factors useful for the implementation of virtual teams.

Kearns, Jonathan

PD September 1998. **TI** The Distribution and Measurement of Inflation. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia Research Discussion Paper: 9810; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. **Website:** <http://www.rba.gov.au>. **PG** 36. **PR** no charge. **JE** C82, E31. **KW** Core Inflation. Permanent Shocks. Transitory Shocks. Price Change Moments.

AB Measured inflation records many shocks that are not representative of the persistent component of inflation. Several methods are used to construct measures of core inflation, which abstract from these unrepresentative shocks-, this paper focuses on trimmed means. Analysis of Australian CPI component price changes shows they are widely dispersed. Further, they are not normally distributed; there is a large proportion of extreme price changes (the distribution is fat-tailed) and the distribution is usually positively skewed. With an understanding of the behavior of price changes, trimmed means are then developed. It is found that trimmed means provide a better measure of trend, or core, inflation when a large proportion of the distribution is removed. As a consequence of the distribution's systematic positive skew, slightly more than half of the trim should be taken from the left-hand tail to ensure that the trimmed mean records average inflation equal to that of the whole CPI.

Keefer, Philip

PD 1998. **TI** When Does Delegation Improve Credibility? Central Bank Independence and the Separation of Powers. **AU** Keefer, Philip; Stasavage, David. **AA** Keefer: The World Bank. Stasavage: CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/98/18; Centre for the Study of African Economies, University of Oxford, St. Cross Building, Manor Road, Oxford, OX1 3UL, England. **Website:** www.csae.ox.ac.uk/. **PG** 23. **PR** 3 pounds or \$5.00; subscription 55 pounds or \$88.00. **JE** E52, E58, E61, O17. **KW** Monetary Policy. Central Banks. Delegation. Commitment. Credibility.

AB Delegation and policy rules are frequently suggested strategies for governments to establish credible commitments. Existing literature on rules and delegation in macroeconomic policy has generally avoided the question of why governments that delegate or establish rules do not subsequently reverse this decision. Either the decision is assumed to be irreversible, or reversal is assumed to be 'politically costly' without further

explanation. We develop several hypotheses which suggest that the difficulty in reversing a decision to delegate (or to establish a rule) depends on the structure of a country's political institutions. Credible commitment through delegation can only be obtained in countries where political institutions provide for checks and balances on executive authority. Checks and balances ensure that the decision to override a legally independent central bank is not the prerogative of a single actor. In countries with these characteristics, the extent of credibility gains will be greatest when political instability is moderate and when polarization is high. We find support for these hypotheses in tests using cross-country data from both developed and developing countries on central bank independence and political institutions.

Keen, Michael

PD April 2000. **TI** VIVAT, CVAT and All That: New Forms of Value-Added Tax for Federal Systems. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/83; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 17. **PR** not available. **JE** H20, H71. **KW** Value Added Tax. Fiscal Federalism. Taxation.

AB Conventional wisdom has it that the value-added tax is not a suitable instrument for lower level jurisdictions ('provinces') in a federal system. The problems that arise when it is so used have become a serious constraint on the development of the VAT -- and closer economic integration -- in Brazil, the EU, India and elsewhere. This paper describes and compares two recent proposals for forms of VAT intended to alleviate these difficulties: the VIVAT and the CVAT. Both enable the VAT chain to be preserved on inter-provincial trade without compromising the destination principle (allowing provinces to tax consumption at different rates) or introducing new scope for game-playing by the provinces. The key difference between them is that the CVAT requires sellers to discriminate between buyers located in different provinces of the federation, whereas VIVAT requires sellers to discriminate between registered and non-registered buyers. Where the balance of advantage between the two lies is not entirely obvious.

Kehoe, Patrick J.

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

Keiding, Hans

TI On the Welfare Economic Foundations of Health Status Measures. **AU** Hougaard, Jens Leth; Keiding, Hans.

PD March 1999. **TI** Representation of Effectivity Functions in Coalition Proof Nash Equilibrium: A Complete Characterization. **AU** Keiding, Hans; Peleg, Bezalel. **AA** Keiding: University of Copenhagen. Peleg: University of Jerusalem. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/21; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 23. **PR** no charge. **JE** C71, D71. **KW** Effectivity Functions. Representation. Coalition Proof. Nash Equilibrium.

AB A Complete Characterization The concept of coalition proof Nash equilibrium was introduced by Bernheim, Peleg, and Whinston [1987]. In the present paper, we consider the

representation problem for coalition proof Nash equilibrium: For a given effectivity function, describing the power structure or the system of rights of coalitions in society, it is investigated whether there is a game form which gives rise to this effectivity function and which is such that for any preference assignment, there is a coalition proof Nash equilibrium. It is shown that the effectivity functions which can be represented in coalition proof Nash equilibrium are exactly those which satisfy the well-known properties of maximality and superadditivity. As a corollary of the result, we obtain necessary conditions for implementation of a social choice correspondence in coalition proof Nash equilibrium which can be formulated in terms of the associated effectivity function.

PD July 1999. **TI** Stable Voting Procedures for Committees in Economic Environments. **AU** Keiding, Hans; Peleg, Bezalel. **AA** Keiding: University of Copenhagen. Peleg: University of Jerusalem. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 99/20; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 24. **PR** no charge. **JE** C71, D71. **KW** Committees. Simple Games. Representation. Effectivity Functions.

AB A strong representation of a committee, formalized as a simple game, on a convex and closed set of alternatives is a game form with the members of the committee as players such that (i) the winning coalitions of the simple game are exactly those coalitions, which can get any given alternative independent of the strategies of the complement, and (ii) for any profile of continuous and convex preferences, the resulting game has a strong Nash equilibrium. In the paper, it is investigated whether committees have representations on convex and compact subsets of R^m . This is shown to be the case if there are people who can veto; for committees with no such people the existence of strong representations depends on the structure of the alternative set as well as on that of the committee (its Nakamura-number). Thus, if A is strictly convex, compact, and has smooth boundary, then no committee can have a strong representation on A . On the other hand, if A has non-smooth boundary, representations may exist depending on the Nakamura-number (if it is at least 7).

PD December 1999. **TI** Imperfect Competition and the Firm: Some Equivalence Results. **AU** Keiding, Hans; Tvede, Mich. **AA** University of Copenhagen. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 00/01; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 18. **PR** no charge. **JE** D21, D51, D52, L22, L23. **KW** Imperfect Competition. Firm Objectives. Profit Maximization.

AB The paper introduces an abstract economy with imperfect competition; the choice of allocation takes place through an abstract mechanism, when producers choose strategies and the outcome is (a set of) feasible allocations, where the consumers' choices are sustained by the market mechanism at some prices. We show that with a wide range of assumptions on producer preferences, the equilibrium outcome in this economy are ordinary compensated equilibria, possibly in an economy with production externalities.

Keister, Todd

TI A Characterization of Robust Sunspot Equilibria.

AU Garratt, Rod; Keister, Todd.

Kejak, Michal

TI Inflation, Growth, and Credit Services. AU Gillman, Max; Kejak, Michal; Valentinyi, Akos.

Kelly, David L.

PD June 1999. TI Adjustment Costs from Environmental Change Induced by Incomplete Information and Learning. AU Kelly, David L.; Kolstad, Charles D.; Mitchell, Glenn. AA Kelly: University of Miami. Kolstad and Mitchell: University of California, Santa Barbara. SR University of California, Santa Barbara, Working Papers in Economics: 99/10; Department of Economics, Working Paper Coordinator. University of California, Santa Barbara. Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. PG 43. PR no charge for domestic orders; for non-U.S. orders, U.S. \$3 per paper, personal check or money order made out to "Regents of the University of California". JE D23, D83, Q11, Q12. KW Adjustment Costs. Learning. Climate Change. Agricultural Production. Productivity Shocks.

AB The paper begins with the problem of a firm subject to random productivity shocks drawn from a particular distribution. We are concerned with the case whereby the distribution of the shocks changes without the knowledge of the firm. Over time the firm learns about the nature and extent of the change to the distribution of the shocks and adjusts, incurring adjustment costs in the process. The long run loss in profits due to the shift in the distribution we term the adaptation costs. The transitory profit loss, incurred while the firm is learning about the distribution shift, is termed the adjustment costs. The theory is developed and then applied to the problem of measuring adaptation and adjustment costs in the face of unanticipated and imperfectly observed climate change in agriculture. The empirical part of the paper involves estimating a supply function for corn that depends on actual weather realizations and expected weather, using county level data for the US. We then simulate the effect of an unobserved climate shock, where learning about the climate shock is by observing the weather and updating prior knowledge using Bayes Rule.

Kempf, Hubert

TI Is it Harmful to Allow Partial Cooperation?
AU Beaudry, Paul; Cahuc, Pierre; Kempf, Hubert.

Kenen, Peter B.

PD August 2000. TI Currency Areas, Policy Domains and the Institutionalization of Fixed Exchange Rates. AA Princeton University. SR London School of Economics, Centre for Economic Performance Discussion Paper: 467; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. PG 46. PR 5 pounds. JE E52, F31, F33, F36, F41. KW Monetary Unions. Exchange Rate Regimes. Policy Domains. Monetary Policy. Optimum Currency Areas.

AB Emerging-market countries are being urged to choose between freely floating exchange rates and firmly fixed rates supported by strong institutional arrangements -- currency boards, monetary unions, or formal dollarization. This paper assesses the benefits and costs of institutionalizing fixed rates by synthesizing and supplementing the theory of optimum currency areas (OCA theory). It shows that (1) OCA theory and

related empirical work have been excessively influenced by the special case used originally by Robert Mundell, where exogenous shocks display mirror-image asymmetry; (2) OCA theory ignores a vital difference between the domains of monetary policy under a monetary union and other institutional arrangements; (3) because it neglects the way in which a monetary union reduces the debt-creating effects of fiscal stabilizers, OCA theory understates the strength of the case for combining a monetary union with a fiscal federation. The paper also criticizes recent work by Jeffrey Frankel and Andrew Rose in which they claim to show that monetary union reduces asymmetric shocks and thus makes monetary union less costly. The paper suggests that their results may reflect the effects of monetary union on the transmission of shocks rather than their incidence.

Kent, Christopher

PD October 1997. TI The Response of the Current Account to Terms of Trade Shocks: A Panel-Data Study. AA Reserve Bank of Australia. SR Reserve Bank of Australia Research Discussion Paper: 9705; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. Website: <http://www.rba.gov.au>. PG 31. PR no charge. JE C23, F32, F41. KW Current Account. Terms of Trade. Persistence. AB This paper demonstrates that the response of the current account to shocks depends on the degree of persistence of these shocks. This result is in accordance with standard intertemporal models that incorporate both consumption smoothing and an investment response to shocks. The estimation procedure used to test this result takes advantage of the fact that the persistence of the terms of trade varies greatly across countries. Countries with the least persistent terms of trade shocks are shown to exhibit a positive relationship between these shocks and the current account; countries with the most persistent terms of trade shocks are shown to exhibit a negative relationship.

PD December 1997. TI Asset-Price Bubbles and Monetary Policy. AU Kent, Christopher; Lowe, Philip. AA Reserve Bank of Australia. SR Reserve Bank of Australia Research Discussion Paper: 9709; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. Website: <http://www.rba.gov.au>. PG 24. PR no charge. JE E31, E44, E52, G12. KW Asset Price Bubbles. Collateral. Monetary Policy. Inflation Targets.

AB In this paper we develop a theoretical framework that helps to analyze the role of monetary policy in responding to asset-price bubbles. A large and rapid fall in the nominal price of assets that form the basis of collateral for loans from financial intermediaries can have adverse effects on financial system stability. This asymmetric effect of asset price changes, by reducing the extent of intermediated finance, can reduce output below potential and keep inflation below the central bank's target for extended periods. We demonstrate that there may be circumstances where monetary policy should be tightened in response to an emerging asset-price bubble, in order to burst the bubble before it becomes too large, even though this means that expected inflation is below target in the short run. Such a policy is optimal because it can help to avoid extreme longer-term effects of a larger asset-price bubble and its eventual collapse. In principle, the adverse effects of asset-price bubbles on financial system stability can be moderated through appropriate financial system regulation and

supervision. Nevertheless, provided that the effects of asset-price bubbles on the economy are not entirely eliminated, a role for monetary policy may remain.

TI Inflation Targeting in a Small Open Economy. **AU** Bharucha, Nargis; Kent, Christopher.

PD October 1998. **TI** Effective Real Exchange Rates and Irrelevant Nominal Exchange-Rate Regimes. **AU** Kent, Christopher; Naja, Rafic. **AA** Kent: Reserve Bank of Australia. Naja: McKinsey and Company, Inc. **SR** Reserve Bank of Australia Research Discussion Paper: 9811; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. Website: <http://www.rba.gov.au>. **PG** 22. **PR** no charge. **JE** E52, E58, F31, F33. **KW** Exchange-Rate Regime. Real Exchange Rates. Volatility.

AB We examine the relationship between the short-term volatility of the effective Real Exchange Rate (RER) and the degree of flexibility of the nominal exchange rate. Existing evidence demonstrates that the short-term variance of bilateral RERs is on average about 12 times higher under floating nominal exchange rate regimes than under fixed regimes. By comparison, based on pooled results across a set of countries with low and stable inflation and stable growth rates from 1978 to 1994, the effective RER is only twice as volatile under floating regimes compared with fixed regimes. Although this difference is statistically significant, results within countries show that for most countries there was no significant increase in effective RER volatility when moving to more flexible exchange-rate regimes. Surprisingly, there are even some countries for which volatility is lower under more flexible exchange-rate regimes. In part our findings reflect the fact that effective RERs are an average of bilateral RERs. Also, we suggest that there is a difference between a fixed exchange-rate regime during Bretton Woods and a fixed exchange-rate regime post-Bretton Woods.

Kets de Vries, Manfred F. R.

PD 1999. **TI** Creating Authentizotic Organizations: Well-Functioning Individuals in Vibrant Companies. **AA** INSEAD. **SR** INSEAD Working Paper: 99/69/ENT; 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** M11, M12, M14. **KW** Authentizotic Organizations. Healthy Workplaces.

AB Given the importance of individual psychological well-being for organizational functioning, an item that should be high on everybody's agenda in the new millennium is creating workplaces that are healthy- i.e., that help people feel good about themselves and their endeavor and that contribute to (and reinforce) adaptive functioning. My objective in this short article is to highlight key issues regarding well-functioning individuals, motivational need systems that drive people, and the conditions that make for healthy organizations. To facilitate the search for these kinds of companies, I review Fortune's list of "best companies to work for" and put forth a number of conditions that make for what I like to call authentizotic organizations -- organizations where people find meaning in and are captivated by their work.

PD July 1999. **TI** The Graduation Speech: Reflections on Happiness. **AA** INSEAD. **SR** INSEAD Working Paper:

99/64/ENT; 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** D11, D69. **KW** Happiness.

AB This essay addresses the question of what makes for happiness. An attempt is made to deconstruct this elusive concept. It is suggested that essential aspects of happiness are someone to love, something to do, and something to hope for. In this essay, each of these three dimensions is reviewed. The need to achieve balance in life is explored. The dichotomy between outward success and inner success is looked at. The importance of play in people's lives is examined. The role of stress-another important topic in the happiness equation-is investigated. It is argued that in the search for happiness, humankind's exploratory needs have to be taken into consideration; people have to strive for authenticity; and an effort needs to be made to know oneself.

PD August 1999. **TI** Authentizotic Organizations: Global Leadership From A to Z. **AU** Kets de Vries, Manfred F. R.; Florent-Treacy, Elizabeth. **AA** INSEAD. **SR** INSEAD Working Paper: 99/62/ENT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 39. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** F01, F02, F15. **KW** Globalization. Global Organizations. Theories of Leadership. Organizational Paradigms. Psychological Contract. National Culture. Corporate Culture. Emotional Intelligence. Teddy Bear Factor. Distributed Leadership. Charisma. Authentizotic Organizations.

AB Organizations are now faced with new realities; globalization is coming of age. This development leads to a host of questions: This paper addresses the question what distinguishes an exceptional leader from an exceptional global leader. How do global leaders and their organizations interact? How do cultural dimensions influence global leadership? This article argues that successful global leadership requires first and understanding of human's universal similarities. Some of the competencies that make leaders more effective in a global environment are explored. The article discusses a new organizational paradigm: the authentizotic organization in which the universal human needs for identity, attachment and meaning are met.

Keuschnigg, Christian

TI Public Policy for Efficient Education. **AU** Fisher, Walter H.; Keuschnigg, Christian.

Khan, B. Zorina

PD April 1999. **TI** Legal Monopoly: Patents and Antitrust Litigation in U.S. Manufacturing, 1970-1998. **AA** Bowdoin College. **SR** National Bureau of Economic Research Working Paper: 7068; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** L22, L40, O31, O32, O33. **KW** Anti-trust Enforcement. Innovation. Patenting.

AB This paper presents an empirical analysis of the relationship between patenting, innovation, and federal antitrust enforcement towards firms in the manufacturing sector. I examine whether the likelihood of antitrust litigation is influenced by patent histories and R&D expenditures, after

controlling for other firm-specific variables including size and likelihood of antitrust charges for medium and large firms. Smaller firms with faster sales growth are also more likely to be charged with antitrust violations.

Khan, Mahmood Hasan

PD April 2000. **TI** Rural Poverty in Developing Countries: Issues and Policies. **AA** Simon Fraser University. **SR** International Monetary Fund Policy Working Paper: WP/00/78; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 24. **PR** not available. **JE** I32, O13, O15, O18, O50. **KW** Rural Poverty. Developing Countries. Development. Public Policy. Welfare.

AB In most developing countries, poverty is more widespread and severe in rural than in urban areas. The author reviews some important aspects of rural poverty and draws key implications for public policy. He presents a policy framework for reducing poverty, taking into account the functional differences and overlap between the rural poor. Several policy options are delineated and explained, including stable management of the macroeconomic environment, transfer of assets, investment in and access to the physical and social infrastructure, access to credit and jobs, and provision of safety nets. Finally, some guideposts are identified for assessing strategies to reduce rural poverty.

Khindanova, Irina N.

PD March 2000. **TI** Value at Risk: Recent Advances. **AU** Khindanova, Irina N.; Rachev, Svetlozar T. **AA** University of California, Santa Barbara and University of Karlsruhe, Germany. **SR** University of California, Santa Barbara, Working Papers in Economics: 00/03; Department of Economics, Working Paper Coordinator. University of California, Santa Barbara. Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. **PG** 52. **PR** no charge for domestic orders; for non-U.S. orders, U.S. \$3 per paper, personal check or money order made out to "Regents of the University of California". **JE** C51, C52, C53, G11, G19. **KW** Market Risks. Value-at-Risk. Paretian Distributions.

AB The Value-at-Risk (VAR) measurements are widely applied to estimate exposure to market risks. The traditional approaches to VAR computations -- the variance-covariance method, historical simulation, Monte Carlo simulation, and stress-testing -- do not provide satisfactory evaluation of possible losses. In this paper we review the recent advances in the VAR methodologies. The proposed improvements still lack a convincing unified technique capturing the observed phenomena in financial data such as heavy-tails, time-varying volatility, and short- and long-range dependence. We suggest the use of stable Paretian distributions in VAR modeling.

PD March 2000. **TI** Stable Modeling of Value at Risk. **AU** Khindanova, Irina N.; Rachev, Svetlozar T.; Schwartz, Eduardo. **AA** Khindanova: University of California, Santa Barbara. Rachev: University of Karlsruhe, Germany. Schwartz: UCLA. **SR** University of California, Santa Barbara, Working Papers in Economics: 00/04; Department of Economics, Working Paper Coordinator. University of California, Santa Barbara. Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. **PG** 52. **PR** no charge for domestic orders; for non-U.S. orders, U.S. \$3 per paper, personal check or money order made out to "Regents of the University of California". **JE** C51, C52, C53, G11, G19. **KW** Market Risks. Value-at-Risk. Paretian Distributions. Financial Markets.

AB The Value-at-Risk (VAR) measurements are widely applied to estimate exposure to market risks. The traditional approaches to VAR computations -- the variance-covariance method, historical simulation, Monte Carlo simulation, and stress-testing -- do not provide satisfactory evaluation of possible losses. In this paper we analyze the use of stable Paretian distributions in VAR modeling.

Kim, Dong Heon

TI A Re-Examination of the Predictability of Economic Activity Using the Yield Spread. **AU** Hamilton, James D.; Kim, Dong Heon.

Kim, Sukkoo

PD May 1999. **TI** Urban Development in the United States, 1690-1990. **AA** Washington University and NBER. **SR** National Bureau of Economic Research Working Paper: 7120; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** \$5.00. **JE** N70, O14, O18, R11, R12. **KW** Urbanization. Economic History. Cities. Regional Economics. Urban Development.

AB The United States transformed itself from a rural to an urban society over the last three centuries. After a century of unremarkable growth, the pace of urbanization was historically unprecedented between the nineteenth and early twentieth centuries. In the twentieth century, the urban population continued to increase but in a much more dispersed manner as the suburban population increased. Throughout these developments, cities also exhibited considerable variation in their population sizes. This paper finds that the pace and pattern of U.S. urban development are explained by changes in regional comparative advantage and in economies in transportation and local public goods, which in turn were determined by the changes in the economic structures of cities. This paper also finds that cities varied considerably in size because the larger cities reduced market transaction costs associated with coordinating greater geographic division of labor.

Kim, Woochan

PD May 1999. **TI** Offshore Investment Funds: Monsters in Emerging Markets? **AU** Kim, Woochan; Wei, Shang-Jin. **AA** Kim: Harvard University. Wei: Harvard University and NBER. **SR** National Bureau of Economic Research Working Paper: 7133; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 17. **PR** \$5.00. **JE** F21, F32, F36, G15, G23. **KW** Investment Funds. Offshore Funds. Emerging Markets. Financial Crises. International Finance.

AB The 1997-99 financial crises in the emerging markets have brought to the foreground the concern about offshore investment funds and their possible role in exacerbating volatility in the markets they invest in. Offshore investment funds are alleged to engage in trading behaviors that are different from their onshore counterparts. Because their behavior is less moderated by tax consequences, and because they may be subject to less supervision and regulation, the offshore funds may trade more intensely. They could also pursue more aggressively certain trading strategies such as positive feedback trading or herding that could contribute to greater volatility in the market. Using a unique data set, the authors compare the trading behavior in Korea by offshore

funds with that of their onshore counterparts registered in the United States and the United Kingdom. There are a number of interesting findings. First, there is indeed evidence suggesting that the offshore funds trade more intensely than their onshore counterparts. Second, however, there is no evidence that the offshore funds engage in positive feedback trading. Third, while offshore funds herd, they do so significantly less than the offshore funds from the US or UK.

Kind, Hans Jarle

TI Access Pricing, Quality Degradation, and Foreclosure in the Internet. **AU** Foros, Oystein; Kind, Hans Jarle; Sorgard, Lars.

Kireyev, Alexei

PD March 2000. **TI** Comparative Macroeconomic Dynamics in the Arab World: A Panel VAR Approach. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/54; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 25. **PR** not available. **JE** C32, C33, E32, F43, O47. **KW** Vector Autoregression. Growth. Panel Data. Arab Countries. Business Fluctuations.

AB The paper presents a comparative analysis of macroeconomic dynamics of 18 Arab countries based on a panel vector autoregression estimation. Comparing growth performance, fiscal and current account developments in these countries, the study concludes that (1) in the short run, external and country-specific factors play an almost equal role in explaining macroeconomic fluctuations, but in the long run external factors dominate; (2) on average, program countries are less vulnerable to adverse exogenous shocks than nonprogram countries; (3) to mitigate the negative impact of an external shock, domestic policy response should be consistent with the size of the shock.

Klein, Michael W.

TI International Trade and Factor Mobility: An Empirical Investigation. **AU** Goldberg, Linda S.; Klein, Michael W.

Klimenko, Mikhail

PD January 2001. **TI** Recurrent Trade Agreements and the Value of External Enforcement. **AU** Klimenko, Mikhail; Ramey, Garey; Watson, Joel. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2001/01; Department of Economics, 0508, University of California, San Diego, La Jolla, CA 92093-0508. **Website:** <http://econ.ucsd.edu/papers>. **PG** 31. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** C72, F13, K33. **KW** Institutions. Recurrent Negotiation. Dispute Resolution. Cooperation. World Trade Organization.

AB This paper presents a theory of dynamic trade agreements in which external institutions, such as the WTO, play a central role in supporting credible enforcement. In our model, countries engage in ongoing negotiations, and as a consequence cooperative agreements become unsustainable in the absence of external enforcement institutions. By using mechanisms such as delays in dispute resolution and direct penalties, enforcement institutions can restore incentives for cooperation, despite the lack of any coercive power. The occurrence of costly trade disputes, and the feasibility of mechanisms such as escape

clauses, depend on the adaptability of enforcement institutions in their use of information.

Kline, J. Jude

PD December 1998. **TI** Heterogeneous or Homogeneous Quantity Competition. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 355; Department of Economics, Australian National University, Canberra ACT 0200, Australia. **PG** 8. **PR** no charge. **JE** L11, L13. **KW** Oligopoly. Product Differentiation.

AB We consider when homogeneous goods quantity competition models are payoff equivalent to heterogeneous goods models. When they are equivalent, changes in some cost parameters are equivalent to changes in some demand parameters. Going from homogeneous models to heterogeneous models is always possible, but the converse is not so easy. We characterize when the converse is possible for linearly separable and multiplicatively separable heterogeneous models. These results have implications that blur the distinction between process and product innovations.

PD December 1998. **TI** Research Joint Ventures and the Cost Paradox. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 356; Department of Economics, Australian National University, Canberra ACT 0200, Australia. **PG** 14. **PR** no charge. **JE** L13, O31. **KW** Research. Joint Venture. Cost Paradox.

AB We consider the impact of the cost paradox on the likelihood of cooperative firms to use a cost reducing Research Joint Venture (RJV) to increase research levels when spillovers are large. The cost paradox (CP) occurs whenever industry-wide cost reductions would lead to such intense competition that profits would fall. We give a restriction on cost reducing research which guarantees that an RJV will prefer marginal reductions in research to the noncooperative levels whenever CP would arise and spillovers are less than perfect. In such cases, firms use an RJV to lessen competition rather than to lower costs.

PD December 1998. **TI** Carrot and Stick Games. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 357; Department of Economics, Australian National University, Canberra ACT 0200, Australia. **PG** 26. **PR** no charge. **JE** C72, L13. **KW** Carrots. Sticks.

AB In a carrot game for a player, that player must help his opponent in order to get a desired response. In a stick game for a player, that player must hurt his opponent to get a desired response. We show that most all smooth monotonic two player games can be classified as: carrot for both, carrot for one and stick for the other, or stick for both. We transform carrot and stick games into sequential move games and incentive games. A carrot game for a player implies mutual benefits will come from his moving first. A stick game for a player implies that if he moves first, the other player will suffer. Incentive games based on a carrot game for each player bring mutual gains. Those based on a stick game for each player bring harm to at least one and possibly to both. These results are applicable to many situations studied by industrial organization theorists.

TI Quantity Competition with Access Fees. **AU** Harrison, Mark; Kline, J. Jude.

Klisz, Chris

TI Empirical Performance of the Czech and Hungarian Index Options Under Jump. **AU** Lee, Gabriel S.; Boss, Michael; Klisz, Chris.

Knight, John

PD June 1999. **TI** Testing for Infinite Order Stochastic Dominance with Applications to Finance, Risk and Income Inequality. **AU** Knight, John; Satchell, Stephen. **AA** Knight: University of Western Ontario. Satchell: University of Cambridge. **SR** University of Cambridge, DAE Working Paper: 9911; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. **PG** 10. **PR** US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. **JE** C12, C44, D61. **KW** Stochastic Dominance. Inequality. Risk Aversion.

AB The authors develop a test of infinite degree stochastic dominance based on the use of the empirical moment generating function. Two applications are considered. One uses the income data of Anderson (*Econometrica*, 1996) and derives results consistent with his. In the other application, the dominance between the US and UK stockmarkets is examined. Using data on the S&P 500 and the FTALL-Share, it is shown that the US displays infinite degree stochastic dominance over the UK.

Knowles, John

TI More on Marriage, Fertility, and the Distribution of Income. **AU** Greenwood, Jeremy; Guner, Nezih; Knowles, John.

PD August 1999. **TI** Racial Bias in Motor Vehicle Searches: Theory and Evidence. **AU** Knowles, John; Persico, Nicola; Todd, Petra. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 99/06; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 22. **PR** no charge. **JE** C14, D82, J71, K14, K42. **KW** Racial Profiling. Discrimination. Optimal Auditing. Law Enforcement. **AB** African American motorists in the United States are more likely than white motorists to have their cars searched by police checking for illegal drugs and other contraband. The courts are faced with the task of deciding on the basis of traffic-stop data whether police are basing their decisions to stop cars on the race of the driver. We develop a model of law enforcement for a population with two racial types who also differ along other dimensions relevant to criminal behavior. We discuss why a simple test commonly applied by the courts is inadequate when the econometrician observes only a subset of the characteristics observed by the policemen. Next, we show how to construct a test for whether differential treatment is motivated purely out of efficiency grounds, i.e. to maximize the number of arrests, or reflects racial prejudice. The test is valid even when the set of characteristics observed by the policemen is only partially observable by the econometrician. We apply the tests for discrimination to traffic stop data from Maryland. Finally, we present a simple analysis of the tradeoff between efficiency and fairness.

Kohler, Jonathan

PD January 1999. **TI** Expenditure on Environmentally Sensitive Goods and Services: Household Spending in Europe. **AU** Kohler, Jonathan; Luhmann, Hans-Jochen; Wadeskog, Anders. **AA** Kohler: University of Cambridge. Luhmann: Wuppertal Institute for Climate and Energy, Germany. Wadeskog: University of Stockholm. **SR** University of Cambridge, DAE Working Paper: 9903; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. **PG** 20. **PR** US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. **JE** C81, D12, D63. **KW** Household Expenditure. Energy Expenditure. Transport Expenditure.

AB Expenditure on environmentally sensitive goods and services has been analysed for the member states of the EEC, using the EUROSTAT Family Budgets data, based on surveys carried out in 1988. Some data are also available from Germany, Finland, Norway, Sweden and Switzerland. The groups with low average expenditures spend a higher proportion of their budget on energy than those with high expenditures, but a lower proportion on transport, especially vehicle purchases. However, all groups spend a much higher proportion of expenditure on transport than on energy, although purchased (i.e. non-private motoring and public) transport is a small proportion of transport spending, even for low expenditure groups. Pensioners spend a relatively high proportion of their budgets on package tours, especially compared to the other "at risk" groups.

Kolstad, Charles D.

TI Adjustment Costs from Environmental Change Induced by Incomplete Information and Learning. **AU** Kelly, David L.; Kolstad, Charles D.; Mitchell, Glenn.

Kompas, Tom

TI Uzawa's Transformation and Optimal Control Problems with Variable Rates of Time Preference. **AU** Francis, Johanna; Kompas, Tom.

Kotlikoff, Laurence J.

TI Simulating the Transmission of Wealth Inequality via Bequests. **AU** Gokhale, Jagadeesh; Kotlikoff, Laurence J.; Sefton, James; Weale, Martin.

Kramarz, Francis

TI Working 40 Hours or Not-Working 39: Lessons from the 1981 Mandatory Reduction of Weekly Working Hours. **AU** Crepon, Bruno; Kramarz, Francis.

Krueger, Alan B.

PD June 1999. **TI** Education for Growth in Sweden and the World. **AU** Krueger, Alan B.; Lindahl, Mikael. **AA** Krueger: Princeton University and NBER. Lindahl: Stockholm University. **SR** National Bureau of Economic Research Working Paper: 7190; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 38. **PR** \$5.00. **JE** I21, O12, O15. **KW** Schooling and Income. Education and Growth. **AB** This paper tries to reconcile evidence on the effect of schooling on income and on GDP growth from the microeconomic and empirical macro growth literatures.

Much microeconomic evidence suggests that education is an important causal determinant of income for individuals within countries. At a national level, however, recent studies have found that increases in educational attainment are unrelated to economic growth. This finding is shown to be a spurious result of the extremely high rate of measurement error in first-differenced cross-country education data. After accounting for measurement error, the effect of changes in educational attainment on income growth in cross-country data is at least as great as microeconomic estimates of the rate of return to years of schooling. We also investigate another finding of the macro growth literature -- that econometric growth depends positively on the initial stock of human capital. Perhaps most importantly, we find that the initial level of education does not appear to have a significant effect on economic growth among OECD countries. The conclusion comments on policy implications for Sweden based on human capital literature.

Kubo, Katsuyuki

TI Why Does Performance Pay De-Motivate? Financial Incentives versus Performance Appraisal. **AU** Marsden, David; French, Stephen; Kubo, Katsuyuki.

Kuijs, Louis

PD March 2000. **TI** The Impact of Ethnic Heterogeneity on the Quantity and Quality of Public Spending. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/49; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 12. **PR** not available. **JE** H10, H41, H51, H52, J10. **KW** Government Spending. Public Goods. Ethnic Heterogeneity. Health. Education.

AB The paper investigates empirically the impact of ethnic heterogeneity on the amount of public spending on health and education and the quality, or "technical efficiency," of spending. While it finds partial evidence for the claim that more heterogeneous societies spend less on public goods, it suggests that heterogeneity significantly affects the efficiency of public expenditure outcomes in terms of social indicators. The results suggest that the impact of heterogeneity on public expenditure outcomes is not just a public choice problem, but also an issue of "technical efficiency."

Kulundu, Damiano Manda

TI Educational Expansion and Economic Decline: Returns to Education in Kenya 1978-1995. **AU** Appleton, Simon; Bigsten, Arne; Kulundu, Damiano Manda.

Kumar, Krishna B.

PD July 1999. **TI** What Determines Firm Size? **AU** Kumar, Krishna B.; Rajan, Raghuram G.; Zingales, Luigi. **AA** Kumar: USC. Rajan and Zingales: University of Chicago and NBER. **SR** National Bureau of Economic Research Working Paper: 7208; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** D23, G32, L22. **KW** Firm Size. Industry Characteristics.

AB Motivated by theories of the firm, which we classify as "technological" or "organizational," we analyze the determinants of firm size across industries and across countries in a sample of 15 European countries. We find that, on average, firms facing larger markets are larger. At the industry level, we find firms in the utility sector are large, perhaps because they

enjoy a natural, or officially sanctioned, monopoly. Capital-intensive industries, high wage industries, and industries that do a lot of R&D have larger firms, as do industries that require less external financing. At the country level, the most salient findings are that countries with efficient judicial systems have larger firms and, correcting for institutional development, there is little evidence that richer countries have larger firms. The effects of interactions (between an industry's characteristics and a country's environment) on size are perhaps the most novel results in this paper, and are best able to discriminate between theories. Finally, the average size of firms in industries dependent on external finance is larger in countries with better financial markets, suggesting that financial constraints limit average firm size.

Kumar, V.

TI On the Profitability of Long Lifetime Customers: An Empirical Investigation and Implications For Marketing. **AU** Reinartz, Werner J.; Kumar, V.

Kunst, Robert M.

TI The Effects of Exchange-Rate Exposures on Equity Asset Markets. **AU** Jumah, Adusei; Kunst, Robert M.

Kyhl, Soren

PD July 1999. **TI** Enforcement of Contracts when Markets are Incomplete. **AA** University of Copenhagen. **SR** University of Copenhagen, Institute of Economics, University of Copenhagen Discussion Paper: 99/16; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 20. **PR** no charge. **JE** D52, D61. **KW** General Equilibrium. Incomplete Markets. Financial Contracts.

AB This paper considers a standard general equilibrium model with incomplete markets, which is extended to incorporate durable goods and the possibility of default, following Dubey, Geanakoplos and Shubik (1990) and Geanakoplos and Zame (1998). In such a model asset markets will not be active unless there is some mechanism enforcing the promises made in the contracts. Here we consider two specific institutions; Utility Penalties and Collateral. If markets are complete; using Utility Penalties as the means of enforcement will yield a Pareto optimal allocation of resources, if penalties are set at infinity. Whereas using Collateral is likely to result in an inefficient allocation of resources, independent of how collateral requirements are chosen. If markets are incomplete matters are quite different; we show that using Collateral (Utility Penalties) as the means of enforcing contracts opposed to Utility Penalties (Collateral) may yield a Pareto superior allocation of resources.

TI Ownership Structure as a Signal of Managerial Ability. **AU** Gyntelberg, Jacob; Kyhl, Soren.

TI The Choice Between Bank Debt and Equity. **AU** Jebjerg, Lars; Kyhl, Soren.

Laidler, David W.

PD unavailable. **TI** What Economists Know About Canada's Exchange Rate Regime. **AA** University of Western Ontario. **SR** University of Western Ontario, Papers in Political Economy: 92; Department of Economics, University of Western Ontario, London, Ontario N6A 5C2, Canada. **PG** 29. **PR** no charge. **JE** F31, F33. **KW** Exchange

Rates. Monetary Union. Canada. Currency Boards. Pegged Rates.

AB In the recent flurry of discussion of Canada's exchange rate regime, the headline grabbing issue has been whether a North American Monetary Union (NAMU) is feasible or desirable. Two of NAMU's most visible proponents, Thomas Courchene and Richard Harris, (1999b), henceforth C- H, have rested their case, not only on its supposedly positive attractions, but on the alleged shortcomings of Canada's current exchange rate regime. It is their view that a "...flexible exchange rate is not, in fact, serving Canada well within the progressively integrated NAFTA environment." Indeed, C-H have devoted considerable energy to singing the praises of a pegged rate. In this essay, the author shows that C-H's attack on Canada's flexible exchange rate relies upon an unfortunately selective approach to the available literature dealing with the topic. Precious little of the empirical research which they cite deals specifically with Canada, and they have ignored a substantial body of work that does. The author argues that their conclusions about Canada's exchange rate regime cannot be upheld in the light of a properly balanced assessment of the current state of knowledge about how it has worked in the past and continues to work at present.

Landsberger, Michael

PD February 1999. **TI** First-Price Auctions when the Ranking of Valuations is Common Knowledge. **AU** Landsberger, Michael; Rubinstein, Jacob; Wolfstetter, Epuian; Zamir, Schmucl. **AA** Landsberger: Haifa University. Rubinstein: Technion Institute. Wolfstetter: Humboldt-University. Schmucl: Hebrew University. **SR** Document de Travail du CREST: 9918; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. **PG** 12. **PR** no charge. **JE** C72, D44. **KW** Auction. Common Knowledge. Private Valuation. **AB** We consider a first-price auction when the ranking of bidders' private valuations is common knowledge among bidders. This new informational framework is motivated by several applications, from procurement to privatization. It induces a particular asymmetric auction model with affiliated private values that has several interesting properties but raises serious technical complications. We prove existence and uniqueness of equilibrium in pure strategies and show that the auctioneer's revenue is generally higher in a first-price than in second-price and English auctions, in contrast to the ranking in the affiliated values model by Milgrom and Weber. This also implies that in first-price auctions, adding common knowledge concerning the ranking of valuations among bidders tends to increase the seller's expected revenue.

Lane, John

TI A Simple Model of the Transformational Recession Under a Mobility Restraint. **AU** Gomulka, Stanislaw; Lane, John.

Langenfeld, James

TI Managed Health Care Effects: Medical Care Costs and Access to Health Insurance. **AU** Frech, H. E., III.; Langenfeld, James; Corbett, Michaelyn.

Lardjane, Salim

PD 1999. **TI** Stochasticite des Systemes Dynamiques et

Implications Statistiques. **AA** CREST. **SR** Document de Travail du CREST: 9953; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. **PG** 25. **PR** no charge. **JE** C12, C13, C15. **KW** Dynamical Systems. Ergodic Theory. Beta-Mixing. Weak Bernoulli. Chaos. Central Limit Theorem.

AB We prove that observations issuing from a Weak Bernoulli dynamical system can be identified with the realizations of an ergodic stochastic process which can be uniformly approximated by a sequence of beta-mixing stochastic processes. Under additional assumptions, a central limit theorem is derived. The applicability of our results to piecewise expanding maps of the interval Anosov diffeomorphisms, and Axiom A diffeomorphisms is then considered.

Laroque, Guy

PD June 1999. **TI** Breaking Down Married Female Non-Employment in France. **AU** Laroque, Guy; Salanie, Bernard. **AA** Laroque: INSEE and CNRS. Salanie: INSEE, CEPR and CNRS. **SR** Document de Travail du CREST: 9931; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. **PG** 29. **PR** no charge. **JE** J22, J42. **KW** Minimum Wage. Female Labor Supply.

AB The purpose of this paper is to study the causes of unemployment empirically, using individual data and an approach that refines that of Meyer and Wise. Using the French 1997 Labor Survey data, we decompose non-employment of married women into three components: voluntary, classical (due to the minimum wage) and "other" (a residual category). We find that the minimum wage explains close to 15% of non-employment for these women and that the disincentive effects of some welfare policy measures may be large. Our approach also allows us to evaluate various labor and welfare policy experiments in their effects on participation and employment.

Latukefu, Alopi S.

TI E-Business: Revolution, Evolution or Hype? **AU** Coltman, Tim; Devinney, Timothy M.; Latukefu, Alopi S.; Midgley, David F.

TI E-Business: Revolution, Evolution or Hype? **AU** Coltman, Tim; Devinney, Timothy M.; Latukefu, Alopi S.; Midgley, David F.

TI International Perspectives on the State of the E-Business Revolution. **AU** Coltman, Tim; Devinney, Timothy M.; Latukefu, Alopi S.; Midgley, David F.

TI International Perspectives on the State of the E-Business Revolution. **AU** Coltman, Tim; Devinney, Timothy M.; Latukefu, Alopi S.; Midgley, David F.

Laurent, Gilles

TI A Benefit Congruency Framework of Sales Promotion Effectiveness. **AU** Chandon, Pierre; Wansink, Brian; Laurent, Gilles.

Laurent, Jean-Paul

TI Distributions implicites anormales des taux de change. **AU** Frachot, Antoine; Laurent, Jean-Paul; Pichot, Olivier.

Laursen, Jytte

TI Macroeconomic Issues in Foreign Aid. **AU** Hjertholm, Peter; Laursen, Jytte; White, Howard.

Lecocq, Sebastien

PD May 1999. **TI** The Impact of Information on Wine Auction Prices: Results of an Experiment. **AU** Lecocq, Sebastien; Magnac, Thierry; Pichery, Marie-Claude. **AA** Lecocq: University Paris I. Magnac: INRA and CREST. Pichery: LATEC. Visser: CREST and University of Amsterdam. **SR** Document de Travail du CREST: 9936; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. **PG** 12. **PR** no charge. **JE** C93, D44, D82. **KW** Auction. Field Experiment. Information. Willingness to Pay. Wine Price.

AB This paper reports the results of an experimental wine auction. Participants of the experiment were randomly assigned to three rooms. In each room four wines had to be evaluated, but the level of information to which participants had access differed across rooms. After the evaluations, the wines were sold sequentially, by four separate Vickrey auctions with secret reservation prices. We find that certain socio-economic characteristics such as gender, income and consumption habits, have a significant impact on the willingness to pay for wine, while others such as age and nationality, do not. We also find that once individuals have read the label characteristics and extracts from wine guides, the taste of the wines does not have an additional impact on willingness to pay. Conversely, if individuals who have only tasted the wines blindly are informed about the wine characteristics and opinions from experts, their willingness to pay increases substantially.

Lee, Gabriel S.

PD January 2001. **TI** Empirical Performance of the Czech and Hungarian Index Options Under Jump. **AU** Lee, Gabriel S.; Boss, Michael; Klisz, Chris. **AA** Lee: Institute for Advanced Studies, Vienna. Boss: Oesterreichische Nationalbank. Klisz: Academia Istropolitana Nova. **SR** Institute for Advanced Studies, Economics Series Working Paper: 91; Institute for Advanced Studies, Library, Stumpergasse 56, A-1060 Vienna. Website: www.ihs.ac.at/Library/libhome.html. **PG** 31. **PR** Individuals: ATS 80.00 -- EUR 5.81; Institutions: ATS 250.00 -- EUR 18.17. Prices subject to change without notice. **JE** C51, C52, G13. **KW** Leptokurtosis. Poisson Jump Diffusion. GARCH. Equity Index Options. Option Pricing.

AB This paper analyzes Czech and Hungarian index options that are traded on the Austrian Futures and Options Exchange. We find that the Poisson jump-diffusion and not the GARCH (1,1) process lends statistical support for the data description. We estimate that approximately four-fifth of 4 percent underpricing (for the Czech Index) and 18 percent overpricing (for the Hungarian Index) biases reported for the short term out-of-the-money call options can be explained by the Jump option pricing model. However, we question whether the mispricings from the jump model are operational, especially, in these emerging financial markets.

TI The Endowment Effect, Status Quo Bias and Loss Aversion: Rational Alternative Explanation. **AU** Dupont, Dominique Y.; Lee, Gabriel S.

TI Legal Restrictions on Portfolio Holdings: Some Empirical Results. **AU** Hlouskova, Jaroslava; Lee, Gabriel S.

Lee, In Ho

TI Entry Deterrence in Durable-Goods Monopoly. **AU** Hoppe, Heidrun C.; Lee, In Ho.

Lee, Kevin

TI Forecast Uncertainties in Macroeconometric Modelling: An Application to the UK Economy. **AU** Garratt, Anthony; Lee, Kevin; Pesaran, M. Hashem; Shin, Yongcheol.

Lehmann, Hartmut

PD June 2000. **TI** Tenures that Shook the World: Worker Turnover in Russia, Poland and Britain. **AU** Lehmann, Hartmut; Wadsworth, Jonathan. **AA** Lehmann: Heriot-Watt University, IZA, Bonn and University of Michigan. Wadsworth: London School of Economics, University of London and IZA, Bonn. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 459; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. **PG** 31. **PR** 5 pounds. **JE** J23, J31, J63. **KW** Job Tenure. Worker Turnover. Transition Economies. Wages.

AB We study worker turnover in a transition economy to investigate to what extent the length of time a worker has been employed by a firm shapes the turnover process. Using data from the Polish Labour Force Survey and The Russian Longitudinal Monitor Survey, we compare the pattern of turnover with a Western economy, Britain. We show tenure profiles are higher and flatter in Russia and steeper and lower in Poland than in Britain. The characteristics of workers hired in the state and private sectors do not look very different. State and private sector firms in Poland offer the same wages to new recruits, but new private sector jobs in Russia appear to offer wage premia relative to new state jobs. We argue that these observations are consistent with a framework where the value of seniority in jobs begun under the old order may be small and the value of a continued job match unsure, offset, in Poland at least, by insider resistance to layoffs.

Leidner, Dorothy

PD 1999. **TI** Leadership Effectiveness in Global Virtual Teams. **AU** Leidner, Dorothy; Kayworth, Timothy R.; Mora-Tavarez, Manuel. **AA** Leidner: INSEAD. Kayworth: Baylor University. Mora-Tavarez: Avenue Universidad. **SR** INSEAD Working Paper: 99/68/TM; 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** L22, M11, M12, M14. **KW** Global Team Leaders. Team Management. Global Management.

AB Given the fundamentally different work contexts faced in virtual team environments, traditional concepts of team leadership may take on an entirely new dimension for this new type of organizational structure. This field-based research study was undertaken to identify factors related to effective team leadership in virtual team environments. To accomplish this, we assembled twelve culturally diverse global teams from locations in Mexico, the United States and Europe, assigning each team a project leader and task to complete. The findings

suggest that effective team leaders demonstrated the capability to deal with paradox and contradiction by performing multiple leadership roles simultaneously (behavioral complexity). Specifically, we discovered that highly effective virtual team leaders acted in a mentoring role and exhibited a high degree of understanding (empathy) towards other team members. At the same time, effective leaders were also able to assert their authority without being perceived as overbearing or inflexible. Finally, effective leaders were found to be extremely effective at providing regular, detailed, and prompt communication with their peers and in articulating role relationships (responsibilities) among the virtual team members.

TI The Global Virtual Manager: A Prescription for Success.
AU Kayworth, Timothy R.; Leidner, Dorothy.

Leker, Tikva

TI The Effects of Immigration on Socioeconomic Gaps in a Labor Managed System Versus in a Competitive System.
AU Shachmurove, Yochanan; Leker, Tikva.

Lerner, Josh

TI Privatizing R&D: Patent Policy and the Commercialization of National Laboratory Technologies.
AU Jaffe, Adam B.; Lerner, Josh.

Leruth, Luc

PD March 2000. **TI** The Complier Pays Principle: The Limits of Fiscal Approaches Toward Sustainable Forest Management. **AU** Leruth, Luc; Paris, Remi; Ruzicka, Ivan. **AA** Leruth: International Monetary Fund. Paris: OECD. Ruzicka: Vovray-en-Bornes, France. **SR** International Monetary Fund Policy Working Paper: WP/00/51; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 25. **PR** not available. **JE** H32, Q23, Q28, R38. **KW** Environment. Sustainable Management. Forestry Taxation. Regulation.

AB This paper examines the role and impact of taxation on sustainable forest management. It is shown that fiscal instruments neither reinforce nor substitute for traditional regulatory approaches. Far from encouraging more sustainable forest management, fiscal instruments such as an inappropriate tax policy can actually undermine it. The paper uses the arguments at the root of the Faustmann solution to draw conclusions on the incentives for sustainable tropical forest exploitation. The paper also proposes a bond mechanism as an alternative market-based instrument to encourage sustainable forest logging while reducing monitoring costs.

Leshchinskii, Dima

TI Can Firms Learn to Acquire? Do Markets Notice?
AU Zollo, Maurizio; Leshchinskii, Dima.

Lettau, Martin

PD March 2000. **TI** Robustness of Adaptive Expectations as an Equilibrium Selection Device. **AU** Lettau, Martin; Van Zandt, Timothy. **AA** Lettau: Federal Reserve Bank of New York. Van Zandt: INSEAD. **SR** INSEAD Working Paper: 2000/25/EPS; 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** D58, D81, D84. **KW** Adaptive Expectations.

Learning Rules. Expectational Stability.

AB Dynamic models in which agents' behavior depends on expectations of future prices or other endogenous variables can have steady states that are stationary equilibria for a wide variety of expectations rules, including rational expectations. When there are multiple steady states, stability is a criterion for selecting among them as predictions of long-run outcomes. The purpose of this paper is to study how sensitive stability is to certain details of the expectations rules, in a simple OLG model with constant government debt that is financed through seigniorage. We compare simple recursive learning rules, learning rules with vanishing gain, and OLS learning, and also relate these to expectational stability. One finding is that two adaptive expectation rules that differ only in whether they use current information can have opposite stability properties.

Levin, Jonathan

TI Information and Competition in U.S. Forest Service Timber Auctions. **AU** Athey, Susan; Levin, Jonathan.

Levinsohn, James

PD June 1999. **TI** Impacts of the Indonesian Economic Crisis: Price Changes and the Poor. **AU** Levinsohn, James; Berry, Steven T.; Friedman, Jed. **AA** Levinsohn: University of Michigan and NBER. Berry: Yale University and NBER. Friedman: University of Michigan. **SR** National Bureau of Economic Research Working Paper: 7194; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** E65, I31. **KW** Economic Crisis. Distributional Impact.

AB The recent financial crisis in Indonesia has resulted in dramatic price increases. Using very recent data, we investigate whether these price increases have had an impact on the cost-of-living of poor households in a disproportionately harsh way. We find that the poor have indeed been hit hardest. Just how hard the poor have been hit, though, depends crucially on where the household lives, whether the household is in a rural or urban area, and just how the cost-of-living index is compared. What is clear is that the notion that the very poor are so poor as to be insulated from international shocks is simply wrong. Rather, in the Indonesian case, the very poor appear the most vulnerable.

Levinthal, Daniel

TI Technology Evolution and Demand Heterogeneity: Implications for Product and Process Innovation. **AU** Adner, Ron; Levinthal, Daniel.

Lewis, Eleanor

TI What Moves Yields in Australia? **AU** Campbell, Frank; Lewis, Eleanor.

Li, Wei

TI Government as a Discriminating Monopolist in the Financial Market: The Case of China. **AU** Gordon, Roger H.; Li, Wei.

Lieberman, Offer

TI An Alpha-Level Adaptive Test for Regression Models via Regressogram Selection. **AU** Guerre, Emmanuel; Lieberman, Offer.

PD June 1999. **TI** Small Sample Asymptotics for the

Sample Autocorrelation Function under Long Range Dependence. AU Lieberman, Offer; Rousseau, Judith; Zucker, David M. AA Lieberman: Technion Israel Institute of Technology. Rousseau: University of Paris V and CREST-ENSAE. Zucker: University of Jerusalem. SR Document de Travail du CREST: 9935; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. PG 11. PR no charge. JE C49. KW Edgeworth Expansion.

AB We prove in this paper the validity of an Edgeworth expansion to the joint distribution of the sample autocorrelations of a stationary, Gaussian, long memory process. The method of proof relies on a verification of Durbin's (1980) suitably modified conditions for the validity of a multivariate Edgeworth expansion.

Lim, Guay-Cheng

PD March 2000. TI Misalignment and Managed Exchange Rates: An Application to the Thai Baht. AA International Monetary Fund. SR International Monetary Fund Policy Working Paper: WP/00/63; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 24. PR not available. JE C22, F31, F36, F47. KW Real Exchange Rates. Misalignment. Foreign Exchange. Time Series. Simulations.

AB This paper proposes a methodology for analyzing dynamic misalignment in managed exchange rate systems that combines the estimation approach to modeling the real exchange rate with the calibration approach to generating the equilibrium real exchange rate. The methodology is applied to the Thai baht and the model is estimated using only pre-July 1997 data. An analysis of the difference between the evolution of the actual real exchange rate and the generated equilibrium rate -- the misalignment gap -- reveals the extent to which the market was persistently factoring in an expected depreciation of the Thai baht.

Lin, Pei-Chien

PD July 1999. TI Growth Theory and Accounting For Growth of the Taiwanese Economy. AU Lin, Pei-Chien; Roe, Terry. AA University of Minnesota. SR University of Minnesota Economic Development Center Bulletin: 99/01; Department of Economics, 1035 Management and Economics Building, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. Website: <http://www.econ.umn.edu/econlib>. PG 34. PR no charge. JE O31, O41, O47, O53. KW Economic Growth. Productivity. Technological Change.

AB A growth accounting and an econometric exercise are used to provide insights into the evolution of the Taiwanese economy over the period 1966-96. The approach links the GDP function of a multiple sector neoclassical growth model to growth accounting and, subsequently to the estimation of the parameters of this function. The growth accounting results show that the contribution of total factor productivity (TFP) to growth in GDP averaged about 32 percent over the period, and this contribution increased as the economy approached its long-run equilibrium during the decade of the 1980s, with evidence of some departure during 1991-96. Growth in TFP increased output growth in industry and services while growth in skilled labor benefited all sectors. Growth in capital stock increased the growth of the industrial sector the most, followed

by services, but the effect on agricultural output growth was negative. Growth in TFP and capital stock appear to have increased the capacity of the industrial and service sectors to pull resources from agriculture.

Lindahl, Mikael

TI Education for Growth in Sweden and the World. AU Krueger, Alan B.; Lindahl, Mikael.

Lippman, Steven A.

TI The Analytics of Search With Posted Prices. AU Arnold, Michael A.; Lippman, Steven A.

Litwin, Adam Seth

PD August 2000. TI Trade Unions and Industrial Injury in Great Britain. AA Board of Governors of the Federal Reserve System. SR London School of Economics, Centre for Economic Performance Discussion Paper: 468; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. PG 19. PR 5 pounds. JE J28, J51. KW Trade Unions. Industrial Injury. Occupational Injury. Health. Safety.

AB Anecdotal evidence suggests that trade unions succeed in ameliorating workplace health and safety, but no attempt has been made to link specific workplace injury rates with a respective union presence. Relying on WERS98, this paper establishes a cross-sectional link between trade unions and occupational injury rates, revealing that unions gravitate to accident-prone workplaces and react by reducing injury rates within these types of employment units. However, the ability of unions to reduce injury rates does not appear to increase monotonically as they progress along a workplace instrumentality continuum from recognition alone to a pre-entry closed shop.

Liu, Qiao

TI Stakes and Stars: The Effect of Intellectual Human Capital on the Level and Variability of High-Tech Firms' Market Values. AU Darby, Michael R.; Liu, Qiao; Zucker, Lynne G.

Lizzeri, Alessandro

PD March 2000. TI The Drawbacks of Electoral Competition. AU Lizzeri, Alessandro; Persico, Nicola. AA Lizzeri: Princeton University. Persico: University of Pennsylvania. SR University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/02; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. PG 28. PR no charge. JE D72, H41, H42. KW Elections. Electoral Competition. Public Goods. Redistribution.

AB According to the conventional view, in politics, just as in economic markets, competition between politicians is a force that pushes towards efficiency. We provide a model that challenges this view. In the model, candidates can promise to provide a public good or to engage in redistributive politics. We show that the more intense is competition (measured by an increase in the number of candidates) the greater the inefficiency. This is because the tendency to focus on policies that provide particularistic benefits increases with the number

of candidates at the expense of policies that benefit the population at large. We also examine the impact of voters' ideology, participation, and information on the efficiency of the electoral process, by allowing for heterogeneity in voters' responsiveness to electoral promises. The larger the fraction of non-responsive voters, the less efficient the political process. This is because electoral competition focuses on swing voters, increasing the value of policies with targetable benefits.

Llinares, Emmanuel

TI Preemption in the Adoption of Time-Saving Process Innovations: The Case of Down-Hill Skiing. **AU** Mulligan, James G.; Llinares, Emmanuel.

TI Peak-Load Pricing, Congestion, and Multiple Capacity Constraints With An Application to Down-Hill Skiing. **AU** Mulligan, James G.; Llinares, Emmanuel.

Lloyd-Braga, Teresa

TI Endogenous Business Cycles and Stabilization Policies. **AU** Aloï, Marta; Jacobsen, Hans Jorgen; Lloyd-Braga, Teresa.

Loch, Christoph H.

TI A Dynamic Resource Allocation Policy in Multiproject Environments. **AU** Kavadias, Stylianos K.; Loch, Christoph H.

PD February 2000. **TI** Expansion Options: Evaluating Strategic Opportunities From Research Projects. **AU** Loch, Christoph H.; Bode-Greuel, Kerstin. **AA** Loch: INSEAD. Bode-Greuel: Decision Support. **SR** INSEAD Working Paper: 2000/13/TM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. **PG** 18. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** G13, G31. **KW** Financial Value. Project Analysis. Expansion Option.

AB 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 uncertain projects, managerial flexibility, or the ability to respond to unexpected events, is a major source of value. Flexibility can be transparently represented in decision trees. We argue in this article that a major part of the value of research projects may come from expansion options. An expansion option is the opportunity to use the technology or competence developed in one project for an unconnected application. We demonstrate the value of expansion options on the example of BestPharma, a large international pharmaceutical company, who faced the problem of choosing among several strategic research initiatives. They 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 expansion option took the form of potential indications unrelated to the primary indication. As a result, the project came out as one of the most attractive.

PD February 2000. **TI** R&D Performance Measures That Are Linked to Strategy. **AU** Loch, Christoph H.; Tapper, U. A. Staffan. **AA** Loch: INSEAD. Tapper: University of Witwatersrand. **SR** INSEAD Working Paper: 2000/14/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** O31, O32. **KW** Research and Development. R&D Performance.

AB Although most companies recognize the importance of R&D for future success, they often struggle to assess R&D performance. No widely accepted performance measurement system for R&D exists. Performance measurement is particularly difficult for the R&D function because the success of a new product or process can only be assessed with certainty after a long delay. Furthermore, success criteria are not always known because they are strategy dependent and because success drivers are subject to factors outside the control of the R&D function. It is, therefore, difficult to formulate measures that are timely, connected to business goals, and fair. We show how the Research Group of the diamond producer GemStone developed a research performance measurement system that is appropriate for the risky projects typical in R&D, and which supports business strategy. The process derives operative measures for R&D from the company strategy. It starts top-down, but then facilitates bottom-up formulation of initiatives. In addition, a mixture of output-oriented and process-control measures ensure timeliness and fairness of the system.

PD March 2000. **TI** Manufacturing Management Quality and Factory Performance. **AU** Loch, Christoph H.; De Meyer, Arnoud; Van der Heyden, Ludo. **AA** INSEAD. **SR** INSEAD Working Paper: 2000/24/TM/CIMSO9; 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, M12, M13, M21. **KW** TQM. Competitive Advantage. Resource Theory. Management Quality. Resource Connectedness.

AB Recent studies on the use of Total Quality Management (TQM) tools in manufacturing management have produced mixed evidence of their performance benefits. This study develops an operational model of manufacturing management quality, which can be translated into managerial actions. Management quality is defined as a combination of six quality dimensions: delegation and integration supported by participation, process measurement, communication, and employee development. Management quality applied across the key business processes yields process improvement as an outcome. We find empirical support for this model, based on data from two separate data sets: 1) Higher manufacturing management quality leads to higher continuous improvement in the key manufacturing processes, which in turn leads to higher volume growth for the plant. 2) Manufacturing management quality offers competitive advantage because it is difficult to imitate. 3) Manufacturing management quality is found to be higher in the automotive and electronics industries than in other sectors. 4) There are differences in growth drivers by economic region. In Japan leverage derives from improvements in new product introduction into the plant, and in the US and Europe from new product development. Manufacturing improvements are important across all three regions.

TI Status as a Valued Resource. **AU** Huberman, Bernardo A.; Loch, Christoph H.; Onculer, Ayse.

Lommerud, Kjell Erik

PD May 2000. **TI** Merger Profitability in Unionized Oligopoly. **AU** Lommerud, Kjell Erik; Straume, Odd Rune; Sorgard, Lars. **AA** Lommerud: University of Bergen and CEPR. Straume: University of Bergen. Sorgard: Norwegian School of Economics and Business Administration. **SR** University of California, Santa Barbara, Working Papers in Economics: 00/10; Department of Economics, Working Paper Coordinator. University of California, Santa Barbara. Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. **PG** 31. **PR** no charge for domestic orders; for non-U.S. orders, U.S. \$3 per paper, personal check or money order made out to "Regents of the University of California". **JE** G34, J51, L13, L41. **KW** Merger Profitability. Trade Unions. Endogenous Wages. Oligopoly.

AB We examine how a merger affects wages of unionized labor and, in turn, the profitability of a merger under both Cournot and Bertrand competition. If unions are plant-specific, we find that a merger is more profitable than in a corresponding model with exogenous wages. In contrast to the received literature, we find that it can be more profitable to take part in a merger than being an outsider. For firm-specific unions, on the other hand, results are reversed.

Loungani, Prakash

PD April 2000. **TI** How Accurate Are Private Sector Forecasts? Cross-Country Evidence from Consensus Forecasts of Output Growth. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/77; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 30. **PR** not available. **JE** C53, D84, E32, F43, O40. **KW** Forecasting. Recessions. Growth. Business Cycles. GDP.

AB This paper evaluates the performance of Consensus Forecasts of GDP growth for industrialized and developing countries from 1989 to 1998. The questions addressed are (1) How do forecast errors differ across industrialized and developing countries? (2) How well do forecasters predict recessions? (3) Are forecasts efficient and unbiased? (4) How does private sector performance compare with that of international organizations? (5) Is forecaster discord a reliable predictor of forecast accuracy? Two key results emerge. First, the record of failure to predict recessions is virtually unblemished. Second, there is a high degree of similarity between private forecasts and those of international organizations.

Lowe, Philip

TI The Implementation of Monetary Policy in Australia. **AU** Battellino, Ric; Broadbent, John; Lowe, Philip.

TI Asset-Price Bubbles and Monetary Policy. **AU** Kent, Christopher; Lowe, Philip.

Ludwig, Jens

PD June 1999. **TI** The Benefits of Reducing Gun Violence: Evidence from Contingent-Valuation Survey Data. **AU** Ludwig, Jens; Cook, Philip J. **AA** Ludwig: Georgetown University. Cook: Duke University and NBER. **SR** National Bureau of Economic Research Working Paper: 7166; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 17. **PR** \$5.00. **JE** D82, J17, H51.

KW Gun Violence. Contingent Valuation.

AB This paper presents the first attempt to estimate the benefits of reducing crime using the contingent-valuation (CV) method. We focus on gun violence, a crime of growing policy concern in America. Our data from a national survey in which we ask respondents referendum-type questions that elicit their willingness-to-pay (WTP) to reduce gun violence by 30 percent. We estimate that the public's WTP to reduce gun violence by 30 percent equals \$23.8 billion, or \$750,000 per injury. Our estimate implies a statistical value of life (\$4.05 to \$6.25 million) that is quite consistent with those derived from other methods.

Luhmann, Hans-Jochen

TI Expenditure on Environmentally Sensitive Goods and Services: Household Spending in Europe. **AU** Kohler, Jonathan; Luhmann, Hans-Jochen; Wadeskog, Anders.

MacDonald, Ronald

TI International Parity Relationships Between Germany and the United States: A Joint Modelling Approach. **AU** Juselius, Katarina; MacDonald, Ronald.

TI Interest Rate and Price Linkages Between the USA and Japan: Evidence from the Post-Bretton Woods Period. **AU** Juselius, Katarina; MacDonald, Ronald.

Machina, Mark J.

PD September 2000. **TI** Payoff Kinks in Preferences over Lotteries. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2000/22; Working Paper Coordinator, Department of Economics, 0508, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0508. Website: http://econ.ucsd.edu/papers. **PG** 41. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** D81. **KW** Risk. Uncertainty. Payoff Kinks. Monetary Lotteries. Preferences Functions.

AB This paper identifies two distinct types of payoff kinks that can be exhibited by preference functions over monetary lotteries -- "locally separable" vs. "locally nonseparable" -- and illustrates their relationship to the payoff and probability derivatives of such functions. Expected utility and Frechet differentiable preference functions are found to be incapable of exhibiting locally nonseparable payoff kinks; rank-dependent preference functions are incapable of avoiding them.

Macho-Stadler, Ines

PD June 1999. **TI** Auditing with Signals. **AU** Macho-Stadler, Ines; Perez-Castrillo, David. **AA** CIE, University of Copenhagen and Universitat Autònoma de Barcelona, Spain. **SR** University of Copenhagen, Centre for Industrial Economics Discussion Paper: 99/08; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. Website: www.econ.ku.dk/cie/wpmast.htm. **PG** 29. **PR** no charge. **JE** D82, H26, K42, M40. **KW** Auditing. Tax Progressivity. Signaling.

AB We analyze the value of information that can be used to improve the audit selection to better target the tax gap. We consider a tax authority allocating resources in an attempt to identify the taxpayers who are underreporting with more

probability and to increase voluntary compliance. In a simple model, we discuss the optimal enforcement policy when the tax authority decides its auditing strategy before the taxpayers file their report, and identify some results that contrast with the literature on optimal auditing when no signal, in addition to the tax return, is considered. In particular, we discuss the relationship between effective tax progressivity and the informational content of the signal.

MacKinlay, A. Craig

PD June 1999. **TI** Asset Pricing Models: Implications for Expected Returns and Portfolio Selection. **AU** MacKinlay, A. Craig; Pastor, Lubos. **AA** MacKinlay: University of Pennsylvania and NBER. Pastor: University of Pennsylvania. **SR** National Bureau of Economic Research Working Paper: 7162; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** \$5.00. **JE** G11, G12. **KW** Factor Analysis. Asset Pricing.

AB Implications of factor-based asset pricing models for estimation of expected returns and for portfolio selection are investigated. In the presence of model mispricing due to a missing risk factor, the mispricing and the residual covariance matrix are linked together. Imposing a strong form of this link leads to expected return estimates that are more precise and more stable over time than unrestricted estimates. Optimal portfolio weights that incorporate the link when no factors are observable are proportional to expected return estimates, effectively using an identity matrix as a covariance matrix. The resulting portfolios perform well both in simulations and in out-of-sample comparisons.

Mackinnon, John

PD 1999. **TI** Food Storage Multiple Equilibria and Instability: Why Stable Markets May Become Unstable During Food Crises. **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/99/01; Centre for the Study of African Economies, University of Oxford, St. Cross Building, Manor Road, Oxford, OX1 3UL, England. Website: www.csae.ox.ac.uk/. **PG** 26. **PR** 3 pounds or \$5.00; subscription 55 pounds or \$88.00. **JE** D51, D52, Q11, Q12. **KW** General Equilibrium. Temporary Equilibrium. Instability. Precautionary Saving. Famine.

AB A temporary-equilibrium model replicating institutional features of low-income agricultural economies is developed. In this model, food is held as an asset; because food production is relatively volatile, those with negative temporary income are net buyers of food. When food is the only asset, asset effects are likely to reduce the price-elasticity of the demand for food and can make it tatonnement-unstable, because the distributional effects of food price rises increase savings. When money is introduced, instability remains possible because a permanent rise in the price level increases risk, inducing substitution from money into food stocks.

MacLeod, W. Bentley

TI Caring About Sunk Costs: A Behavioral Solution to the Hold-Up Problem. **AU** Carmichael, Lorne; MacLeod, W. Bentley.

Magnac, Thierry

TI The Impact of Information on Wine Auction Prices:

Results of an Experiment. **AU** Lecocq, Sebastien; Magnac, Thierry; Pichery, Marie-Claude.

Mailath, George J.

TI Investment and Concern for Relative Position. **AU** Cole, Harold L.; Mailath, George J.; Postlewaite, Andrew.

TI Efficient Non-Contractible Investments in Large Economies. **AU** Cole, Harold L.; Mailath, George J.; Postlewaite, Andrew.

PD June 2000. **TI** Market Selection and Asymmetric Information. **AU** Mailath, George J.; Sandroni, Alvaro. **AA** Mailath: University of Pennsylvania. Sandroni: Northwestern University. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/07; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 25. **PR** no charge. **JE** D51, D82, D83, G12. **KW** Asset Markets. Market Selection. Asymmetric Information. General Equilibrium. Asset Pricing.

AB We consider a dynamic general equilibrium asset pricing model with heterogeneous agents and asymmetric information. We show how agents' different methods of gathering information affect their chances of survival in the market depending upon the nature of the information and the level of noise in the economy.

TI Efficient Non-Contractible Investments in a Finite Economy. **AU** Cole, Harold L.; Mailath, George J.; Postlewaite, Andrew.

PD November 2000. **TI** The Maximum Efficient Equilibrium Payoff in the Repeated Prisoners' Dilemma. **AU** Mailath, George J.; Obara, Ichiro; Sekiguchi, Tadashi. **AA** Mailath and Ichiro: University of Pennsylvania. Sekiguchi: Kobe University. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/20; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 24. **PR** no charge. **JE** C72, C73. **KW** Repeated Games. Prisoner's Dilemma. Equilibrium Payoffs. Perfect Monitoring. Discount Factors.

AB We describe the maximum efficient subgame perfect equilibrium payoff for a player in the repeated Prisoner's Dilemma, as a function of the discount factor. For discount factors above a critical level, every efficient, feasible, individually rational payoff profile can be sustained. For an open and dense subset of discount factors below the critical value, the maximum efficient payoff is not an equilibrium payoff. When a player cannot achieve this payoff, the unique equilibrium outcome achieving the best efficient equilibrium payoff for a player is eventually cyclic. There is an uncountable number of discount factors below the critical level such that the maximum efficient payoff is an equilibrium payoff.

PD March 2001. **TI** Private Strategies in Finitely Repeated Games with Imperfect Public Monitoring. **AU** Mailath, George J.; Matthews, Steven A.; Sekiguchi, Tadashi. **AA** Mailath and Matthews: University of Pennsylvania. Sekiguchi: Kobe University. **SR** University of

Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 01/10; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. PG 19. PR \$3.00 for U.S. and Canada; \$5.00 Foreign; make checks payable to University of Pennsylvania. JE C72, C73. KW Private Strategies. Repeated Games. Public Perfect Equilibria. Sequential Equilibria. Public Monitoring.

AB We present three samples of finitely repeated games with public monitoring that have sequential equilibria in private strategies, i.e., strategies that depend on own past actions as well as public signals. Such private sequential equilibria can have features quite unlike those of the more familiar perfect public equilibria: (i) making a public signal less informative can create Pareto superior equilibrium outcomes; (ii) the equilibrium final-period action profile need not be a stage game equilibrium; and (iii) even if the stage game has a unique correlated (and hence Nash) equilibrium, the first-period action profile need not be a stage game equilibrium.

PD August 1999. TI Repeated Games with Almost-Public Monitoring. AU Mailath, George J.; Morris, Stephen. AA Mailath: University of Pennsylvania. Morris: Yale University. SR University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 99/09; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. PG 44. PR no charge. JE C72, C73. KW Repeated Games. Imperfect Monitoring. Private Monitoring. Folk Theorems. Punishments.

AB In repeated games with imperfect public monitoring, players can use public signals to coordinate their behavior perfectly, and thus support cooperative outcomes with the threat of punishments. But with even a small amount of private monitoring, players' private histories may lead them to have sufficiently different views of the world that such coordination on punishments is no longer possible (we describe a simple strategy profile that is a perfect public equilibrium of a repeated prisoner's dilemma with imperfect public monitoring, and yet is not an equilibrium for arbitrarily close games with private monitoring). If a perfect public equilibrium has players' behavior conditioned only on finite histories, then it induces an equilibrium in all close-by games with private monitoring. This implies a folk theorem for repeated games with almost-public almost-perfect monitoring.

Makridakis, Spyros

TI M3 -- Competition. AU Hibon, Michele; Makridakis, Spyros.

Malaviya, Prashant

TI Taxonomic Versus Goal-Derived Product Categorization: Effects on Within and Across Category Choice Processes. AU Felcher, E. Marla; Malaviya, Prashant; McGill, Ann L.

PD January 2000. TI The Influence of Choice Justification and Stimulus Meaningfulness on the Attraction Effect: An Information-Processing Perspective. AU Malaviya, Prashant; Sivakumar, K. AA Malaviya: INSEAD. Sivakumar: University of Illinois at Chicago.

SR INSEAD Working Paper: 2000/16/MKT; 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 M21, M31, M37. KW Attraction Effect. Information Processing. Data Deficiency. Cognitive Resource Lack.

AB The "attraction effect" refers to the phenomenon in which preference for a target product increases relative to a competitor when a choice option that is dominated by the target brand but not by the competitor brand is included in the choice set. This finding reflects decision making that is inconsistent with principles of IIA and utility maximization. The present article offers an explanation for this in terms of fundamental principles of information processing. The findings implicate two factors, data deficiency and cognitive resource deficiency. Specifically, the results show that when the product information is relatively "meaningless" and thus, data deficient, making respondents allocate greater cognitive resources to the decision task by asking them to justify their decision, increases the attraction effect. However, when the product information is quite "meaningful" and thus, not data deficient, increasing resource allocation by instructing respondents to justify choice, decreases the attraction effect. We propose that when the stimulus is less meaningful, the additional processing effort that justification induces is used to generate heuristics to justify choice, which enhance the attraction effect. The implications of these findings and future research directions are highlighted.

PD March 2000. TI Ad Repetition Effects: The Influence of Amount and Type of Elaboration. AA INSEAD. SR INSEAD Working Paper: 2000/17/MKT; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Website: www.insead.fr/research. PG 43. PR no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. JE M31, M37. KW Advertising. Message Elaboration. Relational Elaboration. Item-Specific Elaboration.

AB Repetition of advertising is a ubiquitous and accepted facet of our consumption environment. Marketers repeat their messages because repeated exposure to the message, up to a certain point, leads to favorable impressions of the brand. This observation is based on the findings reported in several advertising studies. However, a surprisingly large number of published studies also fail to find such an effect of ad repetition. In this paper, we investigate the cause for this observation by examining variables that characterize the every-day settings in which consumers encounter these messages. Findings from two studies suggest that the effect of ad repetition on judgment is observed when the ad message receives two complementary types of elaboration -- relational elaboration, which facilitates the generation of a comparison referent, and item-specific elaboration, which foster the representation of the message information in memory. The paper concludes by offering a "juke-box" model of advertising persuasion, which describes how these two dimensions of message elaboration, the amount and type, interact to produce persuasion.

Manuelli, Rodolfo E.

TI Technology (and Policy) Shocks in Models of Endogenous Growth. AU Jones, Larry E.; Manuelli, Rodolfo E.; Stacchetti, Ennio.

Manuelli, Rody

TI Volatile Policy and Private Information: The Case of Monetary Policy. **AU** Jones, Larry E.; Manuelli, Rody.

Marcellino, Massimiliano

PD December 1999. **TI** Modelling Shifts in the Wage-Price and Unemployment-Inflation Relationships in Italy, Poland, and the UK. **AU** Marcellino, Massimiliano; Mizon, Grayham E. **AA** Marcellino: Bocconi University and European University Institute. Mizon: European University Institute and University of Southampton. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 9919; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 29. **PR** On application; annual subscription 40 pounds. **JE** C32, C52. **KW** Transition Economies. Cointegration. Regime Shifts. Wages and Prices.

AB The relationship between wages, prices, productivity, inflation, and unemployment in Italy, Poland, and the UK between the 1960's and the early 1990's is modeled as a cointegrated vector autoregression subject to regime shifts. For each of these economies there is clear evidence of a change in the underlying equilibria of this sector of the economy. Hypotheses concerning the similarity of the transition from a rigid to a flexible labor market are tested.

Marion, Nancy

TI Reserve Uncertainty and the Supply of International Credit. **AU** Aizenman, Joshua; Marion, Nancy.

Markowitz, Sara

TI Alcohol Regulation and Violence on College Campuses. **AU** Grossman, Michael; Markowitz, Sara.

Markusen, James R.

PD June 1999. **TI** Multinational Firms: Reconciling Theory and Evidence. **AU** Markusen, James R.; Maskus, Keith E. **AA** Markusen: University of Colorado and NBER. Maskus: University of Colorado. **SR** National Bureau of Economic Research Working Paper: 7163; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** \$5.00. **JE** F12, F23. **KW** Knowledge-Capital. Multinational Firms.

AB An important component of Robert Lipsey's work has been his research on multinational firms, and his careful documentation of their behavior in terms of production and intra-firm trade. In this paper, we extend recent theory referred to as the "knowledge-capital model", which simultaneously generates motives for both horizontal and vertical multinational production. We use this model to derive predictions about foreign affiliates' pattern of production for local markets versus production for exports as functions of country characteristics such as market sizes, size differences, and relative endowment differences. These predictions are then taken to data on affiliate production and trade. Results confirm several hypotheses. The ratio of production for export sales to production for local sale by affiliates of foreign multinationals depends on negatively on market size, investment and trade costs in the host country, and positively on the relative skilled-labor abundance of the parent country (skilled-labor scarcity of the host country).

PD June 1999. **TI** Discriminating Among Alternative Theories of the Multinational Enterprise. **AU** Markusen, James R.; Maskus, Keith E. **AA** Markusen: University of Colorado and NBER. Maskus: University of Colorado. **SR** National Bureau of Economic Research Working Paper: 7164; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 17. **PR** \$5.00. **JE** F13, F23. **KW** Vertical Multinationals. Horizontal Multinationals.

AB Recent theoretical developments have incorporated endogenous multinational firms into the general-equilibrium model of trade. One simple taxonomy separates the theory into "vertical" models in which firms geographically separate activities by stages of production and "horizontal" models of multi-plant firms that duplicate roughly the same activities in many countries. We refer to a hybrid of these as the "knowledge capital model". In this paper, we nest these three models within an unrestricted model. Econometric tests give strong support to the horizontal model and overwhelmingly reject the vertical model.

Marsden, David

PD November 2000. **TI** Why Does Performance Pay Demotivate? Financial Incentives versus Performance Appraisal. **AU** Marsden, David; French, Stephen; Kubo, Katsuyuki. **AA** Marsden: CEP and LSE. French: Warwick University. Kubo: Hitotsubashi University. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 476; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. **PG** 17. **PR** 5 pounds. **JE** J33, J41, J45, M12. **KW** Performance Related Pay. Incentives. Performance Measurement. Organizational Commitment. Public Sector.

AB The sheer scale and speed of the shift of payment system from time-based salaries to performance-related pay, PRP, in the British public services provides a unique opportunity to test the effects of incentive pay schemes. This study is based on the first large scale survey designed to measure the effects of performance related pay on employee motivation and work behavior across the British public services. While there is evidence of a clear incentive effect for those gaining above average PRP, it is likely that it is offset by a more widespread de-motivating effect arising from difficulties of measuring performance fairly. Organizational commitment appears to offset some of the negative effects of PRP.

Marston, David

TI Toward a Framework for Systemic Liquidity Policy. **AU** Dziobek, Claudia; Hobbs, J. Kim; Marston, David.

Martin, Stephen

PD August 1999. **TI** Kreps & Scheinkman with Product Differentiation: An Expository Note. **AA** CIE, University of Copenhagen. **SR** University of Copenhagen, Centre for Industrial Economics Discussion Paper: 99/11; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. Website: www.econ.ku.dk/cie/wpmast.htm. **PG** 68. **PR** no charge. **JE** D43, L13. **KW** Cournot Duopoly. Bertrand Model. Capacity. Oligopoly. Product Differentiation.

AB Kreps and Scheinkman's (1983) celebrated result is that

in a two-stage model of a market with homogeneous products in which firms noncooperatively pick capacities in the first stage and set prices in the second stage, the equilibrium outcome is that of a one-shot Cournot game. This note derives capacity reaction functions for the first stage and extends the Kreps and Scheinkman result to the case of differentiated products.

Marx, Leslie M.

PD December 1998. **TI** Dynamic Voluntary Contribution to a Public Project. **AU** Marx, Leslie M.; Matthews, Steven A. **AA** Marx: University of Rochester. Matthews: University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 99/01; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 36. **PR** no charge. **JE** C73, D82, H41. **KW** Public Goods. Private Provision. Voluntary Contribution. Dynamic Games. Information.

AB We consider the dynamic private provision of funds to projects that generate flows of public benefits. Participants have complete information about the environment, but imperfect information about individual actions: each period they observe only the aggregate contribution. Each player may contribute any amount in any period before the contributing horizon is reached. All Nash equilibrium outcomes are characterized. In many cases they are all also perfect Bayesian equilibrium outcomes. If the horizon is long, if the players' preferences are similar, and if they are patient or the period length is short, perfect Bayesian equilibria exist that essentially complete the project. In some of them the completion time shrinks to zero with the period length -- efficiency is achieved in the limit.

Maskus, Keith E.

TI Multinational Firms: Reconciling Theory and Evidence. **AU** Markusen, James R.; Maskus, Keith E.

TI Discriminating Among Alternative Theories of the Multinational Enterprise. **AU** Markusen, James R.; Maskus, Keith E.

Mason, Robin

PD May 2000. **TI** Networks, Options and Preemption. **AU** Mason, Robin; Weeds, Helen. **AA** Mason: University of Southampton. Weeds: University of Cambridge. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 0013; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 41. **PR** On application; annual subscription 40 pounds. **JE** C73, D81, L13, O31. **KW** Real Options. Network Effects. Preemption.

AB This paper examines the irreversible adoption of a technology whose returns are uncertain, when there is an advantage to being the first adopter, but a network advantage to adopting when others also do so. Two patterns of adoption emerge: sequential, in which the leader aggressively preempts its rival, and a more accommodating outcome in which the firms adopt simultaneously. There are two main results. First, conditional on adoption being sequential, the follower adopts at the incorrect point, compared to the co-operative solution. The leader adopts at the co-operative point when there is no

preemption, and too early if there is preemption. Secondly, there is insufficient simultaneous adoption in equilibrium. The paper examines the effect of uncertainty, network effects and preemption on these inefficiencies. Standard results do not always hold. Preemption may actually increase the time to first adoption, since simultaneous adoption is more likely to occur in equilibrium with preemption. The analysis also raises the unusual possibility that an increase in uncertainty may cause the first mover to adopt the technology earlier.

PD August 1999. **TI** Compatibility Between Differentiated Networks. **AA** University of Southampton. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 9909; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 43. **PR** On application; annual subscription 40 pounds. **JE** D43, L13, L96. **KW** Networks. Compatibility. Interconnection. Internet Settlement.

AB This paper develops a generalized model of network competition when consumers vary in their preferences for network size and location, and networks are vertically and horizontally differentiated. The effect of compatibility on the degree of competition between the networks is analyzed. Two effects are identified as central to determining networks' incentives towards compatibility. Compatibility decreases vertical differentiation (and hence increases competition); but it also decreases the importance of market share (and so decreases competition). Which effect dominates depends on the relative importance of horizontal and vertical aspects in consumers' utilities. When network size is a relatively important factor in consumers' utilities, neither the larger nor smaller network in the unique asymmetric equilibrium wishes to be compatible. When horizontal aspects are important, both networks wish to be compatible. For intermediate cases, the larger network does not wish to be compatible, in contrast to the smaller network. The model may explain the dynamics of network industries, particularly interconnection agreements between Internet service providers.

Mathiesen, Lars

PD March 2000. **TI** Comparing the Cost of Emission Reductions in First and Second-Best Economies. **AU** Mathiesen, Lars; Hakonsen, Lars. **AA** Mathiesen: Norwegian School of Economics and Business Administration and University of California, Santa Barbara. Hakonsen: Telemarkforskning, Norway. **SR** University of California, Santa Barbara, Working Papers in Economics: 00/02; Department of Economics, Working Paper Coordinator. University of California, Santa Barbara. Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. **PG** 14. **PR** no charge for domestic orders; for non-U.S. orders, U.S. \$3 per paper, personal check or money order made out to "Regents of the University of California". **JE** D58, D62, H21, H23, L51. **KW** Emission Regulation. Tax Reform. Excess Burden. Welfare. Environmental Policy.

AB In a sequence of illuminating papers Goulder, Parry, Burtraw and Williams decompose the effects of using environmental instruments like taxes and quotas within a second-best setting, i.e., in the presence of pre-existing taxes. We find this part of their analyses most revealing. They also perform numerical analyses from which they conclude that pre-existing taxes raise the costs of environmental policies relative

to their costs in a first-best world. The observation is valid as far as the marginal cost per percentage emission reduction is concerned, but not so for total welfare costs of obtaining an emission target. In fact, employing their model we demonstrate by computing the excess burden of taxation, that the second-best welfare index falls at a slower rate than the first-best welfare index, such that the welfare cost of reducing emissions in second best are lower.

Matthews, Steven A.

TI Private Strategies in Finitely Repeated Games with Imperfect Public Monitoring. **AU** Mailath, George J.; Matthews, Steven A.; Sekiguchi, Tadashi.

TI Dynamic Voluntary Contribution to a Public Project. **AU** Marx, Leslie M.; Matthews, Steven A.

PD May 1999. **TI** Renegotiating Moral Hazard Contracts Under Limited Liability and Monotonicity. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 99/04; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 28. **PR** no charge. **JE** D82, J41, L14. **KW** Moral Hazard. Renegotiation. Limited Liability. Debt. Contracts.

AB A moral hazard model with renegotiation is studied in which contracts must satisfy two natural restrictions, limited liability and monotonicity of payments. After he has chosen his effort, and before its consequence is realized, a risk averse entrepreneur (agent) may renegotiate his contract with a risk neutral investor (principal). Assuming the agent has the renegotiation bargaining power, a debt contract is the optimal initial contract.

McDaniel, Tanga

TI (1) Modelling RETAA Model of Forward Trading and the Balancing Mechanism and (2) Rebidding in the Balancing Mechanism: An Economic Analysis. **AU** Green, Richard; McDaniel, Tanga.

McDermott, C. John

PD March 2000. **TI** Concordance in Business Cycles. **AU** McDermott, C. John; Scott, Alasdair. **AA** Reserve Bank of New Zealand. **SR** International Monetary Fund Policy Working Paper: WP/00/37; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 29. **PR** not available. **JE** C14, E32. **KW** Concordance. Phase. Business Cycles. Time Series. Nonparametric Methods.

AB We study the properties of a test that determines whether two time series comove. The test computes a simple nonparametric statistic for "concordance," which describes the proportion of time that the cycles of two series spend in the same phase. We establish the size and power properties of this test. As an illustration, the procedures are applied to output series from selected major industrial countries. We find limited evidence of widespread concordance for these countries.

McGill, Ann L.

TI Taxonomic Versus Goal-Derived Product Categorization: Effects on Within and Across Category Choice Processes. **AU** Felcher, E. Marla; Malaviya, Prashant; McGill, Ann L.

McIntosh, Steven

TI Working on the Chain Gang? An Examination of Rising Effort Levels in Europe in the 1990s. **AU** Green, Francis; McIntosh, Steven.

McLean, Richard P.

PD January 2001. **TI** Information Size, Incentive Compatibility and the Core of a Game with Incomplete Information. **AU** McLean, Richard P.; Postlewaite, Andrew. **AA** McLean: Rutgers University. Postlewaite: University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 01/02; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 24. **PR** no charge. **JE** C70, D50, D82. **KW** Core. Incentive Compatibility. General Equilibrium. Asymmetric Information. Informational Size.

AB We examine the ex ante incentive compatible core, and show that generically, when agents are informationally small in the sense of McLean and Postlewaite (1999), the ex ante incentive compatible core is nonempty.

PD October 1999. **TI** Informational Size and Incentive Compatibility. **AU** McLean, Richard P.; Postlewaite, Andrew. **AA** McLean: Rutgers University. Postlewaite: University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 99/14; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 26. **PR** no charge. **JE** C70, D50, D82. **KW** Incentive Compatibility. General Equilibrium. Asymmetric Information. Mechanism Design. Informational Size.

AB We examine a general equilibrium model with asymmetrically informed agents. The presence of asymmetric information generally presents a conflict between incentive compatibility and Pareto efficiency. We present a notion of informational size and show that the conflict between incentive compatibility and efficiency can be made arbitrarily small if agents are sufficiently small informationally.

McVicar, Duncan

PD August 2000. **TI** Participation in Further Education in England and Wales: An Analysis of Post-War Trends. **AU** McVicar, Duncan; Rice, Patricia. **AA** McVicar: Queen's University of Belfast. Rice: University of Southampton. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 0014; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 29. **PR** On application; annual subscription 40 pounds. **JE** I21, J24. **KW** Human Capital. Educational Participation. Further Education. Cointegration.

AB The paper examines the time-series evidence relating to participation rates in further education in England and Wales, and uses cointegration analysis to identify a long-run statistical relationship in the data consistent with an augmented human-capital model. The recent rapid growth of participation is attributable largely to the improvements in GCSE attainment of

the last decade, coupled with the expansion of higher education. Fluctuations in labor demand play a significant role in determining movements in participation rates over time, and the substantial rise in youth unemployment of the early nineties was a contribution to the rapid growth of participation at this time.

PD November 1999. **TI** Economic Integration, Intensity of Competition and R&D Incentives. **AA** University of Southampton and Queen's University, Belfast. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 9914; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 39. **PR** On application; annual subscription 40 pounds. **JE** L11, L13, O32, O41. **KW** Integration. R&D. Competition. Scale Effects.

AB A two-country differentiated duopoly model is set out in which economic integration increases firms' incentives to invest in R&D, purely through the effect of increased intensity of competition between firms. The model is extended to incorporate knowledge spillovers, which, if related to the degree of integration, give rise to an inverted u-shaped relationship between R&D incentives and integration. The model is also extended to the n-firm general equilibrium case in which integration stimulates economic growth through intensity of competition. As such, the model suggests a positive growth effect of economic integration that does not rely on the usual scale effects.

Meadwell, Hudson

PD unavailable. **TI** Nations, States, Unions: Institutional Design and State-Breaking in the Developed West. **AA** McGill University. **SR** University of Western Ontario, Papers in Political Economy: 91; Department of Economics, University of Western Ontario, London, Ontario N6A 5C2, Canada. **PG** 34. **PR** no charge. **JE** D70, E61, F42, O51, P16. **KW** Institutions. Secession. Political Economy. Quebec. Consociational Federalism.

AB Most comparative analysis of nationalism argues that separation is difficult in the developed West. Quebec, however, has advanced farther toward independence than any other case. The author develops an explanation for this state that has two components: (1) The institutional design of the Canadian state encourages substate nationalist mobilization. (2) There are no overarching supranational political institutions in North America that might compensate for the centrifugal tendencies of territorially decentralized power sharing in Canada. The design of the Canadian state encourages secessionist challenges, and is not nested in a larger design that could encourage cohesion.

Mehra, Rajnish

TI Junior Can't Borrow: A New Perspective on the Equity Premium Puzzle. **AU** Constantinides, George M.; Donaldson, John B.; Mehra, Rajnish.

Menezes, Flavio

PD January 1999. **TI** Auctions of Identical Objects with Single-Unit Demands: A Survey. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 363; Department of Economics, Australian National University, Canberra ACT 0200, Australia. **PG** 22. **PR** no charge. **JE** D44.

KW Auctions. Identical Objects. Single-Unit Demands.

AB The theory of auctions of a single object generalizes to a situation where identical objects are sold either sequentially or simultaneously but individuals can only buy one object. In this context, I will present a survey of the main results regarding the ranking of auctions based on revenue, bidding behavior, effects of entry fees and reserve prices, and other strategic issues.

Meng, Xin

TI Dress for Success -- Does Primping Pay?
AU Hamermesh, Daniel S.; Meng, Xin; Zhang, Junsen.

Mengistae, Taye

PD 1998. **TI** Skill Formation and Job Matching Effects in Wage Growth: The Case of Manufacturing Workers in Ethiopia. **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/98/19; Centre for the Study of African Economies, University of Oxford, St. Cross Building, Manor Road, Oxford, OX1 3UL, England. Website: www.csae.ox.ac.uk/. **PG** 44. **PR** 3 pounds or \$5.00; subscription 55 pounds or \$88.00. **JE** J24, J31, J41, J63. **KW** Human Capital. Wage Growth. Labor Productivity. Job Matching. Job Turnover.

AB In this paper, I analyze production and labor market data from a random sample of manufacturing firms in Ethiopia in order to test for skill formation and job matching effects in wage growth. Based on estimated labor market experience and job seniority profiles of relative marginal productivity and relative wages, I find that both on- the-job skill formation and job matching are significant sources of the growth of productivity and wages with time in the labor market. However, there is also evidence in the same data that job matching is by far the more important of the two sources: net mobility gains are at least twice the return to skill formation for workers with at most ten years of time in the labor market.

PD 1998. **TI** Wage Rates and Job Queues: Does the Public Sector Overpay in Ethiopia? **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/98/20; Centre for the Study of African Economies, University of Oxford, St. Cross Building, Manor Road, Oxford, OX1 3UL, England. Website: www.csae.ox.ac.uk/. **PG** 45. **PR** 3 pounds or \$5.00; subscription 55 pounds or \$88.00. **JE** C34, J31, J42, J45. **KW** Wage Differentials. Public Sector. Segmented Labor Markets. Truncated Models. Censored Models.

AB In this paper I extend Lee's two-stage structural probit analysis in order to test and measure the existence and scope of a public sector job queue in Ethiopia. Recent urban household survey data reject the absence of job rationing in favor of an implicit queue of most private sector workers for public sector jobs. The queue is mainly due to the expectation of high public sector wage premiums. Controlling for individual differences in the expected sectoral wage differential, I find that skill is not a significant influence on the sector preference of a worker. Parental employment background and gender are. Public sector employers are cost minimizing agents in selecting from the queue: for a given wage rate, more skilled workers are more likely to be selected while, other things being equal, workers on the lower end of the public sector pay scale also have a greater chance of being selected.

Mercer-Blackman, Valerie

PD March 2000. **TI** Compliance with IMF Program

Indicators and Growth in Transition Economies. AU Mercer-Blackman, Valerie; Unigovskaya, Anna. AA International Monetary Fund. SR International Monetary Fund Policy Working Paper: WP/00/47; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 21. PR not available. JE E61, E63, F33, F43, P27. KW Performance Criteria. Structural Benchmark. Transition Economies. Growth. Initial Conditions.

AB This paper makes use of the IMF's Database for Monitoring Fund Arrangements (MONA) to investigate whether transition countries that more successfully implement the conditionality of IMF programs tend to show a better performance on recovery and growth. It is not possible to determine a clear-cut relationship between the index that determines the level of compliance with structural benchmarks in IMF programs and growth. However, the paper finds a definite, positive relationship between the index of compliance with performance criteria and growth, even after controlling for the extent of stabilization of the transition countries.

Merlo, Antonio

TI Endogenous Lobbying. AU Felli, Leonardo; Merlo, Antonio.

Metrick, Andrew

TI Bayesian Performance Evaluation. AU Baks, Klaas; Metrick, Andrew; Wachter, Jessica.

Meyer, Bruce D.

TI Trends in Self-Employment Among White and Black Men: 1910-1990. AU Fairlie, Robert W.; Meyer, Bruce D.

Michel, Philippe

TI Labor Force Participation and Unemployment. AU Belan, Pascal; Michel, Philippe.

Midgley, David F.

TI The Optimal Performance of the Global Firm: Formalizing and Extending the Integration-Responsiveness Framework. AU Devinney, Timothy M.; Midgley, David F.; Venaik, Sunil.

Mihov, Ilian

PD September 1999. TI The Economic Transition in Bulgaria: 1989-1999. AA INSEAD. SR INSEAD Working Paper: 99/60/EPS; 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 F33, N24, P41, P45. KW Bulgaria. Economic Transition. Development. Economic Reform.

AB This paper provides analysis of the key economic developments in Bulgaria over the period between 1989 and 1999. The key facts in the case of Bulgaria are: (1) delay of economic reform; (2) considerable decline in output; (3) series of financial crises; (4) introduction of a currency board with a comprehensive package of reforms in July 1997. These facts shape the discussion in the current paper around the following three questions: Why were reforms delayed? What are the mechanics of the financial and economic collapse? What are the challenges faced by policy-makers and how to deal with these challenges under the currency board constraint?.

Mini, Federico

TI Seasonality and Capacity: An Application to Italy. AU De Blasio, Guido; Mini, Federico.

Miravete, Eugenio J.

PD January 2001. TI Screening Through Bundling. AA University of Pennsylvania. SR University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 01/01; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: <http://www.econ.upenn.edu/CARESS>. PG 16. PR \$3.00 for U.S. and Canada; \$5.00 Foreign; make checks payable to University of Pennsylvania. JE C10, C50, D42, D82. KW Bundling. Convolution. Multidimensional Screening. Increasing Hazard Rate. Asymmetric Information.

AB This paper studies a class of multidimensional screening models where different type dimensions lie on the real line. The paper applies preservation results of totally positive functions to show that some critical properties of the distributions of asymmetric information parameters, such as increasing hazard rate, monotone likelihood ratio, and unimodality, are preserved under convolution and/or composition. Under some general conditions, these preservation results also provide a natural ordering of alternative screening mechanisms. These results explain the optimality of bundling solutions in a wide range of economic models based on distributional features of the informational parameters involved.

PD January 2001. TI On Preservation of Increasing Hazard Rate Under Convolution. AA University of Pennsylvania. SR University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 01/05; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: <http://www.econ.upenn.edu/CARESS>. PG 9. PR \$3.00 for U.S. and Canada; \$5.00 Foreign; make checks payable to University of Pennsylvania. JE C10, C50, D42, D82. KW Convolution. Increasing Hazard Rate. Log-Concavity. Asymmetric Information. Screening.

AB The increasing hazard rate (IHR) property of distributions of asymmetric information parameters plays a critical role in characterizing a separating Perfect Bayesian-Nash Equilibria in screening problems. This paper studies sufficient conditions on these distributions for IHR to be preserved under convolution. When different sources of asymmetric information aggregate into a single scalar, these preservation results prove very useful in designing alternative optimal mechanisms. The paper proves that if the distributions of all convoluting parameters are IHR the resulting distribution is also IHR. This result does not necessarily require that the corresponding densities have to be log-concave.

PD September 1999. TI Quantity Discounts for Taste-Varying Consumers. AA University of Pennsylvania and CEPR. SR University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 99/11; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. PG 41. PR no charge. JE D42, D82, L12, L96. KW Optional Nonlinear

Pricing. Quantity Discounts. Convolution Distributions. Frequency Functions. Increasing Hazard Rate.

AB When a monopolist asks consumers to choose a particular nonlinear tariff option, consumers do not completely know their type. Their valuations of the good and/or optimal quantity purchases are only fully realized after the optional tariff has been subscribed. In order to characterize the menu of optimal nonlinear tariffs when consumers' demands are stochastic, the author assumes that the distributions of the different components of consumers' types are log-concave to prove that the convolution distribution of these components is increasing hazard rate. This result, together with very weak assumptions on demand, ensures that the continuum of optional nonlinear tariffs is characterized by quantity discounts. The author tests the model nonparametrically using data directly linked to consumer types from the 1986 Kentucky telephone tariff experiment. He shows that the distribution of actual calls second order stochastically dominates the distribution of expected calls, which fully supports the suggested type-varying theoretical model. Finally, the author analyzes possible welfare effects of the introduction of optional tariffs and their relative expected profitability using the empirical distribution of consumer types in two local exchanges with differentiated calling patterns.

Miron, Jeffrey A.

PD May 1999. **TI** The Effect of Alcohol Prohibition on Alcohol Consumption. **AA** Boston University and NBER. **SR** National Bureau of Economic Research Working Paper: 7130; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** D12, I10, K40, L51, N40. **KW** Alcohol. Regulation. Prohibition. Consumption. Economic History.

AB This paper examines the impact of Prohibition on alcohol consumption. Since data on both the price and quantity of alcohol are unavailable during the Prohibition period, it is not possible to estimate Prohibition's impact on either the supply or demand for alcohol. Assuming the existence of a reasonable proxy for alcohol consumption, however, it is possible to estimate the net impact of Prohibition on the equilibrium quantity of alcohol consumed. The author estimates this effect under a range of assumptions about the nature of preferences, taking into account other possible determinants of alcohol consumption and the proxy series. The conclusion is that Prohibition exerted a modest and possibly even a positive effect on alcohol consumption. One possible interpretation of the results is that the demand for alcohol is relatively inelastic, although many earlier studies have found substantial elasticity. Another possible interpretation is that Prohibition created a forbidden fruit effect that increased preferences for alcohol, tending to offset the depressing effects of increased prices on demand. Still a third possibility is that Prohibition failed to raise alcohol prices substantially. Existing data provide some support for this last possibility.

Mitchell, Glenn

TI Adjustment Costs from Environmental Change Induced by Incomplete Information and Learning. **AU** Kelly, David L.; Kolstad, Charles D.; Mitchell, Glenn.

Mitchell, Matthew F.

TI Innovation Fertility and Patent Design.

AU Hopenhayn, Hugo A.; Mitchell, Matthew F.

Mitchell, Robert Cameron

TI Public Preferences Toward Environmental Risks: The Case of Trihalomethanes. **AU** Carson, Richard T.; Mitchell, Robert Cameron.

Mizon, Grayham E.

TI Modelling Economies in Transition: An Introduction. **AU** Hall, Stephen; Mizon, Grayham E.; Welfe, Aleksander.

TI On Selecting Policy Analysis Models by Forecast Accuracy. **AU** Hendry, David F.; Mizon, Grayham E.

TI Modelling Shifts in the Wage-Price and Unemployment-Inflation Relationships in Italy, Poland, and the UK. **AU** Marcellino, Massimiliano; Mizon, Grayham E.

Mody, Ashoka

TI Lending Booms, Reserves and the Sustainability of Short-Term Debt: Inferences From the Pricing of Syndicated Bank Loans. **AU** Eichengreen, Barry; Mody, Ashoka.

Mollgaard, H. Peter

TI Countervailing Power and Price Transparency. **AU** Hviid, Morten; Mollgaard, H. Peter.

PD December 1999. **TI** Market Transparency: A Mixed Blessing? **AU** Mollgaard, H. Peter; Overgaard, Per Baltzer. **AA** Mollgaard: CIE and Copenhagen Business School. Overgaard: CIE and University of Aarhus. **SR** University of Copenhagen, Centre for Industrial Economics Discussion Paper: 99/15; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. Website: www.econ.ku.dk/cie/wpmast.htm. **PG** 31. **PR** no charge. **JE** D18, D43, L13, L41. **KW** Market Transparency. Customer Switching. Repeated Oligopoly.

AB Antitrust practitioners and consumer protectionists often argue that market transparency should be improved to allow consumers to shop around for bargain prices thereby putting pressure on oligopolists' pricing. We model how transparency, interpreted as the comparability from the point of view of consumers of the characteristics of goods and services, affects the outcome of a repeated oligopoly. Improved transparency may make consumers switch suppliers more easily. This increases the static temptation of individual firms to deviate from tacitly agreed prices, but at the same time the future punishment may become more severe. When the number of firms is small, the "optimal degree of transparency" may not be perfect transparency, unless the oligopolists may rely on sophisticated, optimal punishment strategies. When the number of firms grows larger, the optimal degree of transparency increases, and from some point onward perfect transparency is optimal. We discuss the various policy implications of these results.

Monfort, Brieuc

PD March 2000. **TI** Using Credit Ratings for Capital Requirements on Lending to Emerging Market Economies: Possible Impact of a New Basel Accord. **AU** Monfort, Brieuc; Mulder, Christian. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/69; International Monetary Fund, 700 19th Street,

Washington, DC 20431. PG 28. PR not available. JE E32, E50, F34, G21, G28. KW Rating Agencies. Capital Requirements. Economic Crises. Emerging Markets. Lending.

AB The Basel Committee on Banking Supervision has proposed linking capital requirements for bank loans to ratings by commercial credit rating agencies. Estimates for 20 emerging market economies show that sovereign ratings react procyclically to crisis indicators. Ratings deteriorate if the real effective exchange rate depreciates, in contrast with the positive effect on overall debt service capacity depreciations are normally supposed to have. Simulations show that linking capital requirements to ratings would have drastically increased these requirements during the crisis periods after decreasing them in the run up to the crises. Simulations suggest modest efficiency gains of using sovereign credit ratings for capital requirements on emerging market lending.

Moon, Hyungsik Roger

TI How to Estimate Autoregressive Roots Near Unity. AU Phillips, Peter C. B.; Moon, Hyungsik Roger; Xiao, Zhijie.

Mora-Tavarez, Manuel

TI Leadership Effectiveness in Global Virtual Teams. AU Leidner, Dorothy; Kayworth, Timothy R.; Mora-Tavarez, Manuel.

Moran, Peter

TI Social Capital and Productive Exchange: Structural and Relational Embeddedness and Managerial Performance Link. AU Galunic, Charles; Moran, Peter.

Morris, Stephen

PD April 2000. TI Rethinking Multiple Equilibria in Macroeconomic Modeling. AU Morris, Stephen; Shin, Hyun Song. AA Morris: Yale University. Shin: Oxford University. SR Yale Cowles Foundation Discussion Paper: 1260; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. PG 21. PR no charge up to 3 papers; \$3.00 U.S.; 4.00 International. JE C72, E10. KW Multiple Equilibria. Macroeconomics. Common Knowledge.

AB Are beliefs as indeterminate as suggested by models with multiple equilibria? Multiplicity of equilibria arise largely as the unintended consequence of two modeling assumptions -- the fundamentals are assumed to be common knowledge, and economic agents know others' actions in equilibrium. Both are questionable. When others' actions are not known with certainty, such as when actions rely on noisy signals, self-fulfilling beliefs lead to a unique outcome determined by the fundamentals and the knowledge that others are rational. This paper illustrates this approach in the context of a model of bank runs and other similar applications. Such an approach places comparative statics and policy analyses on a firmer footing. It also suggests that public information has a disproportionately larger impact on the outcome than private information.

PD August 2000. TI Faulty Communication. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1271; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website:

www.cowles.econ.yale.edu/. PG 18. PR no charge up to 3 papers; \$3.00 U.S.; 4.00 International. JE C72, D82. KW Electronic Mail. Common Knowledge. Coordination.

AB The electronic mail game of Rubinstein (1989) showed that a lack of common knowledge generated by faulty communication could make coordinated action impossible. This paper shows how this conclusion is robust to having a more realistic timing structure of messages, more than two players who meet publicly but not as a plenary group, and strategic decisions about whether to communicate.

TI Does One Soros Make a Difference? A Theory of Currency Crises with Large and Small Traders. AU Corsetti, Giancarlo; Dasgupta, Amil; Morris, Stephen; Shin, Hyun Song.

TI Does One Soros Make a Difference? A Theory of Currency Crises with Large and Small Traders. AU Corsetti, Giancarlo; Dasgupta, Amil; Morris, Stephen; Shin, Hyun Song.

TI Repeated Games with Almost-Public Monitoring. AU Mailath, George J.; Morris, Stephen.

Mui, Vai-Lam

PD August 1998. TI Information, Civil Liberties, and the Political Economy of Witch-Hunts. AA University of Southern California. SR University of Western Ontario, Papers in Political Economy: 90; Department of Economics, University of Western Ontario, London, Ontario N6A 5C2, Canada. PG 41. PR no charge. JE B49, D78, D82, K49, Z00. KW Witch-Hunts. Asymmetric Information. Civil Liberties. Countervailing Action. Political Economy.

AB Drawing from an extensive literature on the European Witch-Hunt, McCarthyism, and the Chinese Cultural Revolution, this paper studies how differences in the level of civil liberties protection and the extent to which the leader has better information about the level of the alleged menace than the populace, together with other variables, jointly determine the incidence of witch-hunts. I develop a model showing that at any level of civil liberties protection, the incidence of illegitimate witch-hunts is higher when the leader enjoys an informational advantage than when he does not. This difference, however, is decreasing in the level of civil liberties protection. However, no amount of civil liberties protection is sufficient to prevent the occurrence of illegitimate witch-hunts, so long as the citizen has a concern for the menace, and the leader enjoys an informational advantage and finds the benefit from conducting a witch-hunt to be larger than his reputational loss.

Mulder, Christian

TI Using Credit Ratings for Capital Requirements on Lending to Emerging Market Economies: Possible Impact of a New Basel Accord. AU Monfort, Brieuc; Mulder, Christian.

Mulligan, Casey B.

PD May 1999. TI Microfoundations and Macro Implications of Indivisible Labor. AA University of Chicago and NBER. SR National Bureau of Economic Research Working Paper: 7116; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 39. PR \$5.00. JE E24, H20, J22, J41. KW Labor Supply. Labor Divisibility. Bunching. Public Finance.

AB I show that the "indivisible labor" models of Diamond and Mirrlees (1978, 1986), Hansen (1985), Rogerson (1988),

Christiano and Eichenbaum (1992), and many others are, when aggregated across persons with the same marginal utility of income, equivalent to the divisible labor model of Lucas and Rapping (1969); any data on aggregate hours and earnings generated by the divisible (indivisible) model can be generated by some parameterization of the indivisible (divisible) model. The same is true when "macro" data is obtained by aggregating over time and across people. This equivalence means that the indivisibility of labor *per se* does not have implications for macroeconomics. Nor does indivisibility have "aggregate" normative implications. I then build a micro model of the bunching of work in continuous time as the consequence of fixed costs and "fatigue effects." Only in a special case does the micro model have as its reduced form the indivisible labor model. In other cases, the bunching of work in time may have unique macro implications. Indivisible and bunching models of labor are shown to have implications for public finance.

PD May 1999. **TI** Gerontocracy, Retirement, and Social Security. **AU** Mulligan, Casey B.; Sala-I-Martin, Xavier. **AA** Mulligan: University of Chicago and NBER. Sala-I-Martin: Columbia University and NBER. **SR** National Bureau of Economic Research Working Paper: 7117; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 50. **PR** \$5.00. **JE** D72, D78, D91, H55, J26. **KW** Elderly. Political Processes. Interest Groups. Social Security. Retirement.

AB Why are the old politically successful? The authors build a simple interest group model in which political pressure is time-intensive, showing that in the political competitive equilibrium each group lobbies for government policies that lower their own value of time but that the old do so to a greater extent and as a result are net gainers from the political process. What distinguishes the elderly from other political groups is that they have lower labor productivity and/or that we are all likely to become elderly at some point, while we are relatively unlikely to change gender, race, sexual orientation, or even occupation. The model has a variety of implications for the design of social security programs, which the authors test using data from the Social Security Administration. For example, the model predicts that social security programs with retirement incentives are larger and that the old are more "single-minded" in their politics, implications which are verified using cross-country government finance data and cross-country political participation surveys. Finally, the authors show that the forced savings programs intended to "reform" the social security system may increase the amount of intergenerational redistribution.

PD May 1999. **TI** Social Security in Theory and Practice (I): Facts and Political Theories. **AU** Mulligan, Casey B.; Sala-I-Martin, Xavier. **AA** Mulligan: University of Chicago and NBER. Sala-I-Martin: Columbia University and NBER. **SR** National Bureau of Economic Research Working Paper: 7118; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 34. **PR** \$5.00. **JE** D72, D78, H21, H55, J26. **KW** Social Security. Public Pensions. Political Processes. Taxation. Retirement.

AB 166 countries have some kind of public old age pension. What economic forces create and sustain old age Social Security as a public program? The authors document some of the internationally and historically common features of Social Security programs including explicit and implicit taxes on labor

supply, pay-as-you-go features, intergenerational redistribution, benefits which are increasing functions of lifetime earnings and not means-tested. The authors partition theories of Social Security into three groups: "political", "efficiency" and "narrative" theories. The authors explore three political theories in this paper: the majority rational voting model (with its two versions: "the elderly as the leaders of a winning coalition with the poor" and the "once and for all election" model), the "time-intensive model of political competition" and the "taxpayer protection model". Each of the explanations is compared with the international and historical facts. A companion paper explores the "efficiency" and "narrative" theories, and derives implications of all the theories for replacing the typical pay-as-you-go system with a forced savings plan.

PD May 1999. **TI** Social Security in Theory and Practice (II): Efficiency Theories, Narrative Theories, and Implications for Reform. **AU** Mulligan, Casey B.; Sala-I-Martin, Xavier. **AA** Mulligan: University of Chicago and NBER. Sala-I-Martin: Columbia University and NBER. **SR** National Bureau of Economic Research Working Paper: 7119; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** \$5.00. **JE** D72, D78, H21, H55, J26. **KW** Social Security. Public Pensions. Political Processes. Taxation. Retirement.

AB What economic forces create and sustain old age Social Security as a public program? Mulligan and Sala-i-Martin (1999) document several of the internationally and historically common features of social security programs, and explore "political" theories of Social Security. This paper discusses the "efficiency theories," which view creation of the SS program as a full or partial solution to some market failure. Efficiency explanations of social security include the "SS as welfare for the elderly", the "retirement increases productivity to optimally manage human capital externalities", "optimal retirement insurance", the "prodigal father problem", the "misguided Keynesian", the "optimal longevity insurance", the "government economizing transaction costs", and the "return on human capital investment". The authors also analyze four "narrative" theories of social security: the "chain letter theory", the "lump of labor theory", the "monopoly capitalism theory", and the "Sub-but-Nearly-Optimal policy response to private pensions theory". The political and efficiency explanations are compared with the international and historical facts and used to derive implications for replacing the typical pay-as-you-go system with a forced savings plan.

Mulligan, James G.

PD February 2000. **TI** Preemption in the Adoption of Time-Saving Process Innovations: The Case of Down-Hill Skiing. **AU** Mulligan, James G.; Llinares, Emmanuel. **AA** University of Delaware. **SR** University of Delaware Department of Economics Working Paper: 00/01; Department of Economics, University of Delaware, Newark, DE 19716-2720. Website: www.be.udel.edu/Econ_site/Working_Papers.html. **PG** 26.

PR no charge. **JE** C70, D20, L20, L83, O33. **KW** Innovations. Diffusion. Game Theory. Stock Effects. Order Effects.

AB We report econometric results concerning the diffusion of high-speed detachable chairlifts in the United States that provide the first empirical support for game-theoretic explanations of stock and order effects on the diffusion process

of an innovation. Although the theoretical literature is based on the maintained assumption that new technology lowers the relative cost of producing the good or service and, eventually, the price of the good or service itself, we also show that an innovation in the speed of service can provide an incentive for a firm to differentiate its service relative to that of its competitors, even when these assumptions are not met. While the incentive to adopt the innovation is positively related to the number of local competitors, it is negatively related to the number of competitors who have already adopted. Our empirical results support this hypothesis.

PD December 1999. **TI** Peak-Load Pricing, Congestion, and Multiple Capacity Constraints With An Application to Down-Hill Skiing. **AU** Mulligan, James G.; Llinares, Emmanuel. **AA** University of Delaware. **SR** University of Delaware Department of Economics Working Paper: 99/10; Department of Economics, University of Delaware, Newark, DE 19716-2720. **Website:** www.be.udel.edu/Econ_site/Working_Papers.html. **PG** 30.

PR no charge. **JE** D24, D41, L80. **KW** Congestion. Capacity Constraints. Services. Stochastic Demand. Peak-Load Pricing.

AB We provide a theoretical model of congestion for competitive service firms subject to multiple capacity constraints. While the modeling approach presented in this paper is applicable to any competitive service market subject to stochastic demand and congestion, we illustrate the empirical relevance of the modeling approach to the pricing behavior of ski areas.

Murnane, Richard J.

PD June 1999. **TI** Who Benefits from Obtaining a GED? Evidence from High School and Beyond. **AU** Murnane, Richard J.; Willett, John B.; Tyler, John H. **AA** Murnane: Harvard University and NBER. Willett: Harvard University. Tyler: Brown University. **SR** National Bureau of Economic Research Working Paper: 7172; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **Website:** www.nber.org. **PG** 62. **PR** \$5.00. **JE** I21, J24. **KW** Credentials. Labor Market Value. Education.

AB This paper examines the value of the GED credential and the conventional high school diploma in explaining the earnings of 27-year-old males in the early 1990s. The data is the High School & Beyond sophomore cohort. We replicate the basic findings of prior studies that implicitly assume the labor market value of the GED credential does not depend on the skills with which dropouts left school. We show that these average effects mask a more complicated pattern. Obtaining a GED is associated with higher earnings at age 27 for those male dropouts who had very weak cognitive skills as tenth graders, but not for those who had stronger cognitive skills as tenth graders.

Nadiri, M. Ishaq

PD April 1999. **TI** Dynamic Factor Demand Models and Productivity Analysis. **AU** Nadiri, M. Ishaq; Prucha, Ingmar R. **AA** Nadiri: New York University and NBER. Prucha: University of Maryland. **SR** National Bureau of Economic Research Working Paper: 7079; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **Website:** www.nber.org. **PG** 88. **PR** \$5.00. **JE** C59, D24, O33, O47. **KW** Dynamic Factor Demand. Productivity Growth. Divisia Index Method.

AB In this paper we discuss recent advances in modeling and estimating dynamic factor demand models, and review the use of such models in analyzing the production structure, the determinants of variable and quasi-fixed factors, and productivity growth. The paper also discusses the traditional approach to productivity analysis based on the Divisia index number methodology. Both approaches may be seen as being complementary. The conventional index number approach will measure the rate of technical change correctly if certain assumptions about the underlying technology of the firm and output and input markets hold. However, if the underlying assumptions do not hold, then the conventional index number approach will, in general, yield biased estimates of technical change. The econometric approach based on general dynamic factor demand models allows for a careful testing of various features of a postulated model. The paper provides both a review of recent methodology developed for the specification and estimation of dynamic factor demand models, as well as a review of recent applications.

Nagayasu, Jun

PD March 2000. **TI** Currency Crisis and Contagion: Evidence from Exchange Rates and Sectoral Stock Indices of the Philippines and Thailand. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/39; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 12. **PR** not available. **JE** F31, F32, F36. **KW** Asian Financial Crisis. Contagion. Currency Crises. Exchange Rates. Economic Integration.

AB This paper analyzes empirically the recent Asian financial crisis using high frequency data of exchange rates and stock indices of the Philippines and Thailand. Utilizing standard time-series techniques, this study confirms that there is evidence that developments in some sectoral indices -- including those of banking and financial sectors -- seem to have caused upward pressure on exchange rates. A correlation between some of these variables is also found to be strong across countries in the crisis period, thereby confirming the importance of the linkages between financial markets as a transmission channel of the Thai crisis to the Philippines.

Naja, Rafic

TI Effective Real Exchange Rates and Irrelevant Nominal Exchange-Rate Regimes. **AU** Kent, Christopher; Naja, Rafic.

Nannerup, Niels

TI Information Structure and the Tragedy of the Commons in Resource Extraction. **AU** Amir, Rabah; Nannerup, Niels.

Neary, J. Peter

PD July 2000. **TI** R&D in Developing Countries: What Should Governments Do? **AA** LSE and University College Dublin. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 464; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. **Website:** http://cep.lse.ac.uk. **PG** 8. **PR** 5 pounds. **JE** F12, F13, L52, O31, O38. **KW** Research and Development. Spillovers. Joint Ventures. Industrial Policy. Absorptive Capacity.

AB I consider the implications of recent research for R&D policy in developing countries. Typical new growth models, which assume free entry and no strategic behavior by R&D

producers, are less appropriate for policy guidance than strategic oligopoly models. But the latter have ambiguous implications for targeted R&D subsidies, and caution against the anti-competitive effects of research joint ventures. A better policy is to raise the economy-wide level of research expertise. This avoids the need for governments to pick winners, is less prone to capture, and dilutes the strategic disincentive to undertake R&D with un-appropriable spillovers.

Neumann, Michael H.

TI Exact Asymptotics for Nonparametric Density Estimation from Dependent Data. **AU** Butucea, Cristina; Neumann, Michael H.

Neumark, David

PD June 1999. **TI** The Employment Effects of Recent Minimum Wage Increases: Evidence from a Pre-Specified Research Design. **AA** Michigan State University and NBER. **SR** National Bureau of Economic Research Working Paper: 7171; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 20. **PR** \$5.00. **JE** J31, J38. **KW** Minimum Wage. Employment. Unemployment. Disemployment.

AB This paper presents evidence on the employment effects of recent minimum wage increases from a pre-specified research design that entailed committing to a detailed set of statistical analyses prior to "going to" the data. Despite the limited data to which the pre-specified research design can be applied, evidence of disemployment effects of minimum wages is often found where we would most expect it - for younger, less-skilled workers.

Nickell, Stephen

TI Wage Equations, Wage Curves and All That. **AU** Bell, Brian; Nickell, Stephen; Quintini, Glenda.

PD November 2000. **TI** A Picture of Job Insecurity Facing British Men. **AU** Nickell, Stephen; Jones, Tracy; Quintini, Glenda. **AA** Nickell and Quintini: CEP. Jones: Vassar College. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 479; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. **PG** 29. **PR** 5 pounds. **JE** J16, J23, J31, J63, J64. **KW** Job Insecurity. Wages. Unemployment. Tenure.

AB This paper considers three aspects of the job insecurity facing British men in the last two decades. The probability of becoming unemployed, the costs of unemployment in terms of real wage losses and the probability that the continuously employed will experience substantial real wage losses. The first of these has not risen in the last two decades, the second has risen by around 50 percent and the third has risen, particularly for the top skill groups.

Nilssen, Tore

PD April 2000. **TI** TV Advertising, Program Quality, and Product-Market Oligopoly. **AU** Nilssen, Tore; Sorgard, Lars. **AA** Nilssen: University of Oslo. Sorgard: Norwegian School of Economics and Business Administration. **SR** University of California, Santa Barbara, Working Papers in Economics: 00/06; Department of Economics, Working Paper Coordinator.

University of California, Santa Barbara. Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. **PG** 44. **PR** no charge for domestic orders; for non-U.S. orders, U.S. \$3 per paper, personal check or money order made out to "Regents of the University of California". **JE** D43, L13, L82, M37. **KW** Advertising. Programming. Oligopoly. Television.

AB We present a model of the TV-advertising market that encompasses both the product markets and the market for TV programs. We argue that the TV industry has several idiosyncratic characteristics that need to be modeled, and show that the strategic interaction in this industry differs from other industries in many respects. We find that a move from a TV monopoly to a TV duopoly may reduce both the total number of viewers and the total amount of TV advertising. A softening of price competition in each product market results in more investment in program quality, higher price per advertising slot, and more advertising. A reduction of the number of firms in each product market may have the opposite effect if the price competition in the product market is sufficiently soft initially. Finally, we find that even small asymmetries between product markets can cause large asymmetries with respect to which producers buy advertising on TV.

Nolan, Charles

TI Inflation Targeting, Transparency and Interest Rate Volatility: Ditching "Monetary Mystique" in the UK. **AU** Chadha, Jagjit S.; Nolan, Charles.

Novaes, Walter

TI Sharing of Control as a Corporate Governance Mechanism. **AU** Gomes, Armando; Novaes, Walter.

Nyblom, Jukka

PD January 1999. **TI** Tests of Common Stochastic Trends. **AU** Nyblom, Jukka; Harvey, Andrew. **AA** Nyblom: University of Joensuu, Finland. Harvey: University of Cambridge. **SR** University of Cambridge, DAE Working Paper: 9902; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. **PG** 15. **PR** US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. **JE** C12, C32. **KW** Co-Integration. Cramer-Von Mises. Locally Best. Time Series. Stochastic Volatility. Structural Time-Series. Unobserved Components.

AB This paper is concerned with tests in multivariate time series models made up of random walk (with drift) and stationary components. When the stationary component is white noise, a Lagrange multiplier test of the hypothesis that the covariance matrix of the disturbances driving the multivariate random walk is null is shown to be locally best invariant, something that does not automatically follow in the multivariate case. The main contribution of the paper is to propose a test of the validity of a specified value for the rank of the covariance matrix of the disturbances driving the multivariate random walk. This rank is equal to the number of common trends, or levels, in the series. The test is very simple insofar as it does not require any models to be estimated, even if serial correlation is present. Its use with real data is illustrated in the context of a stochastic volatility model and the relationship with tests in the co-integration literature is discussed.

O'Connell, Stephen A.

PD 1999. **TI** Aid Intensity in Africa. **AU** O'Connell, Stephen A.; Soludo, Charles C. **AA** O'Connell: Swarthmore College and CSAE, University of Oxford. Soludo: University of Nigeria. **SR** Centre for the Study of African Economies Working Paper: WPS/99/03; Centre for the Study of African Economies, University of Oxford, St. Cross Building, Manor Road, Oxford, OX1 3UL, England. **Website:** www.csae.ox.ac.uk/. **PG** 31. **PR** 3 pounds or \$5.00; subscription 55 pounds or \$88.00. **JE** F35, O19. **KW** Foreign Aid. Africa. Development.

AB The countries of Sub-Saharan Africa are disproportionately among those receiving the most foreign aid per capita in the world. In this paper we assess the intensity of aid flows to African countries, defined as the size of these flows relative to the categories of economic activity they are designed to support. In the process we provide a critical overview of standard measures of aid and place the flows currently being received by African countries in a cross-country and intertemporal perspective. We draw examples throughout from Botswana, Burkina Faso, Cameroon, Mali, Mozambique, Uganda and Zambia - seven countries whose aid experience spans that of Sub-Saharan Africa and will subsequently be the subject of intensive study.

TI Aid Dependence Reconsidered. **AU** Azam, Jean-Paul; Devarajan, Shantayanan; O'Connell, Stephen A.

O'Regan, James

PD October 1997. **TI** Internationalisation and Pricing Behaviour: Some Evidence for Australia. **AU** O'Regan, James; Wilkinson, Jenny. **AA** Reserve Bank of Australia. **SR** Reserve Bank of Australia Research Discussion Paper: 9707; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. **Website:** http://www.rba.gov.au. **PG** 29. **PR** no charge. **JE** E31, F41. **KW** Internalization. Relative Prices. Pricing Behavior. Manufacturing Industry.

AB Standard trade theory suggests that internationalisation of an economy should lead to increased competitive pressures and an improvement in the efficiency with which domestic goods are produced and priced. We examine a number of ways in which the pricing behavior of the Australian manufacturing industry has changed over the past couple of decades, and relate this to the substantial opening up of the economy that has occurred. Using disaggregated industry-level data, we find evidence that, when measured in the same currency, prices of Australian-produced goods have fallen relative to foreign-produced goods in many of Australia's manufacturing industries. We attribute this, in part, to increased international competition driving inefficient domestic producers from the market. We also find, not surprisingly, that domestic price setters tend to be more sensitive to changes in foreign prices in the traded sector than in the non-traded sector, and that the more open the industry the higher the sensitivity to foreign prices.

O'Sullivan, Mary

PD January 2000. **TI** Pension Fund Socialism or Plus ca Change...? Corporate Governance and Retirement Provision in the United States. **AA** INSEAD. **SR** INSEAD Working Paper: 2000/01/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** D91, J54. **KW** Pension Funds. Retirement Incomes. Mutual Funds.

AB The fact that employees of US business and government, through their pension funds, control major shares of the equity of the nation's corporations has given rise to the claim that the US is a truly socialist country. This article documents the emergence of employer-based pension funds in the US in the postwar decades and considers the changing balance between risk and reward that has resulted from developments in employer-based pension provision in the 1980's and 1990's. The article also considers the relationship between developments in the system of pension provision, and the financial sector of the US economy more generally, and the transformation of US corporate governance that has occurred in the 1980's and 1990's. The implications of these developments are analyzed. Contrary to the view that these developments represent a form of socialist worker control, investors, not to mention US households, are a long way from exerting significant control over the allocation of corporate resources. Corporate executives may well be singing the song of the ideology of shareholder democracy but they also largely control the music.

PD October 1999. **TI** Corporate Governance and Globalization. **AA** INSEAD. **SR** INSEAD Working Paper: 99/71/SM; INSEAD, Research and Development, Boulevard de Constance, 77305 Fontainebleau Cedex, France. **Website:** www.insead.fr/research. **PG** 53. **PR** no charge up to five copies; after five copies 18FF per working paper plus postage and VAT. **JE** G32, G38. **KW** Corporate Governance. Globalization. Shareholder Value. Institutional Investors.

AB There are growing pressures for national systems of corporate governance to converge that are allegedly being generated by the process of globalization, especially the global integration of financial markets. Drawing on the examples of the US, Germany, and France, I argue that considerable change has indeed occurred in national governance systems. These changes cannot be understood, however, as the outcome of a market-driven, efficiency enhancing process that is autonomous of political interests. Rather realignments in corporate governance reflect the growing economic and political power of those who have accumulated financial assets, a trend that is closely related to the extent of population ageing and the social arrangements for pension provision in domestic economies as I show in the cases of the US and Germany. Developments in the US and Britain, have generated international pressures for change in corporate governance systems. As I illustrate with the case of France, an analysis of the structure of interests in the domestic corporate economy is also an important prerequisite for understanding the effects of these international pressures.

Obara, Ichiro

TI Belief-Based Equilibria in the Repeated Prisoners' Dilemma with Private Monitoring. **AU** Bhaskar, V.; Obara, Ichiro.

TI The Maximum Efficient Equilibrium Payoff in the Repeated Prisoners' Dilemma. **AU** Mailath, George J.; Obara, Ichiro; Sekiguchi, Tadashi.

PD September 1999. **TI** The Repeated Prisoner's Dilemma with Private Monitoring: A N-player Case. **AA** University of Pennsylvania. **SR** University of

Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 99/13; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: <http://www.econ.upenn.edu/CARESS>. PG 23. PR \$3.00 for U.S. and Canada; \$5.00 Foreign; make checks payable to University of Pennsylvania. JE C73, D82. KW Private Monitoring. Repeated Games. Grim Trigger Strategy. Prisoner's Dilemma. Game Theory.

AB This paper studies the repeated prisoner's dilemma with private monitoring for an arbitrary number of players. It is shown that a mixture of a grim trigger strategy and permanent defection can achieve an almost efficient outcome for some range of discount factors if private monitoring is almost perfect and the number of players is large. This result also holds when the number of players is two for any prisoner's dilemma as long as monitoring is almost perfect and symmetric. A detailed characterization of this sequential equilibrium is provided.

Onculer, Ayse

TI Status as a Valued Resource. AU Huberman, Bernardo A.; Loch, Christoph H.; Onculer, Ayse.

Orne, Chris

TI The Statistical Relationship Between Bivariate and Multinomial Choice Models. AU Weeks, Melvyn; Orne, Chris.

Osborne, Evan

TI Truth and the Legal Battle. AU Hirshleifer, Jack; Osborne, Evan.

Overgaard, Per Baltzer

TI Market Transparency: A Mixed Blessing?
AU Mollgaard, H. Peter; Overgaard, Per Baltzer.

Overman, Henry G.

PD November 2000. **TI** Neighbourhood Effects in Small Neighbourhoods. **AA** LSE and CEPR. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 481; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. PG 12. PR 5 pounds. JE I21, I28, J23, R10. KW Neighborhood Effects. Education. Labor Markets. Dropout Rates.

AB This paper uses data on a sample of Australian teenagers to test for neighborhood effects on school dropout rates. The data allows us to test for neighborhood effects at two different spatial scales. We find that educational composition of the larger neighborhood can influence the dropout rate. We argue that this is most likely to reflect the structure of local labor market demand. We also find that low socio-economic status of the immediate neighborhood has an adverse impact on dropout rates. This suggests that government policy may need to consider the socio-economic composition of quite small geographical areas if it considers interfering in the market to create greater income mixing within neighborhoods. First Proof CUP259.rtf Aug 7, 2001 log748.rtf -- log751.

Owens, Trudy

PD 1999. **TI** Investing in Development or Investing in Relief: Quantifying the Poverty Tradeoffs Using Zimbabwe

Household Panel Data. AU Owens, Trudy; Hoddinott, John. AA CSAE, University of Oxford and IFPRI, Washington D.C. SR Centre for the Study of African Economies Working Paper: WPS/99/04; Centre for the Study of African Economies, University of Oxford, St. Cross Building, Manor Road, Oxford, OX1 3UL, England. Website: www.csae.ox.ac.uk/. PG 44. PR 3 pounds or \$5.00; subscription 55 pounds or \$88.00. JE F35, I32, O12, O19. KW Foreign Aid. Cost-Effectiveness. Poverty. Zimbabwe.

AB This paper examines the implications for the poor of the substantial shift in bilateral ODA since the 1980s towards emergency aid and away from development assistance. It does so by simulating the opportunity cost of such a shift in terms of foregone poverty reduction. Using household panel data for Zimbabwe we find that substituting bilateral aid in physical and human capital, in the place of drought relief, causes poverty to fall in non-drought years. Further, such improvements in well-being are achieved without households necessarily being made worse off during a drought year. These results suggest that for the households in this sample, there is a significant opportunity cost associated with the shift in external aid resources from development to emergency assistance.

Owyang, Michael

PD January 2001. **TI** Regime Switching and Monetary Policy Measurement. AU Owyang, Michael; Ramey, Garey. AA Owyang: Federal Reserve Bank of St. Louis. Ramey: University of California, San Diego. SR University of California, San Diego, Department of Economics Working Paper: 2001/03; Department of Economics, 0508, University of California, San Diego, La Jolla, CA 92093-0508. Website: <http://econ.ucsd.edu/papers>. PG 15. PR \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. JE E42, E52. KW Regime Switching. Monetary Policy. Phillips Curve. Gibbs Sampling.

AB This paper applies regime switching methods to the problem of measuring monetary policy. Policy preferences and structural factors are specified parametrically as independent Markov processes. Interaction between the structural and preference parameters in the policy rule serves to identify the two processes. The estimates uncover policy episodes that are initiated by switches of "dove regimes," shown to Granger cause both NBER recessions and the Romer dates. These episodes imply real effects of monetary policy that are smaller than those found in previous studies.

Palamara, Jorge R.

TI Control Games and Organizations. AU Shapley, Lloyd S.; Palamara, Jorge R.

TI Simple Games and Authority Structures. AU Shapley, Lloyd S.; Palamara, Jorge R.

Palia, Darius N.

TI Understanding the Determinants of Managerial Ownership and the Link Between Ownership and Performance. AU Himmelberg, Charles P.; Hubbard, R. Glenn; Palia, Darius N.

Paris, Remi

TI The Complier Pays Principle: The Limits of Fiscal Approaches Toward Sustainable Forest Management. AU Leruth, Luc; Paris, Remi; Ruzicka, Ivan.

Pastor, Lubos

TI Asset Pricing Models: Implications for Expected Returns and Portfolio Selection. **AU** MacKinlay, A. Craig; Pastor, Lubos.

Patilea, Valentin

TI Optimal Smoothing in Semiparametric Index Approximation of Regression Functions. **AU** Delecroix, Michel; Hristache, Marian; Patilea, Valentin.

Pattillo, Catherine

TI Terms of Trade Shocks in Africa: Are They Short-Lived or Long-Lived? **AU** Cashin, Paul; Pattillo, Catherine.

Pavlova, Anna

TI On Trees and Logs. **AU** Cass, David; Pavlova, Anna.

PD February 1999. **TI** Adjustment Costs, Learning-By-Doing, and Technology Adoption Under Uncertainty. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 99/07; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **Website:** www.econ.upenn.edu/CARESS. **PG** 25. **PR** no charge. **JE** D24, D81, D92, L23, O33. **KW** Technological Change. Vintage Capital. Optimal Scrapping. Learning- By-Doing. Adjustment Costs.

AB We consider a variety of vintage-capital models of a firm's choice of technology under uncertainty in the presence of adjustment costs and technology-specific learning. Similar models have been studied in a deterministic setting. Part of our objective is to examine the robustness of the implications of the certainty models to uncertainty. Our analysis highlights the role of the specification of costs of adjustment: if an adjustment cost comes only in terms of accumulated technology-specific expertise (cf. Parente (1994)), we prove that the implications are robust for a variety of specifications of the firm's production function, however, once a cost paid in units of the produced good is introduced, predictions of an uncertainty model become increasingly different as uncertainty increases. Tractability of our models allows us to disentangle the effects of the models' assumptions, provide characterization of optimal policies, demonstrate the impact of uncertainty on the frequency of technology adoptions and growth in the economy, and present comparative statics.

Peleg, Bezalel

TI Representation of Effectivity Functions in Coalition Proof Nash Equilibrium: A Complete Characterization. **AU** Keiding, Hans; Peleg, Bezalel.

TI Stable Voting Procedures for Committees in Economic Environments. **AU** Keiding, Hans; Peleg, Bezalel.

Penard, Thierry

PD May 1999. **TI** Collusion et politique de la concurrence en information asymetrique. **AU** Penard, Thierry; Souam, Said. **AA** Penard: ENST Bretagne. Souam: Universite de Besancon. **SR** Document de Travail du CREST: 9926; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. **Website:** www.ensae.fr/crest.

PG 16. **PR** no charge. **JE** D21, L41. **KW** Antitrust Policy. Asymmetric Information. Collusion Detection. Collusion Deterrence. Cost Shocks.

AB The aim of this paper is to characterize the optimal antitrust policy against price-fixing when competition authorities imperfectly observe an industry's production costs. We consider an industry, which, at the sequel of shocks in costs, wants to collude. The authorities can deter this behavior by investigating the industry. The analysis shows that since investigation is costly, it is optimal from a welfare point of view to tolerate some degree of collusion. We also give a general characterization of the optimal policy. Moreover, we show that the investigations toughness do vary with the nature of costs shocks, the market characteristics and the easiness of collusion detection. These results enable us to establish some principles of action regarding price variations.

Perez-Castrillo, David

TI Auditing with Signals. **AU** Macho-Stadler, Ines; Perez-Castrillo, David.

PD August 1999. **TI** Auditing Cost Overrun Claims. **AU** Perez-Castrillo, David; Riedinger, Nicolas. **AA** Perez-Castrillo: CIE, University of Copenhagen and Universitat Autònoma de Barcelona. Riedinger: ENSAE, Paris. **SR** University of Copenhagen, Centre for Industrial Economics Discussion Paper: 99/12; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. **Website:** www.econ.ku.dk/cie/wpmast.htm. **PG** 30. **PR** no charge. **JE** D82, H57, L15, L50. **KW** Cost Overruns. Auditing. Procurement. Private Information. Product Quality.

AB We consider a cost-reimbursement or a cost-sharing procurement contract between the administration and a firm. The firm privately learns the true cost overrun once the project has started and it can manipulate this information. We characterize the optimal auditing policy of cost overrun claims as a function of the initial contractual payment, the share of the cost overrun paid by the administration, the cost and the accuracy of the auditing technology, and the penalty rate that can be imposed on fraudulent firms. We also show that this possibility of misreporting reduces the set of projects carried out and biases the choice of the quality level of those projects that the administration carries out.

Perotti, Roberto

TI Fiscal Policy, Profits, and Investment. **AU** Alesina, Alberto; Ardagna, Silvia; Perotti, Roberto; Schiantarelli, Fabio.

TI Fiscal Policy, Profits, and Investment. **AU** Alesina, Alberto; Ardagna, Silvia; Perotti, Roberto; Schiantarelli, Fabio.

Perrot, Anne

TI Allocating and Funding Universal Service Obligations in a Competitive Network Market. **AU** Chone, Philippe; Flochel, Laurent; Perrot, Anne.

Persico, Nicola

TI The Drawbacks of Electoral Competition. **AU** Lizzeri, Alessandro; Persico, Nicola.

PD February 2001. **TI** Racial Fairness and Effectiveness of Policing. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research

in Economics and Social Science (CARESS) Working Paper: 01/09; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104- 6297. Website: www.econ.upenn.edu/CARESS. PG 27. PR \$3.00 for U.S. and Canada; \$5.00 Foreign; make checks payable to University of Pennsylvania. JE C14, D82, J71, K14, K42. KW Racial Fairness. Policing. Racial Profiling. Crime. Law Enforcement.

AB Citizens of two racial groups choose whether to engage in illegal activities, and police audit citizens. Citizens are heterogeneous according to legal earning opportunities, which are distributed differently across groups. We define fairness of policing as policing groups with the same intensity, and effectiveness of interdiction as reducing the amount of crime. We show that sometimes, forcing the police to behave more fairly can increase effectiveness of interdiction, and give exact conditions under which this is so. These conditions are based on the distributions of legal earning opportunities in the two groups, and are expressed as constraints on the QQ plot of these distributions. Legal earning opportunities are not observable for those citizens who become criminals. However, we give conditions under which the QQ plot of legal earning opportunities equals the QQ plot based on reported income distributions (which are observable). We also discuss whether our notion of fairness is meaningful when the cost of being searched reflects the shame of being singled out by the police.

TI Racial Bias in Motor Vehicle Searches: Theory and Evidence. AU Knowles, John; Persico, Nicola; Todd, Petra.

PD August 1999. TI Consensus and the Accuracy of Signals: Optimal Committee Design with Endogenous Information. AA University of Pennsylvania. SR University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 99/08; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104- 6297. Website: www.econ.upenn.edu/CARESS. PG 20. PR no charge. JE D71, D72, D82, D83, H41. KW Committees. Juries. Information Acquisition. Unanimity. Public Goods.

AB We present a model of private production of information in collective decision making. Agents gather costly information, and then aggregate it to produce a collective decision. Because information is a public good, it will be underprovided relative to the social optimum. A "good" mechanism must then give incentives to acquire information, as well as aggregate information efficiently. We characterize the voting mechanism that produces the most informed decision. We obtain a necessary condition for the optimal voting rule to be "consensual". i.e. close to unanimity or veto power: a consensual voting rule can be optimal only if the information available to each agent is sufficiently accurate. This condition is independent of the preferences of voters and of the cost of information, and links the voting rule to the quality of information available to agents. Our results are robust to introducing heterogeneity of agents.

Pesaran, M. Hashem

TI Estimation and Inference in Short Panel Vector Autoregressions with Unit Roots and Cointegration. AU Binder, Michael; Hsiao, Cheng; Pesaran, M. Hashem.

TI Forecast Uncertainties in Macroeconometric Modelling:

An Application to the UK Economy. AU Garratt, Anthony; Lee, Kevin; Pesaran, M. Hashem; Shin, Yongcheol.

TI The Cost Efficiency of UK Debt Management: A Recursive Modelling Approach. AU Coe, Patrick; Pesaran, M. Hashem; Vahey, Shaun P.

TI Neglected Heterogeneity and Dynamics in Cross-Country Savings Regressions. AU Haque, Nadeem U.; Pesaran, M. Hashem; Sharma, Sunil.

PD February 1999. TI Bounds Testing Approaches to the Analysis of Long-Run Relationships. AU Pesaran, M. Hashem; Shin, Yongcheol; Smith, Richard J. AA Pesaran: University of Cambridge. Shin: University of Edinburgh. Smith: University of Bristol. SR University of Cambridge, DAE Working Paper: 9907; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. PG 23. PR US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. JE C12, C22, C32. KW Long-Run Relationship. Unrestricted ECM. Cointegration. Unit Roots. Bounds Tests.

AB This paper develops a new approach to the problem of testing the existence of a long-run level relationship between a dependent variable and a set of regressors, when it is not known with certainty whether the underlying regressors are trend- or first-difference stationary. The proposed tests are based on standard F- and t-statistics used to test the significance of the lagged levels of the variables in a first- difference regression. Two sets of asymptotic critical values are provided which give a band covering all possible classifications of the regressors into I(0), I(1) or mutually cointegrated. Accordingly, various bounds testing procedures are proposed. The empirical relevance of the bounds procedures is demonstrated by a re-examination of the earnings equation included in the UK Treasury macro-econometric model.

TI Economic and Statistical Measures of Forecast Accuracy. AU Granger, Clive W. J.; Pesaran, M. Hashem.

PD September 1999. TI Non-Nested Hypothesis Testing: An Overview. AU Pesaran, M. Hashem; Weeks, Melvyn. AA University of Cambridge. SR University of Cambridge, DAE Working Paper: 9918; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. PG 30. PR US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. JE C12, C21, C22, C52. KW Non-Nested Hypotheses. Model Selection. Cox's Test. Encompassing. Stochastic Simulation. Kullback-Leibler. Divergence Measure.

AB In econometric analysis, non-nested models arise naturally when rival economic theories are used to explain the same phenomenon, such as unemployment, inflation or output growth. The authors examine the problem of hypothesis testing when the models under consideration are "non-nested" or belong to "separate" families of distributions in the sense that none of the individual models may be obtained from the remaining, either by imposition of parameter restrictions or through a limiting process. Although the primary focus is on non-nested hypothesis testing, the authors briefly discuss the problem of model selection and the differences and similarities between the two approaches. By using the linear regression model as a convenient framework, the authors examine three

broad approaches to non-nested hypothesis testing the modified (centered) long-likelihood ratio procedure, the comprehensive models approach, and the encompassing procedure. Finally, they consider a number of practical problems that arise in the application of non-nested tests to non-linear models such as the probit and logit qualitative response models.

PD December 1999. **TI** On Aggregation of Linear Dynamic Models. **AA** University of Cambridge. **SR** University of Cambridge, DAE Working Paper: 9919; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. **PG** 24. **PR** US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. **JE** C10, C43, D91, E21. **KW** Aggregation. Heterogeneous Dynamic Models. Long Memory. Life Cycle Models Under Habit Formation.

AB This paper provides a general framework for aggregating linear dynamic models by deriving the aggregate model as an optimal prediction of the aggregate variable of interest with respect to an aggregate information set generated by current and past values of available aggregate observations. The paper shows how the results in the literature can be readily obtained using the proposed forecasting approach, and provides a number of important extensions and generalizations. In particular, it does not require the assumption of independence of the micro distributed lag coefficients, and establishes that in general the long-run coefficients obtained from the optimal aggregate relation are equal to the averages of the long-run coefficients from the micro relations. Finally, the approach advocated in the paper is applied to aggregation of life-cycle decision rules under habit formation, and the implications of the heterogeneity in habit formation coefficients across individuals for the analysis of aggregate consumption are investigated.

Peterson, Willis

PD November 1998. **TI** Monetary Instability and Economic Growth. **AA** University of Minnesota. **SR** University of Minnesota Economic Development Center Bulletin: 98/06; Department of Economics, 1035 Management and Economics Building, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. Website: <http://www.econ.umn.edu/econlib>. **PG** 31. **PR** no charge. **JE** E31, O23. **KW** Monetary Policy. Money Supply. Economic Growth. Capital.

AB Favorable conditions existed for world economic growth during the 1980s and early 1990s. Yet real GDP growth rates for 76 out of 87 countries included in this study decreased during this time, relative to the 1968-80 period. The middle income countries experienced the greatest decline in growth rates, followed by the low income group. Theory and evidence suggest that an increase in the instability of the growth rate of the money supply, largest in the middle income countries and next largest in the low income nations, contributed to this decline.

Petrie, Murray

TI A Framework for Assessing Fiscal Vulnerability. **AU** Hemming, Richard; Petrie, Murray.

Petrongolo, Barbara

PD September 2000. **TI** Looking Into the Black Box: A Survey of the Matching Function. **AU** Petrongolo, Barbara;

Pissarides, Christopher A. **AA** Petrongolo: CEP, LSE and Universidad Carlos III de Madrid. Pissarides: CEP and LSE. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 470; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. **PG** 41. **PR** 5 pounds. **JE** J41, J63, J64. **KW** Matching. Vacancies. Unemployment. Microfoundations. Labor Markets.

AB We survey the microfoundations, empirical evidence and estimation issues underlying the aggregate matching function. Several microeconomic matching mechanisms have been suggested in the literature with some successes but none is generally accepted as superior to all others. Instead, an aggregate matching function with hires as a function of vacancies and unemployment has been successfully estimated for several countries. The Cobb-Douglas restrictions with constant returns to scale perform well. Recent work has utilized disaggregated data to go beyond aggregate estimates, with many refinements and suggestions for future research.

Phillips, Peter C. B.

PD April 2000. **TI** Trending Time Series and Macroeconomic Activity: Some Present and Future Challenges. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1264; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 6. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C32, C53, E61. **KW** Breaks. Growth. Policy Intervention. Productivity. Trend Mechanisms. Unit Roots.

AB Some challenges for econometric research on trending time series are discussed in relation to some perceived needs of macroeconomics and macroeconomic policy making.

TI Modified Local Whittle Estimation of the Memory Parameter in the Nonstationary Case. **AU** Shimotsu, Katsumi; Phillips, Peter C. B.

TI Local Whittle Estimation in Nonstationary and Unit Root Cases. **AU** Shimotsu, Katsumi; Phillips, Peter C. B.

TI Pooled Log Periodogram Regression. **AU** Shimotsu, Katsumi; Phillips, Peter C. B.

PD August 1999. **TI** How to Estimate Autoregressive Roots Near Unity. **AU** Phillips, Peter C. B.; Moon, Hyungsik Roger; Xiao, Zhijie. **AA** Phillips: Yale University and University of Auckland. Moon: University of California, Santa Barbara. Xiao: University of Illinois at Urbana-Champaign. **SR** University of California, Santa Barbara, Working Papers in Economics: 99/09; Department of Economics, Working Paper Coordinator, University of California, Santa Barbara. Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. **PG** 40. **PR** no charge for domestic orders; for non-U.S. orders, U.S. \$3 per paper, personal check or money order made out to "Regents of the University of California". **JE** C14, C51. **KW** Block Modeling. Time Series. Mixed Diffusion Processes. Deterministic Trends. Near Integration.

AB A new model of near integration is formulated in which the local to unity parameter is identifiable and consistently estimable with time series data. The properties of the model are investigated, new functional laws for near integrated time series are obtained which lead to mixed diffusion processes, and consistent estimators of the localizing parameter are

constructed. The model provides a more complete interface between $I(0)$ and $I(1)$ models than the traditional local to unity model and leads to autoregressive coefficient estimates with rates of convergence that vary continuously between the $O(\text{square root of } n)$ rate of stationary autoregression, the $O(n)$ rate of unit root regression and the power rate of explosive autoregression. Models with deterministic trends are also considered, least squares trend regression is shown to be efficient, and consistent estimates of the localizing parameter are obtained for this case as well. Conventional unit root tests are shown to be consistent against local alternatives in the new class.

Pichery, Marie-Claude

TI The Impact of Information on Wine Auction Prices: Results of an Experiment. AU Lecocq, Sebastien; Magnac, Thierry; Pichery, Marie-Claude.

Pichot, Olivier

TI Distributions implicites anormales des taux de change. AU Frachot, Antoine; Laurent, Jean-Paul; Pichot, Olivier.

Piermartini, Roberta

PD April 2000. TI Trade Liberalisation and Growth: Market Access Advantage. AA University of Southampton. SR University of Southampton, Discussion Papers in Economics and Econometrics: 0007; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. PG 37. PR On application; annual subscription 40 pounds. JE F12, F15, F43, O41. KW Comparative Advantage. Integration. Intra-Industry Trade. Endogenous Growth.

AB This paper analyses the effect of integration on growth when countries have different preferences. It describes a two-country two-sector model, with the first sector producing the homogeneous good and the second sector producing a differentiated good, which is divided in a first-class goods group and a second-class group. The only innovative sector is the one producing first-class goods. In autarchy, both countries produce first and second-class goods. Opening up to trade, with non-zero transport costs, induces countries' specialization according to their home-market comparative advantage. In these circumstances, transportation costs affect the growth rate. There are three main findings. First, integration has a positive effect on growth, but there is a discontinuity at free trade. Second, integration with a country with a smaller market for the innovative good may increase growth more than integration with a country with symmetric preferences. Finally, the effect of integration on growth is higher the larger the size of the home market advantage and the smaller is the extent of spillovers between countries.

Pischke, Jorn-Steffen

TI Minimum Wages and On-the-Job Training. AU Acemoglu, Daron; Pischke, Jorn-Steffen.

Pissarides, Christopher A.

TI Looking Into the Black Box: A Survey of the Matching Function. AU Petrongolo, Barbara; Pissarides, Christopher A.

Pitchford, Rohan

PD February 1999. TI Property Rights, Incomplete Contracts, and Social Harm. AU Pitchford, Rohan; Snyder, Christopher M. AA Pitchford: Australian National University. Snyder: George Washington University. SR Australian National University Working Paper in Economics and Econometrics: 365; Department of Economics, Australian National University, Canberra ACT 0200, Australia. PG 29. PR no charge. JE C78, D23, H23, K11. KW Negative Externality. Incomplete Contracts.

AB We construct a model in which a first mover decides on its location before it knows the identity of the second mover; joint location results in a negative externality. Contracts are inherently incomplete since the first mover's initial decision cannot be specified. We analyze several kinds of rights, including damages, injunctions, and rights to exclude (arising from covenants or land ownership). There are cases in which allocating any of these basic rights to the first mover -- i.e., first-party rights -- is dominated by second-party rights, and cases in which the reverse is true. A Coasian result (efficiency regardless of the rights allocation) only holds under a limited set of conditions. As corollaries of a theorem ranking the basic rights regimes, a number of results emerge contradicting conventional wisdom, including the relative inefficiency of concentrated land ownership and the relevance of the generators' identity. We conclude with a mechanism and a new rights regime that each yield the first best in all cases.

Pollitt, Michael G.

PD February 2000. TI The Declining Role of the State in Infrastructure Investments in the UK. AA University of Cambridge. SR University of Cambridge, DAE Working Paper: 0001; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. PG 31. PR US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. JE L33, L52, L84, L90. KW Private Finance Initiative. Infrastructure. Value for Money Test. Privatization. Investment.

AB This paper explores the increasing private involvement in social infrastructure projects in the UK since 1979. It begins by reviewing the effect of privatization on the quantity of investment undertaken by the utility sector. The evidence is consistent with the view that the private sector is capable of raising the necessary finance. The history, theory and experience of the Private Finance Initiative (PFI) is then discussed. Five case studies of major PFI projects are reviewed, covering hospitals, prisons, computer services and transport projects. The author concludes that the PFI has been a qualified success in the UK especially when compared with the experience under the previous regime of government procurement.

Pommeret, Denys

PD 1999. TI Orthogonal and Pseudo-Orthogonal Multidimensional Appell Polynomials. AA CREST. SR Document de Travail du CREST: 9945; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. PG 16. PR no charge. JE C60. KW Appell Polynomials. Orthogonality. Pseudo-Orthogonality. Lie Algebra. Martingale. Exponential Family.

AB More than one hundred years, Appell introduced a polynomials class characterized by the exponential form of its generatrice function. This class is well known on \mathbb{R} and the aim of this paper is to offer a multidimensional analysis in two directions: we indicate a classical characterization of the Appell on \mathbb{R}^d via their generatrice function and we investigate their orthogonality. Two types of orthogonality are characterized. We relate this study to the theory of Lie algebras and martingales.

PD 1999. **TI** A Construction of Lancaster Probabilities with Margins in the Multidimensional Meixner Class. **AA** CREST. **SR** Document de Travail du CREST: 9950; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. **PG** 10. **PR** no charge. **JE** C60. **KW** Lancaster Probabilities. Meixner Class. Orthogonal Polynomials. Exponential Families.

AB The well-known Meixner class (Meixner, 1934) of probabilities on \mathbb{R} has been recently extended to \mathbb{R}^d (Pommeret, 1996). This generalized Meixner class corresponds to the simple quadratic natural exponential families characterized by Casalis (1996). Following Lancaster (1975), we offer a characterization of the joint probability of a random variable (X, Y) , such that the two variables X and Y on \mathbb{R}^d belong to this multidimensional Meixner class and fulfill a biorthogonality condition involving orthogonal polynomials. Such joint probabilities, called Lancaster probabilities, are characterized by the two sequences (P) and (Q) of orthonormal polynomials with respect to the margins and the sequence (p) defined by $E\{P(X)Q(Y)\} = p$. A few multivariate probabilities are studied: The Poisson-Gaussian and the gamma-Gaussian distributions.

Postlewaite, Andrew

TI Investment and Concern for Relative Position. **AU** Cole, Harold L.; Mailath, George J.; Postlewaite, Andrew.

TI Efficient Non-Contractible Investments in Large Economies. **AU** Cole, Harold L.; Mailath, George J.; Postlewaite, Andrew.

TI Efficient Non-Contractible Investments in a Finite Economy. **AU** Cole, Harold L.; Mailath, George J.; Postlewaite, Andrew.

TI Information Size, Incentive Compatibility and the Core of a Game with Incomplete Information. **AU** McLean, Richard P.; Postlewaite, Andrew.

TI Informational Size and Incentive Compatibility. **AU** McLean, Richard P.; Postlewaite, Andrew

Poterba, James M.

TI Selection Effects in the Market for Individual Annuities: New Evidence from the United Kingdom. **AU** Finkelstein, Amy; Poterba, James M.

TI Joint Life Annuities and Annuity Demand by Married Couples. **AU** Brown, Jeffrey R.; Poterba, James M.

Prasad, Eswar S.

TI Medium-Term Determinants of Current Accounts in Industrial and Developing Countries: An Empirical

Exploration. **AU** Chinn, Menzie D.; Prasad, Eswar S.

Prendergast, Joe

TI Fiscal Stance and the Real Exchange: Some Empirical Estimates. **AU** Clarida, Richard; Prendergast, Joe.

Prucha, Ingmar R.

TI Dynamic Factor Demand Models and Productivity Analysis. **AU** Nadiri, M. Ishaq; Prucha, Ingmar R.

Putnam, Robert D.

TI Education and Social Capital. **AU** Helliwell, John F.; Putnam, Robert D.

Quiggin, John

TI Public Investment and the Risk Premium for Equity. **AU** Grant, Simon; Quiggin, John.

TI The Risk Premium for Equity: Implications for Clinton's Proposed Diversification of the Social Security Trust Fund. **AU** Grant, Simon; Quiggin, John.

Quintini, Glenda

TI Wage Equations, Wage Curves and All That. **AU** Bell, Brian; Nickell, Stephen; Quintini, Glenda.

TI A Picture of Job Insecurity Facing British Men. **AU** Nickell, Stephen; Jones, Tracy; Quintini, Glenda.

Rachev, Svetlozar T.

PD March 2000. **TI** Asset and Liability Management: Recent Advances. **AU** Rachev, Svetlozar T.; Tokat, Yesim. **AA** University of Karlsruhe, Germany. **SR** University of California, Santa Barbara, Working Papers in Economics: 00/01; Department of Economics, Working Paper Coordinator. University of California, Santa Barbara. Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. **PG** 49. **PR** no charge for domestic orders; for non-U.S. orders, U.S. \$3 per paper, personal check or money order made out to "Regents of the University of California". **JE** G11, G20, G31, M10. **KW** Investment Planning. Asset Management. Liability Management. Uncertainty. Paretian Distributions.

AB Asset and liability management is the simultaneous consideration of assets and liabilities in strategic investment planning. The asset and liability management models in the literature are reviewed with an emphasis on the recently developed approaches. In most of the recent models, the uncertainty is described by a representative set of scenarios. The validity of the Gaussian assumption in scenario generation is questioned, and stable Paretian distribution is suggested as an alternative hypothesis.

TI Value at Risk: Recent Advances. **AU** Khindanova, Irina N.; Rachev, Svetlozar T.

TI Stable Modeling of Value at Risk. **AU** Khindanova, Irina N.; Rachev, Svetlozar T.; Schwartz, Eduardo.

TI The Stable Non-Gaussian Asset Allocation: A Comparison with the Classical Gaussian Approach. **AU** Tokat, Yesim; Rachev, Svetlozar T.; Schwartz, Eduardo.

Rajan, Raghuram G.

TI What Determines Firm Size? **AU** Kumar, Krishna B.; Rajan, Raghuram G.; Zingales, Luigi.

Ramey, Garey

TI Liquidity Flows and Fragility of Business Enterprises. **AU** den Haan, Wouter J.; Ramey, Garey; Watson, Joel.

TI Recurrent Trade Agreements and the Value of External Enforcement. **AU** Klimenko, Mikhail; Ramey, Garey; Watson, Joel.

TI Regime Switching and Monetary Policy Measurement. **AU** Owyang, Michael; Ramey, Garey.

Ramezzana, Paolo

PD June 2000. **TI** Per Capita Income, Demand for Variety, and International Trade: Linder Reconsidered. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 460; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. **PG** 26. **PR** 5 pounds. **JE** D11, F12, F15. **KW** Per Capita Income. Product Variety. International Trade. Economic Integration.

AB We analyze a monopolistically competitive model of international trade where goods must be consumed in indivisible amounts. The number of varieties that enter a consumer's optimal consumption bundle is increasing in the consumer's per capita income. We first show that, for a given level of GDP, less populous and richer economies have a larger equilibrium number of product varieties. We then show that in an integrated world, even when total GDP is kept constant in all markets, as the levels of and the similarity in the trading partners' per capita incomes increase, so do the number of varieties exchanged and the volume of bilateral trade flows, as conjectured in the Linder hypothesis. Implications for the distribution of gains from trade between and within countries are also discussed.

Rangan, Subramaniam

PD February 2000. **TI** The Unending Embrace: Raymond Vernon, Multinational Enterprises, and National Governments. **AA** INSEAD. **SR** INSEAD Working Paper: 2000/11/SM; 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** F02, F23, F36. **KW** Raymond Vernon. Multinational Enterprises.

AB In this article commemorating Raymond Vernon, I make no attempt to summarize his expansive work on the nature and prospects of multinational enterprises. Rather, I discuss three forces—rivalry, uncertainty, and time—that Vernon accentuated in his explanations of the behavior of MNEs. I then make brief observations about Vernon and methodology. Subsequently, I speculate on the following question: A hundred years from now, what single idea will Vernon be remembered for? Acknowledging the product cycle as a leading contender, I nominate and discuss (under the moniker "the unending embrace") another candidate, one that dwells on the undulating tension between MNEs and governments. I conclude by flagging for future research some questions that that central idea raises.

Rangelova, Elena

TI The Economics of Bequests in Pensions and Social

Security. **AU** Feldstein, Martin; Rangelova, Elena.

Rauch, James E.

PD June 1999. **TI** Ethnic Chinese Networks in International Trade. **AU** Rauch, James E.; Trindade, Vitor. **AA** Rauch: University of California, San Diego and NBER. Trindade: University of California, San Diego. **SR** National Bureau of Economic Research Working Paper: 7189; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** F14, F15, F23. **KW** Ethnic Chinese. Trade Networks.

AB Ethnic Chinese networks, as proxied by the product of ethnic Chinese population shares, are found in 1980 and 1990 to have increased bilateral trade both within Southeast Asia and for other country pairs. Their effects within Southeast Asia are much greater for differentiated than for homogeneous products, while for other country pairs their effects are neither economically nor statistically significantly different across commodity groups. We interpret these and other, complementary findings as showing that (1) where ethnic Chinese communities are relatively large fractions of their countries' populations and have relatively numerous direct connections across international borders, they facilitate international trade primarily by helping to match international buyers and sellers in characteristics space, and (2) ethnic Chinese communities that are small fractions of their countries' populations are close-knit and facilitate international trade mainly by enforcing community sanctions that deter opportunistic behavior. The smallest estimated increase in bilateral trade in differentiated products within Southeast Asia attributable to ethnic Chinese networks exceeds 150 percent, suggesting that the informal trade barriers these networks help to overcome are economically important.

Razin, Assaf

PD May 1999. **TI** Understanding the "Problem of Economic Development": The Role of Factor Mobility and International Taxation. **AU** Razin, Assaf; Yuen, Chi-Wa. **AA** Razin: Tel Aviv University and NBER. Yuen: University of Hong Kong. **SR** National Bureau of Economic Research Working Paper: 7115; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** F21, F22, H20, H87, O40. **KW** Economic Development. Per Capita Income. Factor Mobility. International Taxation. Growth.

AB The "problem of economic development," as Lucas (1988) states it, is the problem of accounting for the observed diversity in levels and rates of growth of per capita income across countries and across time. We study conditions under which capital mobility and labor mobility (two seemingly income-equalizing forces) may interact with cross-country differences in income tax rates and income tax principles (two seemingly income-diverging forces) to generate such diversity. As a corollary, we also examine when countries with different initial endowments may finally converge in their income levels.

Redding, Stephen

TI Mapping the Two Faces of R&D: Productivity Growth in a Panel of OECD Industries. **AU** Griffith, Rachel; Redding, Stephen; Van Reenen, John.

Reinartz, Werner J.

PD February 2000. **TI** On the Profitability of Long Lifetime Customers: An Empirical Investigation and Implications For Marketing. **AU** Reinartz, Werner J.; Kumar, V. **AA** Reinartz: INSEAD. Kumar: University of Houston. **SR** INSEAD Working Paper: 2000/04/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** M14, M21, M31. **KW** Customer Lifetime. Marketing. Management. Customer Profitability.

AB The analysis of customer lifetime value is seeing a strongly increasing interest in the marketing community. This paper focuses on the managerial aspects of lifetime dynamics with the purpose of contributing to a better understanding of the customer management process. Our study presents a structured framework for identifying the customer lifetime profitability pattern in a non-contractual context. The explicit research objective is to empirically investigate the nature of the association of customer lifetime duration and customer profitability. For this purpose, four commonly stated propositions are tested: 1) customer lifetime duration and customer profitability are strongly related, 2) profits of long life customers increase over time, 3) the cost of serving long-life customers are lower, and 4) long-life customers pay higher prices. The propositions are tested in the context of the general merchandise direct marketing industry with customer cohort data covering three years. Our results represent evidence that it is a gross oversimplification to simply equate long-life customers with higher profits. The contribution of this research lies in the structured framework for analyzing the customer lifetime profitability pattern. It enables the manager to understand the specific driving forces of customer lifetime profitability.

Rengert, George F.

TI Knowing Your Odds: Home Burglary and the Odds Ratio. **AU** Hakim, Simon; Rengert, George F.; Shachmurove, Yochanan.

Reuer, Jeffrey J.

PD March 2000. **TI** Governance Changes in Strategic Alliances: Antecedents of Contractual Renegotiations. **AU** Reuer, Jeffrey J.; Arino, Africa. **AA** Reuer: INSEAD. Arino: University of Navarra. **SR** INSEAD Working Paper: 2000/21/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** C72, D23. **KW** Contractual Renegotiations. Strategic Alliances. Transaction Cost Theory.

AB This study provides an empirical investigation of the incidence and antecedents of contractual renegotiations in strategic alliances. We bring together initial conditions based on transaction cost theory and ex post contingencies highlighted by recent conceptual and qualitative research on the evolution of collaborative agreements. The results indicate that firms tend to change the governance of alliances when a misalignment exists between the chosen structure and features of the transaction. Further, we find that asset specificity affects alliance design as well as post-formation governance decisions. Contractual alterations are more likely in the presence of

strategic change and when firms employ less extensive ex post deterrents in their alliances. We find no evidence that cross-border ventures are any more or less likely to experience contractual renegotiations than domestic alliances.

PD September 1999. **TI** Termination Outcomes of High-Tech Alliances: Bridging Firm- and Transaction-Specific Antecedents. **AU** Reuer, Jeffrey J.; Zollo, Maurizio; Singh, Harbir. **AA** Reuer and Zollo: INSEAD. Singh: University of Pennsylvania. **SR** INSEAD Working Paper: 99/65/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** M14, M21. **KW** Alliance. Collaborative Agreements. Termination Outcomes.

AB This paper examines how alliance experience accumulation, at the parent firm level and alliance features at the transaction level jointly and interactively shape the termination outcomes of high-tech collaborative agreements. We draw upon the knowledge-based view of the firm and work on governance design to differentiate alliance termination outcomes, investigate where favorable terminations occur, and evaluate factors from multiple levels of analysis affecting alliance dynamics. The evidence suggests that partner-specific experience is beneficial for non-equity alliances affording less control than equity structures as this experience facilitates the development of inter-partner routines. Broad-based collaborative experience and alliance experience in a technological domain do not affect how alliances end, however. The findings also indicate that alliance complexity and how parent firms assign responsibilities among themselves influence alliance termination outcomes.

Ricci, Luca

TI Trade and Financial Contagion in Currency Crises. **AU** Caramazza, Francesco; Ricci, Luca; Salgado, Ranil.

Rice, Patricia

TI Participation in Further Education in England and Wales: An Analysis of Post-War Trends. **AU** McVicar, Duncan; Rice, Patricia.

Riedinger, Nicolas

TI Auditing Cost Overrun Claims. **AU** Perez-Castrillo, David; Riedinger, Nicolas.

Rivkin, Steven G.

TI Do Higher Salaries Buy Better Teachers? **AU** Hanushek, Eric A.; Kain, John; Rivkin, Steven G.

Rob, Rafael

TI Working in Public and Private Firms. **AU** Corneo, Giacomo; Rob, Rafael.

PD February 2001. **TI** Product Quality, Reputation and Turnover. **AU** Rob, Rafael; Sekiguchi, Tadashi. **AA** Rob: University of Pennsylvania. Sekiguchi: Kobe University. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 01/11; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104- 6297. **Website:** www.econ.upenn.edu/CARESS. **PG** 20.

PR \$3.00 for U.S. and Canada; \$5.00 Foreign; make checks payable to University of Pennsylvania. **JE** D82, L13, L14, L15. **KW** Product Quality. Reputation. Market Turnover. Efficiency. Oligopoly.

AB We consider a repeated duopoly game where each firm chooses its investment in quality, and realized quality is a noisy indicator of the firm's investment. We derive reputation equilibria, whereby consumers discipline a firm by switching to its rival in case its realized quality is too low. The model predicts that firms with good reputation charge a higher price, sell a bigger quantity and have a higher stock-market capitalization. Every so often, the market is subjected to turnover, whereby the high-quality/good reputation firm loses market share, lowers its price and its capitalization suffers, while its rival gains market share, raises its price and enjoys increased capitalization. We examine properties of reputation equilibria. In particular, we show that the equilibrium is not efficient or nearly efficient even as the discount factor goes to one.

Roberts, Kevin

TI Does Competition Solve the Hold-Up Problem?
AU Felli, Leonardo; Roberts, Kevin.

Robertson, Donald

PD October 2000. **TI** Factor Residuals in SUR Regressions: Estimating Panels Allowing for Cross Sectional Correlations. **AU** Robertson, Donald; Symons, James. **AA** Robertson: European University Institute. Symons: University College London and LSE. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 473; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. **PG** 17. **PR** 5 pounds. **JE** C13, C15, C20, C30, C50. **KW** Estimation. Factor Residuals. Generalized Least Squares. Cross-Sectional Models. Maximum Likelihood.

AB This paper describes a method for estimating panels by imposing a factor structure on the residuals. The method allows SUR estimation of panel models by providing a full-rank estimator of the system covariance matrix when the usual estimate is rank-deficient. We characterize completely the circumstances when this is possible. When the usual estimator is of full rank, our procedure provides a more parsimonious representation of the covariance matrix, which can lead to efficiency gains in finite samples. Monte Carlo analysis of convergence regressions and PPP regressions in the Heston-Summers data-set indicates that the proposed estimator has better performance in terms of RMSE and bias than standard panel or SUR estimators (where available), as well as offering unbiased inference.

Rockoff, Hugh

TI Was Adherence to the Gold Standard a "Good Housekeeping Seal of Approval" During the Interwar Period?
AU Bordo, Michael D.; Edelman, Michael; Rockoff, Hugh.

Rodgers, William M., III.

TI Area Economic Conditions and the Labor Market Outcomes of Young Men in the 1990s Expansion.
AU Freeman, Richard B.; Rodgers, William M., III.

Rodriguez, Francisco

PD April 1999. **TI** Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence. **AU** Rodriguez, Francisco; Rodrik, Dani. **AA** Rodriguez: University of Maryland. Rodrik: Harvard University and NBER. **SR** National Bureau of Economic Research Working Paper: 7081; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 39. **PR** \$5.00. **JE** F13, O57. **KW** Methodological Problems. Growth. Trade-Policy.

AB Do countries with lower policy-induced barriers to international trade grow faster, once other relevant country characteristics are controlled for? There exists a large empirical literature providing an affirmative answer to this question. We argue that methodological problems with the empirical strategies employed in this literature leave the results open to diverse interpretations. In many cases, the indicators of "openness" used by researchers are poor measures of trade barriers or are highly correlated with other sources of bad economic performance. In other cases, the methods used to ascertain the link between trade policy and growth has serious shortcomings. Papers that we review include Dollar (1992), Ben-David (1993), Sachs and Warner (1995), and Edwards (1998). We find little evidence that open trade policies -- in the sense of lower tariff and non-tariff barriers to trade -- are significantly associated with economic growth.

Rodriguez, Sergio L.

TI Banks and Monetary Shocks in Emerging Markets: How Far Can We Go With the "Credit View"? **AU** Catao, Luis; Rodriguez, Sergio L.

Rodrik, Dani

TI Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence. **AU** Rodriguez, Francisco; Rodrik, Dani.

Roe, Terry

TI The Effect of Sequencing Trade and Water Market Reform on Interest Groups in Irrigated Agriculture: An Intertemporal Economy-Wide Analysis of the Moroccan Case. **AU** Diao, Xinshen; Roe, Terry.

TI Growth Theory and Accounting For Growth of the Taiwanese Economy. **AU** Lin, Pei-Chien; Roe, Terry.

Roger, Scott

PD March 2000. **TI** Relative Prices, Inflation and Core Inflation. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/58; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 25. **PR** not available. **JE** C43, E31, E52. **KW** Inflation. Relative Prices. Central Tendency.

AB Empirical evidence on the distribution of relative price changes almost invariably reveals high kurtosis and a tendency toward right-skewness. Simple mixed distribution models including volatile and infrequently adjusted prices can account for these and other common features, such as correlation between the mean and variance of relative prices. In such circumstances, robust measures of central tendency are likely to outperform the mean or standard measures of "core" inflation as indicators of generalized inflation. The analysis also supports

the use of geometric averaging in CPI construction and the targeting of the geometric mean inflation rate rather than the Laspeyres mean.

Rogerson, Richard

TI Equity and Resources: An Analysis of Education Finance Systems. **AU** Fernandez, Raquel; Rogerson, Richard.

Romalis, John

TI The Lags of Monetary Policy. **AU** Gruen, David; Romalis, John; Chandra, Naveen.

Rosenberg, Christoph B.

PD March 2000. **TI** Welfare Effects of Uzbekistan's Foreign Exchange Regime. **AU** Rosenberg, Christoph B.; De Zeeuw, Maarten. **AA** Rosenberg: International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/61; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 20. **PR** not available. **JE** D60, F31, H29. **KW** Multiple Exchange Rates. Welfare Analysis. Quasi-Fiscal Operations. Uzbekistan.

AB In addition to transferring about 16 percent of GDP from exporters to importers, Uzbekistan's quasi-fiscal multiple exchange rate regime generates identifiable welfare losses of 2-8 percent of GDP on import markets and up to 15 percent on export markets. These excess burdens have increased substantially with the growing difference of exchange rates. The welfare analysis allows some conclusions regarding the optimal reform strategy: (i) welfare losses will decline overproportionally as exchange rates unify; (ii) exchange rate unification should be supplemented by changing the explicit fiscal system; (iii) at a minimum, Uzbekistan would benefit from moving to an explicit fiscal regime.

Rostowski, Jacek

TI Whence Reform? A Critique of the Stiglitz Perspective. **AU** Dabrowski, Marek; Gomulka, Stanislaw; Rostowski, Jacek.

Rotondi, Zeno

PD March 2000. **TI** Credibility of Optimal Monetary Delegation: Do We Really Need Prohibitive Reappointment Costs? **AA** University of Southampton and Banca di Roma. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 0003; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 31. **PR** On application; annual subscription 40 pounds. **JE** E42, E58. **KW** Delegation. Reappointment. Inflationary Bias.

AB The paper examines the current debate on the real effectiveness of delegation in overcoming the problem of time inconsistency that afflicts discretionary monetary policy. An important contribution by Jensen has shown that, when the government is unable to credibly carry out optimal policy and delegates monetary policy to a central banker with an announced incentive scheme, optimal policy can be credible only if reappointment costs are prohibitive. This finding is questioned in the present analysis. In particular we show that, when delegation is not considered as an alternative, but rather as supplementary, to reputation and is conducive to reputation building for the central banker, the circumstances under which optimal delegation can be credible need not be so extreme. This

different result is based on the constraint that the central banker's reputation for low inflation imposes on the government's temptation to deviate from its announcements and on the role played by incentive schemes in strengthening the central banker's reputation.

PD March 2000. **TI** Time Consistent Monetary Policy Reconsidered: May we have a Deflationary Bias Too? **AA** University of Southampton and Banca di Roma. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 0004; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 22. **PR** On application; annual subscription 40 pounds. **JE** E52, E58. **KW** Monetary Policy. Time Inconsistency. Instrument Uncertainty. Overlapping Wage Contracts. Lags.

AB The celebrated inflationary bias of time consistent monetary policy is re-examined. To this end we consider an extended version of the simple Barro and Gordon framework featuring important aspects of actual policy making such as imperfect instrument control, overlapping wage contracts, policy lags and interest rate control. The model developed provides a counterexample to the standard theory as it yields the result that a deflationary bias may be possible as well. The rationale for this surprising result is found in the distortion caused by instrument uncertainty in the trade-off between the costs and benefits associated with surprisingly lower interest rates faced at the margin by the policy maker. If the size of uncertainty is relatively large the distortion created may imply an optimal choice for the instrument which trades off the marginal benefit of lower deflation against the marginal cost of higher than optimal output. The implications of imprecise instrument control for welfare are discussed too.

PD April 2000. **TI** Designing Instrument Rules for Monetary Stability: The Optimality of Interest-Rate Smoothing. **AA** University of Southampton and Banca di Roma. **SR** University of Southampton, Discussion Papers in Economics and Econometrics: 0008; Discussion Paper Secretary, Department of Economics, University of Southampton, Southampton S017 1BJ, England. Website: <http://www.soton.ac.uk>. **PG** 30. **PR** On application; annual subscription 40 pounds. **JE** E51, E52, E58. **KW** Monetary Rules. Monetary Discretion. Interest Rates.

AB A key issue in monetary policy is that on the importance of following systematic behaviors. The paper revisits the classic debate on rules versus discretion focusing on the design of instrument rules in a manner that push discretionary policy choices in the direction of the commitment equilibrium. It is shown that an instrument rule with an optimal degree of monetary inertia may render negligible the inflationary bias associated with discretion without necessarily implying a trade-off between flexibility and commitment. The rationale for this surprising finding is found in the disciplining effect played by interest-rate smoothing on the incentive to create surprise inflation by reducing suddenly the interest rate within the time horizon of existing nominal contracts. If the degree of gradualism is high it may enhance the credibility of optimal monetary policy as it contrasts the incentive to fool private sector.

Rousseau, Judith

TI Small Sample Asymptotics for the Sample

Autocorrelation Function under Long Range Dependence.
 AU Lieberman, Offer; Rousseau, Judith; Zucker, David M.

Roy, Jaideep

PD November 2000. TI When Aspiring and Rational Agents Strive to Coordinate. AA University of Copenhagen. SR University of Copenhagen, Institute of Economics Discussion Paper: 00/16; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. PG 29. PR no charge. JE C72, D83. KW Coordination. Evolution of Aspirations. Myopic Optimization. Game Theory. Common Interest.

AB The paper studies a game of common interest played infinitely many times between two players, one being aspiration driven and the other being a myopic optimizer. It is shown that the only two long run stationary outcomes are the two static equilibrium points. Robustness of long run behavior is studied to show that whenever the optimizer is allowed to make small mistakes, players are able to coordinate on the Pareto dominant equilibrium point most of the time in the long run if the speed of evolution of aspirations is sufficiently fast. However, when only the aspiring player is allowed to make small mistakes, achieving coordination is inevitable and independent of the speed at which aspirations evolve.

PD November 2000. TI Strategic Choice of Contract Lengths in Agriculture. AU Roy, Jaideep; Serfes, Konstantinos. AA Roy: University of Copenhagen. Serfes: State University of New York at Stony Brook. SR University of Copenhagen, Institute of Economics Discussion Paper: 00/17; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. PG 35. PR no charge. JE D82, J41, J43, O13, Q10. KW Tenancy Contracts. Risk Aversion. Screening. Agriculture. Private Information.

AB In a multi-period environment, time is certainly an added dimension in which the principal can differentiate in search of better screening contracts. This idea is used in a two-period model of agriculture without any form of uncertainty, where the landlord offers separating tenurial contracts to screen tenants of different skills, when the skill is private information. The paper shows that a risk neutral landlord wishing to hire a risk averse tenant will always find it optimal to offer a long term fixed rent contract to a high-skilled tenant and a short term sharecropping contract to a low-skilled one.

Rubinstein, Jacob

TI First-Price Auctions when the Ranking of Valuations is Common Knowledge. AU Landsberger, Michael; Rubinstein, Jacob; Wolfstetter, Epuian; Zamir, Schmucl.

Rudebusch, Glenn D.

PD June 1999. TI Eurosystem Monetary Targeting: Lessons from U.S. Data. AU Rudebusch, Glenn D.; Svensson, Lars E. O. AA Rudebusch: Federal Reserve Bank of San Francisco. Svensson: Stockholm University and NBER. SR National Bureau of Economic Research Working Paper: 7179; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 24. PR \$5.00. JE E42, E52, E58. KW Monetary Targeting. Inflation Targeting.

AB Using a small empirical model of inflation, output, and money estimated on the U.S. data, we compare the relative performance of monetary targeting and inflation targeting. The

results show that monetary targeting would be quite inefficient, with both higher inflation and output variability. This is true even with a deterministic money demand formulation. In this framework, there is thus no support for the prominent role given to money growth in the Eurosystem's monetary policy strategy.

Ruiz, Pierre

TI Are Common Swings in International Stock Returns Justified by Subsequent Changes in National Outputs? AU Dumas, Bernard; Harvey, Campbell R.; Ruiz, Pierre.

Ruzicka, Ivan

TI The Complier Pays Principle: The Limits of Fiscal Approaches Toward Sustainable Forest Management. AU Leruth, Luc; Paris, Remi; Ruzicka, Ivan.

Sabourian, Hamid

TI Cooperation and Non-Halting Strategies. AU Anderlini, Luca; Sabourian, Hamid.

PD December 1999. TI Bargaining and Markets: Complexity and the Walrasian Outcome. AA King's College. SR Yale Cowles Foundation Discussion Paper: 1249; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. PG 29. PR no charge up to 3 papers; \$3.00 U.S.; 4.00 International. JE C72, C78, D51. KW Bargaining. Matching. Complexity. Automata. Bounded Rationality. Competitive Outcome. Walrasian Equilibrium.

AB Rubinstein and Wolinsky (1900b) consider a simple decentralized market in which agents either meet randomly or choose their partners voluntarily and bargain over the terms on which they are willing to trade. Intuition suggests that if there are no transaction costs, the outcome of this matching and bargaining game should be the unique competitive equilibrium. This does not happen. In fact, Rubinstein and Wolinsky show that any price can be sustained as a sequential equilibrium of this game. In this paper, I consider Rubinstein and Wolinsky's model and show that if the complexity costs of implementing strategies enter players' preferences (lexicographically), together with the standard payoff in the game, then the only equilibrium that survives is the unique competitive outcome. This will be done both for the random matching and for the voluntary matching models. Thus the paper demonstrates that complexity costs might have a role in providing a justification for the competitive outcome.

Saffer, Henry

PD May 1999. TI State Drug Control Spending and Illicit Drug Participation. AU Saffer, Henry; Chaloupka, Frank. AA Saffer: NBER. Chaloupka: University of Illinois, NBER. SR National Bureau of Economic Research Working Paper: 7114; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 15. PR \$5.00. JE H51, I11, I12, I18, K40. KW Illicit Drugs. Drug Control. Health Expenditures. Deterrence. Criminal Justice.

AB The purpose of this paper is to estimate the effect of state criminal justice expenditures and state public health expenditures on deterring illicit drug use. The empirical model is based on a demand and supply model of drug markets. The effect of a given expenditure on criminal justice or public

health programs is dependent on the magnitude of the resulting shifts in the two functions and the demand price elasticity. The data employed come from the 1990 and 1991 National Household Surveys on Drug Abuse (NHSDA). Data on state and local spending for drug related criminal justice and drug related public health programs were merged with the NHSDA. The main findings are that drug control spending reduces drug use. However, the results suggest for marijuana users, the marginal cost of drug control exceeds the social benefits of drug control. This may not be the case for users of other illicit drugs. Spending for drug enforcement by police and drug treatment are found most effective in deterring drug use. However, spending for correctional facilities is never significant which suggests that a more efficient method of reducing drug use might be to reduce correctional facilities spending and increase spending on treatment.

Sahay, Ratna

TI Financial Market Spillovers in Transition Economies.
AU Gelos, Gaston; Sahay, Ratna.

Sakakibara, Mariko

PD April 1999. TI Do Stronger Patents Induce More Innovation? Evidence From the 1988 Japanese Patent Law Reforms. AU Sakakibara, Mariko; Branstetter, Lee.
AA Sakakibara: UCLA. Branstetter: UC Davis and NBER.
SR National Bureau of Economic Research Working Paper: 7066: National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 32. PR \$5.00. JE O31, O33.
KW Innovation. Patent. Japan.
AB Does an expansion of patent scope induce more innovative effort by firms? This article provides evidence on this question by examining firm responses to the Japanese patent reforms of 1988. Interviews with practitioners suggest the reforms significantly expanded the scope of patent rights in Japan, but that the average response in terms of additional R&D effort and innovative output was quite modest. Interviews also suggest that firm organizational structure is an important determinant of the level of response. Econometric analysis using Japanese and U.S. patent data on 307 Japanese firms confirms that the magnitude of the response is quite small.

Sala-I-Martin, Xavier

TI Gerontocracy, Retirement, and Social Security.
AU Mulligan, Casey B.; Sala-I-Martin, Xavier.

TI Social Security in Theory and Practice (I): Facts and Political Theories. AU Mulligan, Casey B.; Sala-I-Martin, Xavier.

TI Social Security in Theory and Practice (II): Efficiency Theories, Narrative Theories, and Implications for Reform. AU Mulligan, Casey B.; Sala-I-Martin, Xavier.

Salanie, Bernard

PD May 1999. TI Guide pratique des series non-stationnaires. AA INSEE. SR Document de Travail du CREST: 9923; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. Website: www.ensae.fr/crest. PG 26. PR no charge. JE C12, C13, C22. KW Non-Stationarities. Cointegration.
AB The purpose of this paper is to present traditional and

more recent procedures for estimation and testing of systems that contain non-stationary variables. The aim throughout is not to prove asymptotic results, but rather to weigh the pros and cons of using each method according to the circumstances. This text attempts to show that more recent methods may be more convenient and/or robust than earlier procedures.

TI Breaking Down Married Female Non-Employment in France. AU Laroque, Guy; Salanie, Bernard.

Salgado, Ranil

TI Trade and Financial Contagion in Currency Crises. AU Caramazza, Francesco; Ricci, Luca; Salgado, Ranil.

TI Currency Crises: In Search of Common Elements. AU Aziz, Jahangir; Caramazza, Francesco; Salgado, Ranil.

Sandroni, Alvaro

TI Market Selection and Asymmetric Information. AU Mailath, George J.; Sandroni, Alvaro.

Sarr, Abdourahmane

PD March 2000. TI Financial Liberalization, Bank Market Structure, and Financial Deepening: An Interest Margin Analysis. AA International Monetary Fund. SR International Monetary Fund Policy Working Paper: WP/00/38; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 27. PR not available. JE E43, G21, L11, L16, O16. KW Financial Liberalization. Financial Deepening. Bank Market Structure. Interest Margin. Deposit Interest Rates.

AB The paper shows that commercial banks' ability to lower deposit interest rates (market power) can increase deposit mobilization. Interest expenses saved can subsidize and lower fees on checking and branching services and thus help attract deposits. United States data illustrates the financial deepening effect of this market power. Commercial banks' ability to lower deposit interest rates diminishes when their deposits become closer substitutes to nonbank liabilities requiring greater interest rate competition. Lack of bank deposit market power, including through capital account mobility, may lessen financial deepening.

Satchell, Stephen

TI Testing for Infinite Order Stochastic Dominance with Applications to Finance, Risk and Income Inequality. AU Knight, John; Satchell, Stephen.

Saxena, Sweta Chaman

TI Alternative Methods of Estimating Potential Output and the Output Gap: An Application to Sweden. AU Cerra, Valerie; Saxena, Sweta Chaman.

TI Contagion, Monsoons, and Domestic Turmoil in Indonesia: A Case Study in the Asian Currency Crisis. AU Cerra, Valerie; Saxena, Sweta Chaman.

Scarf, Herbert E.

PD July 2000. TI Optimal Inventory Policies When Sales are Discretionary. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1270; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. PG 9. PR no charge up to 3 papers; \$3.00 U.S.; 4.00 International.

JE D21, E22. **KW** Inventory Theory. Optimal Policies. (S, s) Policies. K-Concavity.

AB Inventory models customarily assume that demand is fully satisfied if sufficient stock is available. We analyze the form of the optimal inventory policy if the inventory manager can choose to meet a fraction of the demand. Under classical conditions we show that the optimal policy is again of the (S, s) form. The analysis makes use of a novel property of K-concave functions.

TI How to Compute Equilibrium Prices in 1891. **AU** Brainard, William C.; Scarf, Herbert E.

Schabert, Andreas

PD February 2001. **TI** Interest Rate Policy and the Price Puzzle in a Quantitative Business Cycle Model. **AA** University of Cologne. **SR** Institute for Advanced Studies, Economics Series Working Paper: 95; Institute for Advanced Studies, Library, Stumpergasse 56, A-1060 Vienna. Website: www.ihs.ac.at/Library/libhome.html. **PG** 22.

PR Individuals: ATS 80.00 -- EUR 5.81; Institutions: ATS 250.00 -- EUR 18.17. Prices subject to change without notice.

JE E31, E32, E52, E58, E63. **KW** Monetary Transmission. Interest Rate Shocks. Open Market Operations. Price Puzzle.

AB In the empirical literature, monetary policy shocks are commonly measured as an innovation to a short-term nominal interest rate. In contrast, the majority of monetary business cycle models treats a broad monetary aggregate as the central bank's policy measure. We try to overcome this disparity and present a business cycle model which allows for the examination of the effects of innovations to a non-contingent nominal interest rate rule. To obtain unique rational expectations equilibria we assume that changes in money supply are brought about by open market operations. In addition to working capital, we consider staggered prices which enables real marginal costs to vary. Consistent with the empirical findings of Barth and Ramey (2000), the model predicts that real marginal costs and inflation rise in response to positive interest rate innovations. The mechanism corresponds to their "Cost Channel of Monetary Transmission" and replicates typical monetary VAR results, including the puzzling behavior of prices.

Schellekens, Philip

TI Monetary Policy Loss Functions: Two Cheers for the Quadratic. **AU** Chadha, Jagjit S.; Schellekens, Philip.

Schlingemann, Frederik P.

PD June 1999. **TI** Corporate Focusing and Internal Capital Markets. **AU** Schlingemann, Frederik P.; Stulz, Rene M.; Walkling, Ralph A. **AA** Schlingemann: University of Pittsburgh. Stulz: Ohio State University and NBER. Walkling: Ohio State University. **SR** National Bureau of Economic Research Working Paper: 7175; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** \$5.00. **JE** G32, G34. **KW** Divestiture Decisions.

AB A sample of firms that focus by divesting at least one segment allows us to investigate the characteristics of segments divested as well as the nature of focusing firms. We find that firms are more likely to divest segments unrelated to the core activities of the firm and that the probability that a segment is divested is inversely related to its relative size within the firm. In fact, a segment's relative size is the variable that has the

most explanatory power in predicting which segments a firm divests. We argue that this is consistent with the importance of asset market liquidity as a determinant of the divestiture decision. Financial constraints play an important role in determining which firms' focus, which segments these firms divest, and in the market's reaction to divestiture announcements. Focusing firms perform less well and invest significantly less than their non-focusing counterparts.

Schou, Poul

TI Can Nonrenewable Resources Alleviate the Knife-Edge Character of Endogenous Growth? **AU** Groth, Christian; Schou, Poul.

Schumacher, Liliana

TI Central Banks Use of Derivatives and Other Contingent Liabilities: Analytical Issues and Policy Implications. **AU** Blejer, Mario I.; Schumacher, Liliana.

TI Assessing Financial System Vulnerabilities. **AU** Johnston, R. Barry; Chai, Jingqing; Schumacher, Liliana.

Schwartz, Anna J.

TI Was Expansionary Monetary Policy Feasible During the Great Contraction? An Examination of the Gold Standard Constraint. **AU** Bordo, Michael D.; Choudhri, Ehsan U.; Schwartz, Anna J.

Schwartz, Eduardo

TI Stable Modeling of Value at Risk. **AU** Khindanova, Irina N.; Rachev, Svetlozar T.; Schwartz, Eduardo.

TI The Stable Non-Gaussian Asset Allocation: A Comparison with the Classical Gaussian Approach. **AU** Tokat, Yesim; Rachev, Svetlozar T.; Schwartz, Eduardo.

Sciubba, Emanuela

PD June 1999. **TI** Asymmetric Information and Survival in Financial Markets. **AA** University of Cambridge. **SR** University of Cambridge, DAE Working Paper: 9908; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. **PG** 34. **PR** US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. **JE** D51, G14, G82. **KW** Evolution. Portfolio Rules. Noise Trading.

AB In the evolutionary setting for a financial market developed by Blume and Easley (1992) the author considers an infinitely repeated version of a model of the form of Grossman and Stiglitz (1980) with asymmetrically informed traders. Informed traders observe the realization of a payoff relevant signal before making their portfolio decisions. Uninformed traders do not have direct access to this kind of information, but can partially infer it from market prices. As a counterpart to their privileged information, informed traders pay a per-period cost. As a result, information acquisition triggers a trade-off in this setting. It is proved that, so long as information is costly, a strictly positive measure of uninformed traders will survive. This result contributes to the literature on noise trading. It suggests that Friedman's (1953) argument is too simplistic. Traders whose beliefs are "wrong" according to the best available information, in fact, are not wiped out by market forces and do affect asset prices in the long run.

PD June 1999. **TI** The Evolution of Portfolio Rules and the Capital Asset Pricing Model. **AA** University of Cambridge. **SR** University of Cambridge, DAE Working Paper: 9909; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. **PG** 24. **PR** US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. **JE** C61, D81, G11. **KW** Evolution. Portfolio Rules. CAPM. Kelly Criterion. **AB** The aim of this paper is to test the performance of the standard version of CAPM in an evolutionary framework. We imagine a heterogeneous population of long-lived agents who invest their wealth according to differential portfolio rules and ask what is the fate of those who happen to behave as prescribed by CAPM. In a complete securities market with aggregate uncertainty, it is shown that traders who either "believe" in CAPM and use it as a rule of thumb, or are endowed with genuine mean-variance preferences, under some very weak conditions, vanish in the long run. A sufficient condition to drive CAPM or mean-variance traders' wealth shares to zero is shown to be that an investor endowed with a logarithmic utility function enters the market. Finally, the robustness of the results is checked, allowing for different kinds of heterogeneity among traders.

Scotchmer, Suzanne

TI Clubs and the Market. **AU** Ellickson, Bryan; Grodal, Birgit; Scotchmer, Suzanne; Zame, William R.

TI Clubs and the Market: Large Finite Economies. **AU** Ellickson, Bryan; Grodal, Birgit; Scotchmer, Suzanne; Zame, William R.

Scott, Alasdair

TI Concordance in Business Cycles. **AU** McDermott, C. John; Scott, Alasdair.

Sefton, James

TI Simulating the Transmission of Wealth Inequality via Bequests. **AU** Gokhale, Jagadeesh; Kotlikoff, Laurence J.; Sefton, James; Weale, Martin.

TI Simulating the Transmission of Wealth Inequality via Bequests. **AU** Gokhale, Jagadeesh; Kotlikoff, Laurence J.; Sefton, James; Weale, Martin.

Sekiguchi, Tadashi

TI The Maximum Efficient Equilibrium Payoff in the Repeated Prisoners' Dilemma. **AU** Mailath, George J.; Obara, Ichiro; Sekiguchi, Tadashi.

TI Product Quality, Reputation and Turnover. **AU** Rob, Rafael; Sekiguchi, Tadashi.

TI Private Strategies in Finitely Repeated Games with Imperfect Public Monitoring. **AU** Mailath, George J.; Matthews, Steven A.; Sekiguchi, Tadashi.

Serfes, Konstantinos

TI Strategic Choice of Contract Lengths in Agriculture. **AU** Roy, Jaideep; Serfes, Konstantinos.

Shachmurove, Yochanan

PD September 2000. **TI** Utilizing Artificial Neural Network Model to Predict Stock Markets. **AU** Shachmurove,

Yochanan; Witkowska, Dorota. **AA** Shachmurove: City University of New York and University of Pennsylvania. Witkowska: Technical University of Lodz. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/11; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 12. **PR** no charge. **JE** C32, C45, C63, F30, G15. **KW** Neural Networks. Stock Markets. Dynamic Interrelations. Forecasting.

AB The objective of this paper is to examine the dynamic interrelations among major world stock markets through the use of artificial neural networks. The data was derived from daily stock market indices of the major world stock markets of Canada, France, Germany, Japan, United Kingdom (UK), the United States (US), and the world excluding US (World). Multilayer Perceptron models with logistic activation functions were better able to foresee the daily stock returns than the traditional forecasting models, in terms of lower mean squared errors. Furthermore, a multilayer perceptron with five units in the hidden layer seemed to predict more precisely the returns of stock indices than a neural network with two hidden elements. Hence, it is inferred that neural systems could be used as an alternative or supplemental method for predicting financial variables, justifying the potential use of these model by practitioners.

PD September 2000. **TI** Optimal Portfolio Analysis for the Czech Republic, Hungary and Poland During 1994-1995 Period. **AA** City University of New York and University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/12; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 14. **PR** no charge. **JE** F30, G11, G15, O16, P20. **KW** Emerging Markets. Portfolio Choice. Eastern Europe. Stock Markets. Optimization Algorithms.

AB The objective of this paper is to assess the investment opportunities emerging in the newly developing stock markets of Eastern Europe. The Czech Republic, Hungary, and Poland, representative of the emerging stock markets of Eastern Europe, are examined from the perspective of a US investor who invests solely in the US markets. During the period November 24, 1994 to May 12, 1995, the most advantageous investment strategy is derived using optimization algorithms, comparing the optimal portfolio in the stock markets of a select group of Eastern European countries against the S&P 500 Index, representative of the US stock markets. Based on market volatility, sovereign risks, and foreign exchange, the risks and rewards of investing in these countries are appraised. The results show that the risk-adjusted return, yielded from the optimal portfolio, exceeds or equals the return realizable from investing in stock markets with lesser degrees of risk.

TI The Effects of the East Asian Crisis on the Region's Energy Consumption. **AU** Adams, F. Gerard; Shachmurove, Yochanan.

TI Knowing Your Odds: Home Burglary and the Odds Ratio. **AU** Hakim, Simon; Rengert, George F.; Shachmurove, Yochanan.

PD September 2000. **TI** An Empirical Investigation of

IPO's Annualized Returns in the Last Three Decades. AA City University of New York and University of Pennsylvania. SR University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 00/15; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. PG 12. PR no charge. JE D92, G12, G24, G30, M13. KW Annualized Returns. Initial Public Offering. Venture Capital. Stages of Financing. Stock Markets.

AB Venture investment activity covers many phases of financial stages. In spite of the increased attention to the venture capital process during the last three decades, misconceptions about the industry still exist. This paper examines annualized returns for different stages of financing in venture-backed public companies. The unique database includes current actively and inactively trading public companies. The data enable one to ascertain the relationship among companies' annualized rates of return, share price at the Initial Public Offering (IPO) date, IPO size, current total shares, and the role of venture capital. Annualized returns are found to be positively affected by cumulative returns, IPO year, current price, and IPO size in dollars while being negatively influenced by IPO price. The paper refutes the myth that investors demand very high rates of return to compensate for the risks involved in financing ventures.

PD January 1996. TI Dynamic Daily Returns Among Latin American and Other Major World Stock Markets. AA University of Pennsylvania. SR University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 96/03; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. PG 13. PR no charge. JE C30, C45, F30, G15, O16. KW Daily Returns. Latin America. Emerging Financial Markets. Vector Autoregression. Stock Markets.

AB Vector Auto Regression (VAR) models are used to trace the dynamic linkages across daily returns of national stock market indices of Latin America, and among the Latin American and major world stock market indices. The Latin American indices include: Argentina, Brazil, Chile, and Mexico. The major world stock market indices include: the US; the world excluding the US; United Kingdom; Japan; Germany; France; and Canada. Although most of the impulse responses die out very quickly, it is still possible to trace the dynamic linkages among markets. The dynamic linkages among the Latin American markets and among the Latin American and major world stock markets are found to be relatively small. The conclusion is that although markets are efficient and cleared out in a few trading days, there are dynamic linkages that can be explored and exploited to the benefit of the diversified international investor.

PD March 1997. TI The Premium in Black Dollar Markets. AA University of Pennsylvania. SR University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 97/03; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. PG 10. PR no charge.

JE C30, F31, F41, G10, O16. KW Black Dollar. Exchange Rates. Black Markets. Developing Countries. Government Intervention.

AB This paper examines the effects of various economic factors on the black market exchange rate premium in developing countries using monthly data from 1985 to 1989. The model analyzes the interaction of stock and flow conditions in determining both the premium on the black dollar and the stock of black money. Some of the factors this paper hypothesizes to determine the black market premium are the official real exchange rate, the official depreciation-adjusted interest rate differential, the level of exports, and a seasonal factor associated with tourism. The empirical results tend to agree with the findings of Dornbusch et. al. (QJE, February 1983). These results are important because they provide a starting point for governments to control the level of black market activity.

TI Using Vector Autoregression Models to Analyze the Behavior of the European Community Stock Markets. AU Friedman, Joseph; Shachmurove, Yochanan.

PD May 1997. TI Formulating Optimal Portfolios in South American Stock Markets. AA University of Pennsylvania. SR University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 97/06; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. PG 16. PR no charge. JE C20, F31, G11, G15, O16. KW Optimal Portfolio. Emerging Stock Markets. International Finance. Optimization Algorithms. Market Efficiency.

AB This paper analyzes the optimal investment strategy in the stock market of a selected group of South American countries: Mexico, Brazil, Argentina, and Chile. The Markowitz efficiency frontiers are derived based on daily stock market index returns expressed in US dollars, for the period of January 1, 1988 through December 23, 1993. In addition to the Markowitz algorithm, the low partial moment algorithm is used. The benefits of international diversification are studied from the perspectives of an American investor who can invest both in the U.S. and in the South American stock markets. The paper assesses the risks and rewards of investing in these countries based on both foreign exchange as well as sovereign risks. It is shown that the optimal portfolio derived provides a risk-adjusted return that is better or, as good as, the return realizable from investing in stock markets with lesser degrees of risk. The optimal portfolio is calculated based on stock-market returns for the emerging South American countries mentioned, with the S&P 500 Index incorporated into the analysis. The portfolio's performance is then measured using various portfolio evaluation techniques.

PD June 1997. TI The Burglar as a Rational Economic Agent. AU Shachmurove, Yochanan; Fishman, Gideon; Hakim, Simon. AA Shachmurove: University of Pennsylvania. Fishman: Haifa University. Hakim: Temple University. SR University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 97/07; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. PG 13.

PR no charge. **JE** C20, D10, D60, K42, R10. **KW** Spatial Search. Rational Choice. Environmental Economics. Criminal Behavior. Logistic Regression Models. **AB** Understanding the spatial search of burglars is based upon rational choice models which were developed in environmental criminology and economics, and applied also in regional science. The objective is to see whether the behavior of burglars is rational and whether they evaluate alternative courses of action. Such understanding is significant in the design of strategies for police and private security companies aimed at reducing residents' risk of becoming burglary victims. Such findings can also aid residents in selecting the most effective physical security precautions and the preferred behavior to minimize the probability of being victimized. Furthermore, local governments may choose to reduce their visibility and leave space for market forces to fulfill some of the functions and duties that are currently considered to be police responsibility. This paper offers an empirical model which explains the target choice by residential burglars. A logistic regression analysis was employed to estimate the probability of households being burgled as a function of the location of the home with respect to major arterial routes, as well as the attributes of the house, immediate surroundings, and the security precautions that were in use.

PD June 1997. **TI** Japan's Enigmatic Coexistence of Strong Currency and Trade Surplus. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 98/02; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 7. **PR** no charge. **JE** F31, F32, F41, F42, P16. **KW** Exchange Rates. Current Accounts. Plaza Announcement. Deficits. Policy Coordination. **AB** This paper shows that the economic policies of the US and Japan have led to disequilibrium in the pattern of trade. Both economies have built-in mechanisms tending towards equilibrium. However, with restrictive policies imposed by these countries, disequilibrium is perpetuated. The US "suffers" a trade deficit, while Japan "enjoys" a trade surplus. Although a trade surplus has a positive connotation, the prevailing strong yen hurts the Japanese economy. The recession in Japan is partially caused by this large imbalance in trade since the strong yen is driving out many Japanese businesses that can no longer compete. The large government deficit in the United States will also affect the exchange rate and the rest of the world, since the possibility of a default may raise the interest rates as well as the level of uncertainty. Countries must cooperate with each other in order to allow the world economy to reach its equilibrium. Intervention policies require that the citizens in each country actually trust that governments are committed to resolve the enigma of the strong Yen (endaka). Without strong conviction by the public that the policy would be seriously implemented, the exchange rates will not change in the desired direction.

PD August 1997. **TI** Portfolio Analysis of Latin American Stock Markets. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 97/08; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297.

Website: www.econ.upenn.edu/CARESS. **PG** 15. **PR** no charge. **JE** F21, F36, G11, G15, O16. **KW** Optimal Portfolio. Emerging Stock Markets. International Finance. Portfolio Choice. Market Efficiency.

AB This paper examines the strategy of investing in seven Latin American emerging stock markets: Mexico, Brazil, Argentina, Colombia, Peru, Venezuela, and Chile. International portfolio investment gradually increased during the late 1980s and the 1990s in this region. Investors willing to assume the additional risk present in these markets have been well compensated. Yet, many market analysts have indicated that such markets are somewhat of an abnormality, in that they tend to be characterized as thin, narrow and driven by poorly informed individuals rather than by fundamentals. The optimization algorithms include Markowitz variance-covariance and lower partial moment. The optimal portfolios are evaluated using criteria such as terminal wealth, Sharpe utility measure, Treynor and Jensen measures, and reward to semi-variance. In addition, portfolios which employed first, second and third degree stochastic dominances are presented. It is shown that possessing a diversified international portfolio which includes Latin American stocks is beneficial.

PD April 1998. **TI** The Effects of Immigration on Socioeconomic Gaps in a Labor Managed System Versus in a Competitive System. **AU** Shachmurove, Yochanan; Leker, Tikva. **AA** Shachmurove: City University of New York and University of Pennsylvania. Leker: Bar-Ilan University. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 98/04; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. Website: www.econ.upenn.edu/CARESS. **PG** 15. **PR** no charge. **JE** F22, J30, J54, J61, P32. **KW** Immigration. Socioeconomic Gaps. Labor-Managed Firms. Kibbutz. Israel.

AB While most studies on immigration focus on its impact on the labor market, this study addresses its effect on socioeconomic gaps. By studying Israeli immigration, the authors examine the effects of mass immigration on socioeconomic gaps among generations using the Israeli Censuses for 1961 and 1983. The authors look at the socioeconomic gaps within two different economic systems within the same economy. One system is perfect competition oriented while the second, the kibbutz, is organized as a labor-managed firm. The analysis decomposes the Occupation Socioeconomic Score (OSS) differentials into human capital and market evaluation differences for each generation separately. The model develops a gap function that quantifies the socioeconomic gaps and uses iso-gap curves to compare pre-immigration and post-immigration gaps. The study finds that the score differentials among the examined groups in the kibbutz are lower than in the city, prior to the second wave of immigration. Even after the second wave of immigration the score differentials in the kibbutz, among the examined groups, are lower than in the city. The authors attempt to explain this occurrence by looking at how society in the kibbutz differs in the treatment of immigrants.

Shaffer, Greg

TI On the Incidence and Variety of Low-Price Guarantees. **AU** Arbatskaya, Maria; Hviid, Morten; Shaffer, Greg.

Shannon, Chris

PD August 1999. **TI** Quadratic Concavity and Determinacy of Equilibrium. **AU** Shannon, Chris; Zame, William R. **AA** Shannon: UC Berkeley. Zame: UCLA. **SR** University of California, Los Angeles, Department of Economics Working Paper: 791; Department of Economics, UCLA, Box 951477, Los Angeles, CA 90095-1477. Website: www.econ.ucla.edu. **PG** 53. **PR** \$5.00. **JE** C62, D41, D51, E90, G12. **KW** Determinacy. Commodity Spaces. Competitive Equilibria. Continuous Time Finance. Commodity Differentiation. Infinite Horizon. 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 a 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.

Shapiro, Perry

TI Transboundary Environmental Problems with a Mobile Population: Is There a Need for Central Policy? **AU** Hoel, Michael; Shapiro, Perry.

Shapley, Lloyd S.

PD January 2000. **TI** Control Games and Organizations. **AU** Shapley, Lloyd S.; Palamara, Jorge R. **AA** UCLA. **SR** University of California, Los Angeles, Department of Economics Working Paper: 795; Department of Economics, UCLA, Box 951477, Los Angeles, CA 90095-1477. Website: www.econ.ucla.edu. **PG** not available. **PR** \$5.00. **JE** C71, D23, D71, G34, L22. **KW** Simple Games. Authority. Organization. Command. Control. Coalition. Bosses. Approvers. Responsibility.

AB In decision-making bodies like legislatures, parliamentary systems, and organizations in general, coalitions turn out to be either all-powerful or totally ineffectual. This singular circumstance permits us the use of a simple mathematical construct - simple games - to study the internal authority structure of these entities. This paper follows closely Shapley's analysis and modeling of the structure of simple games and its extension into organizational theory, and is organized in five sections. The first three give the basic necessary results about sets, coalitions, simple games, and the local topology of command. The fourth section contains a detailed study of the control function. Finally the global structure of control and its application to organizational theory is discussed.

PD March 2000. **TI** Simple Games and Authority Structures. **AU** Shapley, Lloyd S.; Palamara, Jorge R. **AA** UCLA. **SR** University of California, Los Angeles, Department of Economics Working Paper: 796; Department of Economics, UCLA, Box 951477, Los Angeles, CA 90095-1477. Website: www.econ.ucla.edu. **PG** not available.

PR \$5.00. **JE** C71, D23, D71, G33, L22. **KW** Simple Games. Authority. Organization. Command. Control. Coalition. Bosses. Approvers. Responsibility.

AB We present a formal set-theoretic descriptive model for authority structures in organizations and suggest some applications. We extend the inward looking approach developed in earlier research to include interfaces with the outside world of tasks and rival organizations. An important feature of the model is the ability to assign a numerical measure of the responsibility that each member of the organization bears (i.e., the credit or the blame) for what was actually accomplished.

PD November 2000. **TI** Enhanced Banzhaf Power Index and It's Mathematical Properties. **AU** Shapley, Lloyd S.; Burgin, Mark. **AA** UCLA. **SR** University of California, Los Angeles, Department of Economics Working Paper: 797; Department of Economics, UCLA, Box 951477, Los Angeles, CA 90095-1477. Website: www.econ.ucla.edu. **PG** not available. **PR** \$5.00. **JE** B41, C71. **KW** Simple Games. Critical Coalitions. Power Indices. Axiomatic Foundations.

AB The main objective of the paper is to make the well-known Banzhaf-Coleman power index more adequate to the practice of coalition formation. To achieve this, a new power index, which is denoted by BS, is introduced and studied. Properties of coalitions in simple games are studied. The BS power index is introduced and it is shown how properties of this index make it possible to obtain some intrinsic properties of players (such, for example, as being a blocking player). It is proved that all axioms for the Banzhaf-Coleman power index given by Dubey and Shapley as well as axioms for the BS power index defined in this paper are independent.

Sharma, Sunil

TI Herd Behavior in Financial Markets: A Review. **AU** Bikhchandani, Sushil; Sharma, Sunil.

TI Neglected Heterogeneity and Dynamics in Cross-Country Savings Regressions. **AU** Haque, Nadeem U.; Pesaran, M. Hashem; Sharma, Sunil.

Shiller, Robert J.

PD June 1999. **TI** Designing Indexed Units of Account. **AA** Yale University and NBER. **SR** National Bureau of Economic Research Working Paper: 7160; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** E31, E42. **KW** Unit of Account. Designing Indices.

AB An indexed unit of account is a unit of measurement defined using an index such as a consumer price index so that prices defined in terms of these units will automatically adjust to changing economic conditions. Evidence on sticky prices and money illusion, and evidence from countries (notably Chile) that have created indexed units of account, suggests that creating such units is an important policy option for governments in countries with unstable price levels. A model is given that shows the dynamics of money prices when prices are expressed in the units. Results from the model suggest some design elements for an indexed unit of account: institutions to promote broad use of the unit for pricing, and a formal policy to increase the frequency of index computation when the price level becomes more volatile.

Shimazaki, Masao

PD August 1999. **TI** Effective Exchange Rates in Japan, 1879-1938. **AU** Shimazaki, Masao; Solomou, Solomos. **AA** University of Cambridge. **SR** University of Cambridge, DAE Working Paper: 9917; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. **Website:** <http://www.econ.cam.ac.uk/dae>. **PG** 14. **PR** US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. **JE** F31, N11, N43. **KW** Gold Standard. Effective Exchange Rates. Business Cycles.

AB This paper constructs nominal and real multilateral effective exchange rates for Japan during the period 1879-1938. Existing studies of Japanese quantitative economic history have tended to use the dollar-yen bilateral exchange rate. A comparison of different indices suggests that the new data offer new insights into Japan's economic history.

Shimotsu, Katsumi

PD May 2000. **TI** Modified Local Whittle Estimation of the Memory Parameter in the Nonstationary Case. **AU** Shimotsu, Katsumi; Phillips, Peter C. B. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1265; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. **Website:** www.cowles.econ.yale.edu/. **PG** 15. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C13, C14, C22. **KW** Fourier Transform. Brownian Motion. Fractional Integration. Long Memory. Nonstationarity. Semiparametric Estimation. Whittle Likelihood.

AB Semiparametric estimation of the memory parameter is studied in models of fractional integration in the nonstationary case, and some new representation theory for the discrete Fourier transform of the fractional process is used to assist in the analysis. A limit theory is developed for an estimator of the memory parameter that covers a range of values of d commonly encountered in applied work with economic data. The new estimator is called the modified local Whittle estimator and employs a version of the Whittle likelihood based on frequencies adjacent to the origin and modified to take into account the form of the data generating mechanism in the frequency domain. The modified local Whittle estimator is shown to be consistent for $0 < d < 2$ and is asymptotically normally distributed with variance $1/4$ for $1/2 < d < 7/4$. The approach allows for likelihood-based inference about d in a context that includes nonstationary data, is agnostic about short memory components and permits the construction of valid confidence regions for d that extend into the nonstationary region.

PD June 2000. **TI** Local Whittle Estimation in Nonstationary and Unit Root Cases. **AU** Shimotsu, Katsumi; Phillips, Peter C. B. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1266; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. **Website:** www.cowles.econ.yale.edu/. **PG** 13. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C14, C22. **KW** Fourier Transforms. Brownian Motion. Fractional Integration. Long Memory. Nonstationarity. Semiparametric Estimation. Trend. Whittle Likelihood. Unit Root.

AB Asymptotic properties of the local Whittle estimator in the nonstationary case ($d > 1/2$) are explored. For $1/2 < d \leq 1$, the estimator is shown to be consistent, and its limit distribution

and the rate of convergence depend on the value of d . For $d = 1$, the limit distribution is mixed normal. For $d > 1$ and when the process has a linear trend, the estimator is shown to be inconsistent and to converge in probability to unity.

PD June 2000. **TI** Pooled Log Periodogram Regression. **AU** Shimotsu, Katsumi; Phillips, Peter C. B. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1267; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. **Website:** www.cowles.econ.yale.edu/. **PG** 17. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C14, C22. **KW** Fourier Transform. Log Periodogram. Long Memory. Pooling Bands. Semiparametric Estimation.

AB Estimation of the memory parameter in time series with long range dependence is considered. A pooled log periodogram regression estimator is proposed that utilizes a set of m_L periodogram ordinates with L to infinity rather than m ordinates used in the conventional log periodogram estimator. Consistency and asymptotic normality of the pooled regression estimator are established. The pooled estimator is shown to have smaller variance but larger bias than the conventional log periodogram estimator. Finite sample performance is assessed in simulations, and the methods are illustrated in an empirical application with inflation and stock returns.

Shin, Hyun Song

TI Rethinking Multiple Equilibria in Macroeconomic Modeling. **AU** Morris, Stephen; Shin, Hyun Song.

Shin, Yongcheol

TI Forecast Uncertainties in Macroeconometric Modelling: An Application to the UK Economy. **AU** Garratt, Anthony; Lee, Kevin; Pesaran, M. Hashem; Shin, Yongcheol.

TI Bounds Testing Approaches to the Analysis of Long-Run Relationships. **AU** Pesaran, M. Hashem; Shin, Yongcheol; Smith, Richard J.

Shoven, John B.

PD June 1999. **TI** Asset Location in Tax-Deferred and Conventional Savings Accounts. **AU** Shoven, John B.; Sialm, Clemens. **AA** Shoven: Stanford University and NBER. Sialm: Stanford University. **SR** National Bureau of Economic Research Working Paper: 7192; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **Website:** www.nber.org. **PG** 17. **PR** \$5.00. **JE** G11, G23, H24. **KW** Asset Allocation. Tax-Deferred Accounts. Savings Accounts.

AB The optimal allocation of assets among different asset classes (such as stocks and bonds) has received considerable attention in financial theory and practice. On the other hand, investors have not been given much guidance about which assets should be located in tax-deferred retirement accounts and which in conventional savings accounts. This paper derives optimal asset allocations (which assets to hold) and asset locations (where to hold them) for a risk-averse investor saving for retirement. Locating assets optimally can significantly improve the risk-adjusted performance of retirement savings.

Shubik, Martin

PD April 2000. **TI** The Theory of Money. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1253; Yale University, Cowles Foundation Library, P.O. Box

208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. PG 20. PR no charge up to 3 papers; \$3.00 U.S.; 4.00 International. JE C73, D52, D84, E17, E42. KW Money. Macroeconomics. Strategic Market Games. General Disequilibrium. Bankruptcy.

AB Fiat money is a creation of both the state and society. Its value is supported by expectations which are conditioned by the dynamics of trust in government, the socio-economic structure and by outside events such as wars, plagues or political unrest. The micro-management of a dynamic economy is not far removed in difficulty from the micro-management of the weather. However, money and the financial institutions and instruments of a modern economy provide the means to influence expectations and bounded behavior. Paper money emerges as a virtual commodity. The dynamics of the economy permits it to serve as an imaginary gold. Closely related to but basically different from fiat money is credit. Credit, unlike fiat money is not a virtual commodity but a two party contract. The fact this it's a two party contract set in a dynamic context implies that there are chances that the economy may reach a state where a debtor is unable to meet his or her obligations. When this happens the laws and customs of the society must provide default, bankruptcy and reorganization rules.

TI Information and the Existence of Stationary Markovian Equilibrium. AU Karatzas, Ioannis; Shubik, Martin; Sudderth, William D.

TI A Stochastic Overlapping Generations Economy with Inheritance. AU Karatzas, Ioannis; Shubik, Martin; Sudderth, William D.

Shuetrim, Geoffrey

PD February 1998. **TI** Systematic Risk Characteristics of Corporate Equity. AA Reserve Bank of Australia. **SR** Reserve Bank of Australia Research Discussion Paper: 9802; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. Website: <http://www.rba.gov.au>. PG 35. PR no charge. JE G11, G12. KW Systematic Risk. Equity Betas. Convergence.

AB This paper finds evidence that firms may manipulate their systematic risk. This contrasts with previously held views that changes in estimates of systematic risk were an artifact of the estimators used. The central finding is that firms take actions that result in their equity betas adjusting toward unity, where equity betas are a common measure of systematic risk. This convergence phenomenon appears to result in older and larger firms having equity betas that are closer to unity than smaller and younger firms. The relationship between equity beta convergence and firm size is reconciled with the well-documented negative correlation between equity betas and firm size. Also, greater deviations of systematic risk from the market average are found to be associated with a higher probability of being delisted. Having refuted the hypothesis that observed changes in systematic risk are an artifact of the estimation process, some implications for asset-market efficiency are explored.

Sialm, Clemens

TI Asset Location in Tax-Deferred and Conventional Savings Accounts. AU Shoven, John B.; Sialm, Clemens.

Siconolfi, Paolo

TI Efficient Provision of Public Goods with Endogenous Redistribution. AU Anderlini, Luca; Siconolfi, Paolo.

Singh, Harbir

TI Termination Outcomes of High-Tech Alliances: Bridging Firm- and Transaction-Specific Antecedents. AU Reuer, Jeffrey J.; Zollo, Maurizio; Singh, Harbir.

Sivakumar, K.

TI The Influence of Choice Justification and Stimulus Meaningfulness on the Attraction Effect: An Information-Processing Perspective. AU Malaviya, Prashant; Sivakumar, K.

Slaughter, Matthew J.

TI The Rybczynski Theorem, Factor-Price Equalization, and Immigration: Evidence From U.S. States. AU Hanson, Gordon H.; Slaughter, Matthew J.

Sloth, Birgitte

TI Evolutionary Learning in Signalling Games. AU Jacobsen, Hans Jorgen; Jensen, Mogens; Sloth, Birgitte.

Smith, Richard J.

TI Bounds Testing Approaches to the Analysis of Long-Run Relationships. AU Pesaran, M. Hashem; Shin, Yongcheol; Smith, Richard J.

Smith, Valdemar

PD September 2000. **TI** R&D and Productivity in Danish Firms: Some Empirical Evidence. AU Smith, Valdemar; Dilling-Hansen, Mogens; Eriksson, Tor; Madsen, Erik Stroj. AA Smith and Stroj Madsen: CIE and Aarhus School of Business. Dilling-Hansen: CIE and University of Aarhus. Eriksson: Aarhus School of Business and CLS. **SR** University of Copenhagen, Centre for Industrial Economics Discussion Paper: 2000/05; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. Website: www.econ.ku.dk/cie/wpmast.htm. PG 16. PR no charge. JE D24, L11, L60, O31, O33. KW Productivity. Research and Development. Innovation. Manufacturing.

AB The aim of the paper is to examine the relationship between R&D capital and productivity using micro data for Danish manufacturing firms. We account for the influence of factors such as ownership, innovative characteristics and source of funding. The return to accumulated R&D capital is estimated to be in the neighborhood of 9-12 percent, whereas the short-run effect of R&D is insignificant. Furthermore, we analyze the direct influence from foreign ownership, source of funding, innovative characteristics and ownership dispersion on productivity. However, none of the factors seem to have an impact on firm productivity. The same is the case for the indirect influence coming from interaction with accumulated R&D capital.

Snyder, Christopher M.

TI Property Rights, Incomplete Contracts, and Social Harm. AU Pitchford, Rohan; Snyder, Christopher M.

Soberman, David A.

PD February 2000. **TI** Informative Advertising: An Alternative Viewpoint and Implications. **AA** INSEAD. **SR** INSEAD Working Paper: 2000/05/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** L11, L15, M21, M37. **KW** Advertising. Price Competition. Informative Advertising. Persuasive Advertising. Spatial Competition.

AB Since the early 1960's, economists and marketers have hotly debated the role of advertising. Our model considers a market where demand for a firm's products is driven by three factors: consumers' awareness of products and their attributes, pricing, and the degree of fit between a product's attributes and the needs of the consumer. We assume that product attributes are fixed and the firms make decisions about how much to advertise and what prices to set for their products. A distinct element of our model is the mechanism by which advertising makes consumers aware of products in the category. Advertising is assumed to be a series of messages, which are received randomly by consumers in the target population, and consumers only have interest in a product if they have seen advertising about it. It is important to underline that advertising only affects consumers' awareness of a product and not their valuation of it. The primary finding of our analysis is that the impact of informative advertising on market prices and profits is a function of the pre-existing level of differentiation in the market.

PD August 1999. **TI** High Quality Sellers and Warranties: Sorting Customers and Getting a Fair Price at the Same Time. **AA** INSEAD. **SR** INSEAD Working Paper: 99/81/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** D11, D43, L13, L15. **KW** Extended Warranties. Signaling. Screening. Unobservable Quality. Price Discrimination. Menu of Contracts. Used Cars.

AB We consider the decision process of a high quality seller who wishes to use warranties. The model involves a seller who wishes to sell a product and an optional extended warranty to a heterogeneous market with two types of buyers. The findings of the analysis are first, that a high quality seller sells longer warranty coverage than a low quality seller to every buyer when quality is unobservable. Nevertheless, a high quality seller's optimal warranty policy is often unaffected by the unobservability of quality. Second, when a high quality seller's actions are affected by the "need to signal", the equilibrium action involves lengthening the coverage sold to both types of consumers but shortening the length of the extended warranty. Finally, the model demonstrates that a high quality seller will not maximize profit by signaling solely with base warranties.

TI "Hands Off" or "Hands On" The Marketing of Service Innovations. **AU** Iyer, Ganesh; Soberman, David A.

Solomou, Solomos

PD July 1999. **TI** Weather Effects on European Agricultural Output 1850-1913. **AU** Solomou, Solomos; Wu, Weike. **AA** Solomou: University of Cambridge. Wu: University of Cambridge. **SR** University of Cambridge,

DAE Working Paper: 9915; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. **Website:** <http://www.econ.cam.ac.uk/dae>. **PG** 11. **PR** US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. **JE** C14, C32, N54, Q11. **KW** Agriculture. Weather Effects. Economic History. Economic Fluctuations. Semi-Parametric Methods.

AB This paper compares the effects of weather shocks on agricultural production in Britain, France and Germany during the late nineteenth century. Using semi-parametric models to estimate the non-linear agro-weather relationship, we find that weather shocks explain between one and two-thirds of variations in agricultural production. Given the large size of the agricultural sector during this period, the high variance of agricultural production and the cyclical nature of weather shocks, the agro-weather relationship transmitted large effects on macroeconomic fluctuations over much of the period.

TI Effective Exchange Rates in Japan, 1879-1938. **AU** Shimazaki, Masao; Solomou, Solomos.

Soludo, Charles C.

TI Aid Intensity in Africa. **AU** O'Connell, Stephen A.; Soludo, Charles C.

Somers, Harold M.

PD November 1999. **TI** Social Security with Private Securities. **AA** UCLA. **SR** University of California, Los Angeles, Department of Economics Working Paper: 792; Department of Economics, UCLA, Box 951477, Los Angeles, CA 90095-1477. **Website:** www.econ.ucla.edu. **PG** 12. **PR** \$5.00. **JE** H55. **KW** Social-Security. Privatization. Pensions. Retirement.

AB Some of the many proposals to "fix" Social Security are subjected in this paper to a double-screening test: Do they offer (1) a guaranteed safety-net plus (2) a chance to make stock market profits? Using these criteria, the following plans are found to pass the test: THE ARCHER (GOP) PLAN; PRESIDENT CLINTON'S "USA" ACCOUNTS; THE FELDSTEIN et al (1999) PLAN (with guaranteed option). In the three plans that pass the double test -- a guaranteed safety-net plus a claim on private securities -- the baby boomers and their children will be able to enjoy both peace of mind and dreams of riches.

Somwaru, Agapi

TI Sources of Growth and Supply Response: A Cross-Commodity Analysis of China's Grain Sector. **AU** Colby, Hunter; Diao, Xinshen; Somwaru, Agapi.

Sonnac, Nathalie

PD June 1999. **TI** Monopole Televisuel et Publiphobie. **AA** Universite Libre de Bruxelles and CREST. **SR** Document de Travail du CREST: 9933; Institut National de la Statistique et de Etudes Economiques. CREST-Mme Guedj, 15 Boulevard Gabriel Peri, 92245 Malakoff Cedex, France. **Website:** www.ensae.fr/crest. **PG** 14. **PR** no charge. **JE** L32, L33, L82. **KW** Television Markets. Public Ownership. Advertising.

AB This paper examines the television industry assuming two alternative market structures: private or public monopoly. We compare the advertising tariffs resulting from these two

situations under the assumption that TV-watchers are advertising-averse. We find that a public firm always selects a higher advertising tariff than the tariff that would be proposed to advertisers by a private monopolist. As a consequence, a shorter period of emission time is devoted to advertising under public ownership of the TV-network.

Sorgard, Lars

TI TV Advertising, Program Quality, and Product-Market Oligopoly. **AU** Nilssen, Tore; Sorgard, Lars.

TI Access Pricing, Quality Degradation, and Foreclosure in the Internet. **AU** Foros, Oystein; Kind, Hans Jarle; Sorgard, Lars.

TI Merger Profitability in Unionized Oligopoly. **AU** Lommerud, Kjell Erik; Straume, Odd Rune; Sorgard, Lars.

TI Private Labels, Price Rivalry, and Public Policy. **AU** Staahl Gabrielsen, Tommy; Sorgard, Lars.

Souam, Said

TI Collusion et politique de la concurrence en information asymétrique. **AU** Penard, Thierry; Souam, Said.

Spagnolo, Giancarlo

PD March 1999. **TI** Issue Linkage, Delegation, and International Policy Cooperation. **AA** University Cambridge. **SR** University of Cambridge, DAE Working Paper: 9913; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. **PG** 10. **PR** US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. **JE** E61, F13, F42, H77. **KW** International Agreements. Policy Cooperation. Policy Coordination. Cross-Border Spillovers. International Institutions.

AB How many international agreements should there be, and who should sign them? When policy issues are separable, linking them in a "grand international agreement" facilitates policy cooperation by reallocating slack enforcement power. When policy issues are substitutes, issue linkage further facilitates policy cooperation by increasing the amount of available enforcement power. The contrary happens when issues are complements. Then a better strategy can be to delegate policy issues to different independent national agencies. Constitutional rules that permit credible delegation to agents with different objectives from governments facilitate international cooperation by generating stronger credible threats. Implications for multilateral agreements are discussed.

PD March 1999. **TI** On Interdependent Supergames: Multimarket Contact, Concavity, and Collusion. **AA** University of Cambridge. **SR** University of Cambridge, DAE Working Paper: 9914; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. **PG** 12. **PR** US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. **JE** C72, D43, L13, L21. **KW** Repeated Games. Oligopoly. Collusion. Cooperation. Conglomeration. Mergers.

AB This paper addresses the effects of multimarket contact on firms' ability to collude. Real world imperfections tend to makes firms' objective function strictly concave and market

supergames "interdependent" firms" payoffs in each market depend on how they are doing in others. Then, multimarket contact always facilitates collusion. It may even make it sustainable in all markets when otherwise it would not be sustainable in any. The effects of conglomeration are discussed. "Multi-game contact" is shown to facilitate cooperation in non-oligopolistic supergames as long as agents' objectives function is submodular in material payoffs.

Sproul, Michael F.

PD March 1999. **TI** Backed Money, Fiat Money and the Real Bills Doctrine. **AA** UCLA. **SR** University of California, Los Angeles, Department of Economics Working Paper: 789; Department of Economics, UCLA, Box 951477, Los Angeles, CA 90095-1477. Website: www.econ.ucla.edu. **PG** 36. **PR** \$5.00. **JE** E51, E52, E58. **KW** Real Bills Doctrine. Quantity Theory. Money.

AB In this paper I argue that the real bills doctrine has been wrongly discredited, and that it ought to displace the quantity theory as the dominant theory of money. The discussion begins with the observation that the issue of backed money will not be inflationary as long as central banks follow the real-bills rule of only issuing money to those customers who offer good security in exchange. I then contend that modern paper currencies, which we normally think of as unbacked fiat money, may in fact be (and probably are) backed. If correct, this would imply that the real bills doctrine, and not the quantity theory, is a correct model of the value of modern money. The paper concludes by discussing some key controversies in the history of the real bills doctrine, and shows that the major arguments responsible for the defeat of the real bills doctrine contain obvious and serious error.

Staahl Gabrielsen, Tommy

PD June 2000. **TI** Private Labels, Price Rivalry, and Public Policy. **AU** Staahl Gabrielsen, Tommy; Sorgard, Lars. **AA** Staahl Gabrielsen: University of Bergen. Sorgard: Norwegian School of Economics and Business Administration. **SR** University of California, Santa Barbara, Working Papers in Economics: 00/09; Department of Economics, Working Paper Coordinator. University of California, Santa Barbara. Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. **PG** 28. **PR** no charge for domestic orders; for non-U.S. orders, U.S. \$3 per paper, personal check or money order made out to "Regents of the University of California". **JE** L12, L13, L40, L52. **KW** Private Labels. Public Policy. Price Rivalry. National Brands. Market Structure.

AB The article examines how the existence of a retailer owned brand, private label, affects the price setting of a national brand. We find that the potential for a private label introduction may lead to price concessions from the national brand producer, but that actual private label introduction as such may very well lead to higher retail prices on national brands. We argue that this may have important implications for the interpretation of empirical results and the public policy towards national brands.

Stacchetti, Ennio

TI Technology (and Policy) Shocks in Models of Endogenous Growth. **AU** Jones, Larry E.; Manuelli, Rodolfo E.; Stacchetti, Ennio.

Staiger, Robert W.

TI Multilateral Trade Negotiations, Bilateral Opportunism and the Rules of GATT. **AU** Bagwell, Kyle; Staiger, Robert W.

Stasavage, David

TI When Does Delegation Improve Credibility? Central Bank Independence and the Separation of Powers. **AU** Keefer, Philip; Stasavage, David.

TI Making and Breaking Monetary Policy Rules: The Experience of African Countries. **AU** Guillaume, Dominique; Stasavage, David.

Steinmeier, Thomas L.

TI Employer Provided Pension Data in the NLS Mature Women's Survey and in the Health and Retirement Study. **AU** Gustman, Alan L.; Steinmeier, Thomas L.

Stepanova, Anna

TI Second-Mover Advantage and Price Leadership in Bertrand Duopoly. **AU** Amir, Rabah; Stepanova, Anna.

Stock, James H.

TI Confidence Intervals for Autoregressive Coefficients Near One. **AU** Elliott, Graham; Stock, James H.

Straume, Odd Rune

TI Merger Profitability in Unionized Oligopoly. **AU** Lommerud, Kjell Erik; Straume, Odd Rune; Sorgard, Lars.

Stulz, Rene M.

TI Corporate Focusing and Internal Capital Markets. **AU** Schlingemann, Frederik P.; Stulz, Rene M.; Walkling, Ralph A.

Subramanian, Arvind

TI Dynamic Gains from Trade: Evidence from South Africa. **AU** Jonsson, Gunnar; Subramanian, Arvind.

Sudderth, William D.

TI Information and the Existence of Stationary Markovian Equilibrium. **AU** Karatzas, Ioannis; Shubik, Martin; Sudderth, William D.

TI A Stochastic Overlapping Generations Economy with Inheritance. **AU** Karatzas, Ioannis; Shubik, Martin; Sudderth, William D.

Sussman, Nathan

TI The International Monetary System in the (Very) Long Run. **AU** Eichengreen, Barry; Sussman, Nathan.

Svensden, Gert Tinggaard

TI The Political Economy of International Emissions Trading Scheme Choice: Empirical Evidence. **AU** Boom, Jan-Tjeerd; Svensden, Gert Tinggaard.

Svensson, Lars E. O.

PD June 1999. **TI** Monetary Policy Issues for the Eurosystem. **AA** Stockholm University and NBER. **SR** National Bureau of Economic Research Working Paper:

7177; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 47. **PR** \$5.00. **JE** E42, E52, E58. **KW** Inflation Targeting. Monetary Targeting. Eurosystem.

AB The paper discusses the choice between inflation targeting and monetary targeting as a strategy for the Eurosystem, the actual strategy the Eurosystem announced in the fall of 1998, the framework for policy decisions appropriate for achieving the goals of the Eurosystem, the role of exchange rate management in the EMU, and the accountability and transparency of the Eurosystem. The choice between inflation targeting and monetary targeting is, in effect, a choice between high and low transparency. Inflation targeting and monetary targeting, in practice, imply similar policy decisions, but monetary targeting implies that policy decisions are explained in terms of money-growth developments that are not essential for policy. The Eurosystem has specified an operational inflation target, but will keep secret the inflation forecast that will, in practice, be the decisive input in policy decisions. Exchange rate policy is controlled by the Council of finance ministers in the EMU; this is a major inconsistency in the Maastricht Treaty and a possible threat to the independence of the Eurosystem. The European Parliament may have a crucial role in ensuring the accountability of the Eurosystem.

PD June 1999. **TI** Does the P* Model Provide Any Rationale for Monetary Targeting? **AA** Stockholm University and NBER. **SR** National Bureau of Economic Research Working Paper: 7178; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 11. **PR** \$5.00. **JE** E42, E52, E58. **KW** Monetary Targeting. P* Model.

AB The so-called P* model is frequently used or referred to in discussions of monetary targeting. This gives the impression that the P* model might provide rationale for monetary targeting or for monetary reference value used by the Eurosystem. The P* model implies that inflation is determined by the level of and changes in the "real money gap" (the deviation of current real balances from their long-run equilibrium level), and hence that the real money gap is an important indicator for future inflation. Nevertheless, the P* model does not seem to provide any rationale for either a Bundesbank-style money-growth target or a Eurosystem-style money-growth indicator.

TI Eurosystem Monetary Targeting: Lessons from U.S. Data. **AU** Rudebusch, Glenn D.; Svensson, Lars E. O.

Swaffield, Joanna

PD May 2000. **TI** Gender, Motivation, Experience and Wages. **AA** London School of Economics. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 457; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: http://cep.lse.ac.uk. **PG** 21. **PR** 5 pounds. **JE** J16, J24, J31, J71. **KW** Experience. Motivation. Unobserved Heterogeneity. Gender. Wage Differentiation.

AB Using data from the British Household Panel Survey, 1991-97, this paper investigates the structure of the female wage equation and the gender wage differential. The discriminatory portion of the gender wage differential is overstated by over 40% when inadequate measures of female labor market experience are included in the wage equation. The

degree of labor market motivation, aspirations and constraints are found to have a significant impact on the female wage. Moreover, the impact of time out of the labor market varies across gender, activity undertaken while out, labor market motivation and the degree of male occupational domination.

Swagel, Phillip

PD March 2000. **TI** Unionization and Strategic Trade Policy. **AU** Swagel, Phillip; Tan, Ling Hui. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/53; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 15. **PR** not available. **JE** F13, F41, J51, L13. **KW** Strategic Trade Policy. Trade Unions. Wage Bargaining. Market Structure.

AB This paper examines the effect of unionization on welfare and trade policy in a model of duopolists competing in a third market. It shows that the traditional result that the presence of a union necessitates a stronger strategic trade policy to reach the optimal level of welfare depends on the mode of competition. With Bertrand duopolists, a union can be welfare-improving; it can also lead to a weaker trade policy, or even reverse the direction of the optimal policy. The results highlight the importance for trade policy of understanding the nature of firm behavior and the institutional features of the labor market.

Swann, Troy

TI Stylised Facts of the Australian Labour Market. **AU** Debelle, Guy; Swann, Troy.

Symons, James

TI Factor Residuals in SUR Regressions: Estimating Panels Allowing for Cross Sectional Correlations. **AU** Robertson, Donald; Symons, James.

Tallman, Ellis W.

PD July 1997. **TI** Financial Aggregates as Conditioning Information for Australian Output and Inflation. **AU** Tallman, Ellis W.; Chandra, Naveen. **AA** Tallman: Federal Reserve Bank of Atlanta. Chandra: Reserve Bank of Australia. **SR** Reserve Bank of Australia Research Discussion Paper: 9704; Economic Research Department, Reserve Bank of Australia, GPO Box 3947, Sydney NSW 2001, Australia. Website: <http://www.rba.gov.au>. **PG** 34. **PR** no charge. **JE** E44, E51. **KW** Financial Aggregates. Conditioning Forecasts. Prediction.

AB This paper examines whether financial aggregates provide information useful for predicting real output growth and inflation, extending the inquiry conducted in Tallman and Chandra (1996). First, we investigate whether perfect knowledge of the future values of financial aggregates helps improve significantly the forecasting accuracy of output and inflation in a simple vector autoregression framework. The results display only one notable improvement - future information on credit growth helps improve the prediction accuracy of real output growth. The improvement is most noticeable during the early 1990s recession. Second, we test whether the financial aggregates are important explanators within single-equation models that are more rigorously fitted to the data. We find only the growth in credit helps explain the growth in real output in a particular specification of the output model. This finding, though, is sensitive to the choice of foreign output proxy. In sum, we conclude that while credit may have

some useful information in times of financial restructuring it is unlikely that there is information in financial aggregates that is exploitable systematically for predicting either real output growth or inflation.

Tan, Ling Hui

TI Unionization and Strategic Trade Policy. **AU** Swagel, Phillip; Tan, Ling Hui.

PD March 2000. **TI** Auction Quotas with a Foreign Duopoly. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/65; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 10. **PR** not available. **JE** D44, F13. **KW** Auction Quotas. Duopoly. Commercial Policy.

AB This paper uses a partial equilibrium framework to compare the welfare consequences of different methods of quota administration relative to free trade under imperfect competition. It shows that a country importing a good from foreign duopolists may improve its welfare by setting a quota at the free trade quantity and giving a fraction of the quota licenses to the duopolists while auctioning off the rest.

Tanzi, Vito

PD March 2000. **TI** Tax Policy for Emerging Markets: Developing Countries. **AU** Tanzi, Vito; Zee, Howell H. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/35; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 31. **PR** not available. **JE** E62, F13, H20, O10, O23. **KW** Tax Policy. Tax Reform. Developing Countries. Economic Development. Fiscal Policy.

AB This paper discusses important tax policy issues facing developing countries today. It views tax policy from both the macroeconomic perspective, which focuses on broad questions such as the level and composition of tax revenue, and the microeconomic perspective, which focuses on certain design aspects of selected major taxes, such as the personal income tax, the corporate income tax, the value-added tax, excises, and import tariffs. It provides a review of the role of tax incentives in these countries, and identifies some policy challenges posed by the globalization of the world economy.

PD March 2000. **TI** The Role of the State and the Quality of the Public Sector. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/36; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 23. **PR** not available. **JE** D60, D73, E62, H11, P16. **KW** Rules. Institutions. Role of State. Constitutions. Controls.

AB This paper discusses issues to be considered in designing "second generation" reforms. These reforms should focus on improving the capacity of the public sector to implement economic policies. The paper contrasts these reforms with those known as first generation reforms, which essentially focused on macroeconomic policies. The paper discusses the role of rules and institutions. It concludes that a high-quality public sector is necessary to ensure that good policies generate desirable and durable effects. The creation of such a sector requires many second generation reforms.

Tapper, U. A. Staffan

TI R&D Performance Measures That Are Linked to

Strategy. AU Loch, Christoph H.; Tapper, U. A. Staffan.

Teal, Francis

PD 1999. **TI** Why Can Mauritius Export Manufactures, and Ghana Not? **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/99/10; Centre for the Study of African Economies, University of Oxford, St. Cross Building, Manor Road, Oxford, OX1 3UL, England. Website: www.csaee.ox.ac.uk/. **PG** 13. **PR** 3 pounds or \$5.00; subscription 55 pounds or \$88.00. **JE** F41, J24, J31, O10, O55. **KW** Productivity. Wages. Manufacturing Exports. Sub-Saharan Africa. Open Economy. **AB** Exports of labor-intensive manufactures from sub-Saharan Africa are negligible with the exception of Mauritius. Such exports from Ghana are low relative to other sub-Saharan African countries and relative to what would be predicted by its factor endowment. Firm level data from the two countries is used to assess the reasons for this poor performance. Large firms (those with more than 100 employees) are much more likely to be in the export market than smaller firms. It is shown that Mauritian firms are four times more efficient than those in Ghana while wages are six times higher. However for large firms the productivity differential is similar, but wages in Mauritius are only three times those in Ghana. Large firms in Ghana cannot compete with those from Mauritius due to their high wages relative to productivity.

Timmermann, Allan

PD January 2001. **TI** Structural Breaks, Incomplete Information and Stock Prices. **AA** University of California, San Diego. **SR** University of California, San Diego, Department of Economics Working Paper: 2001/02; Department of Economics, 0508, University of California, San Diego, La Jolla, CA 92093-0508. Website: <http://econ.ucsd.edu/papers>. **PG** 20. **PR** \$3.00 U.S. and Canada; \$7.00 Foreign; make checks payable to Regents, University of California. **JE** D83, D84, G12. **KW** Structural Breaks. Learning. Stock Prices. Asset Pricing. Incomplete Information.

AB This paper presents empirical evidence on the existence of structural breaks in the fundamentals process underlying US stock prices. We develop an asset pricing model that represents breaks in the context of a Markov switching process with an expanding set of non-recurring states. Different hypotheses on how investors form expectations about future dividends after a break are proposed and analyzed. A model in which investors do not have full information about the parameters of the dividend process but gradually update their beliefs as new information arrives is shown to induce skewness, kurtosis, volatility clustering and the serial correlation in stock returns after a break.

Todd, Petra

TI Evaluating the Effect of an Antidiscrimination Law Using a Regression-Discontinuity Design. AU Hahn, Jinyong; Todd, Petra; Van der Klaauw, Wilbert.

TI Racial Bias in Motor Vehicle Searches: Theory and Evidence. AU Knowles, John; Persico, Nicola; Todd, Petra.

Tokat, Yesim

TI Asset and Liability Management: Recent Advances. AU Rachev, Svetlozar T.; Tokat, Yesim.

PD June 2000. **TI** The Stable Non-Gaussian Asset Allocation: A Comparison with the Classical Gaussian Approach. AU Tokat, Yesim; Rachev, Svetlozar T.; Schwartz, Eduardo. **AA** Tokat and Rachev: University of California, Santa Barbara. Schwartz: UCLA. **SR** University of California, Santa Barbara, Working Papers in Economics: 00/08; Department of Economics, Working Paper Coordinator. University of California, Santa Barbara. Santa Barbara, CA 93106. Website: www.econ.ucsb.edu. **PG** 36. **PR** no charge for domestic orders; for non-U.S. orders, U.S. \$3 per paper, personal check or money order made out to "Regents of the University of California". **JE** C53, C61, G11. **KW** Portfolio Optimization. Stable Distribution. Scenario Generation. Uncertainty. Paretian Distributions. **AB** We analyze a multistage stochastic asset allocation problem with decision rules. The uncertainty is modeled using economic scenarios with Gaussian and stable Paretian non-Gaussian innovations. The optimal allocations under these alternative hypotheses are compared. If the agent has very low or very high risk aversion, then the Gaussian and stable non-Gaussian scenarios result in similar allocations. When the risk aversion of the agent is between these two extreme cases, then the two distributional assumptions result in very different asset allocations. Our calculations suggest that the allocations may be up to 85% different depending on the level of risk aversion of the agent.

Toktay, L. Beril

PD February 2000. **TI** Inventory Management of Remanufacturable Products. AU Toktay, L. Beril; Wein, Lawrence M.; Zenios, Stefanos A. **AA** Toktay: INSEAD. Wein: MIT. Zenios: Stanford University. **SR** INSEAD Working Paper: 2000/18/TM; 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** M11, M19, M21. **KW** Recyclable Products. Kodak. Component Procurement. Inventory Management.

AB We address the procurement of new components for recyclable products in the context of Kodak's single-use camera. The objective is to find an ordering policy that minimizes the total expected procurement, inventory holding and lost sales cost. Distinguishing characteristics of the system are the uncertainty and unobservability associated with return flows of used cameras. We model the system as a closed queueing network, develop a heuristic procedure for adaptive estimation and control, and illustrate our methods with disguised data from Kodak. Using this framework, we investigate the effects of various system characteristics such as informational structure, procurement delay, demand rate and length of the product's life cycle.

Tornell, Aaron

PD July 1999. **TI** Privatizing the Privatized. **AA** Harvard University and NBER. **SR** National Bureau of Economic Research Working Paper: 7206; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 37. **PR** \$5.00. **JE** D23, H11, L51. **KW** Privatization. Hard Budget Constraints.

AB In the first part of this paper we argue that three reforms must be implemented if privatization is to increase efficiency.

First, establishing unitary control rights within the firm. Second, making privatized firms face hard budget constraints. Third, establishing a non-corruptible judicial system and transparent bankruptcy procedures. The question arises as to what course of action should be undertaken when these reforms have not been undertaken and privatizers have only a small window of opportunity? Either they privatize hastily today, or not at all. Should they go ahead with privatization and hope that the newly privatized firms will create the demand for good laws? In the case of behemoths, the answer is not clear cut. Privatization without prior implementation of the three reforms mentioned above will simply replace government bureaucrats with private mafias (i.e., private groups with the power to extract fiscal transfers). These private mafias might behave more voraciously than the bureaucrats they are replacing, reducing aggregate efficiency and further hindering the growth of the competitive private sector. In the second part we address the more traditional issues of auction design and of restructuring and regulation of monopolies with network externalities.

Toro, Juan

TI The Effect of Joining the EMS: Monetary Transmission Mechanisms in Spain. **AU** Juselius, Katarina; Toro, Juan.

Tranaes, Torben

TI Optimal Workfare in Unemployment Insurance. **AU** Hansen, Claus Thustrup; Tranaes, Torben.

Trindade, Vitor

TI Ethnic Chinese Networks in International Trade. **AU** Rauch, James E.; Trindade, Vitor.

Trockel, Walter

PD February 1999. **TI** Integrating the Nash Program into Mechanism Theory. **AA** UCLA and Bielefeld University. **SR** University of California, Los Angeles, Department of Economics Working Paper: 787; Department of Economics, UCLA, Box 951477, Los Angeles, CA 90095-1477. Website: www.econ.ucla.edu. **PG** 12. **PR** \$5.00. **JE** C71, C72. **KW** Nash Program. Implementation. Game Form.

AB The present paper provides a method by which the Nash Program may be embedded into mechanism theory. It is shown that any result stating the support of any solution of a cooperative game in coalitional form by a noncooperative equilibrium of some suitable game in strategic form can be used to derive a mechanism theoretic implementation in this equilibrium of that solution.

PD March 1999. **TI** On the Nash Program for the Nash Bargaining Solution. **AA** UCLA and Bielefeld University. **SR** University of California, Los Angeles, Department of Economics Working Paper: 788; Department of Economics, UCLA, Box 951477, Los Angeles, CA 90095-1477. Website: www.econ.ucla.edu. **PG** not available. **PR** \$5.00. **JE** C71, C72. **KW** Nash Program. Nash Bargaining. Implementation. Walras Equilibrium.

AB The present paper provides two different supporting results for the Nash bargaining solution of n-person bargaining games. First, for any bargaining game there is defined a non-cooperative game in strategic form, whose unique dominant strategy equilibrium induces a payoff vector that coincides with the Nash solution of the bargaining game. Next an n-stage

game in extensive form is presented whose unique subgame perfect equilibrium supports the Nash solution of the bargaining game. Finally, the support results are shown to induce implementation results in the sense of mechanism theory.

Turon, Helene

TI Unemployment Dynamics, Duration and Equilibrium: Evidence from Britain. **AU** Burgess, Simon; Turon, Helene.

Tvede, Mich

PD November 2000. **TI** Endogenous Growth and Competitive Markets. **AU** Tvede, Mich; Jensen, Martin Kaae. **AA** University of Copenhagen. **SR** University of Copenhagen, Institute of Economics Discussion Paper: 00/14; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. **PG** 13. **PR** no charge. **JE** D92, E20, F43, O40. **KW** Endogenous Growth. Optimal Growth. Pareto Optimality. Perpetual Growth. Returns to Scale.

AB In the present paper, an optimal growth model for which transformation possibilities are supposed to be bounded in the short run and unbounded in the long run -- maybe due to adjustment costs or accumulation costs -- is considered. It is shown that equilibria exist and that equilibrium allocations are Pareto optimal and exhibit perpetual growth. The model of the present paper combines features of models with increasing returns to scale and externalities and features of models with constant returns to scale in the sense that it is capable of explaining why different countries experience different growth patterns and that equilibrium allocations are Pareto optimal.

TI Ordering Pareto-Optima Through Majority Voting. **AU** Cres, Herve; Tvede, Mich.

TI Optimal Policy in OG Models. **AU** Ghiglino, Christian; Tvede, Mich.

TI Imperfect Competition and the Firm: Some Equivalence Results. **AU** Keiding, Hans; Tvede, Mich.

Tyers, Rod

PD February 1999. **TI** European Unemployment, US Wages and the Asian Emergence. **AU** Tyers, Rod; Yang, Yongzheng. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 367; Department of Economics, Australian National University, Canberra ACT 0200, Australia. **PG** 18. **PR** no charge. **JE** F02, F13, J31. **KW** Trade. Wages. Unemployment.

AB Recent theoretical work by Davis has suggested that Europe's regulated labor markets confer high wages on industrialized trading partners such as the US while the associated unemployment is entirely European. Moreover, the adjustment in the EU and the US to the emergence of developing Asia is seen as adding to EU unemployment. This paper adapts a more general yet standard global model to investigate international effects of wage regulation and of the Asian emergence. The Davis result that European unemployment raises the wage in the US is supported, though the generalizations in our model greatly weaken it. By contrast the Asian emergence is found to confer on the northern economies a terms of trade gain and overall economic expansion. The effect is to reduce, rather than increase, European unemployment even while it raises European wage

inequality.

Tyler, John H.

TI Who Benefits from Obtaining a GED? Evidence from High School and Beyond. **AU** Murnane, Richard J.; Willett, John B.; Tyler, John H.

Unigovskaya, Anna

TI Compliance with IMF Program Indicators and Growth in Transition Economies. **AU** Mercer-Blackman, Valerie; Unigovskaya, Anna.

Uppal, Raman

TI Global Diversification, Growth and Welfare with Imperfectly Integrated Markets for Goods. **AU** Dumas, Bernard; Uppal, Raman.

Vahey, Shaun P.

TI The Cost Efficiency of UK Debt Management: A Recursive Modelling Approach. **AU** Coe, Patrick; Pesaran, M. Hashem; Vahey, Shaun P.

Valentinyi, Akos

TI Inflation, Growth, and Credit Services. **AU** Gillman, Max; Kejak, Michal; Valentinyi, Akos.

Valimaki, Juuso

TI Information Acquisition and Efficient Mechanism Design. **AU** Bergemann, Dirk; Valimaki, Juuso.

Van Audenrode, Marc

TI Employment Protection and the Consequences for Displaced Workers: A Comparison of Belgium and Denmark. **AU** Albaek, Karsten; Van Audenrode, Marc; Browning, Martin.

Van der Heyden, Ludo

TI Introducing Euro Notes and Coins to the Public. **AU** Huchzermeier, Arnd; Van der Heyden, Ludo.

TI Manufacturing Management Quality and Factory Performance. **AU** Loch, Christoph H.; De Meyer, Arnoud; Van der Heyden, Ludo.

Van der Klaauw, Wilbert

TI Evaluating the Effect of an Antidiscrimination Law Using a Regression-Discontinuity Design. **AU** Hahn, Jinyong; Todd, Petra; Van der Klaauw, Wilbert.

Van Reenen, John

TI Mapping the Two Faces of R&D: Productivity Growth in a Panel of OECD Industries. **AU** Griffith, Rachel; Redding, Stephen; Van Reenen, John.

van Rooden, Ron

TI Institutions Matter in Transition, but so do Policies. **AU** Havrylyshyn, Oleh; van Rooden, Ron.

Van Wassenhove, Luk

TI The Impact of Information Technology on Supply Chain Performance: The ERP Phenomenon. **AU** Yucesan, Enver; Van Wassenhove, Luk; Vos, Bart.

Van Zandt, Timothy

TI Robustness of Adaptive Expectations as an Equilibrium Selection Device. **AU** Lettau, Martin; Van Zandt, Timothy.

Venaik, Sunil

TI The Optimal Performance of the Global Firm: Formalizing and Extending the Integration-Responsiveness Framework. **AU** Devinney, Timothy M.; Midgley, David F.; Venaik, Sunil.

Vickery, James

TI Is the Phillips Curve a Curve? Some Evidence and Implications for Australia. **AU** Debelle, Guy; Vickery, James.

TI Labour Market Adjustment: Evidence on Interstate Labour Mobility. **AU** Debelle, Guy; Vickery, James.

Viennet, Gabrielle

TI Model Selection for (Auto-) Regression with Dependent Data. **AU** Baraud, Yannick; Comte, Fabienne; Viennet, Gabrielle.

Villar, Antonio

PD March 2001. **TI** The Welfare Evaluation of Primary Goods: A Suggestion. **AA** University of Alicante. **SR** Institute for Advanced Studies, Economics Series Working Paper: 98; Institute for Advanced Studies, Library, Stumpergasse 56, A-1060 Vienna. **Website:** www.ihs.ac.at/Library/libhome.html. **PG** 14.

PR Individuals: ATS 80.00 -- EUR 5.81; Institutions: ATS 250.00 -- EUR 18.17. Prices subject to change without notice.

JE D30, D63. **KW** Welfare Evaluation. Inequality. Primary Goods.

AB This paper presents a characterization of a welfare index for the evaluation of primary goods (to be understood as those goods that all agents should enjoy equally). The welfare associated with a given distribution of n primary goods among m agents is measured as the sum of n real-valued functions, one for each good, which are increasing in the aggregate consumption and decreasing in its dispersion (measured by Theil's first inequality index).

Vincent, Stephanie

TI The Declining Price Effect in Sequential Auctions: What Theory Does Not Predict. **AU** Chanel, Olivier; Vincent, Stephanie.

Vind, Karl

TI Walras Equilibrium with Coordination. **AU** Grodal, Birgit; Vind, Karl.

Vogt, William B.

TI Antitrust and Competition in Health Care Markets. **AU** Gaynor, Martin; Vogt, William B.

Vos, Bart

TI The Impact of Information Technology on Supply Chain Performance: The ERP Phenomenon. **AU** Yucesan, Enver; Van Wassenhove, Luk; Vos, Bart.

Wachter, Jessica

TI Bayesian Performance Evaluation. AU Baks, Klaas; Metrick, Andrew; Wachter, Jessica.

Waddams Price, Catherine

TI Generating Efficiency: Economic and Environmental Regulation of Public and Private Electricity Generators in Spain. AU Arocena, Pablo; Waddams Price, Catherine.

Wadeskog, Anders

TI Expenditure on Environmentally Sensitive Goods and Services: Household Spending in Europe. AU Kohler, Jonathan; Luhmann, Hans-Jochen; Wadeskog, Anders.

Wadsworth, Jonathan

TI Tenures that Shook the World: Worker Turnover in Russia, Poland and Britain. AU Lehmann, Hartmut; Wadsworth, Jonathan.

Waldfoegel, Joel

TI Mergers, Station Entry, and Programming Variety in Radio Broadcasting. AU Berry, Steven T.; Waldfoegel, Joel.

Walkling, Ralph A.

TI Corporate Focusing and Internal Capital Markets. AU Schlingemann, Frederik P.; Stulz, Rene M.; Walkling, Ralph A.

Wang, Liansheng

PD October 2000. TI A Theory of Unilateral Trade Policy. AA University of Copenhagen. SR University of Copenhagen, Institute of Economics Discussion Paper: 00/11; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. PG 27. PR no charge. JE D72, F13, F12, F21, F23. KW Trade Policy. Political Economy. Foreign Direct Investment. Welfare. Lobbying.

AB See the abstract for Wang, Liansheng. October 2000, "TI A Theory of Unilateral Trade Policy". University of Copenhagen, Centre for Industrial Economics Discussion Paper: 2000/08; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. Website: www.econ.ku.dk/cie/wpmast.htm.

PD October 2000. TI Growth and North-South Wage Gap. AA University of Copenhagen. SR University of Copenhagen, Institute of Economics Discussion Paper: 00/12; Institute of Economics, University of Copenhagen, Studiestraede 6, 1455 Copenhagen K, Denmark. Website: www.econ.ku.dk. PG 28. PR no charge. JE F21, F43, O41, O15. KW Endogenous Growth. Wage Gap. Research and Development. Investment. Foreign Direct Investment.

AB We study the sources of long-run growth and wage gap in a North-South (N-S) model with trade and foreign direct investment (FDI). Although R&D is the engine of global growth, increased share of R&D spending need not be accompanied by higher growth rate, and vice versa. Although investment is induced by productivity growth, investment-output ratio need not rise monotonically with productivity growth. Lower investment-output ratio may accompany higher productivity growth, so higher growth rate need not entail lower share of consumption. We argue that existing models

may exaggerate or under-estimate the role of R&D in growth. We also show that higher growth rate is normally accompanied by greater N-S wage gap in the long run. The effect of country size on wage gap is generally ambiguous, depending on the direction and magnitude of scale effects in R&D. Both FDI and S-N migration may increase global growth rate and N-S wage gap.

PD October 2000. TI A Theory of Unilateral Trade Policy. AA CIE and University of Copenhagen. SR University of Copenhagen, Centre for Industrial Economics Discussion Paper: 2000/08; Centre for Industrial Economics, Institute of Economics, University of Copenhagen, Studiestraede 6, DK-1455 Copenhagen K, Denmark. Website: www.econ.ku.dk/cie/wpmast.htm. PG 26. PR no charge. JE D72, F12, F13, F21. KW Trade Policy. Political Economy. Foreign Direct Investment. Lobbying. Protection.

AB We integrate strategic-trade and political-economy considerations in a unified framework to analyze unilateral trade policy. Foreign firms compete on Home's market through export or foreign direct investment (FDI). They also lobby Home's government which sets trade (tariff) and industrial (tax) policies to maximize a weighted sum of domestic welfare and lobby contributions. We show that protection by a low-cost Home may improve global welfare by inducing a more cost-efficient global production pattern. The strategic-trade motive for unilateral intervention to increase domestic welfare may prevail even without domestic firms, and may be enhanced by the presence of FDI firms. The political motive to induce lobby contributions may mitigate or even reverse strategic-trade motivated policy deviations, and trade policy deviation need not benefit special interests to be politically optimal. If the government cares more about lobby contributions than about domestic welfare, it is more likely to adopt a liberal rather than a protectionist trade policy, regardless of its impact on lobbies.

Wansink, Brian

TI A Benefit Congruency Framework of Sales Promotion Effectiveness. AU Chandon, Pierre; Wansink, Brian; Laurent, Gilles.

Wantchekon, Leonard

TI Electoral Competition under the Threat of Political Unrest. AU Ellman, Matthew; Wantchekon, Leonard.

Watson, Joel

TI Liquidity Flows and Fragility of Business Enterprises. AU den Haan, Wouter J.; Ramey, Garey; Watson, Joel.

TI Recurrent Trade Agreements and the Value of External Enforcement. AU Klimenko, Mikhail; Ramey, Garey; Watson, Joel.

Weeds, Helen

TI Networks, Options and Preemption. AU Mason, Robin; Weeds, Helen.

Weeks, John

TI Intraorganizational Ecology. AU Galunic, Charles; Weeks, John.

Weeks, Melvyn

PD June 1999. TI The Statistical Relationship Between Bivariate and Multinomial Choice Models. AU Weeks,

Melvyn; Orme, Chris. **AA** Weeks; University of Cambridge. Orme; University of Manchester. **SR** University of Cambridge, DAE Working Paper: 9912; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: <http://www.econ.cam.ac.uk/dae>. **PG** 15. **PR** US \$10/5 pounds/EUROS 8; make checks payable to University of Cambridge. **JE** C12, C21, C25, C35. **KW** Discrete Choice. Bivariate Probit. Multinomial Probit. Nested Choice Models.

AB The authors demonstrate the conditions under which the bivariate probit model can be considered a special case of the more general multinomial probit model. Since the attendant parameter restrictions produce a singular covariance matrix, the subsequent problems of testing on the boundary of the parameter space are circumvented by the construction of a score test.

TI Non-Nested Hypothesis Testing: An Overview. **AU** Pesaran, M. Hashem; Weeks, Melvyn.

Wegkamp, Marten H.

TI Asymptotics in Minimum Distance from Independence Estimation. **AU** Brown, Donald J.; Wegkamp, Marten H.

Wei, Shang-Jin

TI "Does 'Grease Money' Speed Up the Wheels of Commerce?" **AU** Kaufmann, Daniel; Wei, Shang-Jin.

TI Offshore Investment Funds: Monsters in Emerging Markets? **AU** Kim, Woochan; Wei, Shang-Jin.

Wein, Lawrence M.

TI Inventory Management of Remanufacturable Products. **AU** Toktay, L. Beril; Wein, Lawrence M.; Zenios, Stefanos A.

Weinberg, Bruce A.

TI Age and the Quality of Work: The Case of Modern American Painters. **AU** Galenson, David W.; Weinberg, Bruce A.

Weir, Sharada

PD 1999. **TI** The Effects of Education on Farmer Productivity in Rural Ethiopia. **AA** CSAE, University of Oxford. **SR** Centre for the Study of African Economies Working Paper: WPS/99/07; Centre for the Study of African Economies, University of Oxford, St. Cross Building, Manor Road, Oxford, OX1 3UL, England. Website: www.csae.ox.ac.uk/. **PG** 51. **PR** 3 pounds or \$5.00; subscription 55 pounds or \$88.00. **JE** I21, J24, O15, Q12. **KW** Education. Returns to Schooling. Human Capital. Labor Productivity. Farms.

AB The Ethiopian educational system is characterized by extremely low participation rates, particularly in rural areas. This paper challenges the hypothesis that demand for schooling in rural Ethiopia is constrained by the traditional nature of farm technology and lack of visible benefits of schooling in terms of farmer productivity. The effects of schooling upon farmer productivity and efficiency are examined employing both average production functions and two-stage stochastic frontier production functions. Data drawn from a large household survey conducted in 1994 were used to estimate internal and external benefits of schooling in 14 cereal-producing villages. Empirical analyses reveal substantial internal (private) benefits

of schooling for farmer productivity, particularly in terms of efficiency gains. However, a threshold effect is identified: at least four years of primary schooling are required to have a significant effect upon farm productivity. Evidence of strong external (social) benefits of schooling was also uncovered, suggesting that there may be considerable opportunities to take advantage of external benefits of schooling in terms of increased farm productivity if school enrollments in rural areas are increased.

Welfe, Aleksander

TI Modelling Economies in Transition: An Introduction. **AU** Hall, Stephen; Mizon, Grayham E.; Welfe, Aleksander.

Wertenbroch, Klaus

TI Consumer Choice between Hedonic and Utilitarian Goods. **AU** Dhar, Ravi; Wertenbroch, Klaus.

White, Eugene N.

PD June 1999. **TI** California Banking in the Nineteenth Century: The Art and Method of the Bank of A. Levy. **AA** Rutgers University and NBER. **SR** National Bureau of Economic Research Working Paper: 7187; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** G21, N21. **KW** Banking History. A. Levy.

AB An 1890s loan book of the Bank A. Levy permits a detailed examination of the lending operations of a private bank in California during the National Banking Era (1864-1914). This period has been intensively analyzed at the macroeconomic level, but there are few microeconomic studies of banks. This unregulated bank was well integrated into national money markets and lent to a broad cross section of the community. Although the bank appeared to adhere to the real bills doctrine, it provided medium term uncollateralized financing to business. The bank priced risk carefully, offering rates equal to the lowest in the country to its best customers while charging extraordinarily high rates to borrowers deemed risky. In the absence of modern accounting, close scrutiny of borrowers' businesses and personal lives overcame the asymmetry of information between borrower and lender, enabling the bank to fulfill a special intermediary role.

White, Howard

TI Survey of Foreign Aid: History, Trends and Allocation. **AU** Hjertholm, Peter; White, Howard.

TI Macroeconomic Issues in Foreign Aid. **AU** Hjertholm, Peter; Laursen, Jytte; White, Howard.

Wilkinson, Jenny

TI Internationalisation and Pricing Behaviour: Some Evidence for Australia. **AU** O'Regan, James; Wilkinson, Jenny.

Willett, John B.

TI Who Benefits from Obtaining a GED? Evidence from High School and Beyond. **AU** Murnane, Richard J.; Willett, John B.; Tyler, John H.

Willman, Paul

PD November 2000. **TI** The Viability of Trade Union Organisation: A Bargaining Unit Analysis. **AA** CEP and

University of Oxford. **SR** London School of Economics, Centre for Economic Performance Discussion Paper: 477; Centre For Economic Performance, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, England. Website: <http://cep.lse.ac.uk>. **PG** 21. **PR** 5 pounds. **JE** C70, J51, J53. **KW** Trade Unions. Strategy. Employer Dependence. Bargaining Units. Game Theory.

AB The paper develops a model of trade union behavior based on the concept of the viable bargaining unit. Bargaining unit viability rests on five conditions: membership level, service level, membership participation, employer recognition and facilities. Viability is achieved by mobilization of both members and employers. Trade unions may be seen as portfolios of viable and inviable bargaining units. From this, six propositions about trade union structure and behavior are derived, concerning scale, growth, the impact of statutory recognition provisions, the emergence of conglomerate unions, governance structures and relations with employers. Employer dependence is a crucial element in the model and a simple game theoretic approach is used to discuss employer cooperation. A key conclusion is that viability at the union level is achieved by diversifying portfolios of bargaining units and securing cooperative relations with employers.

Winer, Stanley L.

TI Searching for Keynes. **AU** Ferris, J. Stephen; Winer, Stanley L.

Witkowska, Dorota

TI Utilizing Artificial Neural Network Model to Predict Stock Markets. **AU** Shachmurove, Yochanan; Witkowska, Dorota.

Wolfstetter, Epuian

TI First-Price Auctions when the Ranking of Valuations is Common Knowledge. **AU** Landsberger, Michael; Rubinstein, Jacob; Wolfstetter, Epuian; Zamir, Schmucl.

TI First-Price Auctions when the Ranking of Valuations is Common Knowledge. **AU** Landsberger, Michael; Rubinstein, Jacob; Wolfstetter, Epuian; Zamir, Schmucl.

Wooders, John

TI Noncooperative R&D and Optimal R&D Cartels. **AU** Amir, Rabah; Evstigneev, Igor; Wooders, John.

Worrell, DeLisle

PD March 2000. **TI** Monetary and Fiscal Coordination in Small Open Economies. **AA** International Monetary Fund. **SR** International Monetary Fund Policy Working Paper: WP/00/56; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 25. **PR** not available. **JE** E58, E61, E63. **KW** Monetary Policy. Central Banks. Inflation. Open Economies. Fiscal Policy.

AB This paper is concerned with the design of institutional arrangements for low inflation in small open economies. In the real world of information asymmetries, uncertain expectations and changeable preferences, it is not enough to create an autonomous and publicly accountable central bank. In addition, the central bank and the treasury must work together on the design, implementation, monitoring and, when necessary, the revision of macroeconomic policy, and on providing the public

with information on ongoing economic developments and interpretation of the macroeconomic strategy.

Wu, Chien-Wei

TI Competitive Prizes: When Less Scrutiny Induces More Effort. **AU** Dubey, Pradeep; Wu, Chien-Wei.

Wu, Weike

TI Weather Effects on European Agricultural Output 1850-1913. **AU** Solomou, Solomos; Wu, Weike.

Xiao, Zhijie

TI How to Estimate Autoregressive Roots Near Unity. **AU** Phillips, Peter C. B.; Moon, Hyungsik Roger; Xiao, Zhijie.

Yang, Yongzheng

TI European Unemployment, US Wages and the Asian Emergence. **AU** Tyers, Rod; Yang, Yongzheng.

Yousef, Tarik

TI Demographic Transition in the Middle East: Implications for Growth, Employment, and Housing. **AU** Dhonte, Pierre; Bhattacharya, Rina; Yousef, Tarik.

Yucesan, Enver

TI The Impact of ERP on Supply Chain Management: Exploratory Findings From a European Delphi Study. **AU** Akkermans, Henk A.; Bogerd, Paul; Yucesan, Enver; Van Wassenhove, Luk N.

TI The Impact of ERP on Supply Chain Management: Exploratory Findings From a European Delphi Study. **AU** Akkermans, Henk A.; Bogerd, Paul; Yucesan, Enver; Van Wassenhove, Luk N.

PD 1999. **TI** The Impact of Information Technology on Supply Chain Performance: The ERP Phenomenon. **AU** Yucesan, Enver; Van Wassenhove, Luk; Vos, Bart. **AA** Yucesan and Wassenhove: INSEAD. Vos: Price Waterhouse Coopers. **SR** INSEAD Working Paper: 99/73/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** M11, M21. **KW** Supply Chain. ERP Systems. Capability Design.

AB The Enterprise Resource Planning (ERP) phenomenon provides an opportunity to drastically rethink supply chain strategies. Recent research on ERP systems aims at understanding the key drivers of the ERP phenomenon, the determination of costs and anticipated benefits, the principal challenges during the implementation project, and the maintenance of the software once it is in place. Such an understanding would provide valuable guidance to managers who are currently undertaking such far-reaching projects. Understanding the ERP phenomenon would equally have more significant longer-term benefits. Current ERP initiatives are aimed at supply chain coordination, viewing the system as a transaction management platform. We believe that ERP will eventually evolve into an infrastructure or a backbone that supports the dynamic view of supply chain design, referred to as capability design. This paper seeks to understand the impact of ERP systems on supply chain performance. Our objective is

to establish conditions under which ERP can be a critical enabler or a severe handicap for superior supply chain performance.

Yuen, Chi-Wa

TI Understanding the "Problem of Economic Development": The Role of Factor Mobility and International Taxation. AU Razin, Assaf; Yuen, Chi-Wa.

Zame, William R.

TI Clubs and the Market. AU Ellickson, Bryan; Grodal, Birgit; Scotchmer, Suzanne; Zame, William R.

TI Clubs and the Market: Large Finite Economies. AU Ellickson, Bryan; Grodal, Birgit; Scotchmer, Suzanne; Zame, William R.

TI Quadratic Concavity and Determinacy of Equilibrium. AU Shannon, Chris; Zame, William R.

Zeckhauser, Richard J.

TI The Anatomy of Health Insurance. AU Cutler, David M.; Zeckhauser, Richard J.

Zee, Howell H.

TI Tax Policy for Emerging Markets: Developing Countries. AU Tanzi, Vito; Zee, Howell H.

PD March 2000. TI Retarding Short-Term Capital Inflows Through Withholding Tax. AA International Monetary Fund. SR International Monetary Fund Policy Working Paper: WP/00/40; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 11. PR not available. JE E63, F32, F36, H20. KW Withholding Tax. Tobin Tax. Financial Transactions Tax. Capital Movements. Stabilization.

AB This paper proposes a price-based measure to mitigate the destabilizing impact of the volatility of global capital movements on the domestic economy of a country pursuing sound economic policies. The measure is a withholding tax on all private capital inflows, with a credit and refund provision that operates within the administrative framework of the existing domestic tax system to relieve noncapital inflows from the tax. This withholding tax, which is substantially more difficult to evade than the much-discussed alternative of imposing non-remunerated reserve requirements, can be implemented with little additional costs to the taxpayers and the tax authorities.

Zenios, Stefanos A.

TI Inventory Management of Remanufacturable Products. AU Toktay, L. Beril; Wein, Lawrence M.; Zenios, Stefanos A.

Zhang, Junsen

TI Dress for Success -- Does Priming Pay? AU Hamermesh, Daniel S.; Meng, Xin; Zhang, Junsen.

Zingales, Luigi

TI What Determines Firm Size? AU Kumar, Krishna B.; Rajan, Raghuram G.; Zingales, Luigi.

Zollo, Maurizio

PD 1999. TI Can Firms Learn to Acquire? Do Markets Notice? AU Zollo, Maurizio; Leshchinskii, Dima.

AA INSEAD. SR INSEAD Working Paper: 99/82/SM; 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 G21, G34. KW Acquisitions. Mergers. Banking. Post-Merger Integration. Organizational Learning. Market Efficiency.

AB Using financial, accounting and questionnaire response data we investigate the postacquisition performance of 47 US bank holding companies that executed 579 mergers and acquisitions in the 1964-1996 period and compare it with their competitors' performance. The objectives of the study are to identify the factors that explain the variance in the distribution of post-acquisition performance, and to test whether the financial markets efficiently predict performance outcomes by incorporating public information about the acquiring firm into the stock price following the acquisition announcement. We find that prior acquisition experience does not improve post-acquisition performance, but the degree to which acquirers articulate and codify their experience in ad-hoc tools does. Furthermore, a high level of integration of the target within the acquirer's organization improves long-term performance, whereas the replacement of top management worsens it. Financial markets do not seem to be sensitive to any of these predictors of performance in their short-term reactions, but long-term adjustments are significantly impacted by acquirers' integration strategies and codified implementation knowledge, in line with the variations of accounting returns.

TI Termination Outcomes of High-Tech Alliances: Bridging Firm- and Transaction-Specific Antecedents. AU Reuer, Jeffrey J.; Zollo, Maurizio; Singh, Harbir.

Zott, Christoph

TI Value Drivers of E-Commerce Business Models. AU Amit, Raphael; Zott, Christoph.

Zucker, David M.

TI Small Sample Asymptotics for the Sample Autocorrelation Function under Long Range Dependence. AU Lieberman, Offer; Rousseau, Judith; Zucker, David M.

Zucker, Lynne G.

TI Stakes and Stars: The Effect of Intellectual Human Capital on the Level and Variability of High-Tech Firms' Market Values. AU Darby, Michael R.; Liu, Qiao; Zucker, Lynne G.