

ABSTRACTS OF WORKING PAPERS IN ECONOMICS

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Abowd, John M.

PD May 1999. **TI** Minimum Wages and Employment in France and the United States. **AU** Abowd, John M.; Kramarz, Francis; Margolis, David N. **AA** Abowd: Cornell University. Kramarz: INSEE. Margolis: Universite de Paris I. **SR** Centre for Economic Policy Research Discussion Paper: 2159; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. **Website:** www.cepr.demon.co.uk. **PG** 40. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** J23, J31. **KW** Minimum Wage. International Comparisons.

AB We use longitudinal individual wage and employment data in France and the United States to investigate the effect of intertemporal changes in an individual's status vis-a-vis the real minimum wage on employment transition rates. We find that movements in both French and American real minimum wages are associated with mild employment effects in general, and very strong effects on workers employed at the minimum wage. In the French case, albeit imprecisely estimated, a 1% increase in the real minimum wage decreases the employment probability of a man (resp. a woman) currently employed at the minimum wage by 1.3% (resp. 1.0%). In the United States, a decrease in the real minimum of 1% increases the probability that a man (resp. a woman) employed at the minimum wage came from nonemployment by 0.4% (resp. 1.6%).

Acemoglu, Daron

PD July 1999. **TI** Minimum Wages and On-the-Job Training. **AU** Acemoglu, Daron; Pischke, Jorn-Steffen. **AA** Massachusetts Institute of Technology. **SR** Centre for Economic Policy Research Discussion Paper: 2177; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. **Website:** www.cepr.demon.co.uk. **PG** 52. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** J24, J31, J41. **KW** Imperfect Labor Markets. Low-Wage Workers. Human Capital. Firm-Sponsored Training.

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 on 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.

Aghion, Philippe

PD March 1999. **TI** Capital Markets and the Instability of Open Economies. **AU** Aghion, Philippe; Bacchetta, Philippe; Banerjee, Abhijit. **AA** Aghion: Harvard University and EBRD. Bacchetta: Studienzentrum Gerzensee. Banerjee: Massachusetts Institute of Technology. **SR** Centre for Economic Policy Research Discussion Paper: 2083; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. **Website:** www.cepr.demon.co.uk. **PG** 33. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** E32, E44, F41. **KW** Instability. Credit Constraints. Capital Flows.

AB This paper introduces a framework for analyzing the role of financial factors as a source of instability in small open economies. Our basic model is a dynamic open economy model with one tradeable and one non-tradeable good with the non-tradeable being an input to the production of the tradeable. We also assume that firms face credit constraints, with the constraint being tighter at a lower level of financial development. The two basic implications of this model are the following: first, economies at an intermediate level of financial development are more unstable than either very developed or very underdeveloped economies. This is true both in the sense that temporary shocks have large and persistent effects and also in the sense that these economies can exhibit stable limit cycles. Thus, countries that are going through a phase of financial development may become more unstable in the short run. Second, in economies at an intermediate level of financial development, full financial liberalization may actually destabilize the economy. On the other hand, foreign direct investment does not destabilize.

PD April 1999. **TI** Competition, Financial Discipline and Growth. **AU** Aghion, Philippe; Dewatripont, Mathias; Rey, Patrick. **AA** Aghion: Harvard University and EBRD. Dewatripont: ECARE, Universite Libre de Bruxelles. Rey: Universite de Toulouse. **SR** Centre for Economic Policy Research Discussion Paper: 2128; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. **Website:** www.cepr.demon.co.uk. **PG** 56. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** L21, O31. **KW** Competition. Growth. Financial Discipline. Bankruptcy.

AB This paper develops a general equilibrium model of technological adoption in an economy populated by "satisficing" entrepreneurs whose main objective is to minimize innovative effort while keeping the firm alive. In such an economy, product market competition is shown to have a

stimulating effect on growth. Indeed, by reducing the amount of slack a manager can afford while keeping his firm alive, competition, combined with the threat of liquidation acts as a disciplinary device, which fosters technology adoption and therefore growth. We then investigate how the existence of financial markets affects the importance of this growth-enhancing effect of competition.

PD April 1999. **TI** Agency Costs, Firm Behaviour and the Nature of Competition. **AU** Aghion, Philippe; Dewatripont, Magnus; Rey, Patrick. **AA** Aghion: Harvard University and EBRD. Dewatripont: ECARE, Université Libre de Bruxelles. Rey: Université de Toulouse. **SR** Centre for Economic Policy Research Discussion Paper: 2130; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. **Website:** www.cepr.demon.co.uk. **PG** 36. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** G31, L16, L21. **KW** Competition. Agency. Satisficing Behavior.

AB This paper develops an agency model in which firms can influence their own incentives to provide a non-contractible effort by contracting on other variables (e.g. by committing themselves to some verifiable investment). In such a model the firms' need for outside finance is shown to interact with their product market behavior in a non-monotonic way; for low levels of outside finance a rise in the need for outside finance reduces the manager's incentive to provide effort; but for high initial levels of outside finance a rise in the need for outside finance requires a commitment to higher effort which in turn is achieved through the contractible investment variables. This non-monotonicity has major implications for firm behavior, either when responding to demand shocks or when reacting to a change in the competitive environment.

Ahmed, Shaghil

PD October 1998. **TI** Inflation and the Great Ratios: Long-Term Evidence from the U.S. **AU** Ahmed, Shaghil; Rogers, John H. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 628; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. **Website:** www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 26. **PR** no charge. **JE** E21, E22, E23, E31. **KW** Inflation. Great Ratios. Tobin Effect. Fisher Effect.

AB Using over 100 years of U.S. data, we find that the long-run effects of inflation on consumption, investment, and output are positive. Thus, models generating long-term negative effects of inflation on output and consumption (including endogenous growth and the RBC models with money) seem to be at odds with data from the moderate inflation rate environment we consider. Also, great ratios like the consumption and investment rates are not independent of inflation, which we interpret in terms of the Fisher effect. However, in the full sample, the variability of the stochastic inflation trend is small relative to the variability of the productivity and fiscal trends, so inflation accounts for little of the movements in real variables. By comparison, we find in the post-WWII sub-period that although significant "permanent" shocks to inflation are a more regular feature of the data, the long-run real effects of a given size inflation shock are much smaller.

PD December 1999. **TI** Sources of Economic

Fluctuations in Latin America and Implications for Choice of Exchange Rate Regimes. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 656; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. **Website:** www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 43. **PR** no charge. **JE** E32, E42, F31, O54. **KW** Economic Fluctuations. Exchange Rate Regimes. Latin America. Dollarization.

AB This paper studies the sources of economic fluctuations in three key Latin American countries (Argentina, Brazil, and Mexico) using a dynamic panel model, distinguishing between external and domestic shocks. The primary motivation is to examine the implications for the choice of monetary and exchange rate regimes, including dollarization. The results do not provide a strong, clear case in favor of a particular policy choice. On the one hand, foreign output shocks appear to have a quite limited role in driving output fluctuations in these Latin countries; this absence of common shocks undermines the case for a rigidly fixed exchange rate regime. On the other hand, the historical experience of these countries indicates that real exchange rates are not very responsive to external shocks, in general, and that exchange rate depreciations tend to be contractionary in the short run. This suggests that rigidity of exchange rates may not be as costly for these countries as economic theory leads us to expect. Although the historical experience of these countries is certainly relevant, the caveat that it is characterized by several failed fixed exchange rate regimes should be noted.

Aiyagari, S. Rao

PD June 1998. **TI** Money and Dynamic Credit Arrangements with Private Information. **AU** Aiyagari, S. Rao; Williamson, Stephen D. **AA** Aiyagari: University of Rochester. Williamson: University of Iowa. **SR** Federal Reserve Bank of Cleveland Working Papers: 9807; Research Department, Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, Ohio 44101-1387. **Website:** www.clev.frb.org. **PG** 36. **PR** no charge. **JE** D60, D82, E31, E51, G21. **KW** Money. Credit. Financial Intermediation. Private Information. Welfare.

AB We construct a model with private information in which consumers write dynamic contracts with financial intermediaries. A role for money arises due to random limited participation of consumers in the financial market. Without defection constraints, a Friedman rule is optimal, the mean and variability of wealth tend to fall in the steady state, and the welfare effects of inflation are very small. With defection constraints, the effects of inflation on the distribution of welfare and consumption are large, but the effect on average welfare is still small. Also, the relaxation of defection constraints resulting from higher inflation causes a substantial increase in the real interest rate.

Al-Najjar, Nabil

PD May 1999. **TI** Equilibrium Existence in Games with Incomplete Information: The Countable Case. **AU** Al-Najjar, Nabil; Solan, Eilon. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1262; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001

Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 21. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE C62, C72, D81. KW Incomplete Information. Information Discontinuity. Atomic Posteriors. Equilibrium Existence.

AB We prove an existence result for games with incomplete information with continuous type spaces under the assumption that players have atomic posteriors. This information structure is an extreme example of the failure of absolute continuity of information, hence our result complements the classical result of Milgrom and Weber (1985).

Alberini, Anna

PD December 1998. **TI** Strict Liability as a Deterrent in Toxic Waste Management: Empirical Evidence from Accident and Spill Data. **AU** Alberini, Anna; Austin, David H. **AA** Alberini: University of Colorado. Austin: Resources for the Future. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 83/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 47. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D21, K32, L51. **KW** Strict Liability. Hazardous Substances. Accident Risk.

AB This paper explores the issue of whether strict liability imposed on polluters has served to reduce uncontrolled releases of toxics into the environment. To answer this question, we exploit the variation in state hazardous waste site laws across states and over time. We use data on accidents and spills involving hazardous substances and fit regressions relating the frequency of spills of selected chemicals used in manufacturing to the type of liability in force in a state and state-manufacturing activity. Results vary with the chemical being analyzed.

Albrecht, Johan

PD September 1998. **TI** Environmental Regulation, Comparative Advantage and the Porter Hypothesis. **AA** University of Ghent, Belgium. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 59/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 34. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** F14, F21, L52, O32, Q28. **KW** Environmental Regulation. Industrial Flight. Comparative Advantage. Export Diversification. Porter Hypothesis.

AB Empirical surveys find no significant impact of environmental regulation and environmental costs on international competitiveness. In the literature, we can find three hypotheses on the impact of environmental regulation. For the industrial-flight and pollution-haven hypothesis, there is no clear empirical evidence. We show that this is a logical consequence of the principle of comparative advantage. Another explanation can be that developed countries have very diversified exports and most surveys do not link regulation to specific products. We therefore investigate the link between export diversification and two measures of labor productivity. The Porter hypothesis -- the third or revisionist hypothesis in our overview -- states that environmental regulation can lead to improved competitiveness.

PD March 1999. **TI** Policy Instruments and Incentives for Environmental R&D: A Market-Driven Approach.

AA University of Ghent, Belgium. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 17/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 25. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** H23, O31, Q28. **KW** Research and Development. Environmental Policy. Environmental Taxes. Emission Trading. Voluntary Approaches. Market Interactions.

AB Environmental policy instruments have an impact on the incentives to invest in environmental R&D and this link deserves careful consideration when introducing new instruments. Some authors argue that environmental taxes and tradable permits have comparable impacts on environmental R&D but we think that only very specific conditions lead to this kind of conclusion. If we broaden the perspective by integrating elements from the Industrial Organization literature and depart for Pigouvian settings, a market-driven approach would link the incentive to invest in new technologies to the market potential offered by the policy instruments. If taxes turn out to be very expensive for the polluting or emitting industries, we can assume that these targeted firms would be more inclined to invest in new -- emission reducing - technologies, than in cases where the chosen policy instrument will lead to a very limited cost.

Allayannis, George

PD February 2000. **TI** The Effect of Markups on the Exchange Rate Exposure of Stock Returns. **AU** Allayannis, George; Ihrig, Jane. **AA** Allayannis: Darden Graduate School of Business. Ihrig: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 661; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 53. **PR** no charge. **JE** C52, F31, F41, G12, G15. **KW** Exposure. Markups. Exchange Rates. Trade Shares. Stock Returns.

AB This paper examines how to properly specify and test for factors that affect the exchange-rate exposure of stock returns. We develop a theoretical model, which explicitly identifies three channels of exposure. An industry's exposure increases (1) by greater competitiveness in the market where its final output is sold, (2) the interaction of greater competitiveness in its export market and a larger share of exports in production and, (3) the interaction of less competitiveness in its imported input market and the smaller the share of imports in production. Using a sample of 82 U.S. manufacturing industries at the 4-digit SIC level, classified in 18 2-digit industry groups, between 1979 and 1995, we estimate exchange-rate exposure as suggested by our model. We find that 4 out of 18 industry groups are significantly exposed to exchange-rate movements through at least one channel of exposure. On average, a 1 percent appreciation of the dollar decreases the return of the average industry by 0.13 percent. Consistent with our model's predictions, as an industry's markups fall (rise), its exchange-rate exposure increases (decreases).

Amir, Eli

PD August 1998. **TI** Analysts' Interpretation and Investors' Valuation of Tax Carryforwards. **AU** Amir, Eli; Sougiannis, Theodore. **AA** Amir: Columbia University. Sougiannis: University of Illinois at Urbana-Champaign.

SR Columbia PaineWebber Working Paper Series in Money, Economics and Finance: PW/98/08; Graduate School of Business, 6N Uris Hall, Columbia University, 3022 Broadway, New York, NY 10027. Website: www.columbia.edu/dlc/wp/. **PG** 34. **PR** \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). **JE** D82, G12, G14, G30, H25. **KW** Deferred Taxes. Carryforwards. Asset Pricing. Forecasting. Expected Earnings. **AB** This paper examines how financial analysts and equity investors incorporate information on deferred taxes from carryforwards into earnings forecasts and share prices, respectively. The authors focus on carryforwards because in providing this information each period, management must use their private information about the firm's profitability prospects. In analyzing the role of carryforwards in valuation, the authors distinguish between two conflicting effects. First, deferred taxes from carryforwards represent future tax savings. In contrast, the existence of tax carryforwards may signal a higher likelihood of future losses, which would have a negative effect on expected earnings and share prices. The authors find that analysts consider earnings of firms with carryforwards to be less persistent due to the increased likelihood of future losses. They also find that analysts tend to be less precise and more optimistic (biased) in forecasting earnings of firms with carryforwards. An analysis of investors' valuation indicates a strong positive relation between deferred taxes from carryforwards and share prices. Also, earnings and book values of equity are valued less in firms that have carryforwards than in firms without carryforwards.

Ammer, John

PD June 2000. **TI** How Consistent are Credit Ratings? A Geographic and Sectoral Analysis of Default Risk. **AU** Ammer, John; Packer, Frank. **AA** Ammer: Board of Governors of the Federal Reserve System. Packer: Salomon Smith Barney. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 668; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 20. **PR** no charge. **JE** F34, G14, G21, G28, G33. **KW** Bonds. Rating Agencies. Capital Requirements. Basel Committee. Banking Supervision.

AB We examine differences in default rates by sector and obligor domicile. We find evidence that credit ratings have been imperfectly calibrated across issuer sectors in the past. Controlling for year of issue and rating, default rates appear to be higher for U.S. financial firms than U.S. industrial firms. Sectoral differences in recovery rates do not offset the higher default rates. By contrast, we do not find significant differences in default rates between U.S. and foreign firms.

Anderson, Kym

TI Developing Country Agriculture and the New Trade Agenda. **AU** Hoekman, Bernard; Anderson, Kym.

Andrews, Donald W. K.

PD July 1999. **TI** Testing When a Parameter Is on the Boundary of the Maintained Hypothesis. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1229; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 50. **PR** no charge up to 3

papers; \$3.00 U.S.; 4.00 International. **JE** C12. **KW** Asymptotic Distribution. GARCH Model. Conditional Heteroskedasticity. Extremum Estimators. Random Coefficients.

AB This paper considers testing problems where several of the standard regularity conditions fail to hold. We consider the case where (i) parameter vectors in the null hypothesis may lie on the boundary of the maintained hypothesis and (ii) there may be a nuisance parameter that appears under the alternative hypothesis, but not under the null. The paper establishes the asymptotic null and local alternative distributions of quasi-likelihood ratio, rescaled quasi-likelihood ratio, Wald, and score tests in this case. The results apply to tests based on a wide variety of extremum estimators and apply to a wide variety of models. Examples treated in the paper are: (1) tests of the null hypothesis of no conditional heteroskedasticity in a GARCH(1,1) regression model and (2) tests of the null hypothesis that some random coefficients have variances equal to zero in a random coefficients regression model with (possibly) correlated random coefficients.

PD July 1999. **TI** Higher-Order Improvements of a Computationally Attractive k-Step Bootstrap for Extremum Estimators. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1230; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 74. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C12, C13, C15. **KW** Asymptotics. Block Bootstrap. Higher-Order Efficiency. Newton-Raphson.

AB This paper establishes the higher-order equivalence of the k-step bootstrap, introduced recently by Davidson and MacKinnon (1999a), and the standard bootstrap. The k-step bootstrap is a very attractive alternative computationally to the standard bootstrap for statistics based on nonlinear extremum estimators, such as generalized method of moment and maximum likelihood estimators. The paper also extends results of Hall and Horowitz (1996) to provide new results regarding the higher-order improvements of the standard bootstrap and the k-step bootstrap for extremum estimators (compared to procedures based on first-order asymptotics). The results of the paper apply to Newton-Raphson (NR), default NR, line-search NR, and Gauss-Newton k-step bootstrap procedures. The results cover symmetric and equal-tailed two-sided t tests and confidence intervals, one-sided t tests and confidence intervals, Wald tests and confidence regions, and J tests of over-identifying restrictions. The optimal block length for the accuracy of tests and confidence intervals is shown to be proportional to $N^{1/4}$ for both non-overlapping and overlapping block bootstraps in the context considered. In addition, the paper provides some results that establish the equivalence of the higher-order efficiency of non-bootstrap k-step statistics and extremum statistics. These results extend results of Pfanzagl (1974), Robinson (1988), and others.

PD September 1999. **TI** Consistent Model and Moment Selection Criteria for GMM Estimation with Application to Dynamic Panel Data Models. **AU** Andrews, Donald W. K.; Lu, Biao. **AA** Andrews: Yale University. Lu: University of Michigan. **SR** Yale Cowles Foundation Discussion Paper: 1233; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 45. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C12, C15, C23, C52. **KW** Information Criteria. Consistent Selection. Moment

Selection. Over-Identifying Restrictions.

AB This paper develops consistent model and moment selection criteria for Generalized Method of Moments (GMM) estimation. The criteria select the correct model specification and all correct moment conditions asymptotically. The selection criteria resemble the widely used likelihood-based selection criteria BIC (Bayesian Information Criterion), HQIC (Hannan-Quinn Information Criterion), and AIC (Akaike Information Criterion). (The latter is not consistent.) The GMM selection criteria are based on the J statistic for testing over-identifying restrictions. Bonus terms reward the use of fewer parameters for a given number of moment conditions and the use of more moment conditions for a given number of parameters. The paper applies the model and moment selection criteria to dynamic panel data models with unobserved individual effects. The paper shows how to apply the selection criteria to select the lagged dependent variables, to detect the number and locations of structural breaks, to determine the exogeneity of regressors, and/or to determine the existence of correlation between some regressors and the individual effect. To illustrate the finite sample performance of the selection criteria and their impact on parameter estimation, the paper reports the results of a Monte Carlo experiment on a dynamic panel data model.

Angrist, Joshua D.

PD June 1998. **TI** Empirical Strategies in Labor Economics. **AU** Angrist, Joshua D.; Krueger, Alan B. **AA** Angrist: Massachusetts Institute of Technology and National Bureau of Economic Research. Krueger: Princeton University and National Bureau of Economic Research. **SR** Princeton Industrial Relations Section Working Paper: 401; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. **PG** 121. **PR** \$3.00. **JE** C13, C81, J20, J31. **KW** Empirical Strategies. Methodology. Instrumental Variables. Causality.

AB This chapter provides an overview of the methodological and practical issues that arise when estimating causal relationships that are of interest in labor economists. The subject matter includes identification, data collection, and measurement problems. Four identification strategies are discussed, and five empirical examples -- the effects of schooling, unions, immigration, military service and class size -- illustrate the methodological points. In discussing each example, we adopt an experimentalist perspective that draws a clear distinction between variables that have causal effects, control variables, and outcome variables. The chapter also discusses secondary data sets, primary data collection strategies, and administrative data. The section on measurement issues focuses on recent empirical examples, presents a summary of empirical findings on the reliability of key labor market data, and reviews the role of survey sampling weights and the allocation of missing values in empirical research.

Araki, Kasunori

PD September 1997. **TI** Long Run Equilibria: Expected Waiting Times with Noisy Selection and Local Interaction. **AU** Araki, Kasunori; Low, Hamish. **AA** Araki University College London. Low: University College London and Institute for Fiscal Studies. **SR** University College London Discussion Papers in Economics: 97/08; Department of

Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 34. **PR** 4 pounds or \$8.00. **JE** C72, C73. **KW** Waiting Times. Local Interaction. Evolutionary Games. Equilibrium Selection.

AB Kandori et al. [13] and Young [16] pioneered the study of history independent equilibrium selection by stochastic evolutionary processes, but expected waiting times in their models are sometimes fantastically large. Ellison [8] shows that local interaction can reduce waiting times. Binmore et al. [3] do the same by introducing noise into the selection process itself. This paper uses simulation to study waiting times when interaction is local and selection is noisy simultaneously. We find that expected waiting times can decrease as the population size increases. In general, the rate of increase of average waiting times decreases as the fixed size of a local group falls. The relationship between local groups is shown to be crucial to the variance of waiting times. If local groups are located on a circle and interact only with neighboring groups, the variance is lower than if groups are connected randomly. In addition, we conclude that the selection of risk-dominance is robust to making interaction predominantly local.

Ashenfelter, Orley

PD November 1998. **TI** Schooling, Intelligence, and Income in America: Cracks in the Bell Curve. **AU** Ashenfelter, Orley; Rouse, Cecilia Elena. **AA** Princeton University and National Bureau of Economic Research. **SR** Princeton Industrial Relations Section Working Paper: 407; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. **PG** 45. **PR** \$1.50. **JE** I21, J24, J31. **KW** Return to Education. Income. Measured Ability. Human Capital.

AB One of the best documented relationships in economics is the link between education and income: higher educated people have higher incomes. Advocates argue that education provides skills, or human capital, that raises an individual's productivity. Critics argue that the documented relationship is not causal. Education does not generate higher incomes; instead, individuals with higher ability receive more education and more income. This essay reviews the evidence on the relationship between education and income. We focus on recent studies that have attempted to determine the causal effect of education on income by either comparing income and education differences within families or using exogenous determinants of schooling in what are sometimes called "natural experiments." In addition, we assess the potential for education to reduce income disparities by presenting evidence on the return to education for people of differing family backgrounds and measured ability. The results of all these studies are surprisingly consistent: they indicate that the return to schooling is not caused by an omitted correlation between ability and schooling. Moreover, we find no evidence that the return to schooling differs significantly by family background or by the measured ability of the student.

PD December 1998. **TI** Do Unemployment Insurance Recipients Actively Seek Work? Randomized Trials in Four U.S. States. **AU** Ashenfelter, Orley; Ashmore, David; Deschenes, Olivier. **AA** Ashenfelter and Deschenes: Princeton University. Ashmore: Private Consultant. **SR** Princeton Industrial Relations Section Working Paper: 412; Industrial Relations Section, Department of Economics,

Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. PG 18. PR not available. JE C93, J64, J65. KW Unemployment Insurance. Job Search. Randomized Trials. Benefit Overpayment.

AB In this paper we report the results of randomized trials designed to measure whether stricter enforcement and verification of work search behavior alone decreases unemployment insurance (UI) claims and benefits. These experiments were designed to explicitly test claims based on non-experimental data, that a prime cause of overpayment is the failure of claimants to actively seek work. Our results provide no support for the view that the failure to actively search for work has been a cause of overpayment in the UI system.

PD July 1999. **TI** Measuring the Effect of Arbitration on Wage Levels: The Case of Police Officers. **AU** Ashenfelter, Orley; Hyslop, Dean. **AA** Ashenfelter: Princeton University. Hyslop: University of California, Los Angeles. **SR** Princeton Industrial Relations Section Working Paper: 421; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. PG 15. PR not available. JE J31, J52. **KW** Arbitration Statutes. Wage Levels. Police Officers.

AB In this paper we provide an empirical evaluation of the effect that the provision of an arbitration statute has on the wage levels of police officers. We analyze the effect of arbitration on wages by comparing wage levels across political jurisdictions and over time using a sample of states. Two complementary data sources are used: panel data on state level wages of police officers, and individual level data on police officers from Decennial Censuses. The empirical results from both data sets are remarkably consistent and provide no robust evidence that the presence of arbitration statutes has a consistent effect on overall wage levels. On average, the effect of arbitration is approximately zero, although there is substantial heterogeneity in the estimated effects across states.

Ashford, Nicholas A.

TI Negotiation as a Means of Developing and Implementing Environmental Policy. **AU** Caldart, Charles C.; Ashford, Nicholas A.

TI Negotiation as a Means of Developing and Implementing Occupational Health and Safety Policy. **AU** Caldart, Charles C.; Ashford, Nicholas A.

Ashmore, David

TI Do Unemployment Insurance Recipients Actively Seek Work? Randomized Trials in Four U.S. States. **AU** Ashenfelter, Orley; Ashmore, David; Deschenes, Olivier.

Athanasoulis, Stefano G.

PD October 1999. **TI** World Income Components: Measuring and Exploiting Risk-Sharing Opportunities. **AU** Athanasoulis, Stefano G.; Shiller, Robert J. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1239; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. PG 30. PR no charge up to 3 papers; \$3.00 U.S.; 4.00 International. JE E43, F31, F36, G29. **KW** Risk Premium. Interest Rates. Contract Design.

Hedging.

AB We provide a method for decomposing the variance of changes in incomes in the world into components, world income components (WICs), in such a way as to indicate the most important risk-sharing opportunities among people of the world. We develop a constant absolute risk premium model, an intertemporal general equilibrium model of the world that facilitates consideration of optimal contract design. We show that for a contract designer maximizing a social welfare function, the optimal risk-management contracts maximize the equilibrium world real interest rate. That is the contract designer achieves the risk-optimal interest rate. We show that these WIC securities are defined in terms of eigenvectors of a transformed variance matrix of income changes. The method is applied with a variance matrix estimated using Penn World Trade data on the G-7 countries, 1950-92.

Austen-Smith, David

PD August 1999. **TI** Redistributing Income Under Proportional Representation. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1270; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 32. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE D31, D72, H23. **KW** Redistributive Taxes. Income Distribution. Majority Rule. Proportional Representation.

AB Most of the theoretical work on purely redistributive taxation has presumed a two-party model in which the parties choose (affine) tax policies to attract a majority of voters. However, while majoritarian decision rules are the norm in legislatures, relatively few democratic electoral systems use simple majority rule at the electoral stage, adopting instead some form of multiparty proportional representation. Moreover, aggregate data suggest that average income tax-rates are higher and distributions of post-tax income flatter, in countries with proportional representation than in those with plurality rule. While there are other differences between these countries, this paper explores how variations in the political system per se influence equilibrium redistributive tax-rates and income distributions. In particular, a three-party proportional representation model is developed in which taxes are determined through legislative bargaining among successful electoral parties, and the fundamental economic decision for individuals is occupational choice. Political-economic equilibria for this model and for a two-party, winner-take-all, majoritarian system are derived and compared.

Austin, David H.

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

Babson, Oliver D.

TI Why Has China Survived the Asian Crisis so Well? What Risks Remain? **AU** Fernald, John G.; Babson, Oliver D.

TI The Contributions of Domestic and External Factors to Latin American Devaluation Crises: An Early Warning Systems Approach. **AU** Kamin, Steven B.; Babson, Oliver D.

Bacchetta, Philippe

TI Capital Markets and the Instability of Open Economies.
AU Aghion, Philippe; Bacchetta, Philippe; Banerjee, Abhijit.

Bagliano, Fabio C.

TI Measuring Monetary Policy in Open Economies.
AU Favero, Carlo A.; Bagliano, Fabio C.; Franco, Francesco.

Bagwell, Kyle

PD April 2000. **TI** Game Theory and Industrial Organization. **AU** Bagwell, Kyle; Wolinsky, Asher. **AA** Bagwell: Columbia University. Wolinsky: Northwestern University. **SR** Columbia University, Department of Economics Discussion Paper Series: 9900/03; Department of Economics, Columbia University, 420 West 118th Street, Room 1022 IAB, New York, NY 10027. Website www.columbia.edu/cu/economics. **PG** 48. **PR** \$4 U.S.; \$5 Canada; \$7 all other countries; Subscriptions \$140 U.S.; \$185 all other countries. **JE** C70, D82, L10. **KW** Game Theory. Industrial Organization. Commitment. Entry Deterrence. Predation.

AB In this article, we consider how important developments in game theory have contributed to the theory of industrial organization. Our goal is not to survey the theory of industrial organization; rather, we consider the contribution of game theory through a careful discussion of a small number of topics within the industrial organization field. We also identify some points in which developments in the theory of industrial organization have contributed to game theory. The topics that we consider are commitment in two-stage games and the associated theories of strategic-trade policy and entry deterrence; asymmetric-information games and the associated theories of limit pricing and predation; repeated games with public moves and the associated theory of collusion in markets with public demand fluctuations; mixed-strategy equilibria and purification theory and the associated theory of sales; and repeated games with imperfect monitoring and the associated theory of collusion and price wars. We conclude with a general assessment concerning the contribution of game theory to industrial organization.

Bailey, Roy E.

PD May 1999. **TI** Seebohm Rowntree and the Post-War Poverty Puzzle. **AU** Bailey, Roy E.; Hatton, Tim J. **AA** University of Essex. **SR** Centre for Economic Policy Research Discussion Paper: 2147; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 44. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** I31, I32, I38, N34. **KW** Poverty. Social Security. Social Surveys. Seebohm Rowntree. Post-War Britain.

AB In his third social survey of York carried out in 1950, Seebohm Rowntree reported a steep decline since 1936 of the percentage of households in poverty. He attributed the bulk of this decline to government welfare reforms enacted during and after the War. Some observers have been uneasy about these striking results, especially with the rediscovery of poverty in the 1960s. In this paper we re-examine the surviving records from the 1950 survey, making the poverty line more consistent with that of 1936 and looking more closely at the measurement of income. We also re-assess the impact of welfare reforms on working class poverty. We find that poverty in York was significantly higher, and the contribution of welfare reform

substantially less, than was originally reported. These findings suggest a less optimistic view of the impact of welfare reforms during the Beveridge era.

Baker, Jonathan B.

PD December 1998. **TI** Market Power and the Cross-Industry Behavior of Prices Around a Business Cycle Trough. **AU** Baker, Jonathan B.; Woodward, Peter A. **AA** Baker: Federal Trade Commission. Woodward: Department of Justice. **SR** Federal Trade Commission Bureau of Economics Working Paper: 221; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave., NW, Room 7634, Washington, D.C. 20580. Website: bperson@ftc.gov. **PG** 35. **PR** no charge. **JE** D43, E31, E32, K21, L13. **KW** Market Power. Business Cycles. Pricing. Oligopoly.

AB This paper examines the behavior of prices in a large number of highly-disaggregated industries around the trough of the business cycle. The paper concludes that the degree to which prices are pro- or counter-cyclical differs between business cycle peaks and business cycle troughs, and that the cyclical behavior of prices varies substantially across industries. The paper also observes a tendency for industry prices to rise immediately following a business cycle trough. In general, the paper accepts a market power explanation for that observation: either oligopolists pricing above marginal cost take advantage of a cyclical tendency for demand functions to grow more inelastic in the early stages of a boom or else interfirm coordination becomes more effective after a trough. From the behavior of prices as a recession ends and a boom begins, the paper also identifies a set of industries likely on average to be exercising market power.

Baker, Michael

PD March 1999. **TI** The Retirement Behavior of Married Couples: Evidence From the Spouse's Allowance. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 99/03; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html. **PG** 47. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** H55, J14, J22, J26. **KW** Retirement. Public Pensions. Labor Supply. Marriage. Elderly.

AB I examine the effects of the introduction of the Spouse's Allowance to the Canadian Income Security system on the retirement behavior of couples. This policy intervention provides an excellent opportunity to investigate how income security programs affect the timing of retirement. The structure of the Allowance also provides a view of how programs targeted at one spouse can affect the behavior of the other. Finally, conditional on the types of data available for this time period, the analysis considers the joint labor market decisions of couples. The results indicate that the introduction of the Allowance is associated with decreased employment rates and increased not in the labor force rates among eligible males. Eligible females did not share the rising employment rates over the 1970s experienced by their counterparts who were not eligible for the Spouse's Allowance.

Baldwin, Richard E.

PD February 1999. **TI** The Core-Periphery Model With Forward-Looking Expectations. **AA** Graduate Institute of International Studies. **SR** Centre for Economic Policy Research Discussion Paper: 2085; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 32. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** F01, F02, R01. **KW** Economic Geography. Forward Looking Expectations.

AB The "core-periphery model" is vitiated by its assumption of static expectations. That is, migration (inter-regional or intersectoral) is the key to agglomeration, but migrants base their decision on current wage differences alone -- even though migration predictably alters wages and workers are (implicitly) infinitely lived. The assumption was necessary for tractability. The model has multiple stable equilibria, so forward-looking behavior requires characterization of global stability in a non-linear dynamic system (a potentially intractable problem). This paper's main contribution is to present a set of solution techniques -- partly analytic and partly numerical -- that allows consideration of forward-looking expectations. Surprisingly, we find that if migration costs are sufficiently high, allowing forward-looking behavior changes nothing, so static expectations are truly an assumption of convenience. If migration costs are lower, "history versus expectations" considerations emerge. Agglomeration, therefore, can be a self-fulfilling prophecy.

PD May 1999. **TI** Multinationals, Endogenous Growth and Technological Spillovers: Theory and Evidence. **AU** Baldwin, Richard E.; Forslid, Rikard; Braconier, Henrik. **AA** Baldwin: Graduate Institute of International Studies. Forslid: University of Lund. Braconier: Research Institute of Industrial Economics. **SR** Centre for Economic Policy Research Discussion Paper: 2155; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 32. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** F23, F43, O04. **KW** Multinationals. Spillovers. Endogenous Growth. Technology Transfer.

AB FDI has received surprisingly little attention in theoretical and empirical work on openness and growth. This paper presents a theoretical growth model where MNCs directly affect the endogenous growth rate via technological spillovers. This is novel since other endogenous growth models with MNCs, e.g. the Grossman-Helpman model, assume away the knowledge-spillovers aspect of FDI. We also present econometric evidence (using industry-level data from seven OECD nations) that broadly supports the model. Specifically, we find industry-level scale effects and international knowledge spillovers that are unrelated to FDI, but we also find that bilateral spillovers are boosted by bilateral FDI.

Banerjee, Abhijit

TI Capital Markets and the Instability of Open Economies. **AU** Aghion, Philippe; Bacchetta, Philippe; Banerjee, Abhijit.

Banks, James

PD March 1997. **TI** Risk Pooling, Precautionary Saving and Consumption Growth. **AU** Banks, James; Blundell, Richard; Brugiavini, Agar. **AA** Banks: Institute for Fiscal Studies. Blundell: Institute for Fiscal Studies and University College London. Brugiavini: University of Venice and Institute

for Fiscal Studies. **SR** University College London Discussion Papers in Economics: 97/03; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 22. **PR** 4 pounds or \$8.00. **JE** D12, D81, D91, E21. **KW** Consumption. Growth. Precautionary Savings. Risk.

AB In this paper we model the evolution of income risk and consumption growth using a grouping estimator for date-of-birth cohorts drawn from twenty five years of UK household data. We decompose the time series innovation of the income process for each cohort into its aggregate and idiosyncratic components. From these we compute conditional variances of the aggregate and idiosyncratic innovations which are used as separate risk terms in a consumption growth equation. After allowing for demographic and labor market variables we find an independent role for aggregate income risk in explaining consumption growth. Rather than the component of this aggregate risk that is common across cohorts, however, it is the cohort-specific element that is important in determining changes in consumption. This result points to a failure of between group insurance mechanisms.

PD May 1999. **TI** What Can We Learn About Pension Reform From Generational Accounts for the UK? **AU** Banks, James; Disney, Richard; Smith, Zoe. **AA** Banks: Institute for Fiscal Studies and University College London. Disney: Institute for Fiscal Studies and University of Nottingham. Smith: Institute for Fiscal Studies. **SR** Institute for Fiscal Studies Working Paper: W99/16; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. **PG** 21. **PR** 3 pounds. **JE** H22, H23, H55. **KW** Pension Reform. Public Pensions. Generational Accounts. Policy.

AB See the abstract for Banks, James; Blundell, Richard; Brugiavini, Agar. March 1997, "Risk Pooling, Precautionary Saving and Consumption Growth". University College London Discussion Papers in Economics: 97/03; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html.

PD August 1999. **TI** Risk Pooling, Precautionary Saving and Consumption Growth. **AU** Banks, James; Blundell, Richard; Brugiavini, Agar. **AA** Banks: Institute for Fiscal Studies. Blundell: Institute for Fiscal Studies and University College London. Brugiavini: University of Venice and Institute for Fiscal Studies. **SR** Institute for Fiscal Studies Working Paper: W99/19; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. **PG** 24. **PR** 3 pounds. **JE** D12, D81, D91, E21. **KW** Income Risk. Consumption. Precautionary Savings. Intertemporal Choice.

AB In this paper we model the evolution of income risk and consumption growth. We decompose the time series innovation of the income process into its common and cohort-specific components. From these we compute conditional variances which are used as separate risk terms in a consumption growth equation. Using a long time series of British household data we find strong evidence of precautionary saving. Specifically, after allowing for demographic and labor market status, there is an independent role for income risk in explaining consumption growth. Rather than the component that is common across cohorts, however, it is the cohort-specific element that is important in determining changes in consumption growth. This result points to a failure of between-cohort insurance mechanisms.

Bansal, Ravi

TI The Forward Premium Puzzle: Different Tales from Developed and Emerging Economies. **AU** Dahlquist, Magnus; Bansal, Ravi.

Barajas, Adolfo

PD November 1999. **TI** Foreign Investment in Colombia's Financial Sector. **AU** Barajas, Adolfo; Steiner, Roberto; Salazar, Natalia. **AA** Barajas: International Monetary Fund. Steiner: Universidad de Los Andes. Salazar: National Planning Department, Bogota, Columbia. **SR** International Monetary Fund Working Paper: WP/99/150; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 37. **PR** not available. **JE** E40, F21, F23, F30, G21. **KW** Foreign Investment. Banking. Colombia. Financial Liberalization.

AB This study analyzes foreign investment in Colombia's financial system, chronicling major changes in legislation, describing how investment flows evolved over time, and comparing performance of foreign-owned versus domestic banks. Panel data estimations reveal that financial liberalization in general had a beneficial impact on bank behavior in Colombia. Although the positive contribution of foreign entry may be overstated in recent studies by not controlling for other liberalization factors, foreign (and domestic) entry beginning in 1990 did improve bank behavior by enhancing operative efficiency and competition. However, this came at the expense of a deterioration in the loan quality of domestic banks.

Barbera, S.

PD May 1998. **TI** Voting for Voters: A Model of Electoral Evolution. **AU** Barbera, S.; Maschler, M.; Shalev, Jonathan. **AA** Barbera: Universitat Autònoma de Barcelona. Maschler: University of Jerusalem. Shalev: Université Catholique de Louvain. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 35/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 48. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C07, D07, D71. **KW** Voting. Elections. Clubs. Game Theory. Noncooperative Games. Pure- Strategy Equilibrium Profiles. Refinements.

AB We model the decision problems faced by the members of societies whose new members are determined by vote. We adopt a number of simplifying assumptions: the founders and the candidates are fixed; the society operates for a fixed number of periods and holds elections at the beginning of each period; one vote is sufficient for admission, and voters can support as many candidates as they wish; voters assess the value of the streams of agents with whom they share the society, while they belong to it. In spite of these simplifications, we show that interesting strategic behavior is implied by the dynamic structure of the problem: the vote for friends may be postponed, and it may be advantageous to vote for enemies. We discuss the existence of different types of equilibria in pure strategies and point out interesting equilibria in mixed strategies.

Barbier, Edward B.

PD December 1998. **TI** Environmental Project Evaluation in Developing Countries: Valuing the Environment as Input. **AA** University of York. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 86/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 39. **PR** 10 papers minimum order at

\$4.00 each; annual subscription at \$250.00. **JE** O01, Q02. **KW** Development. Ecological Services. Environmental Inputs. Production Function. Project Appraisal. Resource Valuation.

AB An important evaluation problem in developing countries is assessing the value and optimal use of environmental resources as inputs into production. This is a key methodology required for many general evaluation approaches, e.g. ensuring the most efficient use of a resource requires incorporating environmental costs and benefits, and comparing the returns from competing uses. However, implementing this approach requires valuing the role of ecological services and resources in contributing to, supporting and protecting economic activity.

PD December 1998. **TI** Debt, Poverty and Resource Management in a Rural Smallholder Economy. **AU** Barbier, Edward B.; Lopez, Ramon. **AA** Barbier: University of York. Lopez: University of Maryland. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 87/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 37. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** Q12, Q14, Q15, O12, O13, O16. **KW** Debt. Development. Intertemporal Model. Poverty. Pricing Policies. Resource Management. Rural Credit. Rural Households. Smallholders. Wealth Accumulation.

AB This paper explores the link between poverty and resource allocation, including the management of natural resources, by chronically indebted rural smallholders in developing countries. The paper proposes a formal intertemporal model of a credit-constrained farm-household that can invest in wealth accumulation to relieve its long run indebtedness or conserve resources. The household must decide on an optimal combination of investments in the two forms of capital, given their savings capacity, indebtedness and costs of obtaining credit. The evolution of the natural resource base is closely dependent on the investment strategy followed by the household. The model is also used to analyze how policy-related variables may affect the household's investment strategy and, consequently, resource management and household poverty: (i) Changes in output and input prices, and (ii) changes in the liquidity available in rural credit markets.

Barrett, Scott

PD July 1998. **TI** A Theory of International Co-operation. **AA** London Business School. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 43/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 32. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C07, F42. **KW** International Cooperation. Individual Rationality. Collective Rationality. Compliance.

AB This paper develops a coherent theory of international co-operation relying on the twin assumptions of individual and collective rationality. Using a linear version of the N-player prisoners' dilemma game, I provide a formal proof of Olson's conjecture that only a "small" number of countries can sustain full co-operation by means of a self-enforcing agreement. Moreover, I find that this number is not fixed but depends on the nature of the co-operation problem; for some problems, three countries will be "too many," while for others even 200 countries will be a "small" number. In addition, I find that the international system is only able to sustain global co-operation -- that is, co-operation involving 200 or so countries -- by a

self-enforcing treaty when the gains to co-operation are "small." Finally, I find that the ability of the international system to sustain co-operation does not hinge on whether the compliance norm of customary international law has been internalized by states or whether compliance must instead be enforced by the use of treaty-based sanctions. The constraint on international co-operation is free-rider deterrence, not compliance enforcement.

PD December 1998. **TI** Freedom, Growth, and the Environment. **AU** Barrett, Scott; Graddy, Kathryn. **AA** London Business School. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 94/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 35. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** O13, Q25. **KW** Economic Growth. Air and Water Pollution. Civil and Political Freedom.

AB A number of recent papers have found that certain measures of pollution worsen and later improve as income per head increases. It is widely believed that the downhill portion of this inverted-U curve reflects an induced policy response; that, as incomes rise, citizens demand improvements in environmental quality, and that these demands are delivered by the political system. In this paper we find that, for a number of pollution variables, an increase in civil and political freedoms significantly improves environmental quality. For other pollution variables, however, we find that freedoms have no effect.

Barth, Marvin

PD August 1999. **TI** Trade Prices and Volumes in East Asia Through The Crisis. **AU** Barth, Marvin; Dinmore, Trevor. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 643; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 13. **PR** no charge. **JE** F13, F14, F15. **KW** Asian Crisis. Trade Prices. Export Volume. Price Effects.

AB This paper presents a break-down of the export and import performance of select East Asian countries into price and volume effects. The results show that in aggregate, the decline in export revenue experienced by these countries in 1998 was largely due to a 9.1 percent fall in prices, and that export volume actually rose. Similarly, while the import volume of these countries did fall in 1998, the decline was not as great as in the dollar value of those imports, but reflected a greater slide in import prices of 10.8 percent. The fall in import and export prices in the East Asian region began in 1996, before the crisis, but intensified in the Summer and Fall of 1997 as the currency crisis unfolded and has continued through the Spring of 1999. Since the fall in import prices was apparently greater than the corresponding fall in export prices, these countries have collectively seen an improvement in their terms of trade during the crisis, reversing pre-crisis declines. The six countries that form the heart of this study were the source of 12.5 percent of US non-oil imports in 1998, and the accrued benefit to the United States of this price collapse may have been as much as a quarter of the value of these imports over two years.

Basu, Susanto

PD September 1998. **TI** Are Technology Improvements

Contractionary? **AU** Basu, Susanto; Fernald, John G.; Kimball, Miles. **AA** Basu and Kimball: University of Michigan and National Bureau of Economic Research. Fernald: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 625; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 37. **PR** no charge. **JE** D51, E23, O33, O41. **KW** Contractionary Effects. Technological Change. Short-Term Contraction. Output.

AB Yes. We construct a measure of aggregate technology change, controlling for imperfect competition, varying utilization of capital and labor, and aggregation effects. On impact, when technology improves, input use falls sharply, and output may fall slightly. With a lag of several years, inputs return to normal and output rises strongly. These results are inconsistent with frictionless dynamic general equilibrium models, which generally predict that technology improvements are expansionary, with inputs and (especially) output rising immediately. However, the results are consistent with plausible sticky-price models, which predict the results we find: When technology improves, input use generally falls in the short run, and output itself may also fall.

TI Why is Productivity Procyclical? Why Do We Care?
AU Fernald, John G.; Basu, Susanto.

Bateman, Ian J.

TI Does a Third Bound Help? Parametric and Nonparametric Welfare Measures From a CV Interval Data Study. **AU** Scarpa, Riccardo; Bateman, Ian J.

PD December 1998. **TI** Transferring Multivariate Benefit Functions Using Geographical Information Systems. **AU** Bateman, Ian J.; Brainard, Julii; Lovett, Andrew A. **AA** Bateman and Lovett: University of East Anglia and University College London. Brainard: University of East Anglia. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 84/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 34. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C14, C42, H41. **KW** Benefit Transfers. GIS. Monetary Evaluation. Woodland Recreation.

AB Recreation value studies have to date generally failed to adequately transfer functions predicting visitor numbers and benefit values from "source" to "target" recreational sites. One reason behind such failure may lie in the difficulty of successfully modelling the inter-site variation in predictors. The present study employs a geographical information system (GIS) to tackle this issue by integrating data from a number of sources (including a recreational site survey, the national census, regional road networks, etc.) permitting improved and standardized measurement and analysis of predictors at both source and target sites.

Battigalli, Pierpaolo

TI Recent Results on Belief, Knowledge and the Epistemic Foundations of Game Theory. **AU** Bonanno, Giacomo; Battigalli, Pierpaolo.

PD March 1999. **TI** An Epistemic Characterisation of Extensive Form Rationalisability. **AU** Battigalli, Pierpaolo; Siniscalchi, Marciano. **AA** Battigalli: Princeton University

and European University Institute. Siniscalchi: Princeton University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 25/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 31. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C70. **KW** Rationalizability. Extensive Form Games.

AB We use an extensive form, universal type space to provide the following epistemic characterization of extensive form rationalizability. Say that player i strongly believes event E if i is certain of E conditional on each of her information sets consistent with E . Our main contribution is to show that a strategy profile s is extensive form rationalizable if and only if there is a state in which s is played and (0) everybody is rational, (1) everybody strongly believes (0), (2) everybody strongly believes (0) & (1), (3) everybody strongly believes (0) & (1) & (2), This result also allows us to provide sufficient epistemic conditions for the backward induction outcome and to relate extensive form rationalizability and conditional common certainty of rationality.

Baumol, William

PD September 1998. **TI** Hope for the Environment: Free Enterprise and Other Economic Regimes. **AA** New York University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 64/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 6. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** B01, B02. **KW** Hope. Environment. Economic Regimes.

AB This paper is the keynote speech delivered by Professor William Baumol at the First World Congress of Environmental Economists that was held in Venice on June 25-27, 1998. It analyses the situation of the environment under different economic regimes: the feudal society, Marxism and capitalism. After a brief description of the environmental situation in medieval England, in the Soviet Nations, in Eastern Europe, in China and in capitalist countries, the author concludes that each economic regime is worse than the other in terms of its environmental performance. There is, however, a message of hope in the long run for the environment. This hope lies in the abundance and growth, such as the world has never known, produced by the market economy.

Bayoumi, Tamim

TI A Peek Inside the Black Box: The Monetary Transmission Mechanism in Japan. **AU** Morsink, James; Bayoumi, Tamim.

PD December 1999. **TI** The Suitability of ASEAN for a Regional Currency Arrangement. **AU** Bayoumi, Tamim; Mauro, Paolo. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/162; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 15. **PR** not available. **JE** F33, F36, F41, F42. **KW** ASEAN. European Monetary Union. Exchange Rates. International Finance. Economic Integration.

AB This paper examines the costs, benefits, preconditions, and implications of an Association of Southeast Asian Nations (ASEAN) regional currency arrangement that is assumed to culminate in a regional currency. On economic criteria, ASEAN appears less suited for a regional currency arrangement than Europe before the Maastricht Treaty,

although the difference is not large. The transition to European Monetary Union (EMU) indicates that the path toward a common currency is fraught with difficulty. A firm political commitment would seem to be vital to ensuring that an attempt to form a regional currency arrangement is not viewed as simply another fixed exchange rate regime, open to speculative crises.

Becker, Gary S.

PD May 2000. **TI** Status, Lotteries and Inequality. **AU** Becker, Gary S.; Murphy, Kevin M.; Werning, Ivan. **AA** University of Chicago. **SR** University of Chicago Center for the Study of the Economy and the State Working Paper: 160; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. **PG** 41. **PR** \$3.00; make check payable to "The University of Chicago.". **JE** A12, D31, D63, D81, O15. **KW** Social Status. Income Distribution. Inequality. Lotteries. Consumption.

AB This paper assumes that the desire for status is a powerful motive in any society where members interact with each other. It also assumes that status and income generally are strong complements in the sense that greater status raises the marginal utility of other consumption. Several significant results are derived from these two rather simple basic assumptions, and from several auxiliary assumptions, especially a fixed distribution of status and the existence of fair lotteries. The most extraordinary result is that if the initial functional distribution of income is sufficiently compact, then the equilibrium distribution of income, and the equilibrium covariance of consumption and status, are the same for all initial income distributions within the "compact" range. The paper shows that the assumption of risk-taking and lotteries to acquire higher status and higher incomes leads to predictions about the distribution of income that might explain both differences and similarities in income distributions among societies, and over time within the same society. This suggests that choice and risk-taking are crucial ingredients of the observed distributions of income and status.

PD August 1998. **TI** Deadweight Costs and the Size of Government. **AU** Becker, Gary S.; Mulligan, Casey B. **AA** University of Chicago. **SR** University of Chicago Center for the Study of the Economy and the State Working Paper: 144; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. **PG** 38. **PR** \$3.00; make check payable to "The University of Chicago.". **JE** H11, H21, H23, H24, H50. **KW** Government Expenditures. Tax Systems. Optimal Taxation. Welfare. Government Size.

AB We provide a model for analyzing effects of the tax system and spending programs on the determination of government spending and taxpayer welfare and show that a tax system or spending program which is suboptimal from a Ramsey point of view can improve taxpayer welfare because the system creates additional political pressure for suppressing the growth of government. Relevant examples include the use of inflation taxes, capital taxes, excise taxes, deficit financing, and income taxes with many "loopholes." We also demonstrate the similarity of the political responses to revenue shocks, spending shocks, and changes in program efficiency. In a broad sample of countries for the years 1973-90, we show that "more efficient" tax systems -- systems which rely on broad-based taxes with fairly flat rate structures -- are associated with larger

governments. An analysis of defense spending -- especially wartime spending -- oil shocks, intergovernmental grants and other flypaper effects suggests that the cause and effect is not from spending to tax structures.

Beddies, Christian H.

PD August 1999. **TI** Investment, Capital Accumulation, and Growth: Some Evidence from The Gambia 1964-98. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/117; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 27. **PR** not available. **JE** C22, E20, O11, O40, O55. **KW** Endogenous Growth. Human Capital. Investment. Capital Stock. Total Factor Productivity.

AB This paper considers the potential variables that have determined economic growth in The Gambia during 1964-98. The results indicate that The Gambia's aggregate production function exhibits increasing returns to scale, thus supporting the endogenous growth-type model. The impact of private investment -- and thus private capital accumulation -- on output is large and significant. Furthermore, increases in public investment boost output substantially. Finally, the effects associated with human capital accumulation are positive and statistically significant. The paper also estimates a series on total factor productivity growth that indicates that The Gambia was able to use its resources more efficiently.

Beetsma, Roel M. W. J.

PD March 1999. **TI** Structural Convergence Under Reversible and Irreversible Monetary Unification. **AU** Beetsma, Roel M. W. J.; Jensen, Henrik. **AA** Beetsma: Dutch Ministry of Economic Affairs. Jensen: University of Copenhagen. **SR** Centre for Economic Policy Research Discussion Paper: 2116; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 21. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** E61, E63, F33. **KW** Monetary Unification. Structural Distortions. Inflation. Convergence.

AB We explore endogenous monetary unification in the context of a model in which a country with serious structural distortions (and, hence, high inflation) is admitted into a monetary union once its economic structure has converged sufficiently towards that of the existing participants. If unification is reversible, so that the new entrant can always be forced to leave the union again later, convergence stops for a while after the high inflation country has joined. With irreversible unification, temporary divergence occurs and unification is most likely to be delayed.

PD June 1999. **TI** Risk Sharing and Moral Hazard with a Stability Pact. **AU** Beetsma, Roel M. W. J.; Jensen, Henrik. **AA** Beetsma: Dutch Ministry of Economic Affairs. Jensen: University of Copenhagen. **SR** Centre for Economic Policy Research Discussion Paper: 2167; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 40. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** E42, E61, F33. **KW** Stability Pact. Monetary Union. Public Debt. Risk Sharing. Fiscal Discipline.

AB We show how a stability pact based on deficit sanctions eliminates the exacerbation of debt accumulation that may arise from monetary unification. Moreover, by making sanctions contingent upon the economic situation of countries, the

stability pact provides for risk sharing. Differences in initial debt levels, however, reduce the scope for unanimous support for a pact. We introduce also endogenous "fiscal discipline" whose unobservability leads to moral hazard in its provision. If countries are ex ante identical, it is nevertheless optimal to make sanctions at least to some extent contingent on countries' economic situation. However, with cross-country differences in the costs of providing discipline, some countries may oppose such contingency.

Bell, Brian

PD April 1999. **TI** Getting the Unemployed Back to Work: The Role of Targeted Wage Subsidies. **AU** Bell, Brian; Blundell, Richard; Van Reenen, John. **AA** Bell: Tudor Proprietary Trading, LLC. Blundell: University College London and Institute for Fiscal Studies. Van Reenen: University of California at Berkeley, Institute for Fiscal Studies, University College London and Centre for Economic Policy Research. **SR** Institute for Fiscal Studies Working Paper: W99/12; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. **PG** 37. **PR** 3 pounds. **JE** H53, J21, J31, J38, J68. **KW** Program Evaluation. Wages. Difference in Differences. Labor Markets. Unemployment.

AB This paper examines alternative approaches to wage subsidy programs. It does this in the context of a recent active labor market reform for the young unemployed in Britain. This "New Deal" reform and the characteristics of the target group are examined in detail. We discuss theoretical considerations, survey the existing empirical evidence and propose two strategies for evaluation. The first suggests an ex-post "trend adjusted difference in difference" estimator. The second relates to a model based ex-ante evaluation. We present the conditions for each to provide a reliable evaluation and fit some of the crucial parameters using data from the British Labour Force Survey. We stress that the success of this type of labor market program hinges on dynamic aspects of the youth labor market, in particular the pay-off to experience and training.

Bender, Stefan

PD April 1999. **TI** Worker Displacement in France and Germany. **AU** Bender, Stefan; Dustmann, Christian; Margolis, David N.; Meghir, Costas. **AA** Bender: Institute für Arbeitsmarkt- und Berufsforschung, Nürnberg. Dustmann and Meghir: University College London and Institute for Fiscal Studies. Margolis: Université de Paris and CREST. **SR** Institute for Fiscal Studies Working Paper: W99/14; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. **PG** 56. **PR** 3 pounds. **JE** J23, J31, J64. **KW** Earnings. Wages. Employment. Unemployment. Displacement.

AB This paper describes the evolution of earnings and employment, post-displacement and post-other-separation for workers in France and Germany. The authors exploit administrative data from both countries, which has the advantage of providing large, representative samples of a wide range of workers from all sectors. Furthermore, reported earnings and employment durations are precisely measured. The paper describes the institutional context in France and Germany surrounding quits and layoffs. The analysis focuses on non-employment duration and earnings changes experienced by workers who have stayed with a single firm for at least 4 years. The authors find that the determinants of displacement are roughly similar across countries. In both countries, a large share

of displaced workers transit to their subsequent employers without spending any time in non-employment. The share of direct transitions is always higher for displaced workers than for workers that separate for other reasons. The durations of spells out of the work force are shorter in both countries for displaced workers than for those who separate for other reasons. In both countries, the authors find that displacement does not seem to be associated with large earnings losses.

Bennett, John

PD February 1999. TI Output and Exports in Transition Economies: A Labour Management Model. AU Bennett, John; Hare, Paul; Estrin, Saul. AA Bennett: University of Wales Swansea. Hare: Heriot-Watt University. Estrin: London Business School. SR Centre for Economic Policy Research Discussion Paper: 2080; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 48. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE D21, P31. KW Transition. Labor Management. Cournot Oligopoly. Exports.

AB The behavior of an oligopolistic industry in a transition economy is analyzed, assuming that the firms are labor-managed and the economy is open to international trade. The output of these firms is assumed to be of lower quality than the output of Western firms. Cournot equilibrium in the presence of bottlenecks is derived. Such bottlenecks may be particularly damaging because firms respond by cutting exports disproportionately. This may explain why countries, such as those in the former Soviet Union, which have faced serious supply bottlenecks have failed to develop exports while the economies of Central Europe, where materials are more freely available, have seen rapid export growth.

Berg, Andrew

PD October 1999. TI The Asia Crisis: Causes, Policy Responses, and Outcomes. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/99/138; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 47. PR not available. JE E52, E65, F31, F32, G20. KW Asian Crisis. Interest Rates. Exchange Rates. Currency Crises. Balance of Payments. AB This paper tells the story of the Asian financial crisis by addressing four questions: What were the causes of the crisis, how did the crisis unfold, what were the policy responses, and what have been the outcomes? The paper takes the view that none of these questions can be understood without appreciating the fundamental vulnerabilities that left authorities without effective tools to counter sudden capital outflows. The pattern of output decline suggests that these vulnerabilities, particularly weaknesses in domestic financial systems, played a larger role than tight monetary policy in determining outcomes.

Berg, Elin

PD December 1998. TI Optimal Oil Exploration Under Climate Treaties. AU Berg, Elin; Kverndokk, Snorre; Rosendahl, Knut Einar. AA Berg: Norsk Hydro A/S, Stabekk, Norway. Kverndokk: SNF Foundation for Research in Economics and Business Administration, Oslo. Rosendahl: Statistics Norway, Oslo. SR Fondazione Eni Enrico Mattei Note di Lavoro: 85/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 25. PR 10 papers minimum order at \$4.00 each;

annual subscription at \$250.00. JE H23, Q31, Q32, Q38, Q41, Q48. KW Carbon Treaties. Exhaustible Resources. Optimal Oil Exploration.

AB In this paper we focus on how an international carbon treaty will influence the exploration of oil in Non-OPEC countries. We present a numerical intertemporal global equilibrium model for the fossil fuel markets. The international oil market is modelled with a cartel (OPEC) and a competitive fringe on the supply side, following a Nash-Cournot approach. An initial resource base for oil is given in the Non-OPEC region, however, the resource base changes over time due to depletion, exploration and discovery. When studying the effects of different climate treaties on oil exploration, two contrasting incentives apply. If an international carbon tax is introduced, the producer price of oil will fall giving an incentive to reduce oil production and exploration. However, the oil price may increase less rapidly over time, which gives an incentive to accelerate production, and exploration.

Bergemann, Dirk

PD May 1999. TI Dynamic Common Agency. AU Bergemann, Dirk; Valimaki, Juuso. AA Bergemann: Yale University. Valimaki: Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1259; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 59. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE C73, D81, D83, J41. KW Common Agency. Dynamic Bidding. Marginal Contribution. Job Matching.

AB We consider a general model of dynamic common agency with symmetric information. We focus on Markov perfect equilibria and characterize the equilibrium set for a refinement of the Markov perfect equilibria. Particular attention is given to the existence of a marginal contribution equilibrium where each principal receives her contribution to the coalition of agent and remaining principals. The structure of the intertemporal payoffs is analyzed in terms of the flow marginal contribution. As a by-product, new results for the static common agency game are obtained. The general characterization results are then applied to two dynamic bidding games for a common agent (i) multi-task allocation and (ii) job matching under uncertainty.

PD May 1999. TI Entry and Innovation in Vertically Differentiated Markets. AU Bergemann, Dirk; Valimaki, Juuso. AA Bergemann: Yale University. Valimaki: Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1260; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 42. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE D81, D82, D83, O31. KW Experience Goods. Vertical Differentiation. Entry. Innovation.

AB See the abstract for Bergemann, Dirk; Valimaki, Juuso. May 1999. "Entry and Innovation in Vertically Differentiated

Markets". Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1260; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math.

PD June 1999. **TI** Entry and Innovation in Vertically Differentiated Markets. **AU** Bergemann, Dirk; Valimaki, Juuso. **AA** Bergemann: Yale University. Valimaki: Northwestern University. **SR** Yale Cowles Foundation Discussion Paper: 1226; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 45. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** D81, D82, D83, O31. **KW** Experience Goods. Vertical Differentiation. Entry. Innovation.

AB This paper analyzes the optimal entry into experience goods markets with vertically differentiated buyers. We consider the case where the value of the new product is imperfectly known, but common to all buyers (common values) as well as the case where the quality is different across buyers (private values). We distinguish between new products that are improvements to existing products and new products that are substitutes. Different types of products have qualitatively distinct diffusion paths. Improvements are introduced slowly relative to the full information case, while substitutes are introduced more aggressively. The slow entry strategy is associated with increasing supply and decreasing prices over time. The reverse pattern holds for an aggressive entry strategy. The incentives to innovate display a similar distinction. A firm with a currently inferior product opts for a large but risky innovation, whereas currently superior product chooses a smaller but certain innovation.

PD August 1999. **TI** Strategic Buyers and Privately Observed Prices. **AU** Bergemann, Dirk; Valimaki, Juuso. **AA** Bergemann: Yale University. Valimaki: Northwestern University and Southampton University. **SR** Yale Cowles Foundation Discussion Paper: 1237; 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** C72, C73, D43, D82. **KW** Repeated Games. Private Monitoring. Collusion. Price Competition.

AB A model of repeated price competition with large buyers is analyzed. The sellers are allowed to offer different prices to different buyers and the buyers act strategically. The set of subgame perfect equilibria is investigated under public and private monitoring. With public monitoring the equilibrium set with large buyers expands relative to the standard model where each buyer is small and behaves myopically. With private monitoring, where prices are not observable to the competing sellers, the set of equilibrium payoffs shrinks. In the finitely repeated game with private monitoring, all sales are made by the efficient seller. In the infinitely repeated game this result is preserved as long as the sellers condition their prices on the public history. In contrast to the finite horizon game, the set of pure strategy equilibria expands if the sellers are allowed to condition on their own past prices. Comparisons are drawn to Markovian equilibria to similar dynamic games.

PD October 1999. **TI** Stationary Multi-Choice Bandit Problems. **AU** Bergemann, Dirk; Valimaki, Juuso. **AA** Bergemann: Yale University. Valimaki: Northwestern

University and University of Southampton. **SR** Yale Cowles Foundation Discussion Paper: 1240; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 12. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** D81, D83, J64. **KW** Multi-Armed Bandits. Gittins Index. Stationary Bandits. Job Search.

AB This note shows that the optimal choice of k simultaneous experiments in a stationary multi-armed bandit problem can be characterized in terms of the Gittins index of each arm. The index characterization remains equally valid after the introduction of switching costs.

Bergin, Paul R.

PD February 1998. **TI** Staggered Price Setting and Endogenous Persistence. **AU** Bergin, Paul R.; Feenstra, Robert C. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 98/05; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html. **PG** 19. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** D43, E23, E31, E50, L13. **KW** Endogenous Persistence. Price Staggering. Translog Utility. Monopolistic Competition. Pricing.

AB This paper generates persistent effects of a monetary disturbance in the context of staggered price-setters. Previous research has been restricted by the CES functional form to price-setting rules that are constant markups over marginal costs. The present paper considers a translog form for preferences and an input-output structure for production in the context of a dynamic general equilibrium model of monopolistically competitive staggered price-setters. We derive a price-setting rule that is a function of marginal cost and also competitors' prices. This rule better captures the interaction of price-setters envisioned in Taylor (1980) and Blanchard (1983) in their early work on staggered contracts. The model is able to generate reasonable persistence, and also confirms the conjecture of Taylor and Blanchard that increasing the number of contracting groups increases the degree of persistence.

PD February 1999. **TI** Pricing to Market, Staggered Contracts, and Real Exchange Rate Persistence. **AU** Bergin, Paul R.; Feenstra, Robert C. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 99/01; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website:

polar.ucdavis.edu/econ/workingpapers/workingpapers.html. **PG** 29. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** E31, F31, F41. **KW** Exchange Rates. Endogenous Persistence. Pricing to Market. Sticky Prices. Translog Preferences.

AB This paper offers an explanation for the persistence observed in real exchange rate movements. The model combines pricing to market behavior with sticky prices generated by staggered contracts. A translog preference structure is used to enhance both features. The paper finds that openness limits the degree of endogenous persistence.

Nevertheless, the model under reasonable parameter values can replicate the serial correlation of real exchange rate data. Further, significant exchange rate volatility can be generated, and this is amplified by the presence of endogenous persistence.

Bertocchi, Graziella

PD May 1999. **TI** The Politics of Cooptation. **AU** Bertocchi, Graziella; Spagat, Michael. **AA** Bertocchi: Universita di Modena. Spagat: University of London. **SR** Centre for Economic Policy Research Discussion Paper: 2156; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 20. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** D03, D74, H03, P26. **KW** Cooptation. Welfare State. Privatization. Upheaval.

AB Group 1 holds political power. Group 2 threatens this power. Group 1 decreases the upheaval probability by co-opting some agents from Group 2 into a more benign Group 3. Improvements in upheaval technology lead to less co-optation. Increasing the relative size of Group 1 implies larger co-optation payments to a smaller group, decreasing the total resources committed to co-optation. In an extension in which Group 3 also threatens Group 1, although less destructively than does Group 2, co-optation transfers are reduced. Growth causes political stabilization. The theory applies to the origin of the welfare state, post-communist privatization and other situations.

Bertrand, Marianne

PD October 1998. **TI** Executive Compensation and Incentives: The Impact of Takeover Legislation. **AU** Bertrand, Marianne; Mullainathan, Sendhil. **AA** Bertrand: Princeton University and National Bureau of Economic Research. Mullainathan: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** Princeton Industrial Relations Section Working Paper: 404; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. **PG** 39. **PR** \$1.50. **JE** G34, J31, J33, K22. **KW** Executive Compensation. Incentives. Takeover Laws. Anti-Takeover Legislation.

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

PD October 1998. **TI** Network Effects and Welfare Cultures. **AU** Bertrand, Marianne; Luttmer, Erzo F. P.; Mullainathan, Sendhil. **AA** Bertrand: Princeton University and National Bureau of Economic Research. Luttmer: University of Chicago. Mullainathan: Massachusetts Institute of Technology and National Bureau of Economic Research.

SR Princeton Industrial Relations Section Working Paper: 405; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. **PG** 50. **PR** \$1.50. **JE** D83, H53, I38, R22. **KW** Welfare Participation. Social Networks. Language.

AB This paper empirically examines the role of social networks in welfare participation. Empirical work has found it difficult to distinguish the effect of networks from unobservable characteristics of individuals and areas. This paper uses data on language spoken to better infer an individual's network within an area. Individuals who are surrounded by others speaking their language have a larger pool of available contacts. The network influence of this pool will depend on their welfare knowledge. Therefore, this paper focuses on the differential effect of increased contact availability: does being surrounded by others who speak the same language increase welfare use more for individuals from high welfare using language groups? The results strongly confirm the importance of networks in welfare participation. The authors deal with omitted variable bias in several ways. First, the methodology allows the authors to include local area and language group fixed effects and to control for the direct effect of contact availability. Second, the paper instruments for contact availability in the neighborhood with the number of one's language group in the entire metropolitan area. Finally, the authors investigate the effect of removing education controls. Both instrumentation and removal of education controls have little impact on the estimates.

PD October 1998. **TI** Is There Discretion in Wage Setting? A Test Using Takeover Legislation. **AU** Bertrand, Marianne; Mullainathan, Sendhil. **AA** Bertrand: Princeton University and National Bureau of Economic Research. Mullainathan: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** Princeton Industrial Relations Section Working Paper: 406; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. **PG** 38. **PR** \$1.50. **JE** E24, G34, J30, M12. **KW** Wage Setting. Discretion. Takeovers.

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

PD December 1998. **TI** From the Invisible Handshake to the Invisible Hand? How Import Competition Changes the

Employment Relationship. AA Princeton University. SR Princeton Industrial Relations Section Working Paper: 410; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. PG 59. PR \$2.00. JE E24, F41, J31, J41. KW Internal Markets. Import Competition. Labor Market. Wage Flexibility. Implicit Constraints.

AB There is a popular perception that increased competitive pressures in U.S. product markets are causing employment relationships to be governed by the market rather than by implicit agreements. This paper examines whether changes in import competition affect the use of implicit agreements between employers and workers, focusing on the extent to which employers shield wages from external labor market conditions. If increased competition induces a switch from implicit agreements to spot market wage setting, then, as competition increases: (1) the sensitivity of workers' wages to the current unemployment rate should increase; and (2) the sensitivity of workers' wages to the unemployment rate prevailing upon hire should decrease. Evidence is found supporting both predictions, using exchange rate movements to generate exogenous variation in import competition. Increased financial pressure on employers is one mechanism behind these effects -- both of the wage-unemployment sensitivity changes are larger in high leverage industries than in low leverage ones. Moreover, declines in corporate returns following increased competition directly increase the sensitivity of wages to the unemployment rate. Wage flexibility may be a response to competition either because flexibility reduces the probability of financial distress or because lower profits weaken the enforceability of implicit wage setting agreements.

PD September 1999. TI Public Policy and Extended Families: Evidence from South Africa. AU Bertrand, Marianne; Miller, Douglas; Mullainathan, Sendhil. AA Bertrand: Princeton University and National Bureau of Economic Research. Miller: Princeton University. Mullainathan: Massachusetts Institute of Technology and National Bureau of Economic Research. SR Princeton Industrial Relations Section Working Paper: 422; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. PG 30. PR not available. JE D13, H55, I38, J14. KW Target Populations. Public Policy. Pensions. Family Income.

AB Tightly-knit families, where money flows between relatives, characterize many developing countries. These monetary flows mean that public policies may affect a very different group of people than the target population. This paper studies a cash pension program for the elderly in South Africa, using the variation in pension receipt in three-generation households that comes from differences in the age of the elder(s) in the households. The paper finds sharp drops in the labor force participation of prime-age men when an elder reaches pension eligibility age. This drop in labor supply diminishes with family size, as pension money is split over more people, and with educational attainment, as pension money becomes less significant relative to outside earnings. Power within the family might play an important role: (1) labor supply drops less when the pension is received by a man rather than a woman; (2) middle-aged men (those more likely to have control in the family) reduce labor supply more than younger men; and (3) female labor supply is unaffected. These last two

findings suggest that the results are unlikely to be driven by increased human capital investment or by a need to stay home to care for the elderly.

Betts, Julian R.

PD October 1998. TI Equalizing Educational Opportunity Through Educational Finance Reform. AU Betts, Julian R.; Roemer, John E. AA Betts: University of California, San Diego and University of California, Davis; Roemer: University of California, Davis. SR University of California, Davis, Department of Economics Working Paper: 99/08; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html. PG 58. PR \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. JE D63, H52, I21, I22, I28. KW Equal Opportunity. Educational Finance. School Quality. Education.

AB We analyze the reallocations of educational expenditures required to equalize opportunities, according to the theory of Roemer (1998). Using the NLSYM data set, we find that implementing an equal-opportunity policy across men of different races, by using educational finance as the instrument, and holding per capita educational finance fixed, would require spending six to ten times as much on black students, per capita, as on white students. Implementing an equal-opportunity policy across men from different socio-economic backgrounds, but ignoring race, does almost nothing to equalize opportunities for men of different races. Raising the school-leaving age by one year, as opposed to increasing spending per pupil directly, is a relatively inexpensive way of reducing inequality of opportunity across races, but the reduction in opportunity inequality it achieves is very small.

Bevelander, Pieter

TI Declining Employment Assimilation of Immigrants in Sweden: Observed or Unobserved Characteristics? AU Nielsen, Helena S.; Bevelander, Pieter.

Bhattacharya, Rina

PD December 1999. TI Political Economy Aspects of Trade and Financial Liberalization: Implications for Sequencing. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/99/159; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 18. PR not available. JE E21, E22, E25, F13, F21. KW Investment Uncertainty. Political Economy. Financial Liberalization. Trade Liberalization.

AB This paper integrates a two-period overlapping generations model with a standard two-sector Heckscher-Ohlin trade model and analyzes the impact of uncertainty on domestic investment in the exportable and importable sectors, the political economy linkages between trade and financial liberalization, and the implications for sequencing. Under certain assumptions financial liberalization leads to a movement of resources in the opposite direction to that implied by trade liberalization, thus defeating one of the objectives of tariff reform. When political economy linkages are taken into account, however, the indirect effects of financial liberalization may offset the direct effects and encourage a movement of

resources in the desired direction.

Bierman, Harold, Jr.

PD December 1996. **TI** A Utility Approach to the Portfolio Allocation Decision and the Investment Horizon. **AA** Cornell University. **SR** University of Cambridge Discussion Papers in Accounting and Finance: AF26; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. **PG** 10. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** G11. **KW** Portfolio Allocation. Investment Horizon. Preferences. Utility Functions. Risk.

AB There are different conclusions in the literature regarding the portfolio allocation decision for different investment horizons. Does the risk of a stock portfolio increase or decrease as the investment horizon lengthens? This paper shows that the portfolio selection depends on the investor's preferences (the utility function) and the probability distribution of returns. It is possible for stocks to be risky in each time period and have risk (at least by some definitions of risk) reduced by increasing the length of the investment horizon.

PD December 1996. **TI** Portfolio Allocation and the Investment Horizon. **AA** Cornell University. **SR** University of Cambridge Discussion Papers in Accounting and Finance: AF27; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: www.econ.cam.ac.uk/dae. **PG** 8. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** G11. **KW** Portfolio Allocation. Investment Horizon. Risk. Utility Functions.

AB Should the investment horizon affect the investor's decision to invest in stocks? Why do respected experts reach different conclusions on this issue? There are two ways of approaching the risk of a stock portfolio. The first method sets the value of risk using an arbitrage model of stocks and options. The second method uses expectations and investors' utility functions. With the second method, one measure of risk is to consider the expected losses. A second measure is the probability of earning less than the risk-free return over the investment horizon. The horizon affects both of these measures, but the effects are different. There are actually three different issues. One is whether or not the investment horizon should affect the proportion of stocks in a portfolio. Secondly, are there reasonable utility functions for investors that will lead some informed investors to adjust their portfolios based on the investment time horizon? The third issue is to what extent can we use the past experiences from investing in stocks to make decisions regarding a portfolio of securities today?

PD December 1996. **TI** The Dividend Conundrum. **AA** Cornell University. **SR** University of Cambridge Discussion Papers in Accounting and Finance: AF28; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: www.econ.cam.ac.uk/dae. **PG** 9. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** G12, G35. **KW** Dividends. Conundrum. Value. Earnings. Asset Pricing.

AB Penman (1992, p.467) defined the "dividend conundrum" to be "price is based on future dividends but observed dividends do not tell us anything about price." Bernard (1995, p.734) in

the same spirit states "anything short of a dividend forecast over an infinite horizon is meaningless." Penman suggests that accounting information provides a solution of the dividend conundrum. This paper explores two issues: whether or not a dividend conundrum exists, and the use of earnings as a substitute for dividends.

PD December 1996. **TI** Accounting and Equity Evaluation. **AA** Cornell University. **SR** University of Cambridge Discussion Papers in Accounting and Finance: AF30; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: www.econ.cam.ac.uk/dae. **PG** 16. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** G12, M41. **KW** Equity Evaluation. Abnormal Income. Clean Surplus. Dividends. Book Value.

AB Equity can be valued using expected dividends, expected earnings, or expected free cash flow. The issues discussed in this paper include the clean surplus assumption of Ohlson (1995) and Feltham and Ohlson (1995), the relevance of book value as discussed by Bernard (1995) and Ohlson (1995), and the positions of Ohlson (1995) and Lundholm (1995) regarding the relevance of dividends. This paper concludes that accounting is highly relevant for valuation, but there is always the need for estimating future values. The argument that the use of earnings effectively replaces the use of irrelevant dividends has no validity.

PD December 1996. **TI** FAS 109: Evaluating the Effects of Tax Rate Changes. **AA** Cornell University. **SR** University of Cambridge Discussion Papers in Accounting and Finance: AF31; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: www.econ.cam.ac.uk/dae. **PG** 8. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** H24, M41. **KW** Taxation. Accounting. Tax Rates. Income Taxes.

AB FAS 109 "Accounting for Income Taxes" requires the adjustment of the deferred tax account for changes in the tax law or tax rates, and there is an effect on income. This paper challenges the validity of the recommended accounting. The solution for the tax accounting issues lies in a better understanding of the economic implications of differences in tax and accounting depreciation expenses.

Bleaney, Michael

PD December 1999. **TI** The Disappearing Openness-Inflation Relationship: A Cross-Country Analysis of Inflation Rates. **AA** University of Nottingham. **SR** International Monetary Fund Working Paper: WP/99/161; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 9. **PR** not available. **JE** E31, F31, F41. **KW** Exchange Rates. Inflation. Openness.

AB The robust negative correlation between openness and inflation found in cross-country data for the 1970s and 1980s has disappeared in the 1990s. There is now a strong negative correlation of inflation with per capita GDP, as higher-income countries have achieved significant disinflation not emulated by lower-income countries. Since 1973, the most consistent finding is that floating exchange rate regimes are associated with inflation rates at least 10 percent a year higher than pegged exchange rates regimes, after allowing for other factors. There is also a consistent positive correlation between land area and inflation.

Blomberg, S. Brock

PD January 1997. TI A Theory of Rigid Extremists and Flexible Moderates with an Empirical Application to the U.S. Congress. AU Blomberg, S. Brock; Harrington, Joseph E., Jr. AA Blomberg: Wellesley College. Harrington: Johns Hopkins University. SR Johns Hopkins Department of Economics Working Paper: 380; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. PG 28. PR no charge. JE D72, D80, H10.

KW Rigidity. Extremism. US Congress. Opinions. Politics.

AB A theory is developed which predicts that people with relatively extreme opinions are relatively rigid in that they are less inclined to modify their opinions. That extremists tend to be rigid and moderates tend to be flexible is found to hold for members of the U.S. Congress.

Blonigen, Bruce A.

PD January 1999. TI R&D Activity and Acquisitions in High Technology Industries: Evidence From the U.S. Electronic and Electrical Equipment Industries. AU Blonigen, Bruce A.; Taylor, Christopher T. AA Blonigen: University of Oregon. Taylor: Federal Trade Commission. SR Federal Trade Commission Bureau of Economics Working Paper: 222; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave., NW, Room 7634, Washington, D.C. 20580. Website: bperson@ftc.gov. PG 35. PR no charge. JE L21, L63, O31, O32. KW Business Objectives. Research and Development. Innovation. Technological Change.

AB Theory argues that R&D intensity and acquisition activity may be either directly or inversely related. However, empirically we know relatively little about which firms are responsible for acquisition activity in high-technology industries. Using a panel of 217 U.S. electronic and electrical equipment firms from 1985-93 and limited dependent variable estimation techniques, we find relatively low R&D-intensity firms are more likely to acquire. This result is true both when looking at between and within estimators, indicating that acquisitions may be used as a short term or long term strategy. These results are robust to a number of sensitivity tests.

Bloom, Nick

PD March 1999. TI Do R&D Tax Credits Work? Evidence From an International Panel of Countries 1979-94. AU Bloom, Nick; Griffith, Rachel; Van Reenen, John. AA Bloom and Griffith: Institute for Fiscal Studies. Van Reenen: Institute for Fiscal Studies and University College London. SR Institute for Fiscal Studies Working Paper: W99/08; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. PG 25. PR 3 pounds. JE C25, H25, L13, O31, O38. KW Tax Credits. Research and Development. Panel Data. Tax Competition. Technological Change.

AB This paper examines the impact of fiscal incentives on the level of R&D investment. An econometric model of R&D investment is estimated using a panel of data on R&D spending and tax changes in eight countries over sixteen years (1979-1994). The countries are Australia, Canada, France, Germany, Italy, Japan, the UK, and the US. We find evidence that tax incentives are effective in increasing R&D intensity. This is true even after we allow for country specific characteristics and world macro shocks. We estimate that in the short-run a 10% fall in the cost of R&D stimulates a 1% rise in the level of

R&D; R&D increases by just over 10% in the long-run. Additionally there is some evidence that changes in R&D tax credits affect decisions over the international location of R&D as suggested by models of tax competition.

Blow, Laura

PD October 1997. TI A GARP Method for Overcoming New Goods Bias in Price Indices with an Application to the UK National Lottery. AU Blow, Laura; Crawford, Ian. AA Blow: Institute for Fiscal Studies. Crawford: University College London and Institute for Fiscal Studies. SR University College London Discussion Papers in Economics: 97/10; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. PG 30. PR 4 pounds or \$8.00. JE C43, D11, E31. KW Cost-of-Living Indices. New Goods. GARP. Price Indices. Inflation.

AB This paper presents a revealed preference method for calculating a lower bound on the virtual price of a new good and suggests a way to improve these bounds by using non-parametric expansion paths. This allows the calculation of cost-of-living and price indices when the number of goods changes between periods. We apply this technique to the UK National Lottery and illustrate the effects of its inclusion in measures of inflation.

PD May 1999. TI A Nonparametric Bound on Substitution Bias in the UK Retail Prices Index. AU Blow, Laura; Crawford, Ian. AA Blow: Institute for Fiscal Studies. Crawford: Institute for Fiscal Studies and University College London. SR Institute for Fiscal Studies Working Paper: W99/15; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. PG 29. PR 3 pounds. JE C14, C43, D11, E31. KW Cost of Living. Substitution Bias. Revealed Preference. Nonparametric Methods.

AB This paper uses revealed preference restrictions and nonparametric statistical methods to bound true cost-of-living indices. These are compared to the popular price indices including the type used to calculate the UK RPI. This is used to assess the method of calculating the RPI for substitution bias.

PD June 1999. TI Valuing Quality. AU Blow, Laura; Crawford, Ian. AA Blow: Institute for Fiscal Studies. Crawford: Institute for Fiscal Studies and University College London. SR Institute for Fiscal Studies Working Paper: W99/21; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. PG 40. PR 3 pounds. JE C43, D11, D81. KW Cost of Living. Quality. GARP. Revealed Preferences.

AB This paper uses revealed preference restrictions and nonparametric statistical methods to bound a quality-constant price series for a good that changes quality over time. Unlike the more usual hedonic regression techniques for estimating quality-adjusted prices, this method does not require us to observe the changing characteristics of the good or to assume a particular functional relationship between these characteristics and quality. To place a bound on quality change using revealed preference conditions we assume that preferences are stable over time, that quality change occurs in one good or group of goods and that the direction of quality change is known.

Blundell, Richard

PD February 2000. TI Identifying Demand for Health Resources Using Waiting Times Information. AU Blundell,

Richard; Windmeijer, Frank. AA Blundell: University College London and Institute for Fiscal Studies. Windmeijer: Institute for Fiscal Studies. SR Institute for Fiscal Studies Working Paper: W00/03; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. PG 13. PR 3 pounds. JE C14, C51, D12, I11. KW Health Care. Waiting Times. Semiparametric Methods.

AB In this paper we utilize the differences in average waiting times to identify the determinants of demand for health services. We use the equilibrium waiting time framework but relax the full equilibrium assumption by selecting areas with low waiting times and estimating a (semi-) parametric selection model. Determinants of supply are used as instruments for the endogeneity of waiting times. We estimate a model for the demand for acute services at the ward level in the UK. We contrast our model estimates, and their implications for health service allocations in the UK, to more standard allocation models. Our results show that it is critically important to account for rationing by waiting times when identifying needs from care utilization data.

PD March 1997. TI Estimation in Large and Dissaggregated Demand Systems: An Estimator for Conditionally Linear Systems. AU Blundell, Richard; Robin, Jean-Marc. AA Blundell: Institute for Fiscal Studies and University College London. Robin: INRA and CRES. SR University College London Discussion Papers in Economics: 97/01; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. PG 16. PR 4 pounds or \$8.00. JE C13, C51, D11, D12. KW Nonlinear Systems. Demand Analysis. Moment Estimators. Conditional Linearity. Consumer Economics.

AB Empirical demand systems that do not impose unreasonable restrictions on preferences are typically nonlinear. For empirical purposes, exact estimation of nonlinear equation systems for large data sets with more than a small number of equations has typically been limited by nonlinearities in the parameters of interest. We show, however, that all popular systems possess the property of conditional linearity, including the Translog, Almost Ideal and Linear Expenditure Systems. A computationally attractive iterated linear estimator (ILLE) is proposed for large nonlinear simultaneous equation systems which are conditionally linear in unknown parameters. The estimator is shown to be consistent and its asymptotic efficiency properties are derived. An application is given for a 22 commodity quadratic demand system using household level data from a time series of repeated cross-section drawn from the UK Family Expenditure Survey 1974-1993.

TI Risk Pooling, Precautionary Saving and Consumption Growth. AU Banks, James; Blundell, Richard; Brugiavini, Agar.

PD July 1997. TI Initial Conditions and Moment Restrictions in Dynamic Panel Data Models. AU Blundell, Richard; Bond, Stephen R. AA Blundell: Institute for Fiscal Studies and University College London. Bond: Institute for Fiscal Studies and Nuffield College, Oxford. SR University College London Discussion Papers in Economics: 97/07; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. PG 31. PR 4 pounds or \$8.00. JE C13, C15, C23, J23. KW Dynamic Panel Data.

Error Components. Weak Instruments. Initial Conditions. GMM.

AB Estimation of the dynamic error components model is considered using two alternative linear estimators that are designed to improve the properties of the standard first-differenced GMM estimator. Both estimators require restrictions on the initial conditions process. Asymptotic efficiency comparisons and Monte Carlo simulations for the simple AR(1) model demonstrate the dramatic improvement in performance of the proposed estimators compared to the usual first-differenced GMM estimator, and compared to non-linear GMM. The importance of these results is illustrated in an application to the estimation of a labor demand model using company panel data.

PD September 1997. TI Latent Separability: Grouping Goods Without Weak Separability. AU Blundell, Richard; Robin, Jean-Marc. AA Blundell University College London and Institute for Fiscal Studies. Robin: INRA-CORELA Paris and CREST-INSEE Paris. SR University College London Discussion Papers in Economics: 97/09; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. PG 36. PR 4 pounds or \$8.00. JE C10, D11, D12, D13. KW Separability. Demand Analysis. Price Aggregation. Household Production.

AB This paper develops a new concept of separability with overlapping groups -- latent separability. This is shown to provide a useful empirical and theoretical framework for investigating the grouping of goods and prices. It is a generalization of weak separability in which goods are allowed to enter more than one group and where the composition of groups is identified by the choice of group specific exclusive goods. Latent separability is shown to be equivalent to weak separability in latent rather than purchased goods and provides a relationship between separability and household production theory. For the popular class of Linear, Almost Ideal and Translog demand models and their generalizations, we provide a method for choosing the number of homothetic separable groups. A detailed method for exploring the composition of the separable groups is also presented. These methods are applied to a long time series of household level consumption data on the demand for twenty two non-durable and service goods for the UK.

TI Getting the Unemployed Back to Work: The Role of Targeted Wage Subsidies. AU Bell, Brian; Blundell, Richard; Van Reenen, John.

PD May 1999. TI Interpreting Movement in Aggregate Wages: The Role of Labor Market Participation. AU Blundell, Richard; Reed, Howard; Stoker, Thomas. AA Blundell and Reed: Institute for Fiscal Studies and University College London. Stoker: Massachusetts Institute of Technology. SR Institute for Fiscal Studies Working Paper: W99/13; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. PG 32. PR 3 pounds. JE C34, C43, E24, J21, J31. KW Labor Market Participation. Wages. Aggregation.

AB This paper analyzes the role of labor market participation in the relationship between aggregate wages and individual wages. A new and easily implementable framework for the empirical analysis of aggregation biases in this context is developed. Aggregate real wages are shown to contain three important bias terms: one associated with the dispersion of

individual wages, a second reflecting the distribution of working hours, and a third deriving from compositional changes in the (selected) sample of workers. Noting the importance of these issues for recent experience in Britain, data on real wages and participation for British male workers over the period 1978-1995 are studied. A close correspondence between the estimated biases and the patterns of differences shown by aggregate wages is established. This is shown to have important implications for the interpretation of real wage growth over this period.

TI Risk Pooling, Precautionary Saving and Consumption Growth. **AU** Banks, James; Blundell, Richard; Brugiavini, Agar.

Boehmer, Ekkehart

PD March 1999. **TI** Business Groups, Bank Control and Large Shareholders: An Analysis of German Takeovers. **AA** Humboldt University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 20/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 47. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** G21, G32, G34. **KW** Business Groups. German Banks. Corporate Governance. Takeovers.

AB The effect of ownership structure and bank control on performance is analyzed. I employ a unique data set of 715 German takeovers to test whether group structure, large shareholders, and bank control affect their value to shareholders. First, I find that takeovers increase bidder value, but generally not that of the business group surrounding it. Second, majority owners provide no clear benefit. Third, bank control is only beneficial if it is counter-balanced by another large shareholder. Fourth, firms that are majority-controlled by financial institutions complete the worst takeovers.

Boeri, Tito

PD March 1999. **TI** Returns to Mobility in the Transition to a Market Economy. **AU** Boeri, Tito; Flinn, Christopher J. **AA** Boeri: Universita Bocconi. Flinn: New York University. **SR** Centre for Economic Policy Research Discussion Paper: 2098; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 28. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** J62, J63, J64. **KW** Worker Flows. Returns to Mobility. Market Segmentation.

AB In spite of ongoing dramatic changes in labor market structure, transitional economies display rather low worker flows across sectors and occupations. Such low mobility can be explained by low returns to job changes as well as by market segmentation in the allocation of job offers. We develop an econometric model that enables us to characterize intertemporal changes in probabilities of dismissal and remuneration, and offer arrival rates on the basis of information on observed transitions and wage payments. The model is estimated using data from the Polish Labor Force Survey. Our results indicate a significant degree of segmentation in the allocation of job offers and more stability in public sector versus private sector jobs. Our model can also be used for policy experiments. In particular, we infer that reductions of 10% in the generosity of unemployment benefits will not significantly boost outflows from the unemployment state. These findings support explanations for low mobility in

transitional economies, which are based on informational failures, and high costs of moving from public to private enterprises for those with high levels of job tenure and labor market experience in the public sector.

Bollerslev, Tim

PD October 1999. **TI** High Frequency Data, Frequency Domain Inference and Volatility Forecasting. **AU** Bollerslev, Tim; Wright, Jonathan H. **AA** Bollerslev: Duke University. Wright: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 649; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 25. **PR** no charge. **JE** C22, F31, G12. **KW** Autoregressions. Spectrum. Volatility Forecasting. High Frequency Data. Exchange Rates.

AB While it is clear that the volatility of asset returns is serially correlated, there is no general agreement as to the most appropriate parametric model for characterizing this temporal dependence. In this paper, we propose a simple way of modeling financial market volatility using high frequency data. The method avoids using a tight parametric model, by instead simply fitting a long autoregression to log-squared, squared or absolute high frequency returns. This can either be estimated by the usual time domain method, or alternatively the autoregressive coefficients can be backed out from the smoothed periodogram estimate of the spectrum of log-squared, squared or absolute returns. We show how this approach can be used to construct volatility forecasts, which compare favorably with some leading alternatives in an out-of-sample forecasting exercise.

Bonanno, Giacomo

PD February 1998. **TI** Intersubjective Consistency of Knowledge and Belief. **AU** Bonanno, Giacomo; Nehring, Klaus. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 98/03; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html. **PG** 33. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** C70. **KW** Common Belief. Common Knowledge. Agreement. Intersubjective Caution. Negative Introspection.

AB We consider interactive epistemic models where individuals are described by both their "knowledge" and their "beliefs." Three intersubjective consistency conditions are examined: Intersubjective Caution (if an individual believes something to be common belief then he knows it to be common belief), Truth of Common Belief (only true facts are commonly believed) and Qualitative Agreement. These conditions are employed in characterizations of the following properties which describe either the extent of intersubjective truth and/or the logic of common belief: common belief in no error, common knowledge of common belief, negative introspection of common belief, coincidence of common knowledge and common belief, and collapse of individual belief and knowledge. We also discuss to what extent the three fundamental conditions can be viewed as intersubjective

rationality conditions.

PD September 1998. **TI** The Logic of Prediction. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 98/12; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html. **PG** 22. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** C60, C70, G10. **KW** Temporal Logic. Branching Time. Prediction. Belief.

AB When we make a non-trivial prediction about the future we select, among the conceivable future descriptions of the world, those that appear to us to be most likely. Within a branching-time framework we capture this by means of two binary relations, $<c$ and $<p$. If t_1 and t_2 are different points in time, we interpret $t_1 <c t_2$ as saying that t_2 is in the conceivable future of t_1 , while $t_1 <p t_2$ is interpreted to mean that t_2 is in the predicted future of t_1 . We propose the following notion of "consistency of predictions." Suppose that at t_1 some future moment t_2 is predicted to occur, then (a) every moment t between t_1 and t_2 should also be predicted at t_1 and (b) the prediction of t_2 should continue to hold at every t between t_1 and t_2 . We provide a sound and complete axiomatization for this notion of consistency.

PD November 1998. **TI** Branching Time Logic, Perfect Information Games and Backward Induction. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 98/13; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html. **PG** 24. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** C72. **KW** Tense Logic. Branching Time. Prediction. Backward Induction. Internal Consistency.

AB The logical foundations of game-theoretic solution concepts have so far been developed within the confines of epistemic logic. In this paper we turn to a different branch of modal logic, namely temporal logic, and propose to view the solution of a game as a complete prediction about future play. We extend the branching-time framework by adding agents and by defining the notion of prediction. We show that perfect information games are a special case of extended branching-time frames and that the backward-induction solution is a prediction. We also provide a characterization of backward induction in terms of the property of internal consistency of prediction.

PD December 1998. **TI** Recent Results on Belief, Knowledge and the Epistemic Foundations of Game Theory. **AU** Bonanno, Giacomo; Battigalli, Pierpaolo. **AA** Bonanno: University of California at Davis. Battigalli: European University Institute and Princeton University. **SR** University of California, Davis, Department of Economics Working Paper: 98/14; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html. **PG** 88. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of

California. We do not invoice, accept purchase orders, or cash. **JE** C72. **KW** Knowledge. Belief. Strategic-Form Games. Extensive-Form Games. Foundations.

AB We provide a self-contained, selective overview of the literature on the role of knowledge and beliefs in game theory. We focus on recent results on the epistemic foundations of solution concepts, including correlated equilibrium, rationalizability in dynamic games, forward and backward induction.

PD March 1999. **TI** Varieties of Interpersonal Compatibility of Beliefs. **AU** Bonanno, Giacomo; Nehring, Klaus. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 99/02; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html. **PG** 17. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** C72. **KW** Common Belief. Negative Introspection. Truth Axiom. Intersubjective. Compatibility.

AB The logic of common belief does not always reflect the logic of individual beliefs. In particular, the Negative Introspection property fails at the common belief level, that is, it can happen that neither is A commonly believed nor is it common belief that A is not commonly believed. Indeed Negative Introspection of common belief involves restrictions on individual beliefs of an intersubjective nature. We consider a number of interpersonal restrictions on beliefs and study their relationship. We also characterize Negative Introspection of common belief in terms of interpersonal properties of individual beliefs. All the results are proved syntactically.

Bond, Stephen R.

TI Initial Conditions and Moment Restrictions in Dynamic Panel Data Models. **AU** Blundell, Richard; Bond, Stephen R.

PD February 1999. **TI** Generalised R-Based and S-Based Taxes Under Uncertainty. **AU** Bond, Stephen R.; Devereux, Michael P. **AA** Bond: Nuffield College and Institute for Fiscal Studies. Devereux: Warwick University and Institute for Fiscal Studies. **SR** Institute for Fiscal Studies Working Paper: W99/09; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. **PG** 16. **PR** 3 pounds. **JE** H25. **KW** Business Taxes. Tax Neutrality. Cash Flow. Taxation.

AB This paper considers the relationship between two general neutral business tax structures, which we label the "firm tax" and the "shareholder tax". The well-known R-based and S-based cash flow taxes, analyzed by Meade (1978), are special cases of these two taxes. We demonstrate the neutrality of both taxes in the presence of uncertainty, and characterize the tax rules required in the event of default and wind-up. Our analysis provides the first proof of the neutrality of the S-based cash flow tax and the Allowance for Corporate Equity (ACE) corporation tax under uncertainty. We also discuss implementation and tax avoidance issues.

Boone, Laurence

PD March 1999. **TI** An Optimal Currency Area Perspective of the EU Enlargement to the CEECs. **AU** Boone, Laurence; Maurel, Mathilde. **AA** Boone:

OECD. Maurel: Universite de Paris I. SR Centre for Economic Policy Research Discussion Paper: 2119; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 13. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE E32, F03, F42. KW Optimal Currency Area. Eastern Enlargement. Transition. AB This paper tries to assess whether it would be optimal for the CEECs to form a monetary union with either Germany or the EU. This cannot be done without first discussing the Maastricht criteria, which are the condition "sine qua non" for a country to be eligible. Yet, they are often independent from more structural criteria (Bayoumi and Eichengreen (1996b)). Hence, this paper argues that although the CEECs do not -- yet -- satisfy the Maastricht criteria, their economic cycle is close enough to that of the EU and Germany for a monetary union to bring them great benefits. Indeed, using a methodology derived by L. Reichlin and M. Forni (1997) and C Fuss (1997), it can be shown that: (i) the percentage of CEECs business cycle fluctuations explained by a German shock is very high; (ii) furthermore, the impulse responses are positively correlated. These suggest that the CEEC's would not suffer from a common monetary policy.

Bortolotti, Bernardo

PD November 1998. TI Regulation and Privatisation: The Case of Electricity. AU Bortolotti, Bernardo; Fantini, Marcella; Siniscalco, Domenico. AA Bortolotti and Siniscalco: University of Torino and Fondazione Eni Enrico Mattei. Fantini: Fondazione Eni Enrico Mattei. SR Fondazione Eni Enrico Mattei Note di Lavoro: 70/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 28. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE G32, G38, L51. KW Privatization. Regulation.

AB This paper sheds some light on the privatization of utilities. An empirical analysis based on sales in the electricity sector in 38 countries for the period 1977-97 shows that regulation is a crucial institutional variable in privatization. Not only does it allow governments to increase the pace of divestiture and to sell higher stakes, but it also maximizes proceeds, reducing regulatory risk. The revenues-efficiency trade-off loses some relevance in electricity privatization.

Bosello, Francesco

PD December 1998. TI The Double Dividend Issue: Modeling Strategies and Empirical Findings. AU Bosello, Francesco; Carraro, Carlo; Galeotti, Marzio. AA Bosello: Fondazione Eni Enrico Mattei. Carraro: University of Venice and Fondazione Eni Enrico Mattei. Galeotti: University of Bergamo and Fondazione Eni Enrico Mattei. SR Fondazione Eni Enrico Mattei Note di Lavoro: 81/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 43. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE H02, H03, Q28. KW Double Dividend. Fiscal Reform. Environmental Modeling.

AB This paper reviews recent developments in the study of the so-called "double dividend", i.e. the possibility of improving the environment and, at the same time, reducing the distortions of the tax system through revenue-neutral green taxes. Recent modeling advances are considered at both the theoretical and

the empirical levels. In particular, we note that the most significant theoretical advances have been made in the direction of allowing for imperfectly competitive markets, especially the market for labor. At the same time, we argue that empirical work, particularly on the "employment double dividend", is still relatively scant and that much more needs to be done both in the direction of more realistic empirical models and of an extended sensitivity analysis of the main findings.

PD December 1998. TI Advances of Climate Modelling for Policy Analysis. AU Bosello, Francesco; Carraro, Carlo; Kempfert, Claudia. AA Bosello: Fondazione Eni Enrico Mattei. Carraro: University of Venice and Fondazione Eni Enrico Mattei. Kempfert: Fondazione Eni Enrico Mattei. SR Fondazione Eni Enrico Mattei Note di Lavoro: 82/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 31. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE C05, C06, D06, D09, O13. KW Environmental Modelling. Climate Change. Policy Analysis. Integrated Assessment.

AB This paper surveys recent advances in climate models by emphasizing how quantitative instruments can answer the main crucial questions addressed by the policymakers involved and therefore aid the formulation of effective global climate policies. The limits of existing models are highlighted and new ideas and developments are shown to increase the reliability of climate models for policy analysis. It is also suggested that the complexity and uncertainties surrounding climate issues are difficult to translate into adequate policies without the help of sophisticated and integrated global quantitative modelling.

Bowman, David

PD September 1999. TI Efficient Tests for Autoregressive Unit Roots in Panel Data. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 646; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 54. PR no charge. JE C12, C33. KW Admissible Tests. Nonstationarity. Panel Data. Unit Roots. Time Series.

AB In this paper the class of admissible tests for unit roots in panel data sets of autoregressive, Gaussian time series will be partially characterized. Using this characterization, several recently suggested tests are shown to be inadmissible. Since the sufficient statistic for this testing problem is multidimensional, there is no uniformly most powerful test, however, in light of the inadmissibility result, a new test is proposed that appears to do well relative to existing tests. The test is parameterized in a way that allows the choice of different directional deviations from the null hypothesis over which power is to be maximized, giving added flexibility to researchers.

Braconier, Henrik

TI Multinationals, Endogenous Growth and Technological Spillovers: Theory and Evidence. AU Baldwin, Richard E.; Forslid, Rikard; Braconier, Henrik.

Brainard, Julii

TI Transferring Multivariate Benefit Functions Using Geographical Information Systems. AU Bateman, Ian J.; Brainard, Julii; Lovett, Andrew A.

Braumann, Benedikt

PD November 1999. **TI** Suriname: A Case Study of High Inflation. **AU** Braumann, Benedikt; Shah, Sukhdev. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/157; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 23. **PR** not available. **JE** E31, E52, E58, E63, F41. **KW** Inflation. Monetary Overhang. Exchange Rates. Non-Neutralities. Stabilization.

AB Suriname recently went through a period of destabilization that bordered on hyperinflation. The country's experience provides a good illustration to study the genesis and dynamics of high inflation and includes some unusual phenomena, such as a monetary overhang, an eight-tiered exchange rate, and inflationary gold purchases by the central bank. High inflation also had a significant impact on the real economy. This paper compares the experience of Suriname with other countries discussed in the recent stabilization literature. It finds strong evidence of intertemporal demand effects, which occurred as the public reacted to the temporary bout of high inflation.

Breuer, Peter

PD October 1999. **TI** Central Bank Participation in Currency Options Markets. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/140; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 24. **PR** not available. **JE** E58, F31, G15, G18. **KW** Central Bank Intervention. Currency Options. Dynamic Hedging. Exchange Rates. Central Banks.

AB This paper analyzes whether and how central banks can use currency options to lower exchange rate volatility and maintain (implicit) target zones in foreign exchange markets. It argues that selling rather than buying options will result in market makers dynamically hedging their long option exposure in a stabilizing manner, consistent with the first objective. Selling a "strangle" allows a central bank to increase the credibility of its commitment to a target zone, and could have a lower expected cost than spot market interventions. However, this strategy also exposes the central bank to an unlimited loss potential.

Brixiova, Zuzana

PD September 1999. **TI** Skill Acquisition and Firm Creation in Transition Economies. **AU** Brixiova, Zuzana; Li, Wenli; Yousef, Tarik. **AA** Brixiova and Yousef: International Monetary Fund. Li: Federal Reserve Bank of Richmond. **SR** International Monetary Fund Working Paper: WP/99/130; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 18. **PR** not available. **JE** J24, J31, J40, L16, P21. **KW** Skill Acquisition. Firm Creation. Transition Economies. Labor Productivity. Growth.

AB The transition from plan to market has hinged on the development of a dynamic private sector that would serve as the engine of growth and employment creation. This paper examines the link between the availability of skilled workers and the creation of new private firms. Using a dynamic search model, it shows how the lack of skilled worker inhibits entrepreneurship and depresses the rate of firm creation, slowing the recovery of aggregate output and labor productivity during the transition. The paper also shows how policies designed to encourage skill acquisition by workers have a

positive impact on the economy.

Broadie, Mark

PD November 1997. **TI** A Stochastic Mesh Method for Pricing High-Dimensional American Options. **AU** Broadie, Mark; Glasserman, Paul. **AA** Columbia University. **SR** Columbia PaineWebber Working Paper Series in Money, Economics and Finance: PW/98/04; Graduate School of Business, 6N Uris Hall, Columbia University, 3022 Broadway, New York, NY 10027. Website: www.columbia.edu/dlc/wp/. **PG** 29. **PR** \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). **JE** C15, G11, G13. **KW** American Options. Security Pricing. Monte Carlo. Option Pricing. Multiple State Variables.

AB High-dimensional pricing problems frequently arise with financial options (examples include basket options, outperformance options, interest-rate and foreign currency options) and real options. American versions of these options, i.e., where the owner has the right to exercise early, are particularly challenging to price. We present a new stochastic mesh method for pricing high-dimensional American options when there is a finite, but possibly large, number of exercise dates. The algorithm provides point estimates and confidence intervals and it converges to the correct values as the computational effort increases. Computational evidence is given which indicates the viability of the method.

Brock, William

PD November 1998. **TI** Optimal Management in Tilman: A Competitive Species Assembly Constrained by a Limiting Factor. **AU** Brock, William; Xepapadeas, Anastasios. **AA** Brock: University of Wisconsin. Xepapadeas: University of Crete. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 68/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 29. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** Q20, Q32. **KW** Biodiversity. Monoculture. Optimal Harvesting. Resilience.

AB Resource-based models of species competition predict that when species compete for a limiting resource in a homogeneous habitat, then the equilibrium outcome is a monoculture with the species characterized by the lowest resource requirement out-competing all the rest. We derive harvesting rules for a habitat that maximize the utility flows generated from consumption activities of the harvested species, and from non-consumptive activities associated with utility generated from positive species biomass. Under the harvesting rules the maximal desired biodiversity is preserved in the long-run equilibrium assembly.

Brugiavini, Agar

TI Risk Pooling, Precautionary Saving and Consumption Growth. **AU** Banks, James; Blundell, Richard; Brugiavini, Agar.

TI Risk Pooling, Precautionary Saving and Consumption Growth. **AU** Banks, James; Blundell, Richard; Brugiavini, Agar.

Brunello, Giorgio

PD November 1998. **TI** Regional Disparities and the

Italian NAIRU. AU Brunello, Giorgio; Lupi, Claudio; Ordine, Patrizia. AA Brunello: University of Udine. Lupi: Istituto di Studi per la Programmazione Economica (ISPE). Ordine: University of Calabria. SR Fondazione Eni Enrico Mattei Note di Lavoro: 71/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 43. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE J03, J05, J06, J38. KW Unemployment. Italy. NAIRU.

AB In this paper we estimate the Italian NAIRU using annual data for the period 1951-1996. We find evidence consistent with aggregate wage setting in Italy depending only on the rate of unemployment prevailing in the Northern and Central areas of the country. There is evidence supporting the presence of a long-run co-integrating relationship among unemployment in the Northern and Central areas, the tax wedge, the real interest rate and a measure of union power. The response of unemployment to exogenous shocks is sluggish, suggesting that persistence is an important feature of the Italian labor market.

PD March 1999. TI Ownership or Performance: What Determines Board of Directors' Turnover in Italy?. AU Brunello, Giorgio; Graziano, Clara; Parigi, Bruno. AA Brunello: University of Padua and Centre for Economic Policy Research. Graziano: University of Udine. Parigi: University of Padua. SR Fondazione Eni Enrico Mattei Note di Lavoro: 30/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 37. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE G34, J63. KW Board of Directors. Corporate Governance. Financial Agency.

AB This paper analyses the turnover of board of directors' members on a sample of companies listed on the Milan Stock Exchange in the period 1988-1996. Our aim is to investigate if board members change more frequently when company performance is poor, as the literature suggests, if this relationship is similar for C.E.O.s and other board members, and if and how the ownership structure of Italian companies affects these relationships. We use three different measures of board of directors turnover: turnover A is the turnover of all board members; turnover B is the turnover of the President, Vice-President, C.E.O. and General Manager; finally turnover C is the turnover of C.E.O.s only. We find that changes in ownership affect turnover and that the relationship between turnover and performance is stronger in companies that have experienced a change in the controlling shareholder.

Brusco, Sandro

PD March 1999. TI Short-Termism as Optimal Investment Policy. AA Universidad Carlos III de Madrid. SR Centre for Economic Policy Research Discussion Paper: 2103; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 25. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE G03, G31. KW Managerial Compensation. Investment Policy.

AB Models of managerial short-termism rely on a number of assumptions, such as limited availability of capital, fixed compensation schemes and an additive impact of managerial ability on revenue. We discuss the role of these assumptions in generating short-termism. We show that when managerial ability has a multiplicative impact on revenue then the first best investment policy may require the implementation of short-term projects with negative net present value (NPV) in order to

generate information on managerial ability that can be exploited in later periods. We also show that, when the firm is free to design the compensation scheme, the first best is attained even if only short-term contracts are allowed. Short-termism is therefore the result of an optimal experimentation policy rather than the consequence of managerial misbehavior.

Buiter, Willem H.

PD May 1999. TI UDROP: A Small Contribution to the New International Financial Architecture. AU Buiter, Willem H.; Sibert, Anne. AA Buiter: University of Cambridge. Sibert: Birkbeck College. SR Centre for Economic Policy Research Discussion Paper: 2138; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 32. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE F31, F32, F33, F34, G13. KW Liquidity Crisis. Disorderly Markets. Foreign Debt. Rollover Option. Contingent Credit.

AB The purpose of the UDROP proposal is to prevent debt rollover crises for foreign-currency-denominated debt instruments. For such liabilities, there is no international analogue to the domestic lender of last resort or to domestic deposit insurance. UDROP stands for Universal Debt Rollover Option with a Penalty. Our proposal is that all foreign currency loans should have a rollover option attached to them. The 'pure' version of the option would entitle the borrower to extend or roll-over performing debt at maturity for a specified period. The pricing of the option would be left to the contracting parties. A number of variants on the basic version are also considered. All versions of the scheme have the property that no commitment of public money is required; either by national governments or by international agencies such as the IMF or the World Bank. The UDROP proposal is rule based and general: it is mandatory for all foreign-currency debt and automatic. UDROP is market-oriented: the terms and conditions on any foreign-currency loan and associated roll-over option would be negotiated by the lenders and borrowers.

PD June 1999. TI The EMU and the NAMU: What is the Case for North American Monetary Union? AA University of Cambridge. SR Centre for Economic Policy Research Discussion Paper: 2181; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 48. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE E42, E44, E52, E58, F33, F36, F41, G15, H77. KW N American Monetary Union. Optimal Currency Area. Seigniorage. Lender of Last Resort. Central Bank. Accountability.

AB The paper considers the pros and cons for a monetary union between Canada and the U.S. The current Canadian monetary arrangements, a flexible exchange rate and an inflation target, are contrasted both with a unilateral adoption by Canada of the U.S. dollar and with a full, formally symmetric monetary union. Microeconomic transaction costs savings argue in favor of either form of monetary union. Seigniorage considerations argue against unilateral adoption of the U.S. dollar, but in favor of a formally symmetric monetary union. Loss of the lender of last resort is a powerful argument against unilateral monetary union. The optimal currency area arguments probably favor either form of monetary union. The shock absorber properties of a flexible exchange rate are dominated by the extraneous instability and excess volatility inherent in a market-determined exchange rate when financial

markets are highly integrated. On balance, the economic arguments favor a full, formally symmetric monetary union but not the unilateral adoption of the U.S. dollar. Because of the absence of any democratic political institutions spanning both Canada and the U.S., the political arguments against any form of monetary union are overwhelming.

Bulow, Jeremy

PD April 1999. **TI** The Tobacco Deal. **AU** Bulow, Jeremy; Klemperer, Paul. **AA** Bulow: Stanford University. Klemperer: Nuffield College, Oxford. **SR** Centre for Economic Policy Research Discussion Paper: 2125; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. **Website:** www.cepr.demon.co.uk. **PG** 72. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** H25, I18, K13, L41, L66. **KW** Tobacco. Cigarettes.

AB We analyze the major economic issues raised by the 1997 Tobacco Resolution and the ensuing proposed legislation that were intended to settle tobacco litigation in the United States. By settling litigation largely in return for tax increases, the Resolution was a superb example of a "win-win" deal. The taxes would cost the companies about \$1 billion per year, but yield the government about \$13 billion per year, and allow the lawyers to claim fees based on hundreds of billions in "damages". Only consumers, in whose name many of the lawsuits were filed, lost out. Though the strategy seems brilliant for the parties involved, the execution was less intelligent. We show that alternative taxes would be considerably superior to those proposed, and explain problems with the damage payments required from the firms, and the legal protections offered to them. We argue that the legislation was not particularly focused on youth smoking, despite the rhetoric. However, contrary to conventional wisdom, youth smokers are not especially valuable to the companies, so marketing restrictions are a sensible part of any deal. We conclude with some views about how public policy might do better.

Burnside, Craig

PD June 1999. **TI** Hedging and Financial Fragility in Fixed Exchange Rate Regimes. **AU** Burnside, Craig; Eichenbaum, Martin; Rebelo, Sergio. **AA** Burnside: World Bank. Eichenbaum and Rebelo: Northwestern University. **SR** Centre for Economic Policy Research Discussion Paper: 2171; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. **Website:** www.cepr.demon.co.uk. **PG** 64. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** F31, F41, G15, G21. **KW** Fixed Exchange Rates. Hedging. Government Guarantees.

AB Currency crises that coincide with banking crises tend to share four elements. First, governments provide guarantees to domestic and foreign bank creditors. Second, banks do not hedge their exchange rate risk. Third, there is a lending boom before the crises. Finally, when the currency/banking collapse occurs interest rates rise and there is a persistent decline in output. This paper proposes an explanation for these regularities. We show that government guarantees lower interest rates, and generate an economic boom. But they also lead to a more fragile banking system: banks choose not to hedge exchange rate risk. When the fixed exchange rate is abandoned in favor of a crawling peg banks go bankrupt, the domestic interest rate rises, real wages fall and output declines.

Caballero, Ricardo J.

PD September 1999. **TI** Emerging Markets Crisis: An Asset Markets Perspective. **AU** Caballero, Ricardo J.; Krishnamuthy, Arvind. **AA** Caballero: Massachusetts Institute of Technology, National Bureau for Economic Research and AEI. Krishnamuthy: Northwestern University. **SR** International Monetary Fund Working Paper: WP/99/129; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 42. **PR** not available. **JE** E44, F31, F36, G10, G30. **KW** Capital Flows. Financial Markets. Corporate Governance. Real Depreciation. Banking. **AB** The entire difference between a mild downturn and a devastating crisis is the occurrence of sharp fire sales of domestic assets and possibly foreign exchange and the ensuing collapse in the balance sheets of both the financial and nonfinancial sector. Why and how do such crises materialize? And why doesn't the private sector take appropriate precautions to avoid the consequences of crises? In this paper we argue that the combination of weak international financial links and underdeveloped domestic financial markets offers a parsimonious account of these and related phenomena present in emerging markets.

Caldart, Charles C.

PD May 1998. **TI** Negotiation as a Means of Developing and Implementing Environmental Policy. **AU** Caldart, Charles C.; Ashford, Nicholas A. **AA** Massachusetts Institute of Technology. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 37/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. **Website:** www.feem.it. **PG** 37. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D74, I18, J28, J52, K32, L50, O31, O38. **KW** Dispute Resolution. Environment. Environmental Negotiation. Environmental Regulation. Negotiated Compliance. Negotiated Implementation. Negotiated Regulation. Negotiated Settlement. Regulation. Technological Change. Technological Innovation.

AB In the environmental area, negotiated rulemaking, implementation, and compliance are proposed by their advocates as delivering two primary benefits: reduced rulemaking time and decreased litigation over a final agency rule. The experience to date, however, indicates that negotiated rulemaking cannot be relied upon to deliver either of these benefits. Nonetheless, experience indicates that negotiation can, in appropriate circumstances, facilitate a better understanding of issues, concerns, facts, and positions among adversaries, promote the sharing of relevant information, and provide an opportunity for creative problem-solving. This paper examines three negotiated rulemakings by the U.S. Environmental Protection Agency (EPA) under the Clean Air Act.

PD May 1998. **TI** Negotiation as a Means of Developing and Implementing Occupational Health and Safety Policy. **AU** Caldart, Charles C.; Ashford, Nicholas A. **AA** Massachusetts Institute of Technology. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 38/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. **Website:** www.feem.it. **PG** 21. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D74, I18, K32, L50, O31, O38. **KW** Dispute Resolution Health. Negotiated Compliance. Negotiated Implementation. Negotiated Regulation. Negotiated Settlement. Technological Change. Technological Innovation. Worker

Health and Safety.

AB In the health, safety, and environmental area, negotiated rulemaking, implementation, and compliance are proposed by their advocates as delivering two primary benefits: reduced rulemaking time and decreased litigation over a final agency rule. The experience to date, however, indicates that negotiated rulemaking cannot be relied upon to deliver either of these benefits. Nonetheless, experience indicates that negotiation can, in appropriate circumstances, facilitate a better understanding of issues, concerns, facts, and positions among adversaries, promote the sharing of relevant information, and provide an opportunity for creative problem-solving. This paper discusses the use of these three types of negotiation by the United States Occupational Safety and Health Administration (OSHA). Four negotiated rulemakings under the Occupational Safety and Health Act -- each of which involved an attempt to establish an OSHA standard for worker exposure to a particular toxic substance -- are evaluated according to whether negotiation was instrumental either in securing a more protective standard, or in securing an innovative technological response.

Calia, Pinuccia

PD January 1999. **TI** Bias and Efficiency of Single vs Double Bound Models for Contingent Valuation Studies: A Monte Carlo Analysis. **AU** Calia, Pinuccia; Strazzer, Elisabetta. **AA** Universita di Cagliari. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 10/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. **Website:** www.feem.it. **PG** 28. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C15, C35, D60, H41, Q26. **KW** Contingent Valuation. Single Bound Estimator. Double Bound Estimator. Bias. Statistical Efficiency.

AB The Dichotomous Choice Contingent Valuation Method can be used either in the single or double bound formulation. The former is easier to implement, while the latter is known to be more efficient. We analyze the bias of the ML estimates produced by either model, and the gain in efficiency associated to the double bound model, in different experimental settings. We find that there are no relevant differences in point estimates given by the two models, even for small sample size, and no estimator can be said to be less biased than the other. The greater efficiency of the double bound is confirmed, although differences tend to reduce by increasing the sample size. Provided that a reliable pre-test is conducted, and the sample size is large, use of the single rather than the double bound model is warranted.

Callen, Tim

PD September 1999. **TI** Modeling and Forecasting Inflation in India. **AU** Callen, Tim; Chang, Dongkoo. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/119; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 23. **PR** not available. **JE** C51, E31, E37, E52. **KW** India. Inflation. Cointegration. Monetary Policy. Exchange Rates.

AB The Reserve Bank of India (RBI) has moved away from a broad money target toward a "multiple indicators" approach to the conduct of monetary policy. In adopting such a framework, it is necessary to know which of the many potential indicators provide the most reliable and timely information on future developments in the target variable(s). This paper assesses

which indicators provide the most useful information about future inflationary trends. It concludes that while the broad money target has been de-emphasized, developments in the monetary aggregates remain an important indicator of future inflation. The exchange rate and import prices are also relevant, particularly for inflation in the manufacturing sector.

Campos, Julia

PD April 2000. **TI** Constructive Data Mining: Modeling Consumers' Expenditure in Venezuela. **AU** Campos, Julia; Ericsson, Neil R. **AA** Campos: Universidad de Salamanca. Ericsson: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 663; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. **Website:** www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 27. **PR** no charge. **JE** C50, C82, C87, D12, E21. **KW** Encompassing. Dynamics. General to Specific. Model Design. PcGets.

AB Hoover and Perez (1999) advocate a constructive approach to data mining. The current paper identifies four pejorative senses of data mining and shows how Hoover and Perez's approach counters each. To assess the benefits of constructive data mining, the current paper applies a data-mining algorithm similar to Hoover and Perez's to a dataset for Venezuelan consumers' expenditure. The selected model is economically sensible and statistically satisfactory; and it illustrates how data can be highly informative, even with relatively few observations. Limitations to algorithmically based data mining provide opportunities for the researcher to contribute value added in the empirical analysis.

Canova, Fabio

PD February 2000. **TI** Monetary Disturbances Matter for Business Fluctuations in the G-7. **AU** Canova, Fabio; De Nicolò, Gianni. **AA** Canova: Universitat Pompeu Fabra. De Nicolò: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 660; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. **Website:** www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 38. **PR** no charge. **JE** C68, E31, E32, E52, F11. **KW** Structural Shocks. Business Cycles. Monetary Disturbances. Dynamic Correlations. Inflation.

AB This paper examines the importance of monetary disturbances for cyclical fluctuations in real activity and inflation. It employs a novel identification approach which uses the sign of the cross correlation function in response to shocks to assign a structural interpretation to orthogonal innovations. We find that monetary shocks significantly drive output and inflation cycles in all G-7 countries; that they are the dominant source of fluctuations in three of the seven countries; that they contain an important policy component, and that their impact is time varying.

Carlin, Wendy

PD February 1998. **TI** Export Market Performance of OECD Countries: An Empirical Examination of the Role of Cost Competitiveness. **AU** Carlin, Wendy; Glyn, Andrew; Van Reenen, John. **AA** Carlin: University College London. Glyn: University of Oxford. Van Reenen: University College

London and Institute for Fiscal Studies. **SR** University College London Discussion Papers in Economics: 98/02; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 40. **PR** 4 pounds or \$8.00. **JE** F10, F41, J24, J30. **KW** Exports. Competitiveness. Labor Costs. Open Economies. International Trade.

AB This paper investigates the relationship between export market shares and relative unit labor costs using a long panel of twelve manufacturing industries across fourteen OECD countries. We ask two questions: (a) how sensitive are export market shares to changes in relative costs and (b) what determines the degree of sensitivity? Although both costs and embodied technology are important, we find that neither can fully explain changing export positions. The residual country-specific trends appear to be linked to "deep" structural features of economies such as human capital investment and national ownership patterns. On the second question, the sensitivity of exports to labor costs is lower in high tech industries and in countries weakly tied to currency unions. The industry elasticities have increased over time, especially in industries subject to increasing product market competition. We discuss the implication of these findings for European Monetary Union.

PD June 1999. **TI** Export Market Performance of OECD Countries: An Empirical Examination of the Role of Cost Competitiveness. **AU** Carlin, Wendy; Glyn, Andrew; Reenen, John Van. **AA** Carlin: University College London and Centre for Economic Policy Research. Glyn: University of Oxford. Reenen: University College London, Institute for Fiscal Studies and Centre for Economic Policy Research. **SR** Institute for Fiscal Studies Working Paper: W99/22; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. **PG** 29. **PR** 3 pounds. **JE** F10, F41, J31, J32, L60. **KW** Exports. Competitiveness. Labor Costs. Ownership Patterns. Open Economies.

AB See the abstract for Carlin, Wendy; Glyn, Andrew; Van Reenen, John. February 1998, "Export Market Performance of OECD Countries: An Empirical Examination of the Role of Cost Competitiveness". University College London Discussion Papers in Economics: 98/02; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html.

Carlstrom, Charles T.

PD December 1998. **TI** Real Indeterminacy in Monetary Models with Nominal Interest Rate Distortions: The Problem with Inflation Targets. **AU** Carlstrom, Charles T.; Fuerst, Timothy S. **AA** Carlstrom: Federal Reserve Bank of Cleveland. Fuerst: Bowling Green State University. **SR** Federal Reserve Bank of Cleveland Working Papers: 9818; Research Department, Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, Ohio 44101-1387. Website: www.clev.frb.org. **PG** 20. **PR** no charge. **JE** E31, E43, E52. **KW** Real Indeterminacy. Interest Rates. Monetary Policy. Inflation Targeting.

AB This paper demonstrates that in a standard monetary model, real indeterminacy exists whenever the nominal interest rate moves too closely with the real rate. One example of such a policy is a central bank's targeting of the inflation rate. This is not a knife-edge result. The conclusion is robust to a wide range of calibrations, a more general monetary policy that targets a varying path for the inflation rate, and a monetary

environment that allows for endogenous velocity.

PD December 1998. **TI** Price-Level and Interest-Rate Targeting in a Model with Sticky Prices. **AU** Carlstrom, Charles T.; Fuerst, Timothy S. **AA** Carlstrom: Federal Reserve Bank of Cleveland. Fuerst: Bowling Green State University. **SR** Federal Reserve Bank of Cleveland Working Papers: 9819; Research Department, Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, Ohio 44101-1387. Website: www.clev.frb.org. **PG** 26. **PR** no charge. **JE** D51, E42, E52. **KW** General Equilibrium. Money. Interest Rates. Monetary Policy. Targets.

AB This paper examines a standard sticky-price monetary model. The equilibrium conditions of the model are perturbed relative to the canonical real business cycle model by two varying distortions: marginal cost and the nominal rate of interest. The paper explores the implications of two monetary policies that are frequently advocated: 1) an inflation rate target and 2) an interest rate target. Under an inflation rate target, marginal cost is stabilized while the nominal rate is variable. In contrast, under an interest rate target, the nominal rate is stabilized but marginal cost is (in general) variable. Both policies are subject to sunspot fluctuations arising from the endogenous movement of the money stock. These fluctuations can be avoided by eliminating the contemporaneous response of the money stock to innovations in the environment.

Carlton, Dennis W.

PD September 1998. **TI** The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries. **AU** Carlton, Dennis W.; Waldman, Michael. **AA** Carlton: University of Chicago. Waldman: Cornell University. **SR** University of Chicago Center for the Study of the Economy and the State Working Paper: 145; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. **PG** 61. **PR** \$3.00; make check payable to "The University of Chicago.". **JE** D42, L12, L20, L41, L44. **KW** Monopoly. Complements. Emerging Markets. Network Externalities. Antitrust.

AB This paper investigates how the tying of complementary products can be used to both preserve and extend monopoly positions. We first show how a firm that is a monopolist of a product in the current period can use tying to preserve its monopoly position in future periods. We then show using related arguments how a monopolist in one market can employ tying to extend its monopoly position into a newly emerging market. The analysis focuses on the importance of entry costs and network externalities. The paper includes a discussion of antitrust implications.

Caroli, Eve

PD August 1999. **TI** Organization, Skills and Technology: Evidence From a Panel of British and French Establishments. **AU** Caroli, Eve; Reenen, John Van. **AA** Caroli: INRA-LEA and Cepremap. Reenen: Institute for Fiscal Studies, University College London and Centre for Economic Policy Research. **SR** Institute for Fiscal Studies Working Paper: W99/23; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. **PG** 33. **PR** 3 pounds. **JE** J24, J30, L22, L23, O30. **KW** Organizational Change. Skills. Technology. Panel Data. **AB** In this paper we investigate evidence for the "skill bias" of organizational change (OC). These include the

decentralization of authority, delaying of managerial functions and increased multi-tasking. We use several sources of panel data on British and French establishments. Three findings emerge: (i) organizational change tends to reduce the demand for unskilled workers in both countries; (ii) OC is retarded by increases in regional skill price differentials (a measure of the relative supply of skill); (iii) OC leads to greater productivity increases in establishments with larger initial skill endowments. We argue that OC, technology and human capital are complementary assets of the modern enterprise. The widespread introduction of new organizational forms may be an important factor in the declining demand for less skilled workers in OECD countries.

Carraro, Carlo

TI The Double Dividend Issue: Modeling Strategies and Empirical Findings. **AU** Bosello, Francesco; Carraro, Carlo; Galeotti, Marzio.

TI Advances of Climate Modelling for Policy Analysis. **AU** Bosello, Francesco; Carraro, Carlo; Kemfert, Claudia.

Carrasco, Raquel

PD January 1999. **TI** Binary Choice with Binary Endogenous Regressors in Panel Data: Estimating the Effect of Fertility on Female Labour Participation. **AA** CEMFI, Madrid. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 03/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 42. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C21, C23, C25, J13. **KW** Binary Choice. Panel Data. Endogenous Variables. Predetermined Variables. Participation. Fertility.

AB This paper considers the estimation of binary choice panel data models with discrete endogenous regressors. We present a switching probit model, which accounts for selectivity bias as well as for other forms of time invariant unobserved heterogeneity. Individual effects are allowed to be correlated with the explanatory variables, which can be predetermined as opposed to strictly exogenous. This model is applied to estimate a female participation equation with endogenous fertility and predetermined existing children and with individual effects using PSID data.

Carroll, Christopher D.

PD May 1997. **TI** Unemployment Expectations, Jumping (S,s) Triggers, and Household Balance Sheets. **AU** Carroll, Christopher D.; Dunn, Wendy E. **AA** Johns Hopkins University. **SR** Johns Hopkins Department of Economics Working Paper: 386; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 52. **PR** no charge. **JE** D10, D80, D91, E20, E30. **KW** Uncertainty. Housing. Consumption. Unemployment. Expectations.

AB This paper examines the relationship between household balance sheets, consumer purchases, and expectations. We find few robust empirical relationships between balance sheet measures and spending, but we do find that unemployment expectations are robustly correlated with spending. We then construct a formal model of durables and nondurables consumption with an explicit role for unemployment and for household debt. We find that the model is capable of explaining several empirical regularities which are, at best, unexplained by standard models. Finally, we show that a loosening of liquidity constraints can produce a runup in debt similar to that

experienced recently in the US, and that after such a liberalization consumer purchases show heightened sensitivity to labor income uncertainty, providing a potential rigorous interpretation of the widespread view that the buildup of debt in the 1980s may have played an important role in the weakness of consumption during and after the 1990 recession.

PD June 1997. **TI** Comparison Utility in a Growth Model. **AU** Carroll, Christopher D.; Overland, Jody; Weil, David N. **AA** Carroll: Johns Hopkins University. Overland: University of Colorado at Denver. Weil: Brown University. **SR** Johns Hopkins Department of Economics Working Paper: 387; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 41. **PR** no charge. **JE** D91, E21, O40. **KW** Habit Formation. Relative Consumption. Endogenous Growth. Saving.

AB This paper compares the dynamics of two general equilibrium models of endogenous growth in which agents have "comparison utility." In the "inward-looking" economy, individuals care about how their consumption in the current period compares to their own consumption in the past (one way to describe this is "habit-formation" in consumption). In the "outward-looking" economy, individuals care about how their own level of consumption compares with others' consumption. While steady state growth rates are identical in the two economies, transition paths differ. For example, consider the effect of a negative shock to capital. In an endogenous growth model with standard preferences, there will be no effect on the saving rate or the growth rate of output. In both of the models that we consider, however, saving and growth will temporarily fall in response to the shock. The initial decline in saving and growth will be larger in the inward-looking case. However, since agents in the outward-looking case do not take into account the externality effect of their consumption, higher growth in this case will lead to lower utility than in the inward-looking case.

PD July 1997. **TI** Why Do The Rich Save So Much? **AA** Johns Hopkins University. **SR** Johns Hopkins Department of Economics Working Paper: 388; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 32. **PR** no charge. **JE** D11, D12, D31, D91, E21. **KW** Saving. Consumption. Life Cycle Models. Rich. Bequests.

AB This paper considers several alternative explanations for the fact that households with higher levels of lifetime income have higher lifetime saving rates (Dynan, Skinner, and Zeldes (1996); Lillard and Karoly (1997)). The paper argues that the saving behavior of the richest households cannot be explained by models in which the only purpose of wealth accumulation is to finance their own future consumption, or even consumption of heirs. The paper concludes that the simplest model that explains the relevant facts is one in which either consumers regard the accumulation of wealth as an end in itself, or unspent wealth yields a flow of services (such as power or social status) which have the same practical effect on behavior as if wealth were intrinsically desirable.

Casella, Alessandra

PD May 1998. **TI** Anonymous Market and Group Ties in International Trade. **AU** Casella, Alessandra; Rauch, James E. **AA** Casella: Columbia University. Rauch: University of California, San Diego. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 36/98; Fondazione Eni Enrico Mattei, Corso

Magenta 63, 20123 Milano, Italy. Website: www.feem.it.
PG 32. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** F01, F12.
KW Anonymous Market. International Trade. Group Ties.

AB When trade involves differentiated products, preferential ties to a group settled abroad facilitate an exporter's entry into the foreign market by providing information and access to distribution channels. This contrasts with the difficulties experienced by an unattached producer unfamiliar with the foreign environment. We build a simple general equilibrium model of trade that formalizes this observation.

Cashin, Paul

PD November 1998. **TI** Booms and Slumps in World Commodity Prices. **AU** Cashin, Paul; McDermott, John C.; Scott, Alasdair. **AA** Cashin: International Monetary Fund. McDermott and Scott: Reserve Bank of New Zealand. **SR** International Monetary Fund Working Paper: WP/99/155; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 19. **PR** not available. **JE** E32, F41, Q11, Q17. **KW** Commodity Prices. Booms. Business Cycles. Duration. Amplitude.

AB This paper examines the duration and magnitude of commodity-price cycles. It finds that for most commodities, price slumps last longer than price booms. How far prices fall in a slump is found to be slightly larger than how far they rebound in a subsequent boom. There is little evidence of a consistent "shape" to commodity-price cycles. For all commodities, the probability of an end to a slump in prices is independent of the time already spent in the slump, and for most commodities, the probability of an end to a boom in prices is independent of the time already spent in the boom.

Castaneda, Ana

PD September 1998. **TI** Earnings and Wealth Inequality and Income Taxation: Quantifying the Trade-Offs of Switching to a Proportional Income Tax in the U.S. **AU** Castaneda, Ana; Diaz-Gimenez, Javier; Rios-Rull, Jose-Victor. **AA** Castaneda: Intermoney. Diaz-Gimenez: Universidad Carlos III de Madrid. Rios-Rull: University of Pennsylvania. **SR** Federal Reserve Bank of Cleveland Working Papers: 9814; Research Department, Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, Ohio 44101-1387. Website: www.clev.frb.org. **PG** 25. **PR** no charge. **JE** D31, D63, D91, H23, H24. **KW** Proportional Income Taxes. Taxation. Inequality. Wealth Distribution.

AB This paper quantifies the steady-state aggregate, distributional and mobility effects of switching the U.S. to a proportional income tax system. The authors propose a theory of earnings and wealth inequality capable of accounting quantitatively for the key aggregate and inequality facts of the U.S. economy. This theory is based on savings to smooth uninsured household-specific risk, for dynastic households that also have some life-cycle characteristics. A suitable calibration of the model economy replicates the U.S. growth facts, earnings and wealth distributions, the progressivity of the tax system, and the size of the U.S. government. The authors also solve a similar model economy in which the government levies a proportional income tax. The findings show that in this class of model worlds a switch from the U.S. tax system to a proportional tax system implies the following trade-offs: i) it increases efficiency as measured by aggregate output by 4.4%, ii) it does not increase inequality as measured by the Gini index

of the earnings, iii) it increases inequality as measured by the Gini index of the wealth distribution by 10.4%, and iv) it changes by little the mobility between the different earnings and wealth groups.

Catao, Luis

PD September 1999. **TI** Determinants of Argentina's External Trade. **AU** Catao, Luis; Falcetti, Elisabetta. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/121; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 33. **PR** not available. **JE** F11, F14, F31. **KW** Argentina. Foreign Trade Elasticities. Competitiveness. MERCOSUR. International Trade.

AB This paper presents new estimates of export and import equations for Argentina, using a broader set of variables than previous studies and distinguishing between intra- and extra-MERCOSUR trade. It measures the importance of relative price versus income effects in accounting for the higher trade deficit during the 1990s, and examines whether foreign trade elasticities have increased as a result of structural changes in the economy. It finds that the high income elasticity of imports and the responsiveness of exports to changes in world commodity prices, domestic absorption, and economic activity in Brazil have been key determinants of Argentina's trade balance.

Cawley, John

PD January 1997. **TI** An Empirical Examination of Information Barriers to Trade in Insurance. **AU** Cawley, John; Philipson, Tomas J. **AA** University of Chicago. **SR** University of Chicago Center for the Study of the Economy and the State Working Paper: 132; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. **PG** 42. **PR** \$3.00; make check payable to "The University of Chicago.". **JE** D82, G22, I10. **KW** Adverse Selection. Asymmetric Information. Insurance. Mortality.

AB This paper uses direct evidence on the self-perceived and actual mortality risk of individuals, as well as the price and quantity of their life insurance, to evaluate whether asymmetric information is a barrier to trade in insurance markets. We report several findings which seem difficult to reconcile with the conventional theory of insurance under asymmetric information. First, we find substantial evidence of a different type of non-linear pricing than is predicted by conventional theory: the theory predicts that unit prices rise with quantity, but we find that they fall. Second, we demonstrate that when such bulk discounts are present, risk must covary negatively with quantity, rather than positively as implied by the theory. Lastly, we find that a substantial fraction of individuals hold multiple insurance contracts, which is difficult to reconcile with rising unit prices because multiple small contracts are preferable to a large one under such prices. Overall, our results suggests that insurance markets may be like many other product markets in that producers may know better than consumers their costs of production.

Chan-Lau, Jorge A.

PD November 1999. **TI** Why Has Inflation in the United States Remained So Low? Reassessing the Importance of Labor Costs and the Price of Imports. **AU** Chan-Lau, Jorge A.; Tokarick, Stephen. **AA** International Monetary Fund.

SR International Monetary Fund Working Paper: WP/99/149; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 10. PR not available. JE E23, E24, E31, F41, J30. KW Inflation. Labor Costs. Phillips Curve. Employment. Compensation.

AB This paper examines some of the factors that have been influential in keeping inflation low in the United States during 1995-98, despite strong growth and high levels of employment. Our results identify three important variables: declines in import prices, a slowdown in the growth of nonwage labor compensation, and a decline in labor costs. We also reassess the role of labor costs and import prices in determining price inflation.

Chander, Parkash

PD January 1998. TI A Stronger Measure of Risk Aversion and a General Characterization of Optimal Income Tax Enforcement. AA Indian Statistical Institute and Johns Hopkins University. SR Johns Hopkins Department of Economics Working Paper: 399; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. PG 24. PR no charge. JE D81, D82, H21, H26. KW Risk Aversion. Optimal Taxation. Principal-Agent. Audit Strategy. Mechanism.

AB This paper introduces a new measure of risk aversion, which is stronger than the Arrow-Pratt measure of absolute risk aversion. In particular, decreasing risk aversion in terms of the new measure implies decreasing absolute risk aversion, but the converse is not necessarily the case. Decreasing risk aversion in terms of the new measure however does not imply increasing or decreasing relative risk aversion and the two are not generally comparable. The stronger measure is then applied to characterize optimal income tax and audit schemes in the principal-agent framework. It is shown that if the agents satisfy decreasing risk aversion in terms of the stronger measure then for a variety of objective functions for the principal the optimal tax schedule is in general concave and monotonic.

Chang, Dongkoo

TI Modeling and Forecasting Inflation in India. AU Callen, Tim; Chang, Dongkoo.

Chang, Won

TI How Regional Blocs Affect Excluded Countries: The Price Effects of MERCOSUR. AU Winters, L. Alan; Chang, Won.

Chang, Yoosoon

PD December 1999. TI Nonlinear Econometric Models with Cointegrated and Deterministically Trending Regressors. AU Chang, Yoosoon; Park, Joon Y.; Phillips, Peter C. B. AA Chang: Rice University. Park: Seoul National University. Phillips: Yale University. SR Yale Cowles Foundation Discussion Paper: 1245; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. PG 43. PR no charge up to 3 papers; \$3.00 U.S.; 4.00 International. JE C22. KW Nonlinear Regressions. Integrated Time-Series. Brownian Motion. Local Time.

AB This paper develops an asymptotic theory for a general class of nonlinear nonstationary regressions, extending earlier work by Phillips and Hansen (1990) on linear cointegrating regressions. The model considered accommodates a linear time

trend and stationary regressors, as well as multiple $I(1)$ regressors. We establish consistency and derive the limit distribution of the nonlinear least squares estimator. The estimator is consistent under fairly general conditions but the convergence rate and the limiting distribution are critically dependent upon the type of the regression function. For integrable regression functions, the parameter estimates converge at a reduced $n^{1/4}$ rate and have mixed normal limit distributions. On the other hand, if the regression functions are homogeneous at infinity, the convergence rates are determined by the degree of the asymptotic homogeneity and the limit distributions are non-Gaussian. It is shown that nonlinear least squares generally yields inefficient estimators and invalid tests, just as in linear nonstationary regressions. The paper proposes a methodology to overcome such difficulties. The approach is simple to implement, produces efficient estimates and leads to tests that are asymptotically chi-square. It is implemented in empirical applications in much the same way as the fully modified estimator of Phillips and Hansen.

Chaudhuri, Shubham

PD May 1999. TI Household Production, the Bundling of Services and Degradation and Non-Monotonic Environmental Engel Curves. AU Chaudhuri, Shubham; Pfaff, Alexander S. P. AA Columbia University. SR Columbia University, Department of Economics Discussion Paper Series: 9899/07; Department of Economics, Columbia University, 420 West 118th Street, Room 1022 IAB, New York, NY 10027. Website www.columbia.edu/cu/economics. PG 9. PR \$4 U.S.; \$5 Canada; \$7 all other countries; Subscriptions \$140 U.S.; \$185 all other countries. JE D11, D13, Q20. KW Environment. Household Production. Engel Curves. Bundling. Degradation.

AB This paper steps back from the literature on "environmental Kuznets curves" to consider one possible component of such relationships, i.e. the link between household income and household choices that impact upon the environment. The approach is distinguished by explicit modeling of a household-level mechanism linking income to changes in environmental quality. Two facts are emphasized (1) a household can not directly purchase environmental quality; and (2) a household starts with a positive endowment of environmental quality, which is degraded through consumption. The authors propose a household production model, in which households purchase marketed commodities that bundle a "good", non-environmental services, with a "bad", environmental degradation. They show that even if the environment is a normal good, household substitution towards less environmentally degrading marketed commodities, combined with natural constraints on the household's shifts between marketed commodities, could produce a non-monotonic relationship between household income and environmental quality, i.e. a non-monotonic environmental Engel curve.

PD August 1999. TI Forward-Looking Behavior, Precautionary Savings, and Borrowing Constraints in a Poor, Agrarian Economy: Tests Using Rainfall Data. AA Columbia University. SR Columbia University, Department of Economics Discussion Paper Series: 9899/10; Department of Economics, Columbia University, 420 West 118th Street, Room 1022 IAB, New York, NY 10027. Website www.columbia.edu/cu/economics. PG 19. PR \$4 U.S.; \$5 Canada; \$7 all other countries; Subscriptions \$140 U.S.; \$185 all other countries. JE D91, E21, O12, O13, Q12.

KW Precautionary Savings. Borrowing Constraints. Forward-Looking Behavior. Agriculture. Consumption.

AB Households in many poor, agrarian economies derive their income from rain-dependent agriculture. This dependence raises the possibility that, from rainfall patterns early on in the crop-cycle, households accumulate information about future cash inflows before the cash flows are realized. Using detailed longitudinal data from three villages in India, this paper explores whether households utilize this information in the ways suggested by modern consumption theories. Two of the central hypotheses suggested by these theories are that households are forward-looking in their consumption behavior and react optimally to the receipt of information; and that in the face of uncertainty about future incomes, households engage in precautionary saving. The author shows that, in the villages studied, rainfall patterns provide good proxies from which measures of "news" and uncertainty might be constructed. The author exploits this fact to test for precautionary saving and forward-looking behavior, finding that these behaviors do not, by themselves, fully explain the observed consumption patterns. However, fairly strong support is obtained for these behaviors when borrowing constraints are incorporated into the testing strategy.

Chennells, Lucy

PD September 1999. **TI** Has Technology Hurt Less Skilled Workers? An Econometric Survey of the Effects of Technical Change on the Structure of Pay and Jobs. **AU** Chennells, Lucy; Reenen, John Van. **AA** Institute for Fiscal Studies and University College London. **SR** Institute for Fiscal Studies Working Paper: W99/27; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. **PG** 35. **PR** 3 pounds. **JE** J23, J24, J31, O33. **KW** Employment. Wages. Skills. Technology. Innovation.

AB There is a growing concern in advanced countries that the position of less skilled workers has deteriorated, either through their ability to secure jobs and/or their ability to earn a decent wage. Some have linked this decline to modern computing technologies. This paper surveys the evidence on the effects of technical change on skills, wages and employment by examining the micro-econometric evidence. The authors focus on over 70 empirical studies that have used direct measures of technology (rather than associating technology with a residual time trend). The authors first point to three basic methodological problems relating to endogeneity, fixed effects and measurement. Their survey comes to the following tentative conclusions: (i) there is a strong effect of technology on skills in the cross section which appears reasonably robust to various econometric problems; (ii) there is a strong effect of diffusion of technologies on wages in the cross section which is not robust to endogeneity and fixed effects; (iii) at the firm level product innovations appear to raise employment growth, but there is no clear evidence of a robust effect of process innovations or R&D on jobs.

Chick, Victoria

PD October 1997. **TI** Deflation and Distribution: Austerity Policies in Britain in the 1920s. **AA** University College London. **SR** University College London Discussion Papers in Economics: 97/11; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 23. **PR** 4 pounds or \$8.00. **JE** E42, E44, E58, E65, N14.

KW Deflation. Income Distribution. Gold Standard. Keynes. Sound Money.

AB The UK policy set in 1919 to return to the gold standard at pre-war parity required the restoration of "sound money" and fiscal deflation. Though the aim was to reduce British prices to bring them into line with prices abroad, this was achieved only through high unemployment and interest rates unprecedented in peacetime. These results significantly altered the distribution of income in favor of fixed-income recipients. However desirable sound money may seem, these are classic results, repeated in the Thatcher recession of the early 1980s. The same principles are now enshrined in the Maastricht criteria for joining the single currency and in the Stability Pact. The operation of these principles cannot fail to be damaging to growth and to favor recipients of rentier income at the expense of labor income.

Chilton, Susan M.

TI Valuing the Recreational Benefits From the Creation of Nature Reserves in Irish Forests. **AU** Scarpa, Riccardo; Chilton, Susan M.; Hutchinson, W. George; Buongiorno, Joseph.

Chinn, Menzie D.

PD September 1999. **TI** Measuring Misalignment: Purchasing Power Parity and East Asian Currencies in the 1990s. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/120; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 17. **PR** not available. **JE** E31, F31, F41, F47. **KW** Exchange Rates. Purchasing Power Parity. Overvaluation. Cointegration. Currency Crises.

AB The concept of purchasing power parity (PPP) is used to evaluate whether eight East Asian currencies were overvalued on the eve of the 1997 crises. The Johansen and Horvath-Watson cointegration test procedures are applied to bilateral and multilateral exchange rates, deflated using CPIs, producer price indices (PPIs), and price indices of export goods. The second deflator yields the greatest evidence of "stationarity." The study finds that the Malaysian, Philippines, and Thai currencies were overvalued, while the Korean and Indonesian were substantially undervalued. Mixed results were obtained for the others. Measures of the equilibrium rate based on time trends in CPI-deflated rates typically suggest larger overvaluations.

Chiswick, Barry R.

PD February 1999. **TI** The "Double Negative" Effect on Earnings of Limited Language Proficiency Among Immigrants in Canada. **AU** Chiswick, Barry R.; Miller, Paul W. **AA** Chiswick: University of Illinois at Chicago and University of Chicago. Miller: University of Western Australia. **SR** University of Chicago Center for the Study of the Economy and the State Working Paper: 148; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. **PG** 15. **PR** \$3.00; make check payable to "The University of Chicago." **JE** J24, J31, J61. **KW** Immigrants. Wages. Language Practice. Canada. Double Negative.

AB This paper analyzes the effects of language practice on earnings among adult male immigrants in Canada using the 1991 Census. Three language groups are considered: those unable to conduct a conversation in an official language; those who can but who usually speak a non-official language at

home; and those who can and who usually speak an official language at home. Earnings and the effects of schooling and pre-immigration labor market experience on earnings are shown to be lower among immigrants who do not speak an official language at home, implying a distinct "double negative" effect of limited official language proficiency.

PD February 1999. **TI** The Language Practice Among Immigrants in Canada. **AU** Chiswick, Barry R.; Miller, Paul W. **AA** Chiswick: University of Illinois at Chicago and University of Chicago. Miller: University of Western Australia. **SR** University of Chicago Center for the Study of the Economy and the State Working Paper: 149; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. **PG** 26. **PR** \$3.00; make check payable to "The University of Chicago.". **JE** J24, J61. **KW** Immigrants. Language Practice. Human Capital. Canada.

AB This paper is concerned with analyzing the determinants of language practice among adult male immigrants in Canada using the 1991 Census. A model is developed using human capital theory and an immigrant adjustment process. Use of English or French is greater the younger the age at migration, the longer the duration of residence, the higher the educational attainment, the further the country of origin from Canada, the linguistically closer is the mother tongue to English or French, and among those who live in an area where fewer people speak the respondent's mother tongue.

PD June 1999. **TI** Immigrant Earnings: Language Skills, Linguistic Concentrations and the Business Cycle. **AU** Chiswick, Barry R.; Miller, Paul W. **AA** Chiswick: University of Illinois at Chicago and University of Chicago. Miller: University of Western Australia. **SR** University of Chicago Center for the Study of the Economy and the State Working Paper: 152; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. **PG** 25. **PR** \$3.00; make check payable to "The University of Chicago.". **JE** J24, J31, J61. **KW** Immigration. Wages. Language Skills. Business Cycles. Unemployment.

AB This study of the determinants of earnings among adult foreign-born men using the 1990 Census of Population focuses on the effects of the respondent's own English language skills, the effects of living in a linguistic concentration area, and the effects of the stage of the business cycle at entry into the U.S. labor market. The analysis demonstrates the importance of English language fluency among the foreign born from non-English speaking countries. There is strong evidence for the complementarity between language skills and other forms of human capital. The partial effects on earnings of schooling, on-the-job-training, duration in the U.S., weeks worked and being married are greater for those who are more fluent in English. There is strong evidence using selectivity correction techniques for the endogeneity between language and earnings. Earnings are lower in an area with a higher minority language concentration, especially among those with greater English language fluency. That is, living in an area in which many others speak the same non-English language as the immigrant has a depressing effect on earnings. Earnings are lower among those who enter the U.S. labor market in a period of high unemployment.

Chong, Alberto

PD September 1999. **TI** Technology and Epidemics. **AU** Chong, Alberto; Zanforlin, Luisa. **AA** Chong: The World Bank. Zanforlin: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/125; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 16. **PR** not available. **JE** O33, O39, O40. **KW** Growth. Epidemics. Logistic. Technology Transfer. Machinery and Equipment.

AB Evidence from historical and epidemiological literatures shows that epidemics tend to spread in the population according to a logistic pattern. We conjecture that the impact of new technologies on output follows a pattern of spread not unlike that of typical epidemics. After reaching a critical mass, rates of growth will accelerate until the marginal benefits of technology are fully utilized. We estimate spline functions using a GMM dynamic panel methodology for 79 countries. We use imports of machinery and equipment as a fraction of gross domestic product as a proxy for the process of technological adoption. Results confirm our hypothesis.

Choueiri, Nada

PD November 1999. **TI** Has the Nature of Crises Changed? A Quarter Century of Currency Crises in Argentina. **AU** Choueiri, Nada; Kaminsky, Graciela L.. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/152; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 24. **PR** not available. **JE** C10, C32, F31, F32, F41. **KW** Argentina. Currency Crises. Speculative Attacks. Vector Autoregressions. Contagion.

AB The recent turmoil in currency markets in Asia, Europe, and Latin America has given a new impetus to the literature on currency crises. The literature originally linked currency crises to deteriorating economic fundamentals, but has more recently focused on self-fulfilling expectations and contagion. To assess the changing roles of domestic and external market fundamentals and contagion, this paper examines seven major currency crises in Argentina. It finds that while crises in the 1970s and 1980s were driven mainly by monetary and fiscal policies at home and abroad, contagion played an important role in the 1990s.

Claessens, Stijn

PD May 1999. **TI** Ownership Concentration and Corporate Performance in the Czech Republic. **AU** Claessens, Stijn; Djankov, Simeon. **AA** World Bank. **SR** Centre for Economic Policy Research Discussion Paper: 2145; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 36. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** G32, G34. **KW** Ownership Concentration. Czech Republic.

AB The relationship between ownership structure and corporate performance has been the subject of intense research in both transition and market economies. The Czech Republic's mass-privatization program provides a unique opportunity to investigate this relationship. It changed the ownership of firms in a short period of time, and firm characteristics had only a limited influence on the resulting ownership structure. For a cross-section of 706 Czech firms over the period 1992 through 1997, we find that the more concentrated ownership, the higher firm profitability and labor productivity. These findings are

weakly robust to the inclusion of control variables for the type of ownership, or to a correction for the endogeneity of ownership concentration.

Clarida, Richard

PD May 1999. **TI** The Science of Monetary Policy: A New Keynesian Perspective. **AU** Clarida, Richard; Gali, Jordi; Gertler, Mark. **AA** Clarida: Columbia University. Gali: Universitat Pompeu Fabra. Gertler: New York University. **SR** Centre for Economic Policy Research Discussion Paper: 2139; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 112. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** E52, E58, E61. **KW** Monetary Policy. Credibility. Stabilization. New Keynesian Models.

AB This paper reviews the recent literature on monetary policy rules. We exposit the monetary policy design problem within a simple baseline theoretical framework. We then consider the implications of adding various real world complications. Among other things, we show that the optimal policy implicitly incorporates inflation targeting. We also characterize the gains from making credible commitments to fight inflation. In contrast to conventional wisdom, we show that gains from commitment may emerge even if the central bank is not trying to inadvertently push output above its natural level. We also consider the implications of frictions such as imperfect information.

Cogo, Valentina

TI Indicators of Sustainable Development for the City and the Lagoon of Venice. **AU** Ramieri, Emiliano; Cogo, Valentina.

Cohen, Daniel

PD March 1999. **TI** Welfare Differentials Across French and US Labour Markets: A General Equilibrium Interpretation. **AA** ENS-CEPREMAP. **SR** Centre for Economic Policy Research Discussion Paper: 2114; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 32. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** D31, J06, P52. **KW** Ranking. Unemployment Duration. Wage Inequality. Earnings Inequality. Labor Market Dynamics.

AB The paper computes lifetime welfare functions for French and US workers. For the vast majority of workers, we find that the lifetime discrepancy between the welfare of an employed and that of an unemployed worker appears to be quite similar in the two countries, corresponding to 9 monthly wages in the United States and 13 monthly wages in France. From these and other values, we then calibrate standard parameters of equilibrium theories of unemployment such as hiring and firing costs and the quantitative incidence of unemployment benefit onto the equilibrium hiring rates. We find that the latter factor dominates the other. Because of the heterogeneity that we document on the labor market, we show however, why reducing the level of French unemployment benefits to the level of US benefits would dramatically reduce the welfare of the most vulnerable workers on the labor market.

Conrad, Klaus

PD September 1998. **TI** An Econometric Model of

Production with Endogenous Improvement in Energy Efficiency 1970-1995. **AA** Mannheim University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 61/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 20. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C51, D21, O31, Q41, Q48. **KW** Production Process. Energy Demand. Energy Saving. Technical Change. Process R&D Expenditures. Energy Tax.

AB The purpose of this paper is to introduce a modification of a standard, four-input production process where energy is used in an inefficient way, partly due to unnecessary waste of energy. In this production process, R&D investment is an additional input in order to improve energy efficiency. It closes the gap between energy purchased and energy used effectively. The more is invested, the less is the waste of energy. With the cost and benefit of R&D investment incorporated in our model of the firm, we analyze the impact of an energy tax on R&D effort, on output and on the waste of energy. The model is implemented empirically by choosing a translog cost function and a set of first-order conditions, using data for the German chemical industry, 1970-1995.

Constantinides, George M.

PD June 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** Columbia PaineWebber Working Paper Series in Money, Economics and Finance: PW/97/24; Graduate School of Business, 6N Uris Hall, Columbia University, 3022 Broadway, New York, NY 10027. Website: www.columbia.edu/dlc/wp/. **PG** 20. **PR** \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). **JE** D91, G11, G12. **KW** Overlapping Generations. Asset Pricing. Portfolio Choice. Borrowing Constraints. Equity Premium Puzzle.

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.

PD December 1999. **TI** Alcohol. **AU** Cook, Philip J.; Moore, Michael J. **AA** Cook: Duke University. Moore: National Bureau of Economic Research. **SR** University of Chicago Center for the Study of the Economy and the State Working Paper: 156; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street,

Chicago, IL 60637. PG 63. PR \$3.00; make check payable to "The University of Chicago." JE D91, H31, I12, I18, L50. KW Alcohol. Consumption. Policy. Consumer Choice. Health Production.

AB Excess drinking is associated with lost productivity, accidents, disability, early death, crime, neglect of family responsibilities, and personality deterioration. These and related concerns have justified special restrictions on alcoholic-beverage commerce and consumption. The nature and extent of government involvement in this arena vary widely over time and place, and are often controversial. Economists have contributed to the evaluation of alcohol policy through empirical work on the effects of alcohol-control measures on consumption and its consequences. Economics has also provided an accounting framework for defining and comparing costs and benefits of interventions, including excise taxes. Outside of the policy arena, economists have analyzed alcohol consumption in the context of stretching the standard model of consumer choice to include intertemporal effects and social influence. Perhaps the most important contribution by economists has been the repeated demonstration that there is nothing unusual about alcohol in at least one essential respect: consumers drink less ethanol when alcohol-beverage prices are increased. Important econometric challenges and unresolved puzzles about the relationship between drinking and productivity remain.

Cornelli, Francesca

PD May 1999. TI Bookbuilding and Strategic Allocation. AU Cornelli, Francesca; Goldreich, David. AA London Business School. SR Centre for Economic Policy Research Discussion Paper: 2160; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 48. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE G24, G32. KW Bookbuilding. IPOs. Winner's Curse.

AB Under the bookbuilding procedure, an investment banker solicits bids for shares from institutional investors prior to pricing the issue. After collecting this demand information, the investment banker prices the issue and allocates shares to the investors. We examine the books from 39 international equity issues. For each issue we consider all institutional bids and the corresponding allocations. We infer some of the criteria the investment banker uses to allocate shares. We find that the investment banker awards more shares to bidders that provide information (such as a limit price in their bids). In addition, regular investors receive more favorable allocations -- especially when the issue is heavily oversubscribed. The results support the winner's curse theories and the justifications for the use of bookbuilding.

Coscelli, Andrea

PD January 1998. TI Are Market Shares in Drug Markets Affected by Doctors' and Patients' Preferences for Brands? AA University of London and University College London. SR University College London Discussion Papers in Economics: 98/01; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. PG 30. PR 4 pounds or \$8.00. JE D12, I10, L10, L65. KW Pharmaceuticals. Brand Loyalty. Switching Costs. Trademark Drugs. Licensed Drugs.

AB I model demand for identical pharmaceutical products by

doctors and patients. I seek to explain a puzzle in the Italian anti-ulcer drug market, where by law uniform prices and quality are imposed across vendors of the same molecule, and yet market segmentation persists. Prior studies of competition between trade-name and generic drugs do not examine doctors' and patients' preferences for branded drugs because of data limitations. I use data from the Istituto Superiore di Sanita, which allow me both (i) to control for heterogeneity of doctors and patients, and (ii) to model habit persistence. More specifically, the availability of panel data on both doctors and patients allows me to test whether doctors and patients are indifferent among chemically identical brands or whether they have preferences. I find significant evidence of habit persistence by doctors, and of brand-loyalty by patients.

Cottica, Alberto

PD 1997. TI Friends Do Matter: Strategic Uncertainty and Vertical Contractual Relations. AU Cottica, Alberto; de Propris, Lisa; Ponti, Giovanni. AA Cottica: University College London. de Propris: University of Birmingham. Ponti: University College London and University of California, Santa Barbara. SR University College London Discussion Papers in Economics: 97/06; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. PG 14. PR 4 pounds or \$8.00. JE C70, D21, D23, L14, L22. KW Industrial Organization. Vertical Integration. Game Theory. Strategic Uncertainty. Contracts.

AB In the literature on vertical integration little attention has been paid to the role of strategic uncertainty, that is, the presence of multiple self-enforcing outcomes which might lead to coordination failure. However, the natural solution to this problem, which is vertical integration, is not the only way out if the agents have some degree of freedom in designing the industrial relations they engage. A game-theoretic model is provided to show how some of the most popular forms of vertical contractual relations can be derived as equilibria of a multi-stage game in which firms bargain over their reciprocal vertical control, in order to minimize the inefficiency created by strategic uncertainty.

Crawford, Ian

TI A GARP Method for Overcoming New Goods Bias in Price Indices with an Application to the UK National Lottery. AU Blow, Laura; Crawford, Ian.

TI A Nonparametric Bound on Substitution Bias in the UK Retail Prices Index. AU Blow, Laura; Crawford, Ian.

TI Valuing Quality. AU Blow, Laura; Crawford, Ian.

PD December 1999. TI Nonparametric Tests of Stochastic Dominance in Bivariate Distributions, with an Application to UK Data. AA Institute for Fiscal Studies and University College London. SR Institute for Fiscal Studies Working Paper: W99/28; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. PG 18. PR 3 pounds. JE C14, D12, D30. KW Social Welfare. Stochastic Dominance. Nonparametric Methods. Bivariate Distributions.

AB This paper makes straightforward extensions to Anderson's (1996) nonparametric statistical tests of stochastic dominance criteria to bivariate distributions. These tests are applied to a time series of cross-section datasets on household level total expenditure and non labor market time in the UK.

Crepon, Bruno

TI Working 40 Hours or Not Working 39: Lessons from the 1981 Mandatory Reduction of Weekly Working Hours. **AU** Kramarz, Francis; Crepon, Bruno.

Crespi-Cladera, Rafel

PD March 1999. **TI** Ownership and Control: A Spanish Survey. **AU** Crespi-Cladera, Rafel; Garcia-Cestona, Miguel A. **AA** Crespi-Cladera: Universitat Autònoma de Barcelona and Universitat Illes Balears, Spain. Garcia-Cestona: Universitat Autònoma de Barcelona. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 23/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 40. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** G32, G34. **KW** Ownership. Control. Spain.

AB The paper analyses the ownership structure of a large sample of Spanish listed companies. The results are analyzed in terms of governance implications in the context of agency theory. The results show a picture with concentrated ownership where stock markets are of relatively low importance. Direct ownership and voting blocks, which account for indirect ownership through third companies, are larger for non-financial firms followed by families or individuals and financial firms other than banks. Nevertheless, the use of intermediate companies (pyramiding) is infrequent according to our data. Banks seem not to play the important role they did in the past and the recent privatization reduced state shareholdings on listed companies to a minimum level.

Dabla-Norris, Era

PD September 1999. **TI** The Enforcement of Property Rights and Underdevelopment. **AU** Dabla-Norris, Era; Freeman, Scott. **AA** Dabla-Norris: International Monetary Fund, Freeman: University of Texas. **SR** International Monetary Fund Working Paper: WP/99/127; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 20. **PR** not available. **JE** D23, K11, O34, O41. **KW** Property Rights. Multiple Equilibria. Expropriation. Development.

AB This paper formalizes the role of legal infrastructure in economic development in a general equilibrium model with endogenously determined property rights enforcement. It illustrates the mutual importance of property rights protection and market production by the model's multiplicity of equilibria. In one equilibrium, property rights are enforced and market activity is unhampered. In the other, property rights are not enforced, which discourages economic activity and leaves the economy without the resources and incentives to enforce property rights. Even identically endowed economies may therefore find themselves in very different equilibria.

Dahlquist, Magnus

TI Performance and Characteristics of Swedish Mutual Funds 1993-97. **AU** Soderlind, Paul; Dahlquist, Magnus; Engstrom, Stefan.

PD June 1999. **TI** The Forward Premium Puzzle: Different Tales from Developed and Emerging Economies. **AU** Dahlquist, Magnus; Bansal, Ravi. **AA** Dahlquist: Stockholm University. Bansal: Duke University. **SR** Centre for Economic Policy Research Discussion Paper: 2169; Centre for Economic Policy Research, 90-98 Goswell Road, London

EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 56. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** F31, G12. **KW** Forward Rates. Forward Premium. Systematic Risk.

AB In this paper we document new results regarding the forward premium puzzle. The often found negative correlation between the expected currency depreciation and interest rate differential is, contrary to popular belief, not a pervasive phenomenon. It is confined to developed economies, and here only to states where the U.S. interest rate exceeds foreign interest rates. Furthermore, we find that differences across economies are systematically related to per capita GNP, average inflation rates, and inflation volatility. Our empirical work suggests that it is hard to justify the cross-sectional differences in the risk premia as compensation for systematic risk. Instead, country-specific attributes seem to be important in characterizing the cross-sectional dispersion in the risk premia.

Dale, Stacy Berg

PD December 1998. **TI** Estimating the Payoff to Attending a More Selective College: An Application of Selection on Observables and Unobservables. **AU** Dale, Stacy Berg; Krueger, Alan B. **AA** Dale: Andrew W. Mellon Foundation. Krueger: Princeton University and National Bureau of Economic Research. **SR** Princeton Industrial Relations Section Working Paper: 409; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. **PG** 54. **PR** \$2.00. **JE** I21, J24, J31. **KW** Returns to Education. College Selectivity. Human Capital. Quality of Education.

AB One difficulty in interpreting past estimates of the effect of college quality on students' subsequent earnings is that colleges admit students, in part, based on characteristics related to earning capacity. This paper uses information on the set of colleges at which students were accepted and rejected to remove the effect of unobserved characteristics. The authors match students in the College and Beyond (C&B) dataset who were admitted to and rejected from a similar set of institutions, and estimate fixed effects models. As another approach, the paper controls for the average SAT score of the schools to which students applied using the C&B and National Longitudinal Survey of the High School Class of 1972. The paper finds that students at colleges with higher average SAT scores do not earn more than other students who were accepted and rejected by comparable schools but attended a college with a lower average SAT score. However, the Barron's rating of school selectivity and the tuition level are significantly related to the students' subsequent earnings. The paper finds a substantial internal rate of return from attending a more costly college. The payoff to attending an elite college appears greater for students from more disadvantaged family backgrounds.

Danielis, Romeo

PD January 1999. **TI** Bottleneck Congestion and Modal Split Revisited. **AU** Danielis, Romeo; Marcucci, Edoardo. **AA** Danielis: University of Trieste, Italy. Marcucci: University of Urbino, Italy. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 05/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 15. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** R41, R48. **KW** Road Transport. Public Transport. Congestion.

Congestion Pricing.

AB The paper examines the efficiency of alternative road pricing schemes when an alternative railroad service is available. The paper uses a model, developed by Tabuchi (1993), in which road transport presents a bottleneck congestion technology while railroad transport shows economies of scale with respect to the number of train users. The competition between the two modes is assumed to be on cost basis only. It is found that if the railroad fare is set equal to the average cost, the relative efficiency of the regimes depends on parameter values. The numerical simulation shows that the fine toll regime is generally to be preferred to the alternative regimes except when the fixed railroad cost is large enough so that the inefficient exploitation of the scale economies is less than compensated by the toll revenue.

Darbar, Salim M.

PD November 1999. **TI** Linkages Among Asset Markets in the United States: Tests in a Bivariate GARCH Framework. **AU** Darbar, Salim M.; Deb, Partha. **AA** Darbar: International Monetary Fund. Deb: Indiana Purdue University. **SR** International Monetary Fund Working Paper: WP/99/158; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 13. **PR** not available. **JE** C32, C51, G12, G14. **KW** Logistic Exponential GARCH. Conditional Correlations. Granger Causality. Asset Pricing. Volatility.

AB This paper develops a bivariate GARCH model that allows for time-varying conditional correlations and simultaneous testing of two Granger-causal linkages: the impact of return volatility in a market on intermarket correlation and the impact of return volatility in one market on the volatility of another. Using daily data from stock, bond, currency, and commodity markets in the United States, the paper finds evidence of each form of linkage. Furthermore, the conditional correlations change over time and exhibit considerable persistence. The estimated time-varying conditional correlations provide insight into the nature of the stock market crash of 1987.

Daseking, Christina

PD October 1999. **TI** From Toronto Terms to the HIPC Initiative: A Brief History of Debt Relief for Low-Income Countries. **AU** Daseking, Christina; Powell, Robert. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/142; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 29. **PR** not available. **JE** F33, F34, H63, H87, O19. **KW** External Debt. HIPC. Low Income Countries. International Finance.

AB The low-income country debt crisis had its origins in weak macroeconomic policies, and official creditor's willingness to take risks unacceptable to private lenders. Payments problems were initially addressed through nonconcessional reschedulings and new lending that maximized financing while containing the budgetary costs for creditors. This led to an unsustainable buildup in debt stocks. More recently, debt ratios have improved, reflecting both adjustment and substantial debt relief. The paper estimates debt relief initiatives since 1988 have cost creditors at least \$30 billion, and possibly much more. This compares with the estimated costs of about \$27 billion under the enhanced HIPC Initiative.

Davis, Donald

PD February 2000. **TI** Human Capital, Unemployment, and Relative Wages in a Global Economy. **AU** Davis, Donald; Reeve, Trevor A. **AA** Davis: Columbia University and National Bureau of Economic Research. Reeve: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 659; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 35.

PR no charge. **JE** E24, F11, F41, J24, J31. **KW** International Trade. Human Capital. Unemployment. Wages. Technological Change.

AB This paper develops a simple framework for examining human capital accumulation, unemployment, and relative wages in a global economy. It builds on the models of Davis (1998a, b) of trade between a flexible wage America and a rigid wage Europe. To this it adds a model of human capital accumulation based on Findlay and Kierzkowski (1983). A variety of comparative statics are examined, including changes in educational capital and population, entry of new countries to the trading world, technical change, and a productivity slowdown. We derive the consequences for the skilled-to-unskilled wage gap, unemployment, and skill composition.

De Bonis, Riccardo

PD July 1998. **TI** Crises and Bail-Outs of Banks and Countries: Interconnections, Analogies, Differences. **AU** De Bonis, Riccardo; Giustiniani, Alessandro; Gomel, Giorgio. **AA** Banca d'Italia. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 40/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 36. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** E44, F33, G21, G28, G33. **KW** Financial Crises. Banking Regulation. International Finance.

AB During the last decade or so a number of banking crises have occurred in both industrial and developing countries. Bank unsoundness is the focus of deep concerns for its possible interactions with macroeconomic instability. The potential size and severity of sovereign debt crises in integrated financial markets were highlighted by the outbreak of the Mexican crisis at the end of 1994. Subsequently, in a number of international bodies, policy makers have undertaken to consider various avenues and arrangements to prevent, anticipate and resolve sovereign debt crises. In the second half of 1997, East Asia's turmoil testified to the interdependence between currency devaluations, stock market crashes, and banks' insolvencies.

De Fraja, Gianni

PD February 1999. **TI** Equal Opportunities in Education: Market Equilibrium and Public Policy. **AU** University of York. **SR** Centre for Economic Policy Research Discussion Paper: 2090; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 40. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** D63, I28. **KW** Education. University. Student Loans.

AB This paper investigates whether individual decisions lead to equality of opportunity in education, defined in the specific sense of irrelevance of parental income for university attendance. We show that, even if households can borrow in the

capital market, the laissez-faire equilibrium exhibits an income bias, in the sense that individuals from high income households are more likely to attend university. We then study the welfare maximizing policy of a utilitarian government. Its features are opposite to the free market equilibrium: with plausible assumptions, at low income levels, the tuition fee should be designed in such a way so as to create a bias in favor of low income households.

de Jong, Abe

PD March 1999. **TI** Ownership and Control in The Netherlands. **AU** de Jong, Abe; Kabir, Rezaul; Marra, Teye; Roell, Ailsa. **AA** de Jong, Kabir and Teye: Tilburg University. Roell: Tilburg University and Princeton University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 22/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 25. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** G32, G34. **KW** Ownership. Control. Corporate Governance.

AB This paper analyses ownership and control structures of Dutch listed companies. Legislation, effective since 1992, mandates all shareholders with holdings of 5 percent or more in Dutch companies to disclose their holdings. Our analysis shows that the average ownership stakes of the largest and the three largest shareholders are 27% and 41%; respectively. The average ownership stakes of banks, insurance companies and other financial institutions are relatively low. We observe that voting rights are more concentrated than ownership rights; the use of a supervisory board representing interests of different stakeholders is ubiquitous; and listed companies use different forms of anti-takeover defense measures.

de la Fuente, Angel

PD March 1999. **TI** The Redistributive Effects of the EU Budget: An Analysis and Some Reflections on the Agenda 2000 Negotiations. **AU** de la Fuente, Angel; Domenech, Rafael. **AA** de la Fuente: University of Barcelona. Domenech: Universidad de Valencia. **SR** Centre for Economic Policy Research Discussion Paper: 2113; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 19. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** H11, H77, H87. **KW** European Union. Fiscal Flows.

AB This paper analyzes the redistributive effects of the EU budget during the period 1986-97 and advances a proposal for setting member countries' budgetary balances in a manner consistent with a simple equity criterion based on relative income per capita.

de Melo, Jaime

PD June 1999. **TI** Who Determines Mexican Trade Policy? **AU** de Melo, Jaime; Olarreaga, Marcelo; Grether, Jean-Marie. **AA** de Melo and Grether: Universite de Geneve. Olarreaga: World Bank. **SR** Centre for Economic Policy Research Discussion Paper: 2176; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 44. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** F13, F23. **KW** Mexico. Endogenous Protection. Foreign Direct Investment.

AB This paper uses a political economy approach to analyze

the pattern of Mexican manufacturing sector protection during the period of trade policy reforms between 1985 and 1989 when Mexico experiences both an important inflow of foreign direct investment (FDI), and a significant trade liberalization. The approach takes into account the potential role of FDI on endogenous tariff formation. It turns out that the data are coherent with the proposed approach in which trade policy formulation reflects political support and in which the sectoral presence of FDI has a strong influence on the determination of the pattern of tariff protection before and during the reform. In particular in Mexican manufacturing, FDI-intensive sectors received higher protection in import-competing sectors, though the move towards greater openness was associated with a reduction in the influence of industrial and FDI lobbying.

De Nicolo, Gianni

TI Monetary Disturbances Matter for Business Fluctuations in the G-7. **AU** Canova, Fabio; De Nicolo, Gianni.

De Nocker, Leo

PD January 1999. **TI** Marginal External Costs of Peak and Non Peak Urban Transport in Belgium. **AU** De Nocker, Leo; Vergote, Stef; Vinckx, Luc; Wouters, Guido. **AA** VITO, Flemish Institute for Technological Research. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 12/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 22. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** H43, I31, R49, Q38, Q49. **KW** Externalities. Urban Transport. Air Pollution. Congestion. Sustainable Mobility.

AB This paper discusses intermediate results of an ongoing research project to estimate all external costs from all transport modes in Belgium. It gives estimates of the marginal external costs of air pollution from urban transport. The evaluation of the environmental impacts is based on the European ExternE accounting framework. This methodology uses the impact pathway analysis for the detailed bottom-up assessment of impacts from air pollutants. It integrates state of the art knowledge in the fields of emission modelling, dispersion modelling, dose-response functions and monetary valuation. This paper focuses on the impact of location (rural areas versus cities), regulation, traffic conditions and congestion on environmental externalities.

de Propriis, Lisa

TI Friends Do Matter: Strategic Uncertainty and Vertical Contractual Relations. **AU** Cottica, Alberto; de Propriis, Lisa; Ponti, Giovanni.

de Zeeuw, Aart

TI Transfer to Sustain Core-Theoretic Cooperation in International Stock Pollutant Control. **AU** Germain, Marc; Toint, Philippe; Tulkens, Henry; de Zeeuw, Aart.

Dearden, Lorraine

PD March 1999. **TI** Qualifications and Earnings in Britain: How Reliable are Conventional OLS Estimates of the Returns to Education? **AA** Institute for Fiscal Studies. **SR** Institute for Fiscal Studies Working Paper: W99/07; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. **PG** 35. **PR** 3 pounds. **JE** I21, J16, J24,

J31. KW Education. Qualifications. Earnings. Wage Differentials. Human Capital.

AB The paper estimates the returns to education for a cohort of individuals born in Britain in March 1958 who have been followed since birth until the age of 33. The data used has information on family background including parental education, social class and interest shown in the child's education as well as measures of ability. The data allows for the direct assessment of the relative importance of omitted ability and family background bias as well as biases arising from measurement error in education qualification variables which have been found to be important in other studies. The paper also looks at possible biases arising from compositional differences between individuals in work and those out of work. The paper also examines whether there is evidence of heterogeneity in the returns to education as well as the impact of education on gender wage differentials. The paper finds that conventional OLS estimates are reasonable estimates of the true causal impact of education on wages. The paper also finds evidence of heterogeneity in the returns to education in Britain. The results from the paper suggest that individuals undertaking schooling involving some sort of formal qualification have significantly larger rates of return.

Deb, Partha

TI Linkages Among Asset Markets in the United States: Tests in a Bivariate GARCH Framework. **AU** Darbar, Salim M.; Deb, Partha.

Decressin, Jorg

PD September 1999. **TI** Regional Income Redistribution and Risk Sharing: How Does Italy Compare in Europe? **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/123; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 22. **PR** not available. **JE** E62, H23, H50, R11. **KW** Public Policy. Regions. Redistribution. Risk Sharing. **AB** This paper investigates income redistribution and risk sharing among Italy's regions and the implications for public policy. Using a richer data set than in previous works, this study allows for an assessment of public consumption's and investment's roles. The findings suggest that Italy's fiscal system provides interregional redistribution at 30-35 percent and risk sharing at 20-30 percent of GDP, mainly through public consumption. Compared with results in the literature for other European countries, there appears to be less redistribution and risk sharing in Italy through its welfare and tax systems because of their different structures.

Deddouche, David

TI Bank Rating Changes and Bank Stock Returns -- Puzzling Evidence from the Emerging Markets. **AU** Richards, Anthony J.; Deddouche, David.

Del Furia, Luca

PD September 1998. **TI** The Effectiveness of Provisions and Quality of Practices Concerning Public Participation in the EIA Procedures in Italy and the UK. **AU** Del Furia, Luca; Wallace-Jones, Jane. **AA** Fondazione Eni Enrico Mattei. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 53/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 28. **PR** 10 papers minimum order at \$4.00 each; annual subscription at

\$250.00. **JE** K32, O20, Q20. **KW** Environmental Impact. Public Participation. Voluntary Approaches.

AB The Environmental Impact Assessment (EIA) procedure foresees that the information on the environmental effects of a specific activity is used to support the decision on whether to give a project consent, and has the ability to ensure no more than that the decision taken is an informed one. As one of the principle groups of actors in the procedure, it can be concluded that the effective involvement of the public serves to guarantee, at least in part, the effectiveness of the whole EIA procedure. This paper therefore addresses the following question: how can the effectiveness of provisions for and practices concerning public participation in the EIA procedure be improved, with specific reference to Italy and the UK?

Demiralp, Selva

PD September 1999. **TI** The Transmission of Monetary Policy via Announcement Effects. **AU** Demiralp, Selva; Jorda, Oscar. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 99/06; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website:

polar.ucdavis.edu/econ/workingpapers/workingpapers.html.

PG 45. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** C50, E42, E43, E52, E58. **KW** Liquidity Effects. Announcement Effects. Term Structure. Marked Point Process. Monetary Policy.

AB The traditional view of the monetary transmission mechanism rests on the premise that the Federal Reserve (Fed) has full control over overnight rates via open market operations. By contrast, this paper tries to establish empirically the Fed's ability to manipulate overnight rates via "announcement" effects. In this paper, announcement effects are defined as unanticipated public disclosures of interest rate targets in the framework of a monetary policy action, not necessarily linked to conventional open market operations. In addition to comparing the relative importance of the more conventional liquidity effect versus the announcement effect, we study the Fed's ability to affect the term structure by surprising markets with announcements of a new level for the Federal funds rate target. This is accomplished with a variation of the autoregressive conditional hazard model introduced by Hamilton and Jorda (1999).

Demirguc-Kunt, Asli

PD October 1999. **TI** Monitoring Banking Sector Fragility: A Multivariate Logit Approach. **AU** Demirguc-Kunt, Asli; Detragiache, Enrica. **AA** Demirguc-Kunt: World Bank. Detragiache: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/147; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 25. **PR** not available. **JE** E44, E47, G21, G28. **KW** Banking Crises. Bank Fragility. Monitoring.

AB This paper explores how a multivariate logit empirical model of banking crisis probabilities can be used to monitor bank sector fragility. The proposed approach relies on readily available data, and the fragility assessment has a clear interpretation based on in-sample statistics. The model has better in-sample performance than currently available

alternatives, and the monitoring system can be tailored to fit the preferences of the decision maker regarding type I and type II errors. The framework can be useful as a preliminary screen to economize on precautionary costs.

Deschenes, Olivier

TI Do Unemployment Insurance Recipients Actively Seek Work? Randomized Trials in Four U.S. States. **AU** Ashenfelter, Orley; Ashmore, David; Deschenes, Olivier.

Detragiache, Enrica

PD August 1999. **TI** Bank Fragility and International Capital Mobility. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/113; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 18. **PR** not available. **JE** F32, F36, F41, G21. **KW** Capital Mobility. Banking Crises. Financial Integration. Open Economy.

AB The paper examines the effects of increased financial integration on the economy and, specifically, the welfare of depositors and the business sector. A simple model of a small open economy with a fragile banking sector and imperfect capital mobility is developed. Increased international integration of the market for bank deposits makes runs on banks more likely and unambiguously hurts the domestic business sector. Depositors may gain or lose depending on the parameters. Even when depositors gain, the overall effect on the economy depends on the size of foreign assets held relative to the costs of bank crises.

TI Monitoring Banking Sector Fragility: A Multivariate Logit Approach. **AU** Demirguc-Kunt, Asli; Detragiache, Enrica.

Devereux, Michael P.

TI Generalised R-Based and S-Based Taxes Under Uncertainty. **AU** Bond, Stephen R.; Devereux, Michael P.

PD September 1999. **TI** The Geographic Distribution of Production Activity in the UK. **AU** Devereux, Michael P.; Griffith, Rachel; Simpson, Helen. **AA** Devereux: University of Warwick and Institute for Fiscal Studies. Griffith and Simpson: Institute for Fiscal Studies. **SR** Institute for Fiscal Studies Working Paper: W99/26; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. **PG** 36. **PR** 3 pounds. **JE** R12, R30. **KW** Geographic Concentration. Agglomeration. Economic Geography.

AB There has been much recent academic and policy interest in the issue of spatial clustering of economic activity, with most attention paid to the geographic concentration of high-tech industries. This paper describes patterns of geographic and industrial concentration in UK production industries at the 4-digit industry level. Several measures are used, including a new simple and intuitive measure of agglomeration. Conditioning on industrial concentration, many of the most geographically concentrated industries are not high-tech industries. We find that the most agglomerated industries are relatively low-tech and that they have lower entry and exit rates and higher survival rates as well as lower job creation and job destruction rates. Within industries we find that the most concentrated region has, on average, lower entry and exit rates but higher job creation rates and lower job destruction rates.

Dewatripont, Magnus

TI Agency Costs, Firm Behaviour and the Nature of Competition. **AU** Aghion, Philippe; Dewatripont, Magnus; Rey, Patrick.

Dewatripont, Mathias

TI Competition, Financial Discipline and Growth. **AU** Aghion, Philippe; Dewatripont, Mathias; Rey, Patrick.

Diaz-Gimenez, Javier

TI Earnings and Wealth Inequality and Income Taxation: Quantifying the Trade-Offs of Switching to a Proportional Income Tax in the U.S. **AU** Castaneda, Ana; Diaz-Gimenez, Javier; Rios-Rull, Jose-Victor.

Diermeier, Daniel

PD January 1999. **TI** An Empirical Investigation of Coalitional Bargaining Procedures. **AU** Diermeier, Daniel; Merlo, Antonio. **AA** Diermeier: Northwestern University. Merlo: New York University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1267; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 13. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C78, D71, D73, D78. **KW** Multi-Party Democracy. Government Formation. Formateur Selection. Seat Share.

AB Models of government formation processes in multi-party democracies are usually highly sensitive to the rules that govern the selection of formateurs. The formal literature has exclusively focused on two selection rules: selection proportional to seat share (Baron and Ferejohn 1989), and selection in order of seat share (Austen-Smith and Banks 1988). In this paper we use a new data set on government formation attempts in 12 multi-party democracies to empirically assess which selection rule most closely approximates the data. We find that while there is no empirical support for selection in order of seat share, proportional selection may serve as a good first approximation. However, our results also indicate that formateur selection exhibits a significant incumbency effect: *ceteris paribus*, the former prime minister's party is more likely to be selected to attempt the formation of the next government.

Dinmore, Trevor

TI Trade Prices and Volumes in East Asia Through The Crisis. **AU** Barth, Marvin; Dinmore, Trevor.

Disney, Richard

TI What Can We Learn About Pension Reform From Generational Accounts for the UK? **AU** Banks, James; Disney, Richard; Smith, Zoe.

PD May 1999. **TI** What Can We Learn From Retirement Expectations Data? **AU** Disney, Richard; Tanner, Sarah. **AA** Disney: University of Nottingham and Institute for Fiscal Studies. Tanner: Institute for Fiscal Studies. **SR** Institute for Fiscal Studies Working Paper: W99/17; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. **PG** 21. **PR** 3 pounds. **JE** D84, J22, J26. **KW** Retirement Behavior. Expectations. Elderly. Labor

Supply.

AB This paper analyzes retirement expectations and outcomes using the two waves of the UK Retirement Survey, undertaken in 1988-89 and 1994. We argue that responses to questions on expectations are not straightforward to interpret where individuals are asked to report point expectations. As in the studies for the US by Bernheim, the evidence here suggests that individuals tend to report their most likely retirement date. About half of the sample retired when they expected. Men tend to retire earlier than expected on average, but with only two waves of data we cannot reject that this is caused by a common shock over the period. Changes in health and marital status are linked to divergences between expectations and realizations. We extend the analysis to consider "don't know" responses, which we argue may be a rational response when individuals face greater uncertainty over their future retirement date. We provide evidence to support this hypothesis. Finally, we show that information on expectations can improve the accuracy of models of actual retirement behavior, most likely because they provide a suitable proxy for unobserved tastes for income and leisure.

PD July 1999. **TI** Individual Choice of Pension Arrangement as a Pension Reform Strategy. **AU** Disney, Richard; Palacios, Robert; Whitehouse, Edward. **AA** Disney: University of Nottingham and Institute for Fiscal Studies. Palacios: World Bank. Whitehouse: Director of Axia Economics. **SR** Institute for Fiscal Studies Working Paper: W99/18; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. **PG** 33. **PR** 3 pounds. **JE** G23, H53, H55, I38, J11. **KW** Pension Choice. Privatization. Public Finance. Social Security.

AB The paper examines social security (public pension) reforms in which the program is partially shifted from a public unfunded basis to a private, prefunded, basis. It focuses on reforms where individuals have a choice in switching from public funded to private unfunded programs (as in the "contracting out" scheme in the UK), or where some individuals are forced to join the funded scheme, or reforms which combine both these options. The welfare consequences of such reform strategies are analyzed both from an individual and a macroeconomic perspective. The paper also examines whether individuals respond "rationally" to the incentives inherent in such programs.

Diwan, Ishac

PD March 1999. **TI** Competition, Complementarity and Contagion in East Asia. **AU** Diwan, Ishac; Hoekman, Bernard. **AA** World Bank. **SR** Centre for Economic Policy Research Discussion Paper: 2112; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 25. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** F14, F15, F42. **KW** East Asia. Financial Crisis. Contagion. Regional Integration. Interdependence.

AB This paper explores to what extent the magnitude and speed of the contagion effects that materialized in East Asia in the second half of 1997 may have had "real" underpinnings, in the sense that the pattern of production, consumption and trade increased the vulnerability of East Asian countries to external shocks. Two major possibilities are investigated using available disaggregated data on intra- and extra- regional trade and direct investment: that Asian economies compete extensively with each other on world markets; or, to the contrary that Asia is

best regarded as an integrated economy with countries specializing in complementary production. The data provide greater support for the latter hypothesis.

Djankov, Simeon

PD April 1999. **TI** The Enterprise Isolation Programme in Romania. **AA** World Bank. **SR** Centre for Economic Policy Research Discussion Paper: 2131; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 28. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** G33, G34. **KW** Isolation Program. Financial Distress. Romania.

AB We provide comprehensive analysis of the isolation program for financially distressed firms in Romania. The results indicate that the isolation program did not deliver any tangible improvements in operational performance, nor did it enhance the process of privatization or liquidation of large loss-making enterprises. Firms included in the program faced softer budget constraints than their competitors outside the program, and few management changes in poorly performing firms took place. These findings question the feasibility of creating successful programs for enterprise restructuring under government auspices.

TI Ownership Concentration and Corporate Performance in the Czech Republic. **AU** Claessens, Stijn; Djankov, Simeon.

Dodzin, Sergei

PD October 1999. **TI** Trade and Industrialization in Developing Agricultural Economies. **AU** Dodzin, Sergei; Vamvakidis, Athanasios. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/145; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 29. **PR** not available. **JE** F13, F15, F41, O13, O14. **KW** Economic Integration. Industrialization. International Trade. Development. Agriculture.

AB This paper examines the impact of international trade on industrialization in developing agricultural economies. The findings show that developing agricultural economies that increased their openness during 1970-95 experienced an increase in their share of industrial production at the expense of agricultural production. This is in contrast to what many policymakers in these economies have often argued when trying to promote industrialization by restricting trade. The paper presents an infant industry model with learning effects from imports of manufacturing products that is consistent with the supporting empirical results.

Dohse, Dirk

TI EMU Challenges European Labor Markets. **AU** Soltwedel, Rudiger; Dohse, Dirk; Krieger-Boden, Christiane.

Domenech, Rafael

TI The Redistributive Effects of the EU Budget: An Analysis and Some Reflections on the Agenda 2000 Negotiations. **AU** de la Fuente, Angel; Domenech, Rafael.

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.

Donnenfeld, Shabtai

PD May 1998. **TI** Regional Blocs and Foreign Direct Investment. **AA** York University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 30/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 25. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** F02, F12, F21. **KW** Regional Blocs. Direct Investment. Trade Diversion.

AB This paper examines the impact of the emergence of regional blocs (customs unions) on the patterns of inter-bloc and intra-bloc trade when firms have the option to engage in direct investment (FDI). The consequences of bloc formation for exogenously given external tariffs are examined. When two regional blocs co-exist and firms have the option to engage in FDI, all inter-bloc trade may cease -- complete trade diversion that is replaced by inter-bloc FDI -- investment creation. In such an event the volume of world trade declines but this is more than offset by the increase in world output due to direct investment. Hence, total world output is the same as under free trade. The optimal tariff to be levied on imports from nonmember countries is examined. The equilibrium tariffs resulting from a non-cooperative game played by the trading blocs is restricted by the option to circumvent the tariff via two-way direct investment. Small set-up costs associated with FDI lead to low tariffs and the outcome is almost free trade. Moderate set-up cost restrains the regional blocs from mutually harming one another through an escalation of the tariff war. Finally, the formation of two regional blocs enhances the welfare of all countries.

Dooley, Michael P.

PD November 1998. **TI** A Model of Crises in Emerging Markets. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 630; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 24. **PR** no charge. **JE** E21, E22, F36, O16. **KW** Currency Crisis. Emerging Markets. Speculative Attacks. Capital Shocks.

AB This paper presents a "first generation" model of speculative attacks on emerging markets. Credit constrained governments accumulate liquid assets in order to self-insure against shocks to national consumption. Governments also insure poorly regulated domestic financial markets. Given this policy regime, a variety of internal and external shocks generate capital inflows followed by anticipated speculative attacks. The model suggests that a common shock generated capital inflows to emerging markets in Asia and Latin America after 1989. Country specific factors determined the timing of speculative attacks. Economic reform programs may also have generated capital inflow/crisis sequences.

Doraszelski, Ulrich

PD September 1999. **TI** Deliberations with Double-Sided Information. **AU** Doraszelski, Ulrich; Gerardi, Dino; Squintani, Francesco. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion

Paper: 1276; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 27. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C78, D72, D82. **KW** Signals. Private Information. Communication. Ex-Ante Utility.

AB Two players need to agree to adopt a certain option, otherwise the status quo is maintained. The correct choice depends on an unknown state variable. While both players would like the correct choice to be made, their relative concern with the two types of mistakes may differ and is private information. Each player observes a private signal that is correlated with the state variable. Before reaching the final decision through simultaneous vote, players communicate by expressing a personal non-binding opinion. We provide a succinct characterization of the equilibria. Although truthful communication may take place in equilibrium, the players' private information about the state of the world is not fully revealed. In fact, the sole role of communication is to provide a means for each player to decide how to vote when her private signal conflicts with her relative concern. Our calculations show that communication increases ex-ante utility. When only one player may speak, we show that their ex-ante utility is independent of who is selected as a speaker even if the quality of information radically differs among players.

Dosi, Cesare

PD January 1999. **TI** Is Ecolabelling a Reliable Environmental Policy Measure? **AU** Dosi, Cesare; Moretto, Michele. **AA** Universita di Padova. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 09/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 22. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** O38, Q28. **KW** Ecolabel. Green Products. Environmental Policy. Environmental Innovation.

AB Ecolabel award schemes have become increasingly popular. Their rationale is to enable (concerned) consumers to identify "green" products. By so doing, ecolabelling should stimulate environmental innovation, and induce firms to reduce the supply of conventional (polluting) products. Our analysis however points out that the two phenomena are not necessarily correlated. Through a dynamic model of investment decisions, the paper outlines the situations under which ecolabelling could induce perverse effects (increased investment in conventional technologies) and examines whether setting quantitative restrictions on the issuing of labels could constitute an antidote.

Doyle, Brian M.

PD January 2000. **TI** "Here, Dollars, Dollars..." -- Estimating Currency Demand and Worldwide Currency Substitution. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 657; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 28. **PR** no charge. **JE** E41, F30, F41, K42. **KW** Currency Substitution. Currency Demand. International Dollar Use. Underground Economy. Money Demand.

AB I obtain very different percentage estimates of the

American, German and Swiss currency that are held outside of these nations than previously done. My estimates are based on currency demand equations implied by cointegrating vectors for Canada, Holland, and Austria. In 1996, the United States estimate is much lower at 30% abroad and the German much higher at 69%. The U.S. estimate falls slowly over the 1960s and was as low as 5% in the early to mid 1970s, only to rise again in the late 70s-early 80s and during the 90s. "Worldwide currency substitution" has roughly tripled in the past decade in constant dollar terms.

Dubey, Pradeep

PD December 1999. TI Default in a General Equilibrium Model with Incomplete Markets. AU Dubey, Pradeep; Geanakoplos, John; Shubik, Martin. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1247; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. PG 68. PR no charge up to 3 papers; \$3.00 U.S.; 4.00 International. JE D52, G14, G22, G24, G33. KW Default. Adverse Selection. Moral Hazard. Refinement.

AB This paper extends the standard general equilibrium model with incomplete markets (GEI) to allow for default. The equilibrating variables include aggregate default levels and prices of assets and commodities. Default can be strategic or due to ill-fortune. Each asset is defined by its promises, the penalties for default, and the limitations on its sale. This model represents, for example, securitized mortgage and credit card markets. It is proven that equilibrium exists under conditions similar to those necessary for the existence of GEI equilibrium. Default is thus reasonably modeled as an equilibrium phenomenon. Moreover, more lenient penalties which encourage default may be Pareto improving because they allow better risk spreading. Equilibrium is defined to include a condition on expected deliveries for untraded assets, similar to trembling hand refinements. Using this condition, the authors argue that the possibility of default is important in explaining which assets are traded in equilibrium. This general equilibrium model encompasses a broad range of moral hazard, adverse selection, and signaling phenomena. The existence theorem presented here shows that equilibrium must exist in the presence of adverse selection. The problem is the inefficiency of the resulting equilibrium, not its nonexistence.

Dunn, Wendy E.

TI Unemployment Expectations, Jumping (S,s) Triggers, and Household Balance Sheets. AU Carroll, Christopher D.; Dunn, Wendy E.

Durbin, Erik

PD July 1999. TI Uncovering Country Risk in Emerging Market Bond Prices. AU Durbin, Erik; Ng, David Tat-Chee. AA Durbin: Olin School of Business and Columbia University. Ng: Columbia University. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 639; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 26. PR no charge. JE D81, G15, G21, O16. KW Country Risk. Credit Rating. Sovereign Ceiling. Emerging Markets. AB We investigate the role of "country risk" in determining the default risk of firms in emerging markets. In particular, we

study the relationship between the secondary market spreads (over hard-currency government bond yields) of bonds issued by emerging market firms and bonds issued by their home governments over the past 3 1/2 years. Our results indicate that market participants do not strictly apply the "sovereign ceiling," under which no firm is more creditworthy than its government. We do find that the spreads of emerging market corporate and government bonds over hard-currency government bonds are highly correlated. The correlation is higher for some industries than for others, and we find no evidence that banks face greater country risk.

Dustmann, Christian

TI Worker Displacement in France and Germany. AU Bender, Stefan; Dustmann, Christian; Margolis, David N.; Meghir, Costas.

PD August 1999. TI Wages and the Demand for Health -- A Life Cycle Analysis. AU Dustmann, Christian; Windmeijer, Frank. AA Dustmann: University College London and Institute for Fiscal Studies. Windmeijer: Institute for Fiscal Studies. SR Institute for Fiscal Studies Working Paper: W99/20; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. PG 25. PR 3 pounds. JE C23, D91, I11, I12. KW Demand for Health. Life Cycle Models. Panel Data. Health. Intertemporal Choice.

AB This paper presents a life cycle model for the demand for health, and derives empirical specifications that distinguish between permanent and transitory wage responses. The empirical specifications for the demand for health and health investment are derived from a continuous time intertemporal model with decreasing returns to scale in the health production function. This is the same kind of model as the Ehrlich and Chuma (1990) version of the Grossman (1972) model. These demand functions are Frisch demand functions and relate current period demands to current period variables and to the relative marginal utility of health to wealth. They provide a natural way to distinguish between transitory and permanent demand responses. Using data from the German Socio Economic Panel, 1984-1995, the authors estimate demand for health capital equations, where they use as a health capital approximation the self-reported state of health of individuals. The authors estimate demand for health investment equations. The estimation results support a dynamic model structure which distinguishes between permanent and temporary wage responses. The authors obtain negative transitory wage effects, and positive permanent effects.

Earle, John S.

PD March 1999. TI Post-Privatisation Ownership Structure and Productivity in Russian Industrial Enterprises. AA Stockholm School of Economics, Central European University. SR Fondazione Eni Enrico Mattei Note di Lavoro: 19/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 40. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE G03, G32, L33. KW Ownership Structure. Productivity. Russia. Industrial Enterprises.

AB This paper investigates the impact of ownership structure on the productivity performance of Russian industrial enterprises. The analysis compares the effects of several types of new private owners -- insiders (managers and other employees) and outsiders (individual and institutional

investors) -- with continued ownership by the state, and it takes into account possible selection effects in the privatization process that may bias the observed ownership-performance relationship. The results provide some evidence that ownership change in Russia was already having some positive effects, shortly after the conclusion of the voucher privatization process, but that those effects were strongest in companies with concentrated outside owners.

Edison, Hali J.

PD March 2000. **TI** Capital Controls During Financial Crises: The Case of Malaysia and Thailand. **AU** Edison, Hali J.; Reinhart, Carmen M. **AA** Edison: Board of Governors of the Federal Reserve System. Reinhart: National Bureau of Economic Research and University of Maryland. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 662; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 36. **PR** no charge. **JE** F13, F21, F31, F32, F41. **KW** Capital Controls. Capital Flows. Financial Crises. Currency Crises. Cross-Border Volatility.

AB This study examines the impact capital controls had in Malaysia (1998-1999) and Thailand (1997). We aim to assess the extent to which the capital controls were effective in delivering the outcomes that motivated their imposition. We conclude that in Thailand the controls did not deliver much of what was intended -- although, one does not observe the counterfactual. By contrast, in the case of Malaysia the controls did align closely with the priors of what controls are intended to achieve: greater interest rate and exchange rate stability and more policy autonomy.

PD April 2000. **TI** Monetary Policy Independence in the ERM: Was There Any? **AU** Edison, Hali J.; MacDonald, Ronald. **AA** Edison: Board of Governors of the Federal Reserve System. MacDonald: University of Strathclyde. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 665; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 34. **PR** no charge. **JE** E42, E58, F31, F32, F33. **KW** Interest Rate Linkages. Monetary Independence. Exchange Rates. Monetary Policy. International Finance.

AB Recently proposals for introducing greater exchange rate fixity into the behavior of key exchange rates have become fashionable. One proposal, for example, suggests that a target zone arrangement for the dollar, mark and yen would represent a desirable reform of the international monetary system. The question we seek to address in this paper is how much monetary independence is likely to be conferred on a country participating in such an arrangement. Recent research for the Classical gold standard has suggested that even with a rigidly fixed exchange rate system there is still some scope for monetary independence. Here we examine the extent of monetary independence conferred by a target zone using data from the recent ERM experience. Amongst our findings is the result that countries which had a credible commitment to the target zone had more independence in the operation of their monetary policy than countries with a lesser commitment. It turns out that the monetary independence for a credible participant in a target zone arrangement is longer than that

conferred by participation in a regime of rigidly fixed exchange rates, such as the Classical gold standard.

Edwards, Franklin R.

PD December 1998. **TI** Managed Commodity Funds. **AU** Edwards, Franklin R.; Liew, Jimmy. **AA** Edwards: Columbia University. Liew: Morgan Stanley Dean Whitter. **SR** Columbia PaineWebber Working Paper Series in Money, Economics and Finance: PW/98/06; Graduate School of Business, 6N Uris Hall, Columbia University, 3022 Broadway, New York, NY 10027. Website: www.columbia.edu/dlc/wp/. **PG** 22. **PR** \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). **JE** G11, G13. **KW** Managed Commodity Funds. Portfolio Choice. Survivorship Bias. Commodity Indexes.

AB This paper examines the performance of managed commodity funds during the period 1982 through 1996. It encompasses sixteen years of data on managed commodity funds and includes nearly two hundred thousand monthly return observations. Unlike most prior studies, the data used in this study include comprehensive performance information on non-surviving commodity funds, which permits a more thorough analysis of the effects of survivorship bias on reported fund returns. In addition, the study provides a thorough analysis of the "self-selection" bias in reported returns by being able to make use of unique data on first-reporting dates, and shows how prior procedures for treating the self-selection bias may result in a downward bias in reported returns. The paper also provides a comprehensive analysis of the portfolio allocations that would be given to the alternative commodity fund investments in diversified stock and bond portfolios. A unique aspect of this analysis is the comparison of managed commodity funds with both passive and "momentum" commodity indexes, which shows that those indexes are not a substitute for an investment in managed commodity funds.

Eftekhari, Babak

PD June 1997. **TI** The Markov Regime Switching Model as a Trading Tool. **AA** University of Cambridge. **SR** University of Cambridge Discussion Papers in Accounting and Finance: AF34; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: www.econ.cam.ac.uk/dae. **PG** 20. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** G11, G15, O16. **KW** Markov Regime Switching. Trading Strategies. Specification Tests. Portfolio Choice.

AB Using two specification tests, the returns from 17 emerging markets and the S&P 500 are tested for Markov regime switching. A trading strategy is formed that invests in the market only when the Markov switching model estimate for probability of a positive returns state in the next period is above a certain trigger level. The trading rule outperforms the index in the markets that show significant regime switching from the specification tests.

Eichenbaum, Martin

TI Hedging and Financial Fragility in Fixed Exchange Rate Regimes. **AU** Burnside, Craig; Eichenbaum, Martin; Rebelo, Sergio.

Eijffinger, Sylvester

PD June 1999. **TI** A Theory of Interest Rate Stepping:

Inflation Targeting in a Dynamic Menu Cost Model. AU Eijffinger, Sylvester; Schaling, Eric; Verhagen, Willem. AA Eijffinger and Verhagen: CentER and Tilburg University. Schaling: RAU. SR Centre for Economic Policy Research Discussion Paper: 2168; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 56. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE E52, E58. KW Inflation Targeting. Dynamic Menu Costs. Uncertainty.

AB A stylized fact of monetary policy making is that central banks do not immediately respond to new information but rather seem to prefer to wait until sufficient "evidence" to warrant a change has accumulated. However, theoretical models of inflation targeting imply that an optimizing central bank should continuously respond to shocks. This paper attempts to explain this stylized fact by introducing a small menu cost, which is incurred every time the central bank changes the interest rate. It is shown that this produces a relatively large range of inaction because this cost will induce the central bank to take the option value of the status quo into account. Next, the paper analyses the effect of the interest rate sensitivity of aggregate demand, the slope of the Lucas supply function and the variance of demand shocks on the size of the interest rate step and the expected length of the time period till the next interest rate step. Finally, we analyze the effect of menu costs on inflationary expectations. In this respect we find that the economy will suffer from an inflationary bias if the cost of raising the interest rate exceeds the cost of lowering it.

Eisenberg, Theodore

PD July 1999. TI The Government As Litigant: Further Tests of the Case Selection Model. AU Eisenberg, Theodore; Farber, Henry S. AA Eisenberg: Cornell University. Farber: Princeton University. SR Princeton Industrial Relations Section Working Paper: 418; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. PG 30. PR not available. JE K13, K19, K41. KW Plaintiff's Decision. Law Suits. Federal Government. Private Parties.

AB We develop a model of the plaintiff's decision to file a law suit that has implications for how differences between the federal government and private litigants and litigation translate into differences in trial rates and plaintiff win rates at trial. Our case selection model generates a set of predictions for relative trial rates and plaintiff win rates depending on the type of case and whether the government is defendant or plaintiff. In order to test the model, we use data on 350,000 cases filed in federal district court between 1979 and 1997 in areas of personal injury and job discrimination where the federal government and private parties work under roughly similar legal rules. We find broad support for the predictions of the model.

Ely, David P.

PD March 1999. TI The Determinants of the Wealth Effects of Banks' Expanded Securities Powers. AU Ely, David P.; Robinson, Kenneth J. AA Ely: San Diego State University. Robinson: Federal Reserve Bank of Dallas. SR Federal Reserve Bank of Dallas Financial Industry Studies Working Paper: 01/99; Federal Reserve Bank of Dallas, Dallas, Texas 75201. Website: www.dallasfed.org. PG 23. PR no charge. JE G21, G24, G34. KW Glass-Steagall. Section 20 Subsidiaries. Wealth Effects. Event Study. Banking.

AB After several unsuccessful attempts by Congress to repeal Glass-Steagall restrictions on banks, the Federal Reserve more than doubled the revenue that commercial banking organizations' securities subsidiaries may earn from certain securities activities. The wealth effects associated with this event for a sample of publicly traded banking organizations are examined. We find evidence that indicates the revenue limit resulted in a less-than-optimal mix of activities for securities subsidiaries. However, subsequent merger activity that could have been generated by the revenue increase was not viewed favorably by investors.

Ely, Jeffrey C.

PD June 1999. TI A Robust Folk Theorem for the Prisoner's Dilemma. AU Ely, Jeffrey C.; Valimaki, Juuso. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1264; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 20. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE C72, D82. KW Folk Theorem. Prisoner's Dilemma. Private Monitoring. Sequential Equilibrium.

AB We prove the folk theorem for the Prisoner's dilemma using strategies that are robust to private monitoring. From this follows a limit folk theorem: when players are patient and monitoring is sufficiently accurate, (but private and possibly independent) any feasible individually rational payoff can be obtained in sequential equilibrium. The strategies used can be implemented by finite (randomizing) automata.

Engel, Charles

PD May 2000. TI Deviations from Purchasing Power Parity: Causes and Welfare Costs. AU Engel, Charles; Rogers, John H. AA Engel: University of Washington and National Bureau of Economic Research. Rogers: Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 666; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 27.

PR no charge. JE E31, F15, F31, F36. KW Exchange Rates. Borders. Economic Integration. Purchasing Power Parity. AB We explore deviations from short-run purchasing power parity across European cities, attempting to move beyond a "first-generation" of papers that document very large border effects. We document two very distinct types of border effects embedded in relative prices. The first is a "real barriers effect", caused by various barriers to market integration. The second is a sticky-consumer-price cum volatile exchange-rate effect. Both are shown to be important empirically, the second type especially so. We argue that the two effects are very different from each other. For the first type of effect, it is clear that border effects imply deadweight welfare losses. We argue that while the second type of border effect could be eliminated with fixed exchange rates, welfare is not necessarily increased.

PD September 1998. TI Relative Price Volatility: What Role Does the Border Play? AU Engel, Charles; Rogers, John H. AA Engel: University of Washington. Rogers:

International Finance Division of the Federal Reserve Board. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 623; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 19. PR no charge. JE E31, F13, F15, F41. KW Exchange Rates. Segmentation. Trade Barriers. Price Volatility.

AB We re-examine the effect of the U.S./Canadian border on integration of markets. The paper updates work from our earlier paper, Engel and Rogers (1996). We consider alternative measures of deviations from the law of one price. We pay special attention to the effect of the U.S.- Canada free trade agreement on market integration. Our conclusions are unchanged: markets in the U.S. and Canada are more segmented than can be explained by the physical distance between the locations. Formal trade barriers do not appear to explain much of that segmentation.

PD August 1999. TI Violating The Law of One Price: Should We Make a Federal Case Out of It? AU Engel, Charles; Rogers, John H. AA Engel: University of Washington and National Bureau of Economic Research. Rogers: Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 644; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 13. PR no charge. JE D40, E31, F15. KW Price Variability. Sticky Prices. Nominal Prices. Tradability.

AB We use new disaggregated data on consumer prices to determine why there is variability in prices of similar goods across U.S. cities. We address questions similar to those that have arisen in the international context: in this variability purely a result of market segmentation or do sticky nominal prices play a role? We also examine how the degree of tradability of a good influences price variability. Surprisingly, we find that variability is larger for traded-goods. We attribute this finding to greater price stickiness for non-traded goods. Distance between cities accounts for a significant amount of the variations in prices between pairs of cities. However, nominal price stickiness plays an even more significant role.

English, William B.

TI Evaluating "Correlation Breakdowns" During Periods of Market Volatility. AU Loretan, Mico; English, William B.

Engstrom, Stefan

TI Performance and Characteristics of Swedish Mutual Funds 1993-97. AU Soderlind, Paul; Dahlquist, Magnus; Engstrom, Stefan.

Enoch, Charles

PD October 1999. TI Recapitalizing Banks with Public Funds: Selected Issues. AU Enoch, Charles; Garcia, Gillian; Sundararajan, V. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/99/139; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 40. PR not available. JE G10, G21, G32, H81, O16. KW Asset Management Companies. Asset Valuation. Banking. Tier 1 Capital. Tier 2 Capital.

AB Recapitalizing banks in a systematic crisis is a complex medium-term process that requires significant government intervention and careful management at both the strategic and individual bank levels. This paper highlights the range of operational and strategic issues to be addressed and the institutional arrangements needed to foster an effective banking system restructuring and maximize the returns on government investment. The approaches to recapitalization have varied, with countries choosing different mixes of direct capital injections and asset purchase and rehabilitation. The choice of an appropriate mix is critical, to minimize the expected present value of government outlays net of recoveries.

Erbas, S. Nuri

PD October 1999. TI Can A Shorter Workweek Induce Higher Employment? Mandatory Reductions in the Workweek and Employment Subsidies. AU Erbas, S. Nuri; Sayers, Chera L. AA Erbas: International Monetary Fund. Sayers: American University. SR International Monetary Fund Working Paper: WP/99/144; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 20. PR not available. JE E24, J22, J23, J31, J38. KW Workweek. Overtime Work. Labor Demand. Labor Supply. Structural Unemployment.

AB A reduction in the legal workweek may induce a degree of downward wage flexibility, while an employment subsidy to firms accommodates downward wage rigidity. It may be possible, therefore, to increase employment with a policy that combines a reduction in the workweek with an employment subsidy. In general, however, the long-run employment outcome is ambiguous, and a decline in output cannot be ruled out. More direct policy measures whose impact can be assessed with greater certainty -- in particular, removing structural rigidities in the labor market -- should be given priority to decrease long-term unemployment.

Erceg, Christopher J.

PD October 1998. TI Tradeoffs Between Inflation and Output-Gap Variances in an Optimizing-Agent Model. AU Erceg, Christopher J.; Henderson, Dale W.; Levin, Andrew T. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 627; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 26. PR no charge. JE E23, E24, E31, E52. KW Inflation Targeting. Output-Gap Volatility. Sticky Wages. Staggered Contracts.

AB We demonstrate the existence of a monetary policy tradeoff between price-inflation variability and output-gap variability is an optimizing-agent model with staggered nominal wage and price contracts. This variance tradeoff is absent only in the special case in which prices are sticky and wages are perfectly flexible. When the model is calibrated to exhibit an empirically reasonable degree of nominal wage inertia, strict inflation targeting induces substantial output-gap volatility.

PD July 1999. TI Optimal Monetary Policy With Staggered Wage and Price Contracts. AU Erceg, Christopher J.; Henderson, Dale W.; Levin, Andrew T. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International

Finance Discussion Paper: 640; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 30. PR no charge. JE E24, E31, E52, E61. KW Monetary Policy. Inflation Targeting. Sticky Wages. Staggered Contracts. AB We formulate an optimizing-agent model in which both labor and product markets exhibit monopolistic competition and staggered nominal contracts. The unconditional expectation of average household utility can be expressed in terms of the unconditional variances of the output gap, price inflation, and wage inflation. Monetary policy cannot replicate the Pareto-optimal equilibrium that would occur under completely flexible wages and prices; that is, the model exhibits a tradeoff between stabilizing the output gap, price inflation, and wage inflation. The Pareto optimum is only attainable if either wages or prices are completely flexible. For reasonable calibrations of the model, we characterize the optimal policy rule. Furthermore, strict price inflation targeting is clearly suboptimal, whereas rules that also respond to either the output gap or wage inflation are nearly optimal.

Ericsson, Neil R.

TI Constructive Data Mining: Modeling Consumers' Expenditure in Venezuela. AU Campos, Julia; Ericsson, Neil R.

PD October 1998. TI A Framework for Economic Forecasting. AU Ericsson, Neil R.; Marquez, Jaime. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 626; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 42. PR no charge. JE C15, C52, C53. KW Mean Square. Forecasting Error. Nonlinearity Bias. Trade Balance. AB This paper proposes a tripartite framework of design, evaluation, and post-evaluation analysis for generating and interpreting economic forecasts. This framework's value is illustrated by re-examining mean square forecast errors from dynamic models and nonlinearity biases from empirical forecasts of U.S. external trade. Previous studies have examined properties such as nonlinearity bias and the possible non-monotonicity and nonexistence of mean square forecast errors in isolation from other aspects of the forecasting process, resulting in inefficient forecasting techniques and seemingly puzzling phenomena. The framework developed reveals how each such property follows from systematically integrating all aspects of the forecasting process.

PD December 1999. TI Distributions of Error Correction Tests for Cointegration. AU Ericsson, Neil R.; MacKinnon, James G. AA Ericsson: Board of Governors of the Federal Reserve System. MacKinnon: Queen's University. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 655; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 46. PR no charge. JE C15, C22, C52. KW Critical values. Error Correction. Monte Carlo. Response Surfaces. Cointegration. AB This paper provides cumulative distribution functions,

densities, and finite sample critical values for the single-equation error correction statistic for testing cointegration. Graphs and response surfaces summarize extensive Monte Carlo simulations and highlight simple dependencies of the statistic's quantiles on the number of variables in the error correction model, the choice of deterministic components, and the estimation sample size. The response surfaces provide a convenient way for calculating finite sample critical values at standard levels; and a computer program, freely available over the Internet, can be used to calculate both critical values and p-values. Three empirical examples illustrate these tools.

Escribano, Alvaro

PD October 1997. TI Improved Testing and Specification of Smooth Transition Regression Models. AU Escribano, Alvaro; Jorda, Oscar. AA Escribano: Universidad Carlos III de Madrid. Jorda: University of California, Davis. SR University of California, Davis, Department of Economics Working Paper: 97/26; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website:

polar.ucdavis.edu/econ/workingpapers/workingpapers.html.

PG 23. PR \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. JE C12, C22, C32, C51, C52. KW Model Specification. Hypothesis Testing. Time Series. Monte Carlo. Unemployment.

AB This paper extends previous work in Escribano and Jorda (1997) and introduces new LM specification procedures to choose between Logistic and Exponential Smooth Transition Regression (STR) Models. These procedures are simpler, consistent and more powerful than those previously available in the literature. An analysis of the properties of Taylor approximations around the transition function of STR models permits one to understand why these procedures work better and it suggests ways to improve tests of the null hypothesis of linearity versus the alternative of STR-type nonlinearity. Monte-Carlo experiments illustrate the performance of the different tests introduced. The new procedures are then implemented on a study of the dynamics of the U.S. unemployment rate.

Estache, Antonio

PD April 1999. TI The Theory of Access Pricing: An Overview for Infrastructure Regulators. AU Estache, Antonio; Valletti, Tommaso M. AA Estache: World Bank. Valletti: London School of Economics. SR Centre for Economic Policy Research Discussion Paper: 2133; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 52. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE D04, L01, L09. KW Access Pricing. Regulation.

AB The paper provides policymakers and regulators with an overview of the more relevant theoretical issues related to the pricing of access to ensure that the political debate around practical concerns is solidly grounded. The paper discusses in detail the importance of access pricing in the context of: 1) a liberalized and vertically separated industry, 2) liberalized but vertically integrated industries, 3) unregulated access (private negotiations).

Estrin, Saul

TI Output and Exports in Transition Economies: A Labour Management Model. **AU** Bennett, John; Hare, Paul; Estrin, Saul.

Ethier, J. Wilfred

PD May 1998. **TI** Regionalism in a Multilateral World. **AA** University of Pennsylvania. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 31/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 35. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** F13, F15, F23. **KW** Direct Investment. Regionalism. Multilateralism. Policy Reform.

AB Recent regional initiatives have been analyzed from a Vinerian perspective of trade creation and trade diversion. This is true both of policy-oriented economists, who tend to be critical of the initiatives, and of theorists, who have added dynamic and game-theoretic elements to the Vinerian structure. This paper describes the stylized facts of much recent regional integration, and develops an alternative model. The analysis suggests that regional integration, far from threatening multilateral liberalism, may in fact be a direct consequence of the success of past multilateralism and an added guarantee for its survival.

Falcetti, Elisabetta

TI Determinants of Argentina's External Trade. **AU** Catao, Luis; Falcetti, Elisabetta.

Fantini, Marcella

TI Regulation and Privatisation: The Case of Electricity. **AU** Bortolotti, Bernardo; Fantini, Marcella; Siniscalco, Domenico.

Farber, Henry S.

PD June 1998. **TI** Mobility and Stability: The Dynamics of Job Change in Labor Markets. **AA** Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 400; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. **PG** 66. **PR** \$2.00. **JE** J41, J63. **KW** Worker Mobility. Employment Relationships. Firm-Specific Capital. Worker Heterogeneity.

AB Three central facts describe inter-firm worker mobility in modern labor markets: 1) long-term employment relationships are common, 2) most new jobs end early, and 3) the probability of a job ending declines with tenure. The author investigates whether tests of the specific capital model are successful in distinguishing it from a model based on heterogeneity. Analyses which use longitudinal data with detailed mobility histories of workers suggest that both heterogeneity and specific capital (implying true duration dependence in the hazard of job ending) appear to be significant factors in accounting for mobility patterns. A second approach uses estimation of the return to tenure in earnings functions. This is found to have several weaknesses including endogeneity of tenure and the lack of tight theoretical links between tenure and accumulated specific capital and between productivity and wages. A third approach uses data on the earnings experience of displaced workers. Several tests are derived based on these data, but there is generally an alternative heterogeneity-based

explanation that makes interpretation difficult. Nonetheless, firms appear willing to pay to encourage long-term employment relationships, and they may do so because it is efficient to invest in their workforce.

PD July 1998. **TI** Recent Trends in Employer-Sponsored Health Insurance Coverage: Are Bad Jobs Getting Worse? **AU** Farber, Henry S.; Levy, Helen. **AA** Farber: Princeton University. Levy: University of California at Berkeley. **SR** Princeton Industrial Relations Section Working Paper: 402; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. **PG** 46. **PR** \$1.50. **JE** I11, J32. **KW** Employer-Sponsored Insurance. Health Insurance. Part-Time Jobs. Tenure.

AB This paper examines whether the decline in the availability of employer-provided health insurance is concentrated in "peripheral" jobs. The paper examines two dimensions on which jobs may be considered peripheral: if they are new (tenure less than one year) or part-time. The paper considers three outcomes whose product is the health insurance coverage rate: 1) the fraction of workers who are in firms that offer health insurance to at least some workers (the offer rate); 2) the fraction of workers who are eligible for health insurance, conditional on being in a firm where it is offered (the eligibility rate); and 3) the fraction of workers who enroll in health insurance when they are eligible for it (the takeup rate). Declines in own-employer insurance coverage over the 1988-1997 period are found to be driven primarily by declines in takeup for core workers and declines in eligibility for peripheral workers. The findings are consistent with the view that employers continue to make health insurance available to their core long-term, full-time employees but are restricting access to health insurance by their peripheral short-term and part-time employees.

PD January 1999. **TI** Changing Stock Market Response to Announcements of Job Loss: Evidence from 1970-1997. **AU** Farber, Henry S.; Hallock, Kevin F. **AA** Farber: Princeton University. Hallock: University of Illinois. **SR** Princeton Industrial Relations Section Working Paper: 414; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. **PG** 7. **PR** not available. **JE** G12, J64, J65, L23. **KW** Reductions in Force. Stock Prices. Efficiency. Job Loss.

AB We report preliminary results of an analysis of the reaction of stock prices to announcement of reductions in force (RIFs) using a large sample of such announcements during the 1970-1997 period collected from the Wall Street Journal index. We find some evidence that the stock market reaction to the announcement of RIFs has become less negative over this period. While a complete understanding of the underlying causes of this finding awaits further research, one possible interpretation is that, over the last three decades, RIFs designed to improve efficiency have become more common relative to RIFs designed to cope with reductions in product demand.

PD June 1999. **TI** Have Employment Reductions Become Good News for Shareholders? The Effect of Job Loss Announcements on Stock Prices, 1970-97. **AU** Farber, Henry S.; Hallock, Kevin F. **AA** Farber: Princeton University. Hallock: University of Illinois. **SR** Princeton Industrial Relations Section Working Paper: 417; Industrial Relations Section, Department of Economics, Princeton University,

Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. PG 21. PR not available. JE G12, G14, J63, J64. KW Layoffs. Job Loss. Event Studies. Stock Prices.

AB We study the reaction of stock prices to announcements of reductions in force (RIFs) using a sample of nearly 3878 such announcements in 1176 large firms during the 1970-97 period collected from the Wall Street Journal Index. We note that, although there has been a dramatic secular increase in news stories related to job loss, the total number of actual announcements for the firms in our sample follows the business cycle quite closely. We then examine changes over time in standard summary statistics (means, medians, fraction negative) of the distribution of stock market reactions as well as changes over time in estimates of this distribution. We find clear evidence that the distribution of stock market reactions has shifted to the right (became less negative) over time. One possible explanation for this change is that, over the last three decades, RIFs designed to improve efficiency have become more common relative to RIFs designed to cope with reductions in product demand. We find that, although this explanation shows some promise, most of the decline in the negative average stock price reaction remains unexplained.

PD June 1999. **TI** Union Success in Representation Elections: Why Does Unit Size Matter? **AA** Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 420; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. PG 42. PR \$1.50. JE D72, J51, J59. KW Empirical Model. Union Elections. Election Outcomes. Optimizing Model.

AB This paper establishes four facts regarding the pattern of the National Labor Relations Board (NLRB) supervised representation election activity over the past 45 years: 1) the quantity of election activity has fallen sharply and discontinuously since the mid-70's after increasing between the mid-1950's and the mid-1970's; 2) union success in elections held has declined less sharply, though continuously, over the entire period; 3) it has always been the case that unions have been less likely to win NLRB-supervised representation elections in large units than in small units; and 4) the size-gap in union success-rates has widened substantially over the last forty years. The first three facts are accounted for by a simple optimizing model of the union decision to hold a representation election. Using data on NLRB elections over the 1952-98 time period, I conclude that the fourth fact is consistent with a purely statistical explanation based on the law of large numbers.

TI The Government As Litigant: Further Tests of the Case Selection Model. **AU** Eisenberg, Theodore; Farber, Henry S.

Farzin, Y. H.

PD November 1998. **TI** Pollution Abatement Investment When Environmental Regulation is Uncertain. **AU** Farzin, Y. H.; Kort, P. M. **AA** Farzin: University of California, Davis. Kort: Tilburg University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 75/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 30. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE D81, H32, Q28. KW Abatement Investment. Pollution Tax. Uncertainty.

AB In a dynamic model of a risk-neutral competitive firm which can lower its pollution emissions per unit of output by building up abatement capital stock, we examine the effect of a higher pollution tax rate on abatement investment both under full certainty and when the timing or the size of the tax increase is uncertain. We show that a higher pollution tax encourages abatement investment if it does not exceed a certain threshold rate -- a "Laffer-curve" phenomenon. When the size of the tax increase is uncertain, at the time of the tax increase the abatement investment path may shift upward or downward depending on whether the actual tax rate is higher or lower than the firm's expected rate. But, when the time of the tax increase is uncertain, the abatement investment path always jumps upward.

PD December 1998. **TI** An Economic Model of Oil Reserves Additions: Application to U.S. Data. **AA** University of California, Davis. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 96/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 26. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE D02, H03, Q31, Q41. KW Reserves Additions. Price Effect. Depletion. Technological Progress. Oil Dependence.

AB Departing from Hotelling's assumption of fixed and known reserves, in this paper I develop an economic model of additions to proven reserves that explicitly incorporates the effects of expected resource price, cumulative reserves development, and technological progress on reserves additions. The model treats additions to proven oil reserves as output of a production process in which drilling wells are a primary input to transform some of the oil-in-place into the economic category of proven reserves. Application of the model to U.S. data for the 1950-1995 period provides strong statistical support for the existence of all the three salient effects.

PD May 1999. **TI** Nonpoint Source Pollution Control Under Incomplete and Costly Information. **AU** Farzin, Y. H.; Kaplan, D. J. **AA** University of California, Davis. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 32/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 30. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE D61, D81, D83, Q28. KW Nonpoint Source Pollution. Uncertainty. Costly Information. Constrained Pollution Control Budget.

AB This paper analyses the efficient management of nonpoint source pollution (NPS) under limited pollution control budget and incomplete information inherent in NPS pollution. By incorporating information acquisition into a pollution control model, it focuses on the tradeoff between data collection and treatment efforts and derives conditions under which (i) a favorable change in the state of treatment cost at one site may lead to an increase in treatment level at another site, (ii) a higher data collection cost induces more data collection, and (iii) an increase in information productivity leads to an increase in the level of data collection. A numerical simulation of the model illustrates how in managing NPS pollution the value of information acquisition depends on the degree of heterogeneity of polluting sites.

Faust, Jon

PD November 1999. **TI** The Equilibrium Degree of Transparency and Control in Monetary Policy. **AU** Faust,

Jon; Svensson, Lars E. O. **AA** Faust: Board of Governors of the Federal Reserve System. Svensson: Stockholm University, Centre for Economic Policy Research and National Bureau of Economic Research. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 651; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm.

PG 24. **PR** no charge. **JE** E52, E58. **KW** Credibility. Transparency. Dynamic Games. Monetary Policy. Central Banks.

AB We examine a central bank's endogenous choice of degree of control and degree of transparency, under both commitment and discretion. Under commitment, we find that the deliberate choice of sloppy control is far less likely under a standard central-bank loss function than reported for a less standard loss function by Cukierman and Meltzer. Under discretion, the maximum degree of control is the only equilibrium. With regard to the degree of transparency, under commitment, a sufficiently patient bank with sufficiently low average inflation bias will always choose minimum transparency. Under discretion, both minimum and maximum transparency are equilibria. We argue that discretion is the more realistic assumption for the choice of control and that commitment is more realistic for the choice of transparency. A maximum feasible degree of control with a minimum degree of transparency is then a likely outcome. The Bundesbank and the Federal Reserve System are, arguably, examples of this outcome.

PD November 1999. **TI** Monetary Policy's Role in Exchange Rate Behavior. **AU** Faust, Jon; Rogers, John H. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 652; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm.

PG 31. **PR** no charge. **JE** E40, E52, F31, F41. **KW** Exchange Rates. Overshooting. Forward Premium Bias. Monetary Policy. Identification.

AB While much empirical work has addressed the role of monetary policy shocks in exchange rate behavior, conclusions have been clouded by the lack of plausible identifying assumptions. We apply a recently developed inference procedure allowing us to relax dubious identifying assumptions. This work overturns some earlier results and strengthens others: i) Contrary to earlier findings of "delayed overshooting," the peak exchange rate effect of policy shocks may come nearly immediately after the shock; ii) In every otherwise reasonable identification, monetary policy shocks lead to large uncovered interest rate parity (UIP) deviations; iii) Monetary policy shocks may account for a smaller portion of the variance of exchange rates than found in earlier estimates. While (i) is consistent with overshooting, (ii) implies that the overshooting cannot be driven by Dornbusch's mechanism, and (iii) gives reason to doubt whether monetary policy shocks are the main source of exchange rate volatility.

Favero, Carlo A.

PD February 1999. **TI** Measuring Monetary Policy in Open Economies. **AU** Favero, Carlo A.; Bagliano, Fabio C.; Franco, Francesco. **AA** Favero and Franco: Universita Bocconi. Bagliano: Universita di Torino. **SR** Centre for

Economic Policy Research Discussion Paper: 2079; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website:

www.cepr.demon.co.uk. **PG** 40. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** E44, E52, F41. **KW** Monetary Policy. VAR Models. Exchange Rates. Implicit Forward Rate.

AB The empirical VAR literature on the monetary transmission mechanism in open economies has not yet provided a commonly accepted solution to the problem of simultaneity between interest rates and the exchange rate. In this paper we propose to solve the identification problem by using information extracted from financial markets independently from the VAR to measure monetary policy shocks. We also evaluate the relative importance of macroeconomic and monetary policy variables in explaining short-term fluctuations in the nominal exchange rate. Our main results are that the simultaneity between German policy rates and the US dollar/Deutsche mark exchange rate is not an empirically relevant problem, and that monetary variables are dominated by macroeconomic factors in the explanation of exchange rate fluctuations.

PD June 1999. **TI** Modelling and Identifying Central Banks' Preferences. **AU** Favero, Carlo A.; Rovelli, Riccardo.

AA Favero: Universita Bocconi. Rovelli: Universita di Bologna. **SR** Centre for Economic Policy Research Discussion Paper: 2178; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 36. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** C52, E52. **KW** Inflation Targeting. Central Bank Preferences. GMM Estimation. Euler Equations.

AB We propose an approach to identify independently the parameters describing the structure of the economy from those describing central bank preferences. We first estimate a parsimonious structural model for US inflation, US output-gap and the world commodity price index. We then proceed to the identification of central bank preferences by estimating by GMM the Euler equations for the solution of the intertemporal optimization problem relevant to the central bank. The empirical analysis of the structural model shows that the persistence of real interest rates effects on aggregate demand is sufficient to generate an autoregressive structure in any interest rate rule. From estimation of the Euler equations, we infer that strict inflation targeting together with real interest rate smoothing delivers an optimal policy rule capable of replicating the observed path of real interest rates over the sample 1983:1-1998:3. Our empirical findings imply that the output gap enters into the optimal interest rate rule only as a leading indicator of future inflation, and we reject the hypothesis that output stabilization is an independent argument in the loss of function of the Fed.

Feenstra, Robert C.

PD February 1998. **TI** Facts and Fallacies About Foreign Direct Investment. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 98/04; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website:

polar.ucdavis.edu/econ/workingpapers/workingpapers.html. **PG** 39. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University

of California. We do not invoice, accept purchase orders, or cash. **JE** F21, F23, F31. **KW** Foreign Direct Investment. Japan. Exchange Rates. Multinational Firms.

AB This paper begins with a summary of the major trends in foreign direct investment over the 1980-1995 period. Following that we present five fallacies, dealing with: the magnitude of foreign investment in Japan; the impact of FDI on the U.S. and Japanese trade balance; the extent to which multinational corporations control U.S. trade; the impact of exchange rate movements on foreign investment flows; and finally, the impact of FDI on the welfare of the host country. The paper concludes with a further analysis of the recent trends in foreign investment, and their implications for the competition faced by U.S. firms on international markets.

TI Staggered Price Setting and Endogenous Persistence.
AU Bergin, Paul R.; Feenstra, Robert C.

PD April 1998. **TI** Integration of Trade and Disintegration of Production in the Global Economy. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 98/06; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html. **PG** 24. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** F15, F23, F41, J31, L23. **KW** Outsourcing. Technological Change. Wages. Labor Standards. Economic Integration.

AB The last few decades have seen a spectacular integration of the global economy through trade. The rising integration of world markets has brought with it a disintegration of the production process, however, as manufacturing or services activities done abroad are combined with those performed at home. I compare several different measures of foreign outsourcing, and argue that they have all increased since the 1970s. I also consider the implications of globalization for employment and wages of low-skilled workers, and for trade and regulatory policy, such as labor standards.

PD May 1998. **TI** The U.S.-China Bilateral Trade Balance: It's Size and Determinants. **AU** Feenstra, Robert C.; Hai, Wen; Woo, Wing T.; Yao, Shunli. **AA** Feenstra, Woo, and Yao: University of California at Davis. Hai: Fort Lewis College and Beijing University. **SR** University of California, Davis, Department of Economics Working Paper: 98/09; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html. **PG** 28. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** F14, F41. **KW** China. Trade Deficits. Hong Kong. Entrepot. International Trade.

AB This paper aims to reduce the range within which the true U.S.-China bilateral trade deficit lies, and identify the determinants of the bilateral trade deficit. We take advantage of detailed Chinese Customs data at the commodity level. Our calculated U.S.-China bilateral trade deficit is \$15 billion to \$20 billion in 1994, and \$16 billion to \$22 billion in 1995, compared to the official range of \$8 billion to \$30 billion, and \$9 billion to \$34 billion, respectively. The widening of the U.S.-China bilateral trade deficit in recent years reflected

various factors, including: (i) macroeconomic forces in the U.S. and China moving in opposite directions, causing their respective overall trade balance to move in opposite directions; and (ii) the accelerated relocation of production of U.S. imports from East Asia to China.

PD June 1998. **TI** Offshore Assembly from the United States: Production Characteristics of the 9802 Program. **AU** Feenstra, Robert C.; Hanson, Gordon H.; Swenson, Deborah L. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 98/10; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website:

polar.ucdavis.edu/econ/workingpapers/workingpapers.html.

PG 24. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** F13, F14, F23, F41. **KW** Offshore Assembly. Production Labor. 806/807 Program. Maquiladora. Tariffs.

AB We study outsourcing from the United States under the offshore assembly program (OAP). Formerly called the 806/807 provision of the U.S. tariff code, and now renamed the 9802 provision of the Harmonized System code, this program allows U.S. firms to export component parts and have them assembled overseas. When the finished product is imported back into the United States, duties are paid only on the foreign value-added. We estimate the production characteristics of the U.S. OAP activity, and in particular, whether this activity is intensive in the use of non-production labor as compared to the overseas production. We also examine the sensitivity of OAP imports to real exchange rate movements.

TI Pricing to Market, Staggered Contracts, and Real Exchange Rate Persistence. **AU** Bergin, Paul R.; Feenstra, Robert C.

Fernald, John G.

TI Are Technology Improvements Contractionary?
AU Basu, Susanto; Fernald, John G.; Kimball, Miles.

PD February 1999. **TI** Why Has China Survived the Asian Crisis so Well? What Risks Remain? **AU** Fernald, John G.; Babson, Oliver D. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 633; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 23. **PR** no charge. **JE** F32, F36, G15. **KW** China. Asian Crisis. Capital Controls. External Accounts.

AB China's strong growth in the midst of the Asian crisis is striking. We explore features of China's financial system that helped insulate it from the crisis, and then try to assess whether China has avoided crisis or simply deferred it. We argue that regardless of whether the Asian crisis resulted from weak fundamentals or from "country runs" by investors, it is not surprising that China has survived so far. In a market-oriented system, pressures generally force rapid adjustment when institutions are, or are perceived to be, insolvent; these mechanisms do not operate fully in China. In addition, China's external accounts remain strong. Even in the absence of capital controls, the strength of these external fundamentals would

plausibly preclude a self-fulfilling "country run" on China. Whatever their other effects, capital controls may have played a role in preventing Chinese financial institutions from borrowing excessively abroad, and hence may have helped keep China's external fundamentals strong. Clear risks remain for China's outlook.

PD June 1999. **TI** Why is Productivity Procyclical? Why Do We Care? **AU** Fernald, John G.; Basu, Susanto. **AA** Fernald: Board of Governors of the Federal Reserve System. Basu: University of Michigan and National Bureau of Economic Research. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 638; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. **Website:** www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 54. **PR** no charge. **JE** D24, E10, E23, E32. **KW** Procyclical Productivity. Technology Shocks. Resource Reallocation. Amplification Mechanisms.

AB Productivity rises in booms and falls in recessions. There are four main explanations for procyclical productivity: (i) procyclical technology shocks, (ii) widespread imperfect competition and increasing returns, (iii) variable utilization of inputs over the cycle, and (iv) resource reallocations. Each of these explanations has important implications for macroeconomic modeling. In this paper, we discuss empirical methods for assessing the importance of these explanations. We provide microfoundations for our preferred approach of estimating a first-order approximation to the production function, using a theoretically motivated proxy for utilization. When we implement this approach, we find that variable utilization and resource reallocations are particularly important in explaining procyclical productivity. We argue that the reallocation effects that we identify are not "biases" -- instead, they reflect changes in an economy's ability to produce goods and services for final consumption from given primary inputs of capital and labor. Thus, from a normative viewpoint, reallocations are significant for welfare, and from a positive viewpoint, they constitute potentially important amplification and propagation mechanisms for macroeconomic modeling.

Ferrer-i-Carbonell, Ada

TI Models of Individual Behaviour and Implications for Environmental Policy. **AU** van den Bergh, Jeroen C. J. M.; Ferrer-i-Carbonell, Ada; Munda, Giuseppe.

TI Models of Individual Behaviour and Implications for Environmental Policy. **AU** van den Bergh, Jeroen C. J. M.; Ferrer-i-Carbonell, Ada; Munda, Giuseppe.

Fershtman, Chaim

TI Social Status and Economic Performance: A Survey. **AU** Weiss, Yoram; Fershtman, Chaim.

PD March 1999. **TI** Estimating the Effects of Tax Reform in Differentiated Product Oligopolistic Markets. **AU** Fershtman, Chaim; Markovich, Sarit; Gandal, Neil. **AA** Fershtman and Gandal: Tel Aviv University. Markovich: University of Chicago. **SR** Centre for Economic Policy Research Discussion Paper: 2107; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. **Website:** www.cepr.demon.co.uk. **PG** 25. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** H02, L08. **KW** Taxation. Differentiated Product. Oligopoly.

AB The incidence of taxation has been extensively discussed in the public finance literature, but mainly within a competitive market setting or within a homogenous good (Cournot type) oligopoly. In a differentiated product oligopoly the effect of taxation can be more complex as the rate of taxation may affect not only the prices, but also the profile and quality of products that are sold in the market. In this paper, we examine the effects of changing tax regimes in a differentiated product oligopoly. In order to illustrate our approach we employ data from one such market: the automobile market in Israel.

Fidrmuc, Jan

PD March 1999. **TI** Stochastic Shocks and Incentives for (Dis)Integration. **AA** Tilburg University. **SR** Centre for Economic Policy Research Discussion Paper: 2104; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. **Website:** www.cepr.demon.co.uk. **PG** 17. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** E62, F02, H73. **KW** Disintegration. Median Voter. Risk Sharing. Optimal Currency Areas. Central Europe. Eastern Europe.

AB I present a political economy model of limits to regional redistribution under the threat of secession. The model depicts a union composed of two regions with centralized fiscal policy. The key feature is the trade-off between the benefits of secession embodied by autonomous fiscal policy and the benefits of integration -- efficiency gains and risk sharing. I argue that previously stable unions may disintegrate in response to specific patterns of region-specific output shocks. The decision on secession depends on correlation and persistence of shocks. Integration is sustainable if the shocks are positively correlated and/or transient. On the other hand, the combination of negative correlation and high persistence of the shocks makes integration fragile. Benefits from risk sharing are greatest when shocks are negatively correlated and transient.

Fitzgerald, Terry J.

PD January 1998. **TI** Reducing Working Hours: A General Equilibrium Analysis. **AA** Federal Reserve Bank of Cleveland. **SR** Federal Reserve Bank of Cleveland Working Papers: 9801; Research Department, Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, Ohio 44101-1387. **Website:** www.clev.frb.org. **PG** 24. **PR** no charge. **JE** E23, E24, J22, J23, J31. **KW** Working Hours. Work Sharing. Employment. Wages. Skill.

AB This paper examines the effects of restricting the weekly hours of workers in a heterogeneous-agent, general equilibrium framework. The framework presented here contains two types of workers, which allows the author to explore the consequences of a mismatch between the skills of the nonemployed and the skills of the employed. Previous studies of these issues have been based on partial equilibrium models. The main findings are that restricting weekly hours increases employment substantially, but may also lead to large declines in wages, productivity, output, and consumption, and can result in an increased wage disparity between skilled and unskilled workers. In one case, the policy raises the wages and consumption of skilled workers, while lowering them for the unskilled. A skills mismatch is shown to have dramatic effects on the aggregate and distributional consequences of the policy.

Flinn, Christopher J.

TI Returns to Mobility in the Transition to a Market

Economy. AU Boeri, Tito; Flinn, Christopher J.

Forslid, Rikard

PD March 1999. TI Agglomeration With Human and Physical Capital: An Analytically Solvable Case. AA Lund University. SR Centre for Economic Policy Research Discussion Paper: 2102; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 14. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE F12, F15, F21, R12. KW Economic Geography. Agglomeration. Capital Mobility.

AB This paper suggests a simple modification of the core-periphery model by Krugman (1991), which makes the model easy to solve analytically. We use the modified model to analyze the tendencies for geographical agglomeration of manufacturing industry as regions integrate economically. Two cases of human capital mobility and physical or knowledge capital mobility are treated separately. In the human capital case the model behaves qualitatively just as in the core-periphery model, where manufacturing tends to agglomerate for low trade costs. In the physical capital case, on the contrary, agglomeration will not occur as a consequence of economic integration.

PD March 1999. TI Comparative Advantage and the Location of Production. AU Forslid, Rikard; Wooton, Ian. AA Forslid: University of Lund. Wooton: University of Glasgow. SR Centre for Economic Policy Research Discussion Paper: 2118; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 18. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE F12, F15, F22. KW Comparative Advantage. Economic Geography. Factor Mobility. International Trade.

AB We return to a familiar topic in international trade, comparative advantage, introducing it into a model of economic geography. We provide a clear counterexample to the familiar result that trade liberalization leads to increased industrial concentration. Instead, lower trade costs may lead to a dispersion of production. As trade barriers diminish, agglomerative forces weaken, leaving room for other influences on the location of production. When a pattern of comparative advantage exists, integration may lead to international specialization of production. This may be good news for peripheral countries, which may be able to retain industry despite the attraction of the core.

TI Multinationals, Endogenous Growth and Technological Spillovers: Theory and Evidence. AU Baldwin, Richard E.; Forslid, Rikard; Braconier, Henrik.

Foster, Dean P.

PD March 1999. TI Calibration, Expected Utility and Local Optimality. AU Foster, Dean P.; Vohra, Rakesh V. AA Foster: University of Pennsylvania. Vohra: Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1254; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 15. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern

University. JE C11, C19, D81, D84. KW Probability. Beliefs. Frequentist View. Subjectivist. View.

AB We propose a framework for reconciling frequentist and subjectivist views of probability. In an environment with repeated trials we show that beliefs about the possible states of nature can be represented by probabilities. Second, these probabilities will correspond to long run frequencies. In particular they will be naively calibrated. Third, the actions chosen in each trial will be the ones that maximize expected utility on that trial. The expectation is with respect to the probabilities used to represent beliefs.

Franco, Francesco

TI Measuring Monetary Policy in Open Economies. AU Favero, Carlo A.; Bagliano, Fabio C.; Franco, Francesco.

Francois, Joseph F.

PD May 1999. TI Trade in Financial Services: Procompetitive Effects and Growth Performance. AU Francois, Joseph F.; Schuknecht, Ludger. AA Francois: Erasmus University Rotterdam. Schuknecht: World Trade Organization. SR Centre for Economic Policy Research Discussion Paper: 2144; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 32. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE F13, F43. KW Financial Services. Service Trade. Imperfect Competition. Growth.

AB In this paper we explore linkages between financial services trade and growth. We offer a formalization of the argument that trade, through the fostering of financial market integration, may yield important long-run effects related to increased competition. The relationships formalized here link long-run economic performance to scale economies and cost structures in the financial services sector, and to market concentration in the sector. We first develop an analytical model. This motivates an econometric exercise. Cross-country growth regressions point to a strong positive relationship between financial sector competition and financial sector openness, and between growth and financial sector competition.

Fratantoni, Michael C.

PD October 1998. TI Homeownership, Committed Expenditure Risk, and the Stockholding Puzzle. AA Fannie Mae. SR Johns Hopkins Department of Economics Working Paper: 406; Department of Economics, 3400 N. Charles Street, Johns Hopkins University, Baltimore, Maryland 21218. Website: www.econ.jhu.edu. PG 34. PR no charge. JE E21, G11, R21. KW Risk. Temperance. Stockholding. Housing. Portfolio Choice.

AB Kimball (1991) showed that consumers who face an unavoidable risk will display "temperance," meaning that they will increase their holdings of safe assets. In principle, temperance could provide an explanation for the stockholding puzzle, which is the microeconomic manifestation of the equity premium puzzle. Previous work has shown that the temperance effect induced by labor income uncertainty is too small to explain the stockholding puzzle. This paper finds that committed expenditure risk associated with homeownership induces enough additional temperance to explain the puzzle.

Freeman, Scott

PD September 1998. TI Monetary Aggregates and

Output. **AU** Freeman, Scott; Kydland, Finn. **AA** Freeman: University of Texas at Austin. Kydland: Carnegie Mellon University. **SR** Federal Reserve Bank of Cleveland Working Papers: 9813; Research Department, Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, Ohio 44101-1387. Website: www.clev.frb.org. **PG** 34. **PR** no charge. **JE** E31, E32, E41, E42, E51. **KW** Money Multipliers. Business Cycles. Causality. Monetary Aggregates. Endogenous Money Supply.

AB This paper offers a general equilibrium model that explains how the observed correlations of money and output fluctuations may come about through endogenously determined fluctuations in the money multiplier. The model is calibrated to meet long run features of the U.S. economy and then subjected to shocks to the Solow residual. The model's predicted business-cycle frequency correlations, of both real and nominal variables, share the following features with U.S. data: i) M1 is positively correlated with real output; ii) the money multiplier and deposit-to-currency ratio are positively correlated with real output; iii) the price level is negatively correlated with output; iv) the correlation of M1 with contemporaneous prices is substantially weaker than the correlation of M1 with real output; v) correlations among real variables are essentially unchanged under different monetary policy regimes; and vi) real money balances are smoother than money demand equations would predict. Although features (i) and (iv) may have been considered support for a causal influence of money on output, the paper demonstrates that they are consistent with an economy in which money has no such causal influence.

TI The Enforcement of Property Rights and Underdevelopment. **AU** Dabla-Norris, Era; Freeman, Scott.

Freeman, Shirra

TI Options, Quasi Options, and the Opportunity to Develop a Resource of Environmental Value. **AU** Zeitouni, Naomi; Freeman, Shirra.

Freund, Caroline L.

PD June 1999. **TI** On the Dynamics of Trade Diversion: Evidence From Four Trade Blocs. **AU** Freund, Caroline L.; McLaren, John. **AA** Freund: Board of Governors of the Federal Reserve System. McLaren: Columbia University. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 637; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 26. **PR** no charge. **JE** F02, F15. **KW** Trade. Regionalism. Sunk Costs. Trade Blocs.

AB This paper studies the dynamics of trade reorientation experienced when a country joins a regional trade bloc. We find that the joining country's trade orientation toward bloc countries typically rises along an 'S'-shaped path. We estimate the size, speed, and timing of this adjustment path for a 'typical' joining country, for four trade agreements. We find that, in the European Union (EU), the incumbent bloc countries' share of the joining country's trade typically rose by eighteen percentage points over the course of the adjustment; that this took twelve years; and that the adjustment began four years before the date of accession. MERCOSUR shows a similar pattern in progress, but NAFTA and EFTA are more idiosyncratic. We argue that the data provide strong evidence of anticipatory sunk investments made to prepare for accession.

Fuerst, Timothy S.

TI Real Indeterminacy in Monetary Models with Nominal Interest Rate Distortions: The Problem with Inflation Targets. **AU** Carlstrom, Charles T.; Fuerst, Timothy S.

TI Price-Level and Interest-Rate Targeting in a Model with Sticky Prices. **AU** Carlstrom, Charles T.; Fuerst, Timothy S.

Furnkranz-Prskawetz, Alexia

TI Third Births in Austria: The Effect of Public Policies, Educational Attainment and Labour-Force Attachment. **AU** Hoem, Jan Michael; Fumkranz-Prskawetz, Alexia; Neyer, Gerda.

Galeotti, Marzio

TI The Double Dividend Issue: Modeling Strategies and Empirical Findings. **AU** Bosello, Francesco; Carraro, Carlo; Galeotti, Marzio.

TI Desperately Seeking (Environmental) Kuznets. **AU** Lanza, Alessandro; Galeotti, Marzio.

Gali, Jordi

TI The Science of Monetary Policy: A New Keynesian Perspective. **AU** Clarida, Richard; Gali, Jordi; Gertler, Mark.

Galor, Oded

PD February 1999. **TI** From Malthusian Stagnation to Modern Growth. **AU** Galor, Oded; Weil, David N. **AA** Brown University. **SR** Centre for Economic Policy Research Discussion Paper: 2082; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 20. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** J13, O11, O33, O49. **KW** Fertility. Growth. Technological Change. Malthusian Trap. Demographic Transition. Population Growth.

AB This paper examines the historical evolution of the relationship between population growth, technological change, and the standard of living. It considers several unified models that encompass the transition between three distinct regimes that have characterized the process of economic development: "The Malthusian Regime," "The Post-Malthusian Regime," and the "Modern Growth Regime." We view the unified modeling of this long transition process -- from thousands of years of Malthusian stagnation through the demographic transition to modern growth -- as one of the most significant research challenges facing economists interested in growth and development.

Gandal, Neil

PD February 1999. **TI** The Dynamics of Technological Adoption in Hardware/Software Systems: The Case of Compact Disc Players. **AU** Gandal, Neil; Kende, Michael; Rob, Rafael. **AA** Gandal: Tel Aviv University. Kende: Federal Communications Committee. Rob: University of Pennsylvania. **SR** Centre for Economic Policy Research Discussion Paper: 2078; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 40. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** K02, L82, L86. **KW** Technological Adoption. Complementary Products. Compact Discs.

AB In this paper we examine the diffusion of a

hardware/software system. For such systems there is interdependence between the hardware adoption decisions of consumers and the supply decisions of software manufacturers. Hence there can be bottlenecks to the diffusion of the system, which stem not from high prices but from the fact that the complementary product is not available. We consider the CD-industry and estimate the (direct) elasticity of adoption with respect to CD prices and (the cross) elasticity with respect to the variety of CD-titles. Our results show that the cross elasticity is indeed significant so that the presence of complementarities poses a serious bottleneck problem for the diffusion of the base product. We illustrate two applications of our methodology: (i) the business-policy question of how to subsidize a new base product which is contingent on a sufficiently large supply of complementary products; and (ii) the public-policy question of what are the benefits of imposing backward compatibility on a new technology (e.g., high definition televisions).

TI Estimating the Effects of Tax Reform in Differentiated Product Oligopolistic Markets. **AU** Fershtman, Chaim; Markovich, Sarit; Gandal, Neil.

Garcia, Gillian

TI Recapitalizing Banks with Public Funds: Selected Issues. **AU** Enoch, Charles; Garcia, Gillian; Sundararajan, V.

Garcia-Cestona, Miguel A.

TI Ownership and Control: A Spanish Survey. **AU** Crespi-Cladera, Rafel; Garcia-Cestona, Miguel A.

Garibaldi, P.

PD June 1999. **TI** Search Unemployment with Advance Notice. **AA** International Monetary Fund. **SR** Centre for Economic Policy Research Discussion Paper: 2164; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 44. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** J63, J64. **KW** Unemployment Flows. Advance Notice. Search Theory.

AB This paper proposes and solves a search unemployment model in which job separation requires mandatory notice. When jobs are subject to idiosyncratic uncertainty, firms would issue advance notice even with good business conditions. We show that such precautionary policy is not pursued if it entails sufficiently high productivity losses. If workers can search on the job, an increase in advance notice increases job-to-job movements, reduces unemployment flows, and has ambiguous effects on equilibrium unemployment. Results are consistent with the fact the North American and European labor markets, despite their differences in job security provisions, experience similar turnover rates and dissimilar unemployment flows.

Geanakoplos, John

PD August 1998. **TI** Would a Privatized Social Security System Really Pay a Higher Rate of Return? **AU** Geanakoplos, John; Mitchell, Olivia S.; Zeldes, Stephen P. **AA** Geanakoplos: Yale University. Mitchell: University of Pennsylvania. Zeldes: Columbia University. **SR** Columbia PaineWebber Working Paper Series in Money, Economics and Finance: PW/98/03; Graduate School of Business, 6N Uris Hall, Columbia University, 3022 Broadway, New York, NY 10027. Website: www.columbia.edu/dlc/wp/. **PG** 26.

PR \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). **JE** G23, H24, H55. **KW** Social Security. Public Pensions. Privatization. Diversification. Prefunding.

AB Many advocates of social security privatization argue that rates of return under a defined contribution individual account system would be much higher for all than they are under the current social security system. This claim is false. The mistake comes from ignoring accrued benefits already promised based on past payroll taxes, and from underestimating the riskiness of stock investments. Confusion arises because three distinct reforms are muddled: privatization, diversification and prefunding. Any one of these reforms could be implemented alone. If the system were completely privatized, with no prefunding or diversification, the social security system would need to raise taxes and/or issue new debt in order to pay benefits already accrued. Unlike privatization, prefunding would raise rates of return for later generations, but at the cost of lower returns for today's workers. For households able to invest in the stock market on their own, diversification would not raise rates of return. Households that are constrained from holding stock would gain higher risk-adjusted returns and would benefit from diversification. Overall, privatization and diversification would have a much smaller effect on returns than reformers typically claim.

PD August 1998. **TI** Social Security Money's Worth. **AU** Geanakoplos, John; Mitchell, Olivia S.; Zeldes, Stephen P. **AA** Geanakoplos: Yale University. Mitchell: University of Pennsylvania. Zeldes: Columbia University. **SR** Columbia PaineWebber Working Paper Series in Money, Economics and Finance: PW/98/05; Graduate School of Business, 6N Uris Hall, Columbia University, 3022 Broadway, New York, NY 10027. Website: www.columbia.edu/dlc/wp/. **PG** 46. **PR** \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). **JE** G23, H24, H55. **KW** Social Security. Public Pensions. Privatization. Prefunding. Diversification.

AB This paper describes how three money's worth measures -- the benefit-to-tax ratio, the internal rate of return, and the net present value -- are calculated and used in analyses of social security reforms, including systems with privately managed individual accounts invested in equities. If the old system were closed down, massive unfunded liabilities of \$9-10 trillion would still have to be paid unless already accrued benefits were cut. The authors show that privatization without prefunding would not increase returns at all, net of the new taxes needed to pay for unfunded liabilities. Prefunding, implemented by reducing accrued benefits or by raising taxes, would eventually increase money's worth for later generations, but at the cost of lower money's worth for today's workers and/or retirees. Computing money's worth when there is uncertainty is much more difficult unless four conditions hold, namely optimization, time homogeneity, stable prices, and spanning. Under these conditions, the diversification of social security investments into stocks and out of bonds has no effect whatsoever on money's worth. When spanning fails, diversification can raise welfare for constrained households, but the exact money's worth must depend on specific assumptions.

TI Default in a General Equilibrium Model with Incomplete Markets. **AU** Dubey, Pradeep; Geanakoplos, John; Shubik, Martin.

Gerardi, Dino

TI *Deliberations with Double-Sided Information.*
 AU Doraszelski, Ulrich; Gerardi, Dino; Squintani, Francesco.

Germain, Marc

PD September 1998. TI *Transfer to Sustain Core-Theoretic Cooperation in International Stock Pollutant Control.*
 AU Germain, Marc; Toint, Philippe; Tulkens, Henry; de Zeeuw, Aart. AA Germain: Universite Catholique de Louvain. Toint: Facultes Universitaires Notre Dame de la Paix, Namur. Tulkens: Universite Catholique de Louvain and Facultes Universitaires Saint-Louis, Bruxelles. de Zeeuw: Tilburg University. SR *Fondazione Eni Enrico Mattei Note di Lavoro: 62/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it.* PG 26. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE C73, D62, F42, H04, Q03. KW *Transfrontier Pollution. Stock Pollutant. Dynamic Co-operative Games. Coalitions. Core Solution.*

AB *International environmental agreements aiming at correcting negative externalities generated by transboundary pollution are difficult to achieve for many reasons. Important obstacles arise from asymmetries in costs and benefits, and instability may occur due to the fact that coalitions of countries may attempt to do better for themselves outside of any proposed agreement. In a static context it has already been shown that it is possible to achieve stability in the sense of the core of a co-operative game, by means of appropriately defined transfers between the countries involved. However, accumulated pollutants cause the transboundary pollution problems that are most important so that a dynamic analysis is required. This paper provides a transfer scheme that yields a core property in a dynamic context. The possibility of computing such transfers numerically is discussed.*

Geroski, Paul A.

PD March 1999. TI *The Growth of Firms in Theory and in Practice.* AA London Business School. SR Centre for Economic Policy Research Discussion Paper: 2092; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 21. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE L01, O33. KW *Growth. Gibrat's Law.*

AB *This paper is a reflective survey of past and recent econometric work on the growth of firms. Most of this work suggests that firm size follows a random walk; i.e. that corporate growth rates are random. The survey documents this and shows what a strong result this is by contrasting it with several alternative (and rather obvious) models which might be used to explain corporate growth rates but which are basically inconsistent with the data. The survey also discusses complementary evidence on corporate innovation rates and adjustment costs in investment/employment decisions, which is consistent with (and therefore provide some support for) these results. This particular result is striking for a number of reasons, not least because it is basically inconsistent with most theories of the growth of firms that have been developed over the years. It is also inconsistent with the recently fashionable resource based theory of the firm. The second half of this paper identifies how and why these theories of growth seem to be inconsistent with the data.*

PD May 1999. TI *Models of Technology Diffusion.*

AA London Business School. SR Centre for Economic Policy Research Discussion Paper: 2146; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 56. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE O31, O33. KW *Technology Diffusion. Epidemics. Probit Models. Density Dependence. Information Cascades.*
 AB *This paper surveys the literature on new technology diffusion by focusing on alternative explanations of the dominant stylized fact: namely, that the usage of new technologies over time typically follows an S-curve. Most common, is the so-called epidemic model, which builds on the premise that the speed of usage of new technology is limited by a lack of information regarding how to use it and what it does. The leading alternative model is the probit model. This assumes that different firms, with different goals and abilities, will adopt the new technology at different times. There are actually many ways to generate an S-curve, and the third class examined are models of density dependence popularized by population ecologists. In these models, the twin forces of legitimation and competition help to establish new technologies and then ultimately limit their take-up. Finally, we examine models in which the initial choice between variants of the new technology affects the subsequent diffusion speed of the chosen technology. Such models often rely on information cascades, which drive herd-like adoption behavior when a particular variant is finally selected.*

Gertler, Mark

TI *The Science of Monetary Policy: A New Keynesian Perspective.* AU Clarida, Richard; Gali, Jordi; Gertler, Mark.

Gibson, Michael S.

PD September 1998. TI *"Big Bang" Deregulation and Japanese Corporate Governance: A Survey of the Issues.* AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 624; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 24. PR no charge. JE G31, G32, G38. KW *Big Bang. Corporate Governance. Insider Stakeholders. Institutional Investors.*

AB *The "Big Bang" deregulation of Japanese financial markets focuses on financial modernization. I argue that financial modernization is of secondary importance for improving the performance of the Japanese economy. A key long-term issue facing Japan is to maintain its high level of per capita income in the face of an aging population and slower productivity growth. To achieve this, it is important to increase the return earned on Japan's large stock of wealth. I argue the low return on wealth reflects characteristics of the Japanese corporate governance system. The proper focus of the "Big Bang" should be on measures to strengthen corporate governance. I identify three characteristics of the Japanese corporate governance system that lead Japanese managers to produce low returns for shareholders. First, insider stakeholders dominate corporate governance. Second, institutional investors are weak. Third, there is no market for corporate control. For each characteristic, I describe potential corporate governance change, I review empirical evidence on its effectiveness, its current status in Japan, and how it is addressed, if at all, in the*

"Big Bang." I conclude that the progress of the "Big Bang" reforms to corporate governance has been limited.

PD December 1998. TI The Implications of Risk Management Information Systems for the Organization of Financial Firms. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 632; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm.

PG 14. PR no charge. JE D81, D82, G24, G31, L22. KW Asymmetric Information. Value at Risk. Capital Budgeting. Capital Structure.

AB Financial dealer firms have invested heavily in recent years to develop information systems for risk measurement. I take it as given that technological progress is likely to continue at a rapid pace, making it less expensive for financial firms to assemble risk information. I look beyond questions of risk measurement methodology to investigate the implications of risk management information systems. By examining several theoretical models of the firm in the presence of asymmetric information, I explore the likely effects of the falling cost of assembling risk information on a financial firm's organizational structure. Two common themes emerge: centralization within the firm and increased disclosure of risk information outside the firm are both likely to increase.

Giovannetti, Giorgia

PD December 1998. TI EMU and the Mediterranean Area. AA Universita degli Studi, Florence and European University Institute. SR Fondazione Eni Enrico Mattei Note di Lavoro: 90/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 38. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE F13, F15, F33, F49. KW European Monetary Union. Mediterranean. Investment. Capital Flow. International Monetary System.

AB This paper analyses the impact of the European Monetary Union on outside countries, with emphasis on countries of the Mediterranean Area (MED12). After discussing the possible "eurization" of bilateral trades between EMU countries and countries with close economic and geographical links; the possible "eurization" of existing debts, today denominated in dollars, and the closely connected increase of direct investment and private capital flows to the area, the paper argues that the advent of EMU is likely to have a positive, though small, effect on MED12. As a related issue, the paper also discusses the stability of the demand for the euro and some possible implications of the EMU for the international monetary system.

Gisselquist, David

PD July 1998. TI Why Agricultural Technological Transfers to Developing Countries Should be Deregulated. AU Gisselquist, David; Grether, Jean-Marie. AA Gisselquist: The World Bank. Grether: University of Geneva and University of Neuchatel. SR Fondazione Eni Enrico Mattei Note di Lavoro: 45/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 20. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE F14, O33. KW Technological Transfer. Input Trade Liberalization. Agriculture.

AB This paper analyzes the institutional arrangements

governing the international transfer of input -- embodied new technologies in agriculture. While developed countries characteristically allow "multiple channel" private and public technological transfer, developing countries often force technology transfer through a "single channel" controlled by government agencies, with an emphasis on official performance tests. On the basis of case studies, it is shown that allowing private technology transfer and refocusing input regulations on externalities can lead to significant productivity and income gains in developing countries.

Giustiniani, Alessandro

TI Crises and Bail-Outs of Banks and Countries: Interconnections, Analogies, Differences. AU De Bonis, Riccardo; Giustiniani, Alessandro; Gomel, Giorgio.

Glasserman, Paul

TI A Stochastic Mesh Method for Pricing High-Dimensional American Options. AU Broadie, Mark; Glasserman, Paul.

PD November 1998. TI Arbitrage-Free Discretization of Lognormal Forward Libor and Swap Rate Models. AU Glasserman, Paul; Zhao, Xiaoliang. AA Columbia University. SR Columbia PaineWebber Working Paper Series in Money, Economics and Finance: PW/98/09; Graduate School of Business, 6N Uris Hall, Columbia University, 3022 Broadway, New York, NY 10027. Website: www.columbia.edu/dlc/wp/. PG 25. PR \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). JE C15, E43, G13, G14. KW Interest Rates. Monte Carlo. Simulation. Market Models. Financial Markets.

AB An important recent development in the pricing of interest rate derivatives is the emergence of models that incorporate lognormal volatilities for forward Libor or forward swap rates while keeping interest rates stable. These market models have three attractive features: they preclude arbitrage among bonds, they keep rates positive, and most distinctively, they price caps or swaptions according to Black's formula, thus allowing automatic calibration to market data. But these features of continuous-time formulations are easily lost when the models are discretized for simulation. The authors introduce methods for discretizing these models giving particular attention to precluding arbitrage among bonds and to keeping interest rates positive even after discretization. These methods transform the Libor or swap rates to positive martingales, discretize the martingales, and then recover the Libor and swap rates from these discretized variables, rather than discretizing the rates themselves. Choosing the martingales proportional to differences of ratios of bond prices to numeraire prices turns out to be particularly convenient and effective. Numerical results indicate that several of the methods proposed here often outperform more standard discretizations.

Glyn, Andrew

TI Export Market Performance of OECD Countries: An Empirical Examination of the Role of Cost Competitiveness. AU Carlin, Wendy; Glyn, Andrew; Van Reenen, John.

TI Export Market Performance of OECD Countries: An Empirical Examination of the Role of Cost Competitiveness. AU Carlin, Wendy; Glyn, Andrew; Reenen, John Van.

Goergen, Marc

PD March 1999. **TI** Strong Managers and Passive Institutional Investors in the UK. **AU** Goergen, Marc; Renneboog, Luc. **AA** Goergen: Manchester School of Management. Renneboog: Tilburg University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 21/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 50. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** G32, G34. **KW** Corporate Governance. Capital. Ownership Structure.

AB The first striking feature is that ownership of the average UK company is diffuse: a coalition of at least eight shareholders is required to reach an absolute majority of voting rights. Even though the average firm has a dispersed ownership, the reader should bear in mind that there are about ten per cent of firms where the founder or his heirs are holding more than thirty per cent. The ownership structure is also shaped by regulation; the mandatory takeover threshold of thirty per cent, for example, has an important impact on the ownership structure. In about four per cent of sample companies, corporate shareholders hold just under thirty per cent of the shares.

Gokhale, Jagadeesh

PD September 1998. **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 National Bureau of Economic Research. Sefton and Weale: National Institute for Economic and Social Research. **SR** Federal Reserve Bank of Cleveland Working Papers: 9811; Research Department, Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, Ohio 44101-1387. Website: www.clev.frb.org. **PG** 30. **PR** no charge. **JE** D31, D63, D91, H23, H55. **KW** Bequests. Wealth Inequality. Social Security. Income Taxation.

AB Answering the question of how much wealth inequality arises from inheritance inequality requires data that are unavailable and potentially uncollectable. The alternative approach taken here (from Blinder [1974, 1976] and Davies [1982]) is to simulate the transmission of inequality via bequests.

Golder, Stefan M.

PD March 1999. **TI** Discrimination in the Swiss Labour Market: An Empirical Analysis. **AU** Golder, Stefan M.; Straubhaar, Thomas. **AA** Golder: Kiel Institute of World Economics. Straubhaar: University of the Bundeswehr Hamburg. **SR** Centre for Economic Policy Research Discussion Paper: 2100; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 14. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** F22, J31, J61, J71. **KW** International Migration. Wage Differentials. Immigrant Workers. Discrimination.

AB Recent studies have shown that there are significant earnings differentials between immigrants and natives in Switzerland. The goal of this paper is to determine whether these differences can be attributed to diverging socio-economic endowments or to discrimination. We use the well known econometric technique, developed by Oaxaca (1973) and Blinder (1973), to determine the extent of discrimination. As data on earnings are available only for the employed, we adopt

a two-stage Heckman procedure to correct for sample-selection bias. Our analysis is based on data from the 1995 wave of the Swiss Labour Force Survey (SLFS). The earnings difference decomposition between natives and immigrants reveals that the discrimination effect plays a more important role in the explanation of the earnings differentials than the endowment effect.

Goldreich, David

TI Bookbuilding and Strategic Allocation. **AU** Cornelli, Francesca; Goldreich, David.

Gomel, Giorgio

TI Crises and Bail-Outs of Banks and Countries: Interconnections, Analogies, Differences. **AU** De Bonis, Riccardo; Giustiniani, Alessandro; Gomel, Giorgio.

Gomme, Paul A.

PD November 1998. **TI** Evolutionary Programming as a Solution Technique for the Bellman Equation. **AA** Federal Reserve Bank of Cleveland. **SR** Federal Reserve Bank of Cleveland Working Papers: 9816; Research Department, Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, Ohio 44101-1387. Website: www.clev.frb.org. **PG** 11. **PR** no charge. **JE** C61, C63. **KW** Evolutionary Programming. Bellman Equation. Value Functions. Computational Techniques. Stochastic Optimization.

AB Evolutionary programming is a stochastic optimization procedure which has proved useful in optimizing difficult functions. It is shown that evolutionary programming can be used to solve the Bellman equation problem with a high degree of accuracy and substantially less CPU time than Bellman equation iteration. Future applications will focus on sometimes binding constraints -- a class of problem for which standard solutions techniques are not applicable.

Gommers, Michael

PD January 1999. **TI** Towards the Green Environment -- Comparison of Environmental Impacts of Urban Public Transport and Automobiles. **AA** Netherlands Economic Institute. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 06/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 10. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D62, H53, L92, R41. **KW** Emissions. Public Transport. Transport Policy.

AB This study compares the environmental impacts of urban public transport and automobiles (energy use, emissions, noise nuisance, waste materials and use of space). For this purpose two models have been developed FACTS-Urban (Forecasting air pollution by car traffic simulation) and MILOV (environmental impacts of public transport). The current Dutch situation as well as future scenarios on the demand side and the (technological) supply side has been studied. Generally speaking public transport (especially rail) is and will remain cleaner than car usage. However, the environmental advantage of diesel buses over passenger cars is diminishing rapidly.

Goria, Alessandra

PD December 1998. **TI** Environmental Security and Migration: The Role of Environmental Factors as Determinants of Migration Flows in Pakistan. **AA** Fondazione Eni Enrico Mattei. **SR** Fondazione Eni Enrico Mattei Note di Lavoro:

89/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 26. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE C35, C51, C52, O13, O15, O53. KW Migration. Income. Environment. Inequalities. Self-Selection.

AB This paper investigates the linkages between the environment, income and migration, exploring the role that environmental factors play in inducing migration within a rural, developing economy. The environment has a deep economic value, representing a source of living for most developing countries: exogenous shocks to the environment, determined for instance by extreme climatic events, and the gradual degradation of natural resources, associated with population pressure and human activities might induce human displacement and migration. Because of the deterioration of the environment people could be forced to seek new opportunities or might choose to look for better opportunities, migrating either temporarily or permanently.

Gort, Michael

PD February 1998. TI Measuring the Rate of Technological Progress in Structures. AU Gort, Michael; Greenwood, Jeremy; Rupert, Peter. AA Gort: State University of New York at Buffalo. Greenwood: University of Rochester. Rupert: Federal Reserve Bank of Cleveland. SR Federal Reserve Bank of Cleveland Working Papers: 9806; Research Department, Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, Ohio 44101-1387. Website: www.clev.frb.org. PG 28. PR no charge. JE D50, E22, O30, O40. KW Technological Advance. Depreciation. Capital Stock Measurement. Buildings.

AB How much technological progress has been made in structures? This paper attempts to measure that progress using panel data on the age and rents for buildings. These data are interpreted according to a vintage capital model in which buildings are replaced with some chosen periodicity. There appears to have been significant technological advance in structures, which accounts for a major part of economic growth.

Gould, David M.

PD June 2000. TI The Impact of Monetary Policy on Exchange Rates During Financial Crises. AU Gould, David M.; Kamin, Steven B. AA Gould: Federal Reserve Bank of Dallas. Kamin: Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 669; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 51. PR no charge. JE E44, E52, E58, F31, F32. KW Interest Rates. Currency Values. Monetary Policy. Exchange Rates. Financial Crises.

AB This paper addresses the impact of monetary policy on exchange rates during financial crises. Some observers have argued that a tightening of monetary policy is necessary to stabilize the exchange rate, restore confidence, and lay the groundwork for an eventual recovery of economic activity. Others have argued that raising interest rates may further reduce investor confidence and lead to further weakening of domestic currencies. This debate remains unresolved. A key reason is that, because of the endogeneity of interest rates with respect to exchange rates and investor expectations, it is

difficult to use statistical analysis to identify the impact of monetary policy on the exchange rate. The authors use measures of international credit spreads and of domestic stock prices as proxies for investor concerns about creditworthiness and country risk in order to better identify the impact of monetary policies on the exchange rate. Using weekly data from Indonesia, Korea, Malaysia, the Philippines, Thailand, and Mexico, they find that credit spreads and stock prices exert significant impacts on exchange rates during financial crises, but interest rates still are not estimated to have significant effects.

Gould, Eric D.

TI Contracts, Externalities and Incentives in Shopping Malls: An Empirical Analysis. AU Pashigian, B. Peter; Gould, Eric D.

Graddy, Kathryn

TI Freedom, Growth, and the Environment. AU Barrett, Scott; Graddy, Kathryn.

Graziano, Clara

TI Ownership or Performance: What Determines Board of Directors' Turnover in Italy?. AU Brunello, Giorgio; Graziano, Clara; Parigi, Bruno.

Greenstone, Michael

PD November 1998. TI The Impacts of Environmental Regulations on Industrial Activity: Evidence from the 1970 and 1977 Clean Air Act Amendments and the Census of Manufactures. AA University of California, Berkeley. SR Princeton Industrial Relations Section Working Paper: 408; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. PG 61. PR \$2.00. JE J23, L51, Q28, R38. KW Plant Location. Environmental Regulations. Manufacturing Activity. Cost of Regulation.

AB This paper presents evidence that environmental regulations reduce industrial activity. The analysis uses the 1970 and 1977 Clean Air Act Amendments' division of counties into "high" and "low" regulation categories. High regulation counties were subject to substantially stricter regulations than low regulation counties. More than 1.75 million plant observations from the microdata underlying the 1967-1987 Census of Manufacturers are assigned to precisely defined "regulated" and "unregulated" groups, based on their county's regulatory status, their emissions of the regulated pollutants, and the year. After controlling for a wide variety of factors including plant level characteristics, unrestricted industry shocks, and unrestricted county shocks, the estimates suggest that in the first 15 years after the Amendments passed (1972-1987), high regulation counties (relative to low regulation ones) lost approximately 100,000 jobs, \$50 billion in capital stock, and \$30 billion (1987) of output in pollution intensive industries. Although substantial in affected counties, the "lost" manufacturing activity was relatively modest when compared to the size of the entire manufacturing sector. These estimated "losses" are larger than those found in previous studies. The previous literature did not control for unobservable factors that are correlated with regulation or for the Amendments' simultaneous regulation of multiple pollutants.

Greenwood, Jeremy

TI Measuring the Rate of Technological Progress in Structures. **AU** Gort, Michael; Greenwood, Jeremy; Rupert, Peter.

Grether, Jean-Marie

TI Why Agricultural Technological Transfers to Developing Countries Should be Deregulated. **AU** Gisselquist, David; Grether, Jean-Marie.

TI Who Determines Mexican Trade Policy? **AU** de Melo, Jaime; Olarreaga, Marcelo; Grether, Jean-Marie.

Griffith, Rachel

PD January 2000. **TI** Mapping the Two Faces of R&D: Productivity Growth in a Panel of OECD Industries. **AU** Griffith, Rachel; Redding, Stephen; Reenen, John Van. **AA** Institute for Fiscal Studies and Centre for Economic Policy Research. Redding: London School of Economics, Institute for Fiscal Studies and Centre for Economic Policy Research. Reenen: University College London, Institute for Fiscal Studies and Centre for Economic Policy Research. **SR** Institute for Fiscal Studies Working Paper: W00/02; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. **PG** 45. **PR** 3 pounds. **JE** D24, J24, O10, O30, O40. **KW** Research and Development. Human Capital. Total Factor Productivity. Convergence. Innovation.

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.

TI Do R&D Tax Credits Work? Evidence From an International Panel of Countries 1979-94. **AU** Bloom, Nick; Griffith, Rachel; Van Reenen, John.

PD April 1999. **TI** Productivity and Foreign Ownership in the Car Industry. **AA** Institute for Fiscal Studies. **SR** Institute for Fiscal Studies Working Paper: W99/11; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. **PG** 34. **PR** 3 pounds. **JE** D24, F21, F23, L23, L62. **KW** Foreign Direct Investment. Productivity. Multinational Firms. Automobile Industry.

AB Many sectors of the UK economy experienced rapid productivity growth over the 1980s. This coincided with an increase in the flow of inward investment. Studies using macro data have linked these two events. This paper investigates what has happened in one industry at the microeconomic level and asks whether foreign-owned establishments in the UK car industry are more productive than domestic-owned ones. Production functions are estimated using a new panel data set at the plant level. The findings suggest that, while foreign-owned establishments have higher output and value-added per worker, these differences appear to be largely explained by different levels of factor usage. Foreign-owned firms invest more in physical capital and use more intermediate goods. They also pay their workers higher wages. Differences in levels of total

productivity still exist but they are relatively small.

TI The Geographic Distribution of Production Activity in the UK. **AU** Devereux, Michael P.; Griffith, Rachel; Simpson, Helen.

Griliches, Zvi

TI Empirical Patterns of Firm Growth and R&D Investment: A Quality Ladder Model Interpretation. **AU** Klette, Tor Jakob; Griliches, Zvi.

Gross, Dominique M.

PD September 1999. **TI** Three Million Foreigners, Three Million Unemployed? Immigration and the French Labor Market. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/124; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 24. **PR** not available. **JE** E24, F22, J31, J61. **KW** International Migration. Labor Markets. Cointegration. Immigrant Workers. Unemployment.

AB This paper investigates the effects of the flows of immigrant workers on the French labor market between the mid-1970s and mid-1990s. Using a system of equations for unemployment, labor-force participation, the real wage, and the immigration rate, it is shown that, in the long run, legal and amnestied immigrant workers, and their families, lower the unemployment rate permanently. In the short run, the arrival of immigrants increases unemployment slightly with an impact similar to that of an increase in domestic labor-force participation. The composition of immigration flows matters, and the proportion of skilled and less-skilled workers should remain balanced.

Gwilliam, David

PD March 2000. **TI** Principals and Agents in Crisis: Reforms of Accounting and Audit at Lloyd's in 1982-6. **AU** Gwilliam, David; Macve, Richard; Meeks, Geoffrey. **AA** Gwilliam: University of Wales. Macve: London School of Economics. Meeks: University of Cambridge. **SR** University of Cambridge Discussion Papers in Accounting and Finance: AF44; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: www.econ.cam.ac.uk/dae. **PG** 36. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** D82, G22, G28, G30, M40. **KW** Agency Theory. Audit. Insurance. Lloyd's. Regulation.

AB The paper explores the monitoring by "external Names" (the principals) of "working Names" (their agents) in the Lloyd's insurance market of the 1970s and early 1980s. The market was relying heavily on external Names to finance its rapid growth; and these principals were dependent upon their agents to determine the extent and nature of the risks they were underwriting, and their share of the returns. Contrary to expectations based on agency theory, the paper finds little evidence that more formal and rigorous accounting and audit accompanied the sharp rise in external investment in the market. Such changes in monitoring were only installed as a result of intervention by government and the City, after revelations that insider agents had exploited their informational advantage to plunder their principals' assets. The paper discusses institutional characteristics of the Lloyd's market that might help explain its failure to adapt until there was external regulatory pressure.

PD May 1999. **TI** The Costs and Benefits of Increased Accounting Regulation: A Case Study of Lloyd's of London. **AU** Gwilliam, David; Macve, Richard; Meeks, Geoffrey. **AA** Gwilliam: University of Wales. Macve: London School of Economics. Meeks: University of Cambridge. **SR** University of Cambridge Discussion Papers in Accounting and Finance: AF42; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: www.econ.cam.ac.uk/dae. **PG** 17. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** G18, G22, G38, L84, M40. **KW** Regulation. Cost-Benefit Analysis. Lloyd's. Accounting. Auditing.

AB Economic arguments in support of increases or decreases in accounting and auditing regulation have generally not been supported by empirical evidence as to the magnitude of the costs and benefits. The step-change in the scale of such regulation at Lloyd's between 1982 and 1985 provides evidence which enables us to calculate sufficient estimates of the incremental costs and benefits to show that in this case the benefits to Lloyd's Names, including US Names, clearly exceeded the costs. The calculations do not, however, provide an evaluation of whether the particular style of regulation and form of accounting and auditing change adopted were the most appropriate for Lloyd's, nor of the overall efficiency and effectiveness of the regulatory regime in force. The precise limits that should be set to the continuing expansion of Lloyd's regulation therefore remain problematic pending further investigation.

Hackett, Steven C.

TI Self-Regulation and Social Welfare: The Political Economy of Corporate Environmentalism. **AU** Maxwell, John W.; Lyon, Thomas P.; Hackett, Steven C.

Hai, Wen

TI The U.S.-China Bilateral Trade Balance: It's Size and Determinants. **AU** Feenstra, Robert C.; Hai, Wen; Woo, Wing T.; Yao, Shunli.

Hall, George

PD June 1999. **TI** An Empirical Model of Inventory Investment by Durable Commodity Intermediaries. **AU** Hall, George; Rust, John. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1228; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 32. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C61, D21, E22, L61. **KW** Commodities. Inventories. Dynamic Programming. Price Speculation.

AB Analysis of a new data set of high-frequency observations on inventory investment by a U.S. steel wholesaler yields six conclusions: orders and sales are made infrequently; orders are more volatile than sales; order sizes vary considerably; there is substantial high-frequency variation in the firm's sales prices; inventory/sales ratios are unstable; and there are occasional stockouts. The firm is modeled as a durable commodity intermediary engaging in commodity price speculation. The firm's inventory investment behavior is well approximated by an optimal trading strategy from the solution to a nonlinear dynamic programming problem. The paper shows that the optimal trading strategy is a generalized (S, s) rule. Whenever the firm's inventory level q falls below the

order threshold $s(p)$ the firm places an order of size $S(p) - q$ in order to attain a target inventory level $S(p)$, where p is the current spot price. The (S, s) bands are decreasing functions of p , capturing the basic intuition of commodity price speculation: it is optimal for the firm to hold higher inventories when the spot price is low in order to profit from "buying low and selling high." Simulated data exhibit the key features of inventory investment observed in the actual data.

Hallock, Kevin F.

TI Changing Stock Market Response to Announcements of Job Loss: Evidence from 1970-1997. **AU** Farber, Henry S.; Hallock, Kevin F.

TI Have Employment Reductions Become Good News for Shareholders? The Effect of Job Loss Announcements on Stock Prices, 1970-97. **AU** Farber, Henry S.; Hallock, Kevin F.

Hamann, A. Javier

PD October 1999. **TI** Exchange-Rate-Based Stabilization: A Critical Look at the Stylized Facts. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/132; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 26. **PR** not available. **JE** E31, E61, E63. **KW** Inflation Stabilization. Exchange Rates. Stabilization Policy.

AB Do exchange-rate-based stabilizations generate distinctive economic dynamics? To address this question, this paper identifies stabilization episodes using criteria that differ from those in previous empirical studies of exchange-rate-based stabilizations. We find that, while some differences can be detected between exchange-rate-based stabilizations and stabilizations where the exchange rate is not the anchor, the behavior of important variables does not appear to differ -- especially output growth, which is good in both cases. There is also no evidence that fiscal discipline is enhanced by adopting an exchange-rate anchor, or that there are any systematic differences in the success records of stabilizations that use the exchange rate as a nominal anchor and those that do not.

Hamilton, James D.

PD September 1999. **TI** A Model for the Federal Funds Rate Target. **AU** Hamilton, James D.; Jorda, Oscar. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 98/07; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html. **PG** 44. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** C22, C25, C41, C53, E52. **KW** Federal Funds Rate. Marked Point Process. Conditional Duration Model. Conditional Hazard Model. Autoregression.

AB This paper is a statistical analysis of the manner in which the Federal Reserve determines the level of the Federal funds rate target, one of the most publicized and anticipated economic indicators in the financial world. The analysis presents two econometric challenges: (1) changes in the target are irregularly spaced in time; (2) the target is changed in discrete increments of 25 basis points. The contributions of this paper are: (1) to give a detailed account of the changing role of the target in the conduct of monetary policy; (2) to develop new

econometric tools for analyzing time-series duration data; (3) to analyze empirically the determinants of the target. The paper introduces a new class of models termed autoregressive conditional hazard processes, which allow one to produce dynamic forecasts of the probability of a target change. Conditional on a target change, an ordered probit model produces predictions on the magnitude by which the Fed will raise or lower the Federal funds rate. By decomposing Federal funds rate innovations into target changes and nonchanges, we arrive at new estimates of the effects of a monetary policy "shock."

Hamilton, Jonathan

PD May 1999. **TI** Wage Competition with Heterogeneous Workers and Firms. **AU** Hamilton, Jonathan; Thisse, Jacques-Francois; Zenou, Yves. **AA** Hamilton: University of Florida. Thisse: Universite Catholique de Louvain. Zenou: CERAS. **SR** Centre for Economic Policy Research Discussion Paper: 2141; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 28. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** I22, J41. **KW** Wage Competition. Job Assignment. Information Structure. Median Voter.

AB We study imperfect competition in the labor market when worker skills are continuously distributed within the population and a finite number of firms have different job requirements. The cost of training a worker depends on the difference between this worker's skill and the employer's needs. When firms cannot identify worker training costs in advance, firms pay workers equal wages, but workers absorb training costs. When firms can identify worker types before employment, firms can pay different net wages to workers with different training costs. Voters select a level of general education, which is financed by a lump-sum tax. Workers are on average better off when firms can observe workers' skill for a given level of human capital, but the median voter prefers a higher level of general human capital when firms cannot observe worker types.

Hanson, Gordon H.

TI Offshore Assembly from the United States: Production Characteristics of the 9802 Program. **AU** Feenstra, Robert C.; Hanson, Gordon H.; Swenson, Deborah L.

Hare, Paul

TI Output and Exports in Transition Economies: A Labour Management Model. **AU** Bennett, John; Hare, Paul; Estrin, Saul.

Harrington, Joseph E., Jr.

TI A Theory of Rigid Extremists and Flexible Moderates with an Empirical Application to the U.S. Congress. **AU** Blomberg, S. Brock; Harrington, Joseph E., Jr.

Harris, Trevor S.

PD July 1998. **TI** Are Dividend Taxes and Tax Imputation Credits Capitalized in Share Values? **AU** Harris, Trevor S.; Hubbard, Glenn R.; Kemsley, Deen. **AA** Columbia University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 42/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 55. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** G12, H03, H21, H25.

KW Dividend Taxes. Tax Policy.

AB The relation between personal taxes and firm value has fundamental implications for understanding why firms pay dividends and how taxes influence capital structure choices. Assessing personal tax valuation effects also influences tax policy debates regarding the integration of corporate and personal taxes. Despite its importance, however, several underlying problems have hampered existing research on the valuation consequences of personal taxes, leading to mixed and inconclusive results. Using a new approach, we obtain three findings. First, firm-level results for the United States indicate that accumulated retained earnings are valued less per unit than contributed capital. This finding is consistent with the capitalization of future dividend taxes in retained earnings, and it is robust to inclusion of a variety of control variables and tests for possible alternative explanations. Second, we find that differences in dividend tax rates across U.S. tax regimes are associated with predictable differences in the implied tax discount for retained earnings. Third, cross-country variation in dividend tax rates is associated with predictable variation in the implied tax discount. Furthermore, the difference in dividend tax rates across two different tax regimes in the United Kingdom is associated with predictable differences in the value discount.

Haskel, Jonathan

PD March 1999. **TI** Trade, Technology and UK Wage Inequality. **AU** Haskel, Jonathan; Slaughter, Matthew. **AA** Haskel: Queen Mary & Westfield College. Slaughter: Dartmouth College. **SR** Centre for Economic Policy Research Discussion Paper: 2091; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 32. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** F01, J03, O03. **KW** Trade. Technology. Wage Inequality.

AB The UK skill premium fell from the 1950's to the late 1970's and then rose very sharply. This paper examines the contributions to these relative wage movements of international trade and technical change. We first measure trade as changes in product prices and technical change as total-factor productivity (TFP) growth. Then we relate price and TFP changes to a set of underlying factors. Among a number of results, we find that changes in prices, not TFP, were the major force behind the rise in inequality in the 1980's. We also find that although increased trade pressure has raised technical change, its effect on wage inequality was not quantitatively significant.

Hassler, John

TI Equilibrium Unemployment Insurance. **AU** Zilibotti, Fabrizio; Hassler, John; Mora, Jose V. Rodriguez; Storesletten, Kjetil.

Hatton, Tim J.

TI Seebom Rowntree and the Post-War Poverty Puzzle. **AU** Bailey, Roy E.; Hatton, Tim J.

Haubrich, Joseph G.

PD February 1998. **TI** Large Shareholders and Market Discipline in a Regulated Industry: A Clinical Study of Mellon Bank. **AU** Haubrich, Joseph G.; Thomson, James B. **AA** Federal Reserve Bank of Cleveland. **SR** Federal

Reserve Bank of Cleveland Working Papers: 9803; Research Department, Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, Ohio 44101-1387. Website: www.clev.frb.org. PG 14. PR no charge. JE G21, G24, G28, G32, L14. KW Corporate Control. Large Shareholders. Banking. Principal Agent. Regulation.

AB The change in control at Mellon Bank in 1987 sheds a unique light on several aspects of corporate control, because Mellon was one of only a few banks with a large shareholder. We find that the large shareholder did not monitor the firm extensively before it experienced performance difficulties, but was able to enforce a management change when problems arose. Contrary to some theoretical models, the shareholder did not have to acquire a majority stake to effect the change. Mellon's rapid recovery relative to peer banks' reveals the inability of regulatory intervention to substitute fully for market-based forms of corporate control.

Hayes, Lashawn Richburg

PD September 1999. TI Are Prices Higher For the Poor in New York City? AA Princeton University. SR Princeton Industrial Relations Section Working Paper: 423; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. PG 20. PR not available. JE D40, E31, J71, L19. KW Imperfect Competition. Price Differential. Supermarket Prices. Urban Poor.

AB Despite earlier evidence to the contrary, recent inquiries appear to reach a consensus that the poor pay more for food. However, these studies utilize samples drawn on the basis of prior knowledge of unfair pricing strategies, proximity of volunteer surveyors, or other non-random methods. This paper revisits the issue of price discrimination by analyzing price data collected using a stratified, random sample design to answer the question of whether prices are higher in poor, urban neighborhoods. Contrary to the recent literature, I find that market prices in poor neighborhoods are not higher than those in more affluent areas.

Heady, Christopher

PD September 1998. TI Natural Resource Management and Poverty Reduction. AA University of Bath. SR Fondazione Eni Enrico Mattei Note di Lavoro: 63/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 24. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE O02, Q02. KW Renewable Resources. Poverty Reduction. Fishery Models. Environment and Development.

AB This paper considers the relationship between natural resource management and poverty by analyzing a specific example: an inland fishery in Bangladesh. The analysis involves substantial extensions to standard models and allows the simulation of market distortions and alternative management policies, using data from the fishery. The simulations show that fish migration is the most important distortion. They also show that both wage reductions and bans on capital-intensive gears can increase employment, and so reduce poverty, without endangering the sustainability of the resource. The techniques used here can be applied to other fisheries and non-fish natural resources.

Heal, Geoffrey

PD February 1998. TI Valuing the Future: Economic Theory and Sustainability. AA Columbia University. SR Columbia PaineWebber Working Paper Series in Money, Economics and Finance: PW/98/10; Graduate School of Business, 6N Uris Hall, Columbia University, 3022 Broadway, New York, NY 10027. Website: www.columbia.edu/dlc/wp/. PG 25. PR \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). JE C60, D60, D90, Q20, Q30. KW Sustainability. Environment. Resource Management. Valuation. National Income.

AB Almost without exception, sustainability issues are rooted in economic behavior and organization. Yet, economists have not really come to grips with valuing events that are centuries away. Typical economic time horizons differ by an order of magnitude from those for ecological or climatological phenomena. A lot of what follows is about reconciling these perspectives. The author develops a framework for thinking about some aspects of sustainability. The framework is one for modeling the dynamic interactions of economic and biological systems, studying the time paths that can emerge from these, and then selecting one of these as optimal. The author investigates alternative approaches to optimality, inquiring whether there is a concept of optimality that captures the concerns that underlie the emerging interest in sustainability. He suggests that the essence of sustainability lies in three points: a treatment of the present and the future that places a positive value on the very long run, recognition of all the ways in which environmental assets or natural capital contribute to economic well-being, and recognition of the constraints on economic activity implied by the dynamics of environmental assets.

PD May 1998. TI Markets and Sustainability. AA Columbia Business School. SR Columbia PaineWebber Working Paper Series in Money, Economics and Finance: PW/98/02; Graduate School of Business, 6N Uris Hall, Columbia University, 3022 Broadway, New York, NY 10027. Website: www.columbia.edu/dlc/wp/. PG 9. PR \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). JE D60, L10, O13, Q20, Q30. KW Sustainability. Conservation. Discounting. Incentives. Environment.

AB Do markets lead us to make sustainable choices? If not, why not? And what would we need to do to remedy this? This paper takes a preliminary look at these questions. It identifies three categories of reasons why market choices may not be sustainable, related to valuation of the future, recognition of the benefits provided by environmental assets, and incorrect incentives. It gives examples of cases in which these problems have been corrected, and considers the scope for a more positive relation between market forces and conservation of the environment.

PD October 1998. TI National Income and the Environment. AU Heal, Geoffrey; Kristrom, Bengt. AA Heal: Columbia University. Kristrom: SLU-Umea. SR Columbia PaineWebber Working Paper Series in Money, Economics and Finance: PW/98/01; Graduate School of Business, 6N Uris Hall, Columbia University, 3022 Broadway, New York, NY 10027. Website: www.columbia.edu/dlc/wp/. PG 17. PR \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico).

Rico). **JE** D90, E20, Q20. **KW** National Income. National Accounts. Green Accounting. Environment. Hamiltonian.

AB There is widespread recognition that we need to revise our methods of measuring national income to incorporate better the impact of economic activity on environmental assets. This paper aims to investigate alternative concepts of national income in a dynamic economy, one a generalization of Hicksian income and the other a generalization of the welfare economics concept of income as the value of output at equilibrium prices. The relationships between these concepts and the Hamiltonian of a dynamic optimization problem in a representative agent economy can be characterized fully and rather neatly: 1. the Hamiltonian is a stationary equivalent utility level. 2. a first order approximation to changes in the Hamiltonian is a Hicksian measure of the change in national income. 3. national wealth is the present value of consumption over time, valued at supporting prices. 4. if a consumption path changes slightly, then the change in Hicksian income is the change in wealth times the discount rate. 5. change in wealth equals the present value of change in income minus the present value of changes in stock accumulation. The wealth concept seems more fundamental and in some ways more robust.

PD December 1998. **TI** New Strategies for the Provision of Global Public Goods: Learning from International Environmental Challenges. **AA** Columbia University. **SR** Columbia PaineWebber Working Paper Series in Money, Economics and Finance: PW/98/11; Graduate School of Business, 6N Uris Hall, Columbia University, 3022 Broadway, New York, NY 10027. Website: www.columbia.edu/dlc/wp/. **PG** 29. **PR** \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). **JE** F42, H41, Q20, Q30. **KW** Public Goods. Environment. Policy Coordination. International Agreements. Free Riding.

AB The world of public goods has changed in the last quarter century. Many of the changes have their origins in massively increased human impacts on the biosphere, and in particular on important life support systems such as the carbon cycle, and on resources such as biodiversity, which operate as public goods that are privately provided. These goods have quite particular characteristics that may enhance the possibility of reaching durable international agreements concerning their provision. Adoption spillovers are important in this context: they can mitigate the normal free rider effect associated with public good provision. The private production of these public goods makes it natural to seek to use markets to manage their provision.

Hemmelskamp, Jens

PD March 1999. **TI** The Influence of Environmental Policy on Innovative Behaviour: An Econometric Study. **AA** Joint Research Centre, Institute for Prospective Technological Studies, Spain and University of Heidelberg. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 18/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 27. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** L21, O31, Q58. **KW** Innovation Determinants. Environmental Innovation. Environmental Policy. Environmental Standards. Environmental Taxes. Firms. **AB** The paper examines the determinants that influence the environmental innovation behavior of companies in Germany in a multivariate context by using data from the Mannheimer

Innovations Panel 1993, which was part of the Community Innovation Survey. The objective is to analyze the general structures of the determinants of environmental innovation, as well as the specific impact of environmental policy instruments as an integral part of this framework. The pressure of environmental policy instruments on the innovation behavior of companies is reproduced by indicators, which are investigated in a written survey at the level of the German Chambers of Commerce.

Henderson, Dale W.

TI Tradeoffs Between Inflation and Output-Gap Variances in an Optimizing-Agent Model. **AU** Erceg, Christopher J.; Henderson, Dale W.; Levin, Andrew T.

PD April 1999. **TI** Exact Utilities Under Alternative Monetary Rules in a Simple Macro Model With Optimizing Agents. **AU** Henderson, Dale W.; Kim, Jinill. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 635; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 25. **PR** no charge. **JE** C62, E24, E31, E52. **KW** Exact Utility. Stabilization. Sticky Wages. Price Contracts.

AB We construct an optimizing-agent model of a closed economy which is simple enough that we can use it to make exact utility calculations. There is a stabilization problem because there are one-period nominal contracts for wages, or prices, or both and shocks that are unknown at the time when contracts are signed. We evaluate alternative monetary rules using the utility function of the representative agent. Fully optimal policy can attain the Pareto-optimal equilibrium. Fully optimal policy is contrasted with both "naive" and "sophisticated" simple rules that involve, respectively, complete stabilization and optimal stabilization of one variable or a combination of two variables. With wage contracts, outcomes depend crucially on whether there are also price contracts. For example, if labor supply is relatively inelastic, for productivity shocks, nominal income stabilization yields higher welfare when there are no price contracts. However, with price contracts, outcomes are independent of whether there are wage contracts, except, of course, for nominal wage outcomes.

TI Optimal Monetary Policy With Staggered Wage and Price Contracts. **AU** Erceg, Christopher J.; Henderson, Dale W.; Levin, Andrew T.

Henry, Marc

PD February 1999. **TI** Averaged Periodogram Spectral Estimation with Long Memory Conditional Heteroscedasticity. **AA** Columbia University. **SR** Columbia University, Department of Economics Discussion Paper Series: 9899/06; Department of Economics, Columbia University, 420 West 118th Street, Room 1022 IAB, New York, NY 10027. Website www.columbia.edu/cu/economics. **PG** 31. **PR** \$4 U.S.; \$5 Canada; \$7 all other countries; Subscriptions \$140 U.S.; \$185 all other countries. **JE** C13, C14, C22, C40, G10. **KW** Semiparametric Methods. Spectral. Long Memory. Heteroskedasticity. Averaged Periodogram.

AB Semiparametric spectral methods seem particularly appropriate for the analysis of long financial time series,

providing they are robust to a variety of forms of conditional heteroskedasticity, which is generally recognized as a dominant feature of financial returns. This paper analyses the averaged periodogram statistic in the framework of a generalized linear process with (possibly long memory) conditional heteroskedasticity in the innovations. It is shown that the averaged periodogram statistic is appropriate for asymptotically normal estimation of the spectrum of a weakly dependent process at frequency zero and for consistent estimation of long memory and stationary cointegration in strongly dependent processes. The asymptotic results are coupled with extensive small sample investigations of the performance of the estimates considered.

Hertzendorf, Mark N.

PD January 1999. **TI** Price Competition and Advertising Signals -- Signaling by Competing Senders. **AU** Hertzendorf, Mark N.; Overgaard, Per Baltzer. **AA** Hertzendorf: Federal Trade Commission. Overgaard: University of Aarhus. **SR** Federal Trade Commission Bureau of Economics Working Paper: 223; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave., NW, Room 7634, Washington, D.C. 20580. Website: bperson@ftc.gov. **PG** 46. **PR** no charge. **JE** C72, D43, D82, L15. **KW** Duopoly Signaling. Signaling Games. Product Quality. Advertising. Vertical Differentiation.

AB Can price and advertising be used by vertically differentiated duopolists to signal qualities to consumers? We show that pure price separation is impossible if the vertical differentiation is small, while adding dissipative advertising ensures existence of separating equilibria. Two simple, but non-standard, equilibrium refinements are introduced to deal with the multi-sender nature of the game, and they are shown to produce a unique separating and a unique pooling profile. Pooling results in a zero-profit Bertrand outcome. Separation gives strictly positive duopoly profits, and dissipative advertising is used by the high-quality firm when products are sufficiently close substitutes. Finally, depending on the differentiation, the separating prices of both firms may be distorted upwards or downwards compared to the complete information benchmark.

Hinloopen, Jeroen

PD May 1998. **TI** Strategic R&D Cooperatives. **AA** Technische Universiteit Delft, The Netherlands. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 32/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 31. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D43, L13, L41. **KW** Differentiated Oligopoly. Cournot Competition. Bertrand Competition. Spillovers.

AB Allowing firms to cooperate in their R&D is an industrial policy which has received much attention in recent economics literature. Many of these contributions are based on the seminal analysis of d'Aspremont and Jacquemin (1988). We provide a general version of their model, which encompasses several recent contributions in the literature. With this general model we then examine the main arguments against and in favor of sustaining R&D cooperatives.

Hoekman, Bernard

PD March 1999. **TI** Deep Integration, Non-Discrimination and Euro-Mediterranean Free Trade.

AU Hoekman, Bernard; Konan, Denise Eby.

AA Hoekman: World Bank. Konan: University of Hawaii.

SR Centre for Economic Policy Research Discussion Paper: 2095; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 26. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** F13.

KW Preferential Agreements. Deep Integration. Trade in Services. Non-Tariff Barriers. Egypt. Arab League.

AB Key questions in evaluating the justification for free trade agreements (FTA's) are whether formal international cooperation is necessary to promote greater contestability of markets through harmonization or recognition of regulatory regimes ("deep integration") and whether any actions taken to reduce market segmentation are applied on a non-discriminatory basis. This paper investigates the potential importance of deep integration in the context of trade agreements the EU has concluded with Mediterranean countries. Using a standard competitive general equilibrium model of the Egyptian economy, we find that the static welfare impact of a deep FTA is a multiple of what can be obtained from a classic "shallow" agreement; in some scenarios welfare may increase by more than 10% of GDP, compared to close to zero under a shallow agreement.

PD March 1999. **TI** Developing Country Agriculture and the New Trade Agenda. **AU** Hoekman, Bernard; Anderson, Kym. **AA** Hoekman: World Bank. Anderson: University of Adelaide. **SR** Centre for Economic Policy Research Discussion Paper: 2096; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 18. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** F13, K33, Q17, Q18. **KW** WTO. Trade Negotiations. Economic Development. Agricultural Policy.

AB A new round of WTO negotiations on agriculture, services and perhaps some other issues is expected to be launched in late 1999. To what extent should those negotiations include so-called "new trade agenda" items aimed at ensuring that domestic regulatory policies do not discriminate against foreign suppliers? We argue in this paper that while market access negotiations should be given priority, as the potential welfare gains from liberalizing access to agricultural (and services) markets is still huge, the new issues should be included too. This is because they would increase the role of market disciplines in the allocation of resources in the agricultural sector itself and would ensure non-agricultural groups with interests in the new issues take part in the round to counter-balance forces favoring agricultural protection. We also argue, however, that rule-making efforts to accommodate the new issues should be de-linked from the agricultural market access negotiations, because the issues affect all sectors of activity.

TI Competition, Complementarity and Contagion in East Asia. **AU** Diwan, Ishac; Hoekman, Bernard.

Hoel, Michael

PD January 1999. **TI** Taxes and Quotas for a Stock Pollutant with Multiplicative Uncertainty. **AU** Hoel, Michael; Karp, Larry. **AA** Hoel: University of Oslo. Karp: University of California, Berkeley. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 15/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website:

www.feem.it. **PG** 21. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** H21, Q28. **KW** Pollution Control. Asymmetric Information. Taxes and Quotas. Stochastic Control. Global Warming. Multiplicative Disturbances.

AB We compare taxes and quotas when firms and the regulator have asymmetric information about abatement costs. Damages are caused by a stock pollutant. Uncertainty enters multiplicatively, i.e. it affects the slope rather than the intercept of abatement costs. We calibrate the model using cost and damage estimates of greenhouse gases. As with additive uncertainty, taxes dominate quotas. The advantage of taxes is much greater with multiplicative, compared to additive uncertainty.

Hoem, Jan Michael

PD May 1999. **TI** Third Births in Austria: The Effect of Public Policies, Educational Attainment and Labour-Force Attachment. **AU** Hoem, Jan Michael; Furnkranz-Prskawetz, Alexia; Neyer, Gerda. **AA** Hoem: Stockholm University; Prskawetz: Max Planck Institute for Demographic Research. Neyer: Austrian Academy of Sciences. **SR** Centre for Economic Policy Research Discussion Paper: 2162; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. **Website:** www.cepr.demon.co.uk. **PG** 56. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** C49, J13. **KW** Fertility. Third Births. Event History Analysis. Public Policies. Education. Labor-Force Attachment.

AB Total fertility in Austria has declined slowly but persistently from about 1.7 in the late 1970s to around 1.4 in the mid-90s, a reduction of less than twenty percent. As we show in this paper, a much stronger reduction (over fifty percent) occurred over the same period in the standardized rate of third births. This decline was accompanied by a gradual postponement of the third birth over the years up through 1991-2, after which there was a sudden increase in the tempo of childbearing in response to a change in the parental-leave policy that inadvertently favored women who had their second or subsequent child shortly after their previous one. We cannot find any indication that the general decline in third births can be seen as a consequence of women's increasing independence of their husbands at the stage in life that we study. Furthermore, it still seems to be more difficult to combine motherhood and market work in Austria than in Sweden, which is a leader in reducing such incompatibility. We conclude that these results mirror some of the ambiguities in public policies in Austria, especially the tension between the development of gender equality and the dominance of traditional norms.

Holderness, Clifford G.

PD December 1996. **TI** Were the Good Old Days That Good? The Evolution of Managerial Stock Ownership Since the Great Depression. **AU** Holderness, Clifford G.; Kroszner, Randall S.; Sheehan, Dennis P. **AA** Holderness: Boston College. Kroszner: University of Chicago. Sheehan: Penn State University. **SR** University of Chicago Center for the Study of the Economy and the State Working Paper: 131; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. **PG** 52. **PR** \$3.00; make check payable to "The University of Chicago.". **JE** D82, G32, L20, N62. **KW** Ownership Structure. Agency Problems. Firms. Managerial Control.

Economic History.

AB Despite the widespread view from Berle and Means (1932) onward that ownership of firms is increasingly separated from managerial control of those firms, almost no time series research exists to address this issue. Using the earliest available source on ownership for a large cross-section of U.S. firms, we compare managerial ownership and other firm characteristics for nearly the universe of 1,500 exchange-listed firms in 1935 with 4,200 exchange-listed firms today. Contrary to the conventional view, we find that ownership by officers and directors has risen from 13 percent to 21 percent between 1935 and 1995. After investigating the comparability of the data over such a long horizon, we examine how changes in the costs and benefits of managerial ownership may account for its increase. Alternative control devices are used at least as intensively today as earlier in the century, so managerial ownership is not simply acting as a substitute for other methods of mitigating agency problems. The relation between ownership and performance appears little changed over time. Lower volatility and the development of financial markets, however, appear to be important factors contributing to the rise in managerial ownership.

Holvad, Torben

PD January 1999. **TI** Contingent Valuation Methods: Possibilities and Problems. **AA** University of North London. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 07/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. **Website:** www.feem.it. **PG** 10. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D62. **KW** Externality Valuation. Monetization. Contingent Valuation.

AB Valuation of external costs created from transport is important to undertake in order to improve the decision-making basis for transport policy. In particular, this information could be utilized with respect to policy measures for the internalization of external costs as well as with respect to appraisal of specific transport investment projects. A number of methods towards the valuation of external costs have appeared in recent years in parallel with the increased awareness about the environmental problems created by transport. This paper will provide a critical assessment of contingent valuation methods. In particular, the paper will consider the theoretical and empirical possibilities and problems provided by this method.

Hoover, Kevin D.

PD October 1997. **TI** Data Mining Reconsidered: Encompassing and the General-to-Specific Approach to Specification Search. **AU** Hoover, Kevin D.; Perez, Stephen D. **AA** Hoover: University of California, Davis. Perez: Virginia Commonwealth University. **SR** University of California, Davis, Department of Economics Working Paper: 97/27; One Shields Avenue, Department of Economics, Davis, California 95616-8578. **Website:** polar.ucdavis.edu/econ/workingpapers/workingpapers.html. **PG** 38. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** C15, C50, C80. **KW** Simulation. Data Mining. General to Specific. Model Specification.

AB The effectiveness of one aspect of the London School of Economics (LSE) approach to econometrics is assessed in a

simulation study. The paper uses a data set and nine models analogous to those in Lovell's (1983) study of data mining. A simplified general-to-specific algorithm is tested in a simulation framework. While the study documents some of the pitfalls of the general-to-specific approach, it is, on the whole, supportive of the effectiveness of the LSE methodology as applied to stationary data with relatively simple dynamics. The general-to-specific methodology clearly dominates the alternative search methodologies investigated by Lovell.

PD October 1997. **TI** Econometrics and Reality. **AA** University of California, Davis. **SR** University of California, Davis, Department of Economics Working Paper: 97/28; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html. **PG** 27. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** B41, C10. **KW** Realism. Econometrics. Methodology.

AB Starting with a realist ontology the economic methodologist, Tony Lawson, argues that econometrics is a failed project. Apparently more sympathetic to econometrics, the philosopher of science, Nancy Cartwright, again from a realist perspective, nonetheless argues for conditions of applicability that are so stringent that she must seriously doubt the usefulness of econometrics. In this paper, I reconsider Lawson's and Cartwright's analyses and argue that realism supports rather than undermines econometrics properly interpreted and executed.

PD October 1997. **TI** Technology Shocks or Colored Noise? Why Real-Business-Cycle Models Cannot Explain Actual Business Cycles. **AU** Hoover, Kevin D.; Salyer, Kevin D. **AA** University of California, Davis. **SR** University of California, Davis, Department of Economics Working Paper: 97/29; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website:

polar.ucdavis.edu/econ/workingpapers/workingpapers.html.

PG 34. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** C15, E32, O40. **KW** Business Cycles. Real Business Cycle. Solow Residual. Simulations. Technology Shocks.

AB Typically real-business-cycle models are assessed by their ability to mimic the covariances and variances of actual business cycle data. Recently, however, advocates of RBC models have used them to fit the historical path of real GDP using the Solow residual as a driving process. We demonstrate that the success of RBC models at matching historical GDP data does not confirm the validity of RBC models. Through simulations we demonstrate that the Solow residual does not carry useful information about technology shocks and that the RBC model does not add incremental information about GDP. RBC models fit historical GDP data entirely because the Solow residual is itself just a noisy measure of GDP.

PD October 1997. **TI** Two Centuries of Taxes and Spending: A Causal Investigation of the Federal Budget Process, 1791-1990. **AU** Hoover, Kevin D.; Siegler, Mark V. **AA** University of California, Davis. **SR** University of California, Davis, Department of Economics Working Paper:

97/30; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website:

polar.ucdavis.edu/econ/workingpapers/workingpapers.html.

PG 43. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** E62, H20, H50, N11, N12. **KW** Taxation. Government Expenditures. Causality. Economic History.

AB Causal relations between U.S. federal taxation and expenditure are analyzed using an approach based on the invariance of econometric relationships in the face of structural interventions. Institutional evidence for interventions or changes of regime and econometric tests for structural breaks are used to investigate the relative stability of conditional and marginal probability distributions for each variable. The patterns of stability are the products of the underlying causal order. In keeping with earlier work on the post-World War II period, we find that causal order is not constant in the nineteenth century, but the dominant direction is from taxes to spending.

Hosken, Daniel

PD March 1999. **TI** Pricing Behavior of Multi-Product Retailers. **AU** Hosken, Daniel; Reiffen, David. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 225; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave., NW, Room 7634, Washington, D.C. 20580. Website: bperson@ftc.gov. **PG** 41. **PR** no charge. **JE** D21, D40, L11, L81. **KW** Retailing. Pricing. Multiple Products. Sales.

AB Two common features of retailing are that each retailer sells many different products, and that pricing strategies differ across these products. This paper extends previous theoretical research on single-product retailer competition to a multi-product setting. Specifically, we model a retailer's optimal pricing strategy for perishable and non-perishable items. We find the intuition used to explain retailer behavior in single-product models generalizes to the multi-product setting. Moreover, the multi-product setting allows us to generate a richer set of implications than does the single product case, some of which we empirically examine. Consistent with the theory, price changes are significantly less frequent for the non-perishable item examined (peanut butter) than for the perishable good (margarine), but when price changes occur, they are larger in magnitude for the non-perishable. Further, perishable and non-perishable price changes are negatively correlated, as the theory predicts. We view this evidence as suggesting that retailers' pricing strategies are related in predictable ways to product characteristics, such as consumers' storage costs.

Howes, Candace

PD August 1999. **TI** National Competitiveness, Dynamics of Adjustment and Long-Term Economic Growth: Conceptual, Empirical and Policy Issues. **AU** Howes, Candace; Singh, Ajit. **AA** Howes: Connecticut College. Singh: University of Cambridge. **SR** University of Cambridge Discussion Papers in Accounting and Finance: AF43; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: www.econ.cam.ac.uk/dae. **PG** 21. **PR** \$10.00 (5 pounds); checks payable to University of

Cambridge. **JE** F10, F41, F43, O30, O40. **KW** National Competitiveness. Technological Change.

AB Although the concept of national competitiveness is widely used by policy-makers at both the national and international levels, it has been the subject of severe criticism by Professor Krugman. He regards it as a meaningless concept and in the hands of naive policy-makers "a dangerous obsession" with harmful consequences. This paper challenges Professor Krugman's critique and suggests that its validity depends on a rather limited economic model whose assumptions are greatly at variance with the real world. The paper shows the analytical validity and usefulness of the concept specifically in relation to the UK and US economies.

Hubbard, Glenn R.

TI Are Dividend Taxes and Tax Imputation Credits Capitalized in Share Values? **AU** Harris, Trevor S.; Hubbard, Glenn R.; Kemsley, Deen.

Huhtala, Anni

PD December 1998. **TI** On International Harmonization of Policy Instruments to Promote Paper Recycling in Europe. **AU** Huhtala, Anni; Samakovlis, Eva. **AA** Huhtala: National Institute of Economic Research Stockholm, Sweden. Samakovlis: Umea University, Sweden. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 79/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 33. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** Q28, L05, L52, L73. **KW** Recycling. Minimum Content Requirement. Taxes. Subsidies. Environmental Policy. Harmonization.

AB Harmonization of the instruments used in environmental policy has been considered necessary to guarantee fair competition in international markets. We investigate alternative policy measures for promoting paper recycling in seven European countries and present a theoretical framework for analyzing policy requirements for the minimum amount of recycled material to be used in production. We estimate empirically the technologically feasible input combinations of pulp and waste paper for paper production. We then "translate" the standard into market-based instruments to illustrate how a common recycling goal could be implemented in different countries through taxes or subsidies. Finally, we discuss the distributional effects of harmonized policy.

PD December 1998. **TI** Green Accounting and Environmental Efficiency Indexes. **AA** National Institute of Economic Research Stockholm, Sweden. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 80/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 21. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** E66, Q28. **KW** National Income Accounting. Environmental Efficiency. Technology Parameters.

AB We derive a theoretically consistent welfare measure that is to be interpreted as a "green" net national product (NNP). In our framework, environmental deterioration is modelled as an undesirable, but inherent by-product of economic activities consuming the resource base. A major advantage of our approach is that, instead of using shadow prices of pollution that are not readily available, we can focus on quantitative data on consumption baskets of desirable (goods) and undesirable (pollution) outputs actually chosen by societies. This issue has not been discussed in the context of green national income

accounts to date, and here we show that this omission is partly a result of a tradition of modelling pollution as an unpriced input in growth models. Accordingly, the shadow value of pollution has been determined by preferences that have been distinguished from consumption choices. We suggest, instead, that environmental efficiency indexes based on outputs of firms or industries could be used as weights in green NNP calculations for the adjustment of environmental effects.

Humpage, Owen F.

PD September 1998. **TI** The Federal Reserve as an Informed Foreign-Exchange Trader. **AA** Federal Reserve Bank of Cleveland. **SR** Federal Reserve Bank of Cleveland Working Papers: 9815; Research Department, Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, Ohio 44101-1387. Website: www.clev.frb.org. **PG** 16. **PR** no charge. **JE** E51, E52, E58, F31, F47. **KW** International Finance. Monetary Policy. Central Banking. Money Supply. Credit.

AB U.S. exchange-market interventions have no apparent effect on market fundamentals, but may influence expectations. If intervention can accurately forecast exchange-rate movements, knowledge that the Federal Reserve was trading will cause traders to alter their prior estimates of the distribution of exchange-rate changes. This paper finds that U.S. intervention has value only as a forecast that recent exchange-rate movements will moderate, but not that they will reverse. Less than half of the interventions, however, seem successful, and the favorable results are generally confined to two relatively short periods that are characterized by uncertainty about future Federal Reserve policies.

Hunt, Jennifer

PD March 1999. **TI** Post-Unification Wage Growth in East Germany. **AA** Yale University. **SR** Centre for Economic Policy Research Discussion Paper: 2106; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 28. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** J03, P02. **KW** Wages. Job Changing. Migration. Unions.

AB Following monetary union with West Germany in June 1990 the median real monthly wage of prime age East German workers rose by 83% in six years. I use the German Socio-Economic Panel data to investigate the determinants of this wage growth and some of its implications. For the 1990-1 period I find that the biggest gainers were low-wage workers generally, and women and the less educated specifically. In the 1991-6 period the biggest gainers were women and the better educated. Job changing rates were high: a majority of workers had changed jobs by 1996. The return to job changing, particularly changing to a job in the west, was high in 1990-1 but fell greatly in the later period, so that overall only 18% of wage growth was due to job changing within the east and 7% to east-west job changing.

Hunt, Julie

PD July 1998. **TI** Does Promoting High Tech Products Spur Development? **AU** Hunt, Julie; Tybout, James. **AA** Georgetown University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 41/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 35. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** O02, O32,

O33. KW Productivity Growth. Development. High Tech Products.

AB The models of Lucas (1993), Krugman (1987), Stokey (1988, 1991) and Young (1991) predict that productivity growth is associated with the production of increasingly sophisticated products, and that high-end goods should exhibit more productivity growth than low-end goods. This paper investigates the empirical evidence in support of this view, using plant-level panel data from Colombia (1977-1991) and Morocco (1986- 1990). Technician-intensity is used as a measure of product sophistication. The analysis demonstrates that both countries became significantly more technician-intensive over time. This is attributed to increases in technician-intensity within plants, rather than increases in market share of technician-intensive producers. The data do not indicate that productivity growth rates were above average in the high- end plants. However, they do indicate that, in Colombia, the industries undergoing rapid intra-firm growth in technician-intensity were also experiencing relatively rapid productivity improvements. Given that the individual plants in these industries were not experiencing unusually rapid growth, it is argued that they may have been generating positive spillovers for their competitors by increasing the general knowledge stock.

Hussain, Qaizar

PD October 1999. TI Corporate Insolvency Procedures and Bank Behavior: A Study of Selected Asian Economies. AU Hussain, Qaizar; Wihlborg, Clas. AA Hussain: International Monetary Fund. Wihlborg: University of Gothenburg, Sweden. SR International Monetary Fund Working Paper: WP/99/135; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 35. PR not available. JE G21, G32, G33, K40, P52. KW Insolvency Procedures. Bankruptcy. Capital Structure. Shareholder Concentration. Firm Performance.

AB This paper explores insolvency and debt recovery procedures, and political, legal, and institutional factors influencing financial decisions of corporations and banks during the pre-crisis years in six Asian economies. It also examines whether these factors may have contributed to the depth and duration of the 1997 crisis. There are two key findings: First, bank behavior and other institutional factors, and not the nature of stakeholder orientation, seem to explain variations in capital structures and the depth of recessions across economies. Second, aspects of insolvency procedures favoring rehabilitation of "financially distressed" firms seem to explain well the expected duration of the crisis.

Hutchinson, W. George

TI Valuing the Recreational Benefits From the Creation of Nature Reserves in Irish Forests. AU Scarpa, Riccardo; Chilton, Susan M.; Hutchinson, W. George; Buongiorno, Joseph.

TI Valuing the Recreational Benefits From the Creation of Nature Reserves in Irish Forests. AU Scarpa, Riccardo; Chilton, Susan M.; Hutchinson, W. George; Buongiorno, Joseph.

Hwang, Soosung

PD December 1997. TI Market Risk and the Concept of Fundamental Volatility: Measuring Volatility Across Asset and Derivative Markets and Testing for the Impact of Derivatives

Markets on Financial Markets. AU Hwang, Soosung; Satchell, Stephen E. AA University of Cambridge. SR University of Cambridge Discussion Papers in Accounting and Finance: AF37; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: www.econ.cam.ac.uk/dae. PG 12. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE C32, G12, G13, G18. KW Fundamental Volatility. Kalman Filter. Stochastic Volatility. Implied Volatility. Financial Markets.

AB This paper proposes the unobserved fundamental component of volatility as a measure of risk. This concept of fundamental volatility may be more meaningful than observed volatility for market regulators. Fundamental volatility may be obtained using a stochastic volatility model. The authors decompose four FTSE100 stock index related volatilities into transitory noise and unobserved fundamental volatility. The question as to whether derivative markets destabilize asset markets is addressed. The analysis shows that introducing European options reduces fundamental volatility, while transitory noise in the underlying and futures markets does not show significant changes. It is concluded that, for the FTSE100 index, introducing an options market has stabilized underlying and derivative markets.

PD February 1998. TI Implied Volatility Forecasting: A Comparison of Different Procedures Including Fractionally Integrated Models with Applications to UK Equity Options. AU Hwang, Soosung; Satchell, Stephen E. AA University of Cambridge. SR University of Cambridge Discussion Papers in Accounting and Finance: AF38; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: www.econ.cam.ac.uk/dae. PG 13. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE C53, G12, G13. KW Implied Volatility. Forecasting. ARFIMA. Long Memory. Options.

AB The purpose of this paper is to consider how to forecast implied volatility for a selection of UK companies with traded options on their stocks. The authors consider a range of GARCH and log-ARFIMA based models as well as some simple forecasting models. Overall, it is found that a log-ARFIMA model forecasts best over short and long horizons.

Hyslop, Dean

TI Measuring the Effect of Arbitration on Wage Levels: The Case of Police Officers. AU Ashenfelter, Orley; Hyslop, Dean.

Ihrig, Jane

TI The Effect of Markups on the Exchange Rate Exposure of Stock Returns. AU Allayannis, George; Ihrig, Jane.

PD April 2000. TI The Dynamics of Informal Employment. AU Ihrig, Jane; Moe, Karine E. AA Ihrig: Board of Governors of the Federal Reserve System. Moe: Macalester College. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 664; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 28. PR no charge. JE E24, E62, H26, O17, O50. KW Enforcement. Taxation. Informal Sector. Economic Development. Employment.

AB This paper develops a dynamic model that includes an informal sector. It illustrates the natural dynamics of this sector, shows how tax policy affects the size of this sector, and quantifies the costs of having an informal sector. Simulations yield movements in informal employment and output consistent with empirical observations. Calibrating the model to United States data, we find approximately 5 percent of time is devoted to the informal sector and it produces 3 percent of GDP in steady state. For those who want to reduce the size of this sector, we find the best policy is to reduce tax rates. This policy not only reduces informal employment, but increases the standard of living. If we hold tax revenues constant, then governments should increase efforts in tax collection in conjunction with lowering tax rates. However, the distortion from this sector, in terms of the lifetime loss in an economy's capital stock, is minimal -- supporting those who want to keep the informal sector as a functioning part of society.

Ireland, Peter N.

PD September 1998. **TI** Expectations, Credibility, and Time-Consistent Monetary Policy. **AA** Boston College. **SR** Federal Reserve Bank of Cleveland Working Papers: 9812; Research Department, Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, Ohio 44101-1387. Website: www.clev.frb.org. **PG** 32. **PR** no charge. **JE** D84, E31, E52, E58, E61. **KW** Credibility. Time-Consistency. Monetary Policy. Expectations. Inflation. **AB** This paper addresses the problem of multiple equilibria in a model of time-consistent monetary policy. It suggests that this problem originates in the assumption that agents have rational expectations and proposes several alternative restrictions on expectations that allow the monetary authority to build credibility for a disinflationary policy by demonstrating that it will stick to that policy even if it imposes short-run costs on the economy. Starting with these restrictions, the paper derives conditions that guarantee the uniqueness of the model's steady state; monetary policy in this unique steady state involves the constant deflation advocated by Milton Friedman.

Irwin, Douglas A.

PD June 1997. **TI** Interests, Institutions, and Ideology in the Republican Conversion to Trade Liberalization, 1934-1945. **AU** Irwin, Douglas A.; Kroszner, Randall S. **AA** Irwin: Dartmouth College and NBER. Kroszner: University of Chicago. **SR** University of Chicago Center for the Study of the Economy and the State Working Paper: 137; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. **PG** 25. **PR** \$3.00; make check payable to "The University of Chicago.". **JE** D72, D78, E61, F13, N72. **KW** Trade Liberalization. Institutional Change. Voting Models. Economic History. Policy. **AB** This paper investigates the factors explaining significant policy change by studying how bipartisan support developed to sustain the Reciprocal Trade Agreements Act (RTAA) of 1934. The RTAA fundamentally transformed both the process and outcome of U.S. trade policy: Congress delegated its authority over tariff-setting to the president, and the United States then moved sharply toward trade liberalization. The durability of this change was achieved only when the Republicans, long-time supporters of high tariffs who originally vowed to repeal the RTAA, began to support this Democratic initiative in the 1940s. In seeking to explain this conversion, we find little

evidence of an ideological shift among Republicans, but rather an increased sensitivity to export interests for which the institutional structure of the RTAA itself may have been responsible. Our results suggest that analyzing changes in both institutional incentives and economic interests are important for understanding lasting change in economic policy.

Irwin, Gregor

PD May 1999. **TI** A Krugman-Dooley-Sachs Third Generation Model of the Asian Financial Crisis. **AU** Irwin, Gregor; Vines, David. **AA** Oxford University. **SR** Centre for Economic Policy Research Discussion Paper: 2149; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 32. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** E44, F34, O16. **KW** Financial Crisis. Asian Economic Crisis. Over-Investment. Multiple Equilibrium.

AB This paper presents a multiple-equilibrium model of the Asian financial crisis. The economy has Krugman-style over-investment caused by weak financial regulation and exacerbated by government guarantees. Following Dooley, the government only has a limited capacity or willingness to honor such guarantees. The model has a unique long-run equilibrium, with over-investment. But in the short run, in which the capital stock is fixed, it also has multiple equilibria. If lenders regard lending as low-risk, then it is. But if they regard lending as high-risk then the cost of honoring guarantees rises, making the lending high-risk and the risk premium self-justifying. We argue that this model usefully captures the ideas of panic and collapse which have been popularized in Sachs' discussions of the Asian crisis.

Iyigun, Murat F.

PD September 1998. **TI** What Determines Public Support for Affirmative Action? **AU** Iyigun, Murat F.; Levin, Andrew T. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 620; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 18. **PR** no charge. **JE** D72, I28, J15, J31. **KW** Public Education. Education Premium. Affirmative Action. Screening.

AB We present a public higher education finance model in which demand for educational services can exceed supply because of indivisibilities in educational investment. In such situations, a screening mechanism -- which may be imperfect due to direct or indirect discrimination -- is required for allocation. We show how changes in the education premium affect political support for affirmative action policies. When the education premium is relatively low, the matching efficiency gains provided by affirmative action policies are relatively high compared to the opportunity cost of not acquiring education, and the majority supports broader affirmative action. In contrast, when the education premium is high, the opportunity cost of not getting educated is high relative to the matching efficiency gains provided by affirmative action policies, and the majority's support for affirmative action is weaker. With endogenous wages, the negative relationship between the returns to education and affirmative action is reinforced.

PD July 1999. **TI** From Indoctrination to the Culture of

Change: Technological Progress, Adaptive Skills, and the Creativity of Nations. AU Iyigun, Murat F.; Owen, Ann L. AA Iyigun: Board of Governors of the Federal Reserve System. Owen: Hamilton College. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 642; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 21. PR no charge. JE J24, J31, O31, O41. KW Inventions. Innovations. Learning. Human Capital. Growth.

AB We distinguish learning in a static environment from that in a dynamic environment to show the existence of an important interaction between the development of new technologies and human capital accumulation. Since technological progress creates a more dynamic and uncertain environment, it not only increases the rewards to education and ability but also enhances adaptive skills. The latter in turn determines how effectively new technologies are utilized in production because they help the workforce to innovate and improve new technologies. Thus, the adaptive skills of a workforce are technological progress. Our results suggest why countries that have comparable levels of aggregate human capital and that are in similar stages of development may differ significantly in how successful they are in implementing new technologies. They also show how the intergenerational transmission of knowledge evolves endogenously with technological change. If technology changes rapidly during the process of development, learning fosters the intergenerational propagation of adaptive skills. In contrast, if technological progress is slow during development, the education of the young reinforces the learning of long-held norms.

PD October 1999. TI When Would Educational Standards Help Improve Scholastic Achievement? AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 648; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 22. PR no charge. JE I21, I28. KW Tests. Student Performance. Education Premia. Skills. Wages.

AB This paper studies the potential effects of setting mandatory standards in primary and secondary education on student performance. The author presents a model in which investment in education is indivisible. Thus, if demand exceeds supply at any level of education, allocation is carried out -- at least in part -- via test scores. The model highlights how the effectiveness of educational standards in altering student performance depends on the college and secondary school education premia, the stringency of standards, and the supply of college education. A relatively high college education premium raises the incentive to finish high school and apply to college, but the marginal benefit of meeting standards or the cost of non-compliance depend on the secondary education premium. Thus, the effect of raising educational standards on student performance may be relatively small when the secondary education premium is relatively low. Moreover, when the supply of higher education is relatively abundant so that college entrance is a non-competitive process, students' incentive to make their best effort diminishes, and in that case, the role of education premia as incentives may be limited.

Janssen, Joseph

PD January 1999. TI (Self-) Enforcement of Joint Implementation and Clean Development Mechanism Contracts. AA University of St. Gallen, Switzerland and Fondazione Eni Enrico Mattei, Milano. SR Fondazione Eni Enrico Mattei Note di Lavoro: 14/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 21. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE D21, D26, D72, F21, K12, Q25, Q28, Q49. KW Joint Implementation. Clean Development Mechanism. Climate Protection. Environmental Agreements. International Investments. Contract Enforcement. Co-operation. Incentive Compatibility.

AB International climate protection investments (Joint Implementation and Clean Development Mechanism projects) are burdened with problems of contract enforcement, which prevent the realization of efficiency gains associated with these investments. The paper analyses this problem from the perspective of non-cooperative game theory and proposes two different solutions to the co-operation problem. The first analyses the potential role of national environmental authorities in facilitating credible commitment of the project host operating under its jurisdiction. It is argued that the threat of punishing the project host if he breaches the contract may serve this purpose. The effective level of punishment is derived. The second option involves strategic delegation of contract implementation to a third party operating under the same jurisdiction as the project host. Again, the paper explores the conditions that ensure incentive-compatibility. Both options are based on the idea that the project sponsor may commit.

Jappelli, Tullio

PD May 1999. TI Consumption Insurance or Consumption Mobility. AU Jappelli, Tullio; Pistaferri, Luigi. AA Jappelli: Universita di Salerno. Pistaferri: University College London. SR Centre for Economic Policy Research Discussion Paper: 2148; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 36. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE D52, D91, I30. KW Consumption Insurance. Mobility.

AB The theory of full consumption insurance posits that households are insulated from all idiosyncratic shocks so that the ratio of the marginal utilities of consumption of any two households is constant over time. Consumption insurance therefore implies the absence of consumption mobility between any two time periods. This implication requires knowledge of the evolution of the entire consumption distribution, not just its mean as in standard tests of complete markets. We test this unexplored prediction of the theory using a panel drawn from the Bank of Italy Survey of Household Income and Wealth. We design an appropriate non-parametric test and find substantial mobility of consumption even controlling for possible preference shifts and measurement error in consumption. The findings strongly reject the theory of full consumption insurance.

Jeanne, Olivier

TI Noise Trading and Exchange Rate Regimes. AU Rose, A. K.; Jeanne, Olivier.

PD June 1999. TI Currency Crises: A Perspective on Recent Theoretical Developments. AA International Monetary Fund. SR Centre for Economic Policy Research

Discussion Paper: 2170; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 52. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE F03, F04. KW Currency Crises. European Monetary System. Self-Fulfilling Speculation. Speculative Attack. Multiple Equilibria. Contagion. Escape Clause. Fixed Exchange Rates. Fundamentals.

AB This paper puts recent theoretical developments in the literature on currency crises in perspective by comparing two theoretical approaches, one based on the speculative attack model of Krugman-Flood-Garber and the other approach, which evolved following the 1992-93 crisis of the European Monetary System, and that we call here "escape clause". The escape clause approach broadens the set of fundamentals to non-monetary variables, including unemployment or the state of the banking sector, and even "softer" fundamentals such as the reputation of the policymaker and the rules of the game played by the participants in a fixed exchange rate arrangement. It also suggests that the relationship between the economic fundamentals and devaluation expectations is in general nonlinear, and may give rise to multiple equilibria. We argue that, while the speculative attack approach provides useful insights on the anatomy of currency crises, it must be complemented by the escape clause approach if one wants to understand the underlying causes of the crises that we have witnessed in the 1990s.

Jehiel, Philippe

PD July 1998. TI Constitutional Rules of Exclusion in Jurisdiction Formation. AU Jehiel, Philippe; Scotchmer, Suzanne. AA Jehiel: CERAS, Ecole Nationale des Ponts et Chaussées, Paris and University College London. Scotchmer: University of California, Berkeley. SR Fondazione Eni Enrico Mattei Note di Lavoro: 52/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 36. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE F22, J61, K31, K33. KW Jurisdiction. Constitution. Immigration.

AB The rules under which jurisdictions (nations, provinces) can deny immigration or expel residents are generally governed by a constitution, but there do not exist either positive or normative analyses to suggest what types of exclusion rules are best. We stylize this problem by suggesting four constitutional rules of admission: free mobility, admission by majority vote, admission by unanimous consent, and admission by a demand threshold for public goods. In a simple model we characterize the equilibria that result from these rules, and provide a positive theory for which constitutional rule will be chosen.

Jensen, Henrik

TI Structural Convergence Under Reversible and Irreversible Monetary Unification. AU Beetsma, Roel M. W. J.; Jensen, Henrik.

TI Risk Sharing and Moral Hazard with a Stability Pact. AU Beetsma, Roel M. W. J.; Jensen, Henrik.

Johal, Surjinder

PD December 1998. TI Tying Government's Hands: Why Harmonisation of Environmental Policies May Be Desirable. AU Johal, Surjinder; Ulph, Alistair. AA University of Southampton. SR Fondazione Eni Enrico Mattei Note di Lavoro: 95/98; Fondazione Eni Enrico Mattei, Corso Magenta

63, 20123 Milano, Italy. Website: www.feem.it. PG 31. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE F01, H07, Q02. KW Policy Co-ordination. Harmonization. Asymmetric Information. Political Economy. Federal/State Relations.

AB We consider environmental policy in a federal system where states face purely domestic environmental problems. It is normally argued that in this context, environmental policy is best set at the state level, perhaps because of better local information. To provide a rationale for federal involvement, we use a simple strategic trade model in which if states act non-co-operatively they set laxer environmental policies than if they acted co-operatively ("environmental dumping"). While this provides a possible role for a federal government to coordinate environmental policies, it is sometimes argued that a federal government should impose uniform environmental policies across states (harmonization).

Johnson, Karen

PD July 1999. TI Monetary Policy and Price Stability. AU Johnson, Karen; Small, David; Tryon, Ralph. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 641; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 30. PR no charge. JE E31, E52, E58, E61. KW Inflation. Interest Rate. Lower Bound. Taylor Rules.

AB This paper explores issues that arise in implementing monetary policy under conditions of sustained price stability. We discuss several issues that concern the selection of a central bank's inflation objective: price measurement questions must be recognized in articulating the goals of monetary policy under sustained low inflation, questions about the behavior of other key nominal variables, particularly wages, when price increases are on average about zero, and the possibility of other channels through which conditions of very low inflation change relationships within the real economy. We present a framework for analyzing monetary policy reaction functions that can illuminate the choices facing policy makers in a regime of price stability. The zero lower bound on nominal interest rates is a potential constraint on monetary policy when nominal interest rates are low on average, which will tend to be the case when long-term inflation is low. We summarize the results of research done at the Federal Reserve to clarify these issues for the United States and consider the availability and effectiveness of alternative policy tools when the nominal interest rate is at the zero bound.

Johnson, Simon

TI Contract Enforcement in Transition. AU McMillan, John; Woodruff, Christopher; Johnson, Simon.

PD March 1999. TI Why do Firms Hide? Bribes and Unofficial Activity After Communism. AU Johnson, Simon; McMillan, John; Woodruff, Christopher. AA Johnson: Massachusetts Institute of Technology. McMillan and Woodruff: University of California, San Diego. SR Centre for Economic Policy Research Discussion Paper: 2105; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 24. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE H26, O17, P35.

KW Corruption. Unofficial Economy.

AB Our survey of private manufacturing firms finds the size of hidden "unofficial" activity to be much larger in Russia and Ukraine than in Poland, Romania and Slovakia. A comparison of cross-country averages shows that managers in Russia and Ukraine face higher effective tax rates, worse official corruption, greater incidence of Mafia protection and have less faith in the court system. Our firm-level regressions for the three East European countries find that official corruption is significantly associated with hiding output.

Jonsson, Gunnar

PD August 1999. **TI** The Relative Merits and Implications of Inflation Targeting for South Africa. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/116; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 22. **PR** not available. **JE** E37, E52, E58. **KW** Inflation Targeting. South Africa. Monetary Policy. Central Banks. Transparency.

AB This paper describes the main elements of inflation targeting, reviews its pros and cons, and examines the experiences thus far in countries using this framework. It discusses the implications and relative merits of such a framework for South Africa, and concludes that it would be feasible and desirable for South Africa to adopt explicit inflation targeting. Doing so could reduce uncertainties about the Reserve Bank's objectives and enhance the transparency of monetary policy. However, further experience with the operational aspects of the repurchase system and a refinement of the inflation forecasting framework may be needed before inflation targeting is implemented.

PD September 1999. **TI** Inflation, Money Demand, and Purchasing Power Parity in South Africa. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/122; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 24. **PR** not available. **JE** C32, E31, E41, F31, F41. **KW** Inflation. Money Demand. Purchasing Power Parity. Cointegration. Monetary Policy.

AB This empirical study for South Africa indicates that there exists a stable money demand type of relationship among domestic prices, broad money, real income, and interest rates, as well as a long-run relationship among domestic prices, foreign prices, and the nominal exchange rate. In the short run, shocks to the nominal exchange rate affect domestic prices but have virtually no impact on real output, while shocks to broad money have a temporary impact on real output before becoming inflationary. Both types of shocks seem to trigger a monetary policy response, since the short-term interest rate adjusts quickly.

Jorda, Oscar

TI Improved Testing and Specification of Smooth Transition Regression Models. **AU** Escribano, Alvaro; Jorda, Oscar.

PD December 1997. **TI** Random-Time Aggregation in Partial Adjustment Models. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 97/32; One Shields Avenue, Department of Economics, Davis, California 95616-8578. **Website:** polar.ucdavis.edu/econ/workingpapers/workingpapers.html.

PG 39. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** C43, C51, C81, E22. **KW** Point Process. Intensity. Adjustment Speed. Time Series. Inventory.

AB How is econometric analysis (of partial adjustment models) affected by the fact that, while data collection is done at regular, fixed intervals of time, economic decisions are made at random intervals of time? This paper addresses this question by modeling the economic decision making process as a general point process. Under random-time aggregation: (1) inference on the speed of adjustment is biased -- adjustments are a function of the intensity of the point process and the proportion of adjustment; (2) inference on the correlation with exogenous variables is generally downward biased; and (3) a non-constant intensity of the point process gives rise to a general class of regime dependent time series models. An empirical application to test the production-smoothing-buffer-stock model of inventory behavior illustrates, in practice, the effects of random-time aggregation.

TI The Transmission of Monetary Policy via Announcement Effects. **AU** Demiralp, Selva; Jorda, Oscar.

TI A Model for the Federal Funds Rate Target. **AU** Hamilton, James D.; Jorda, Oscar.

Joskow, Paul

TI Transmission Rights and Market Power on Electric Power Networks. II: Physical Rights. **AU** Tirole, Jean; Joskow, Paul.

PD March 1999. **TI** Transmission Rights and Market Power on Electric Power Networks I: Financial Rights. **AU** Joskow, Paul; Tirole, Jean. **AA** Joskow: Massachusetts Institute of Technology. Tirole: Institut D'Economie Industrielle. **SR** Centre for Economic Policy Research Discussion Paper: 2093; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. **Website:** www.cepr.demon.co.uk. **PG** 35. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** L13, L14. **KW** Power Markets. Restructuring. Transmission. Congestion. Financial Rights.

AB We examine whether and how the allocation of financial transmission rights affect the behavior of electricity generators and electricity consumers with market power in the electricity market. Three alternative rights market microstructures are examined. The analysis initially focuses on a two-node network where there are cheap supplies available in an exporting region, expensive supplies in an importing region and a congested transmission link between the two regions. We find that the allocation of financial rights can enhance the market power of generators at the expensive node and of electricity buyers at the cheap node. Financial rights can also mitigate market power of buyers at the expensive node and of sellers at the cheap node. Whether and how many rights will be allocated through the rights market to agents that can use them to enhance market power turns on the microstructure of the rights market and, in particular, on the extent of free riding on the potential monopoly rents accruing to rights holders. Alternative regulatory rules that would restrict who can acquire rights are examined.

Kabir, Rezaul

TI Ownership and Control in The Netherlands. **AU** de Jong, Abe; Kabir, Rezaul; Marra, Teye; Roell, Ailsa.

Kalai, Adam

PD July 1999. **TI** Strategic Polarization. **AU** Kalai, Adam; Kalai, Ehud. **AA** Kalai, A.: Carnegie Mellon University. Kalai, E.: Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1266; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 6. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C71, D71, D74, D82. **KW** Joint Decisions. Strategic Polarization. Mechanism Design. Preferences.

AB In joint decision making, people with common goals and similar preferences often take drastically opposing positions. In some cases, arbitrarily small discrepancies in preferences result in arbitrarily large losses in utility for all participants. An understanding of the properties of polarization may help game players and mechanism designers avoid its pitfalls.

Kalai, Ehud

TI Strategic Polarization. **AU** Kalai, Adam; Kalai, Ehud.

Kalra, Sanjay

PD August 1999. **TI** Inflation and Growth in Transition: Are the Asian Economies Different? **AU** Kalra, Sanjay; Slok, Torsten. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/118; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 22. **PR** not available. **JE** E31, E63, O40, O53, P52. **KW** Transition Economies. Asia. Growth. Inflation. Structural Reforms.

AB This paper examines the progress made in four Asian transition economies -- China, Lao P. D. R., Vietnam, and Mongolia -- to market-based systems. Overall, these economies appear to have had a more favorable experience with inflation stabilization and output growth than that of transition economies elsewhere. While initial conditions played an important role in determining the strategy and speed of the transition, growth performance benefited from continued macroeconomic stability and reforms in a key sector (such as agriculture); this confirms the need for sustained and rapid structural reforms and highlights the constraints for sustainable growth posed by weak financial and enterprise sectors.

Kalter, Eliot

PD December 1999. **TI** The 1994 Mexican Economic Crisis: The Role of Government Expenditure and Relative Prices. **AU** Kalter, Eliot; Ribas, Armando. **AA** Kalter: International Monetary Fund. Ribas; ESEADE, Buenos Aires. **SR** International Monetary Fund Working Paper: WP/99/160; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 16. **PR** not available. **JE** E61, E62, E65, F32, F41. **KW** Mexican Economic Crisis. Government Expenditures. Relative Prices. Financial Crises. Open Economies.

AB This paper discusses the role of a country's fiscal stance in weakening the financial underpinnings of an open economy

with a quasi-fixed nominal exchange rate, even where the overall fiscal deficit remains unchanged, or even narrows. The paper cites the role of expanding government operations in reducing the relative price of traded goods. A marked increase in government expenditure and taxation is associated with increased production costs, excess demand for nontraded goods, and a deterioration in the financial health of the traded goods sector. The paper demonstrates that, in contrast to the current economic situation in Mexico, the period leading to the 1994 crisis closely parallels these stylized facts.

Kamin, Steven B.

TI The Impact of Monetary Policy on Exchange Rates During Financial Crises. **AU** Gould, David M.; Kamin, Steven B.

PD June 1999. **TI** The Current International Financial Crisis: How Much is New? **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 636; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 11. **PR** no charge. **JE** F32, F34, G15, O16. **KW** Devaluations. Financial Crises. Debt Crisis.

AB The paper surveys a broad array of data to compare the scope and impact of three emerging market financial crises: the debt crisis of the 1980s, the Mexican financial crisis of 1994-95, and the current international financial crisis. While certain conventional views regarding the three episodes are supported by the data examined in this paper, we find that in several respects, the current crisis is more similar to prior emerging market crisis episodes than is commonly believed.

PD September 1999. **TI** The Contributions of Domestic and External Factors to Latin American Devaluation Crises: An Early Warning Systems Approach. **AU** Kamin, Steven B.; Babson, Oliver D. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 645; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 39. **PR** no charge. **JE** F31, F32, F41. **KW** Exchange Rate Regimes. Foreign Exchange. Devaluations. Financial Crises. Latin America.

AB In this paper we develop a modified "early warning system" (EWS) approach to identifying the roles of domestic and external factors in Latin America's crises. Several probit models of balance-of-payments crises, based on different identified sets of crisis dates, were estimated for six Latin American countries. These models were then used to identify the separate contributions to the probabilities of crisis of domestic and external variables. Our basic finding is that, when the effect of adverse external shocks is removed from the simulated probabilities of devaluation in Latin America, the resultant simulated devaluation probabilities are still high. Taken at face value, these results indicate that devaluation crises in Latin America primarily have been a function of domestic policy and economic imbalances, with exogenous external factors playing only a secondary role. All else equal, this suggests that the adoption of strongly fixed exchange rate regimes in the region may not be too costly in terms of

diminished ability to respond to exogenous external shocks.

PD November 1999. **TI** The Evolution and Determinants of Emerging Market Credit Spreads in the 1990s. **AU** Kamin, Steven B.; von Kleist, Karsten. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 653; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. **Website:** www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 45. **PR** no charge. **JE** E43, F34, G21, O16. **KW** Emerging Markets. Credit Spreads. Credit Ratings. Bonds. Interest Rates.

AB This paper develops measures of emerging market credit spreads for the 1990's, based on data on new bond issues and bank loans, that cover a broader range of borrowers than the Brady bond spreads most commonly used to date. These measures are used to identify the impacts of credit ratings, maturity and currency denomination on spreads. The authors find important regional differences in spreads across the developing world, even after controlling for risk and maturity. They also identify the evolution of spreads during the 1990's up until the advent of the Asian financial crisis, holding other determinants constant, and find that emerging market spreads declined by more than can be explained by improvements in risk. However, for emerging market instruments with relatively favorable credit ratings, trends in spreads differed considerably from those experienced by Brady bonds. Finally, and in contrast to much market commentary, the authors find that variations in industrial country short-term interest rates explain relatively little of the decline in emerging market bond spreads. Longer-term trends, along with the temporary impact of the Mexican financial crisis, may have been more important factors in the behavior of emerging market spreads.

Kaminsky, Graciela L.

PD October 1998. **TI** Currency and Banking Crises: The Early Warnings of Distress. **AA** George Washington University. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 629; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. **Website:** www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 26. **PR** no charge. **JE** C53, E41, F31, G21. **KW** Banking Crises. Currency Crises. Early Warnings. Predicting Crises.

AB The abruptness and virulence of the 1997 Asian crises have led many to claim that these crises are of a new breed and thus they were unforecastable. This paper examines 102 financial crises in 20 countries and concludes that the Asian crises are not of a new variety. Overall, the 1997 Asian crises, as well as previous crises in other regions, occur when the economies are in distress, making the degree of fragility of the economy a useful indicator of future crises. Based on this idea, the paper proposes different composite leading indicators of crises, which are evaluated in terms of accuracy both in-sample and out-of-sample.

PD April 1999. **TI** What Triggers Market Jitters: A Chronicle of the Asian Crisis. **AU** Kaminsky, Graciela L.; Schmukler, Sergio L. **AA** Kaminsky: George Washington University. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 634; Board of Governors of the Federal

Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. **Website:** www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 22. **PR** no charge. **JE** D81, D82, F15, F32. **KW** Currency Crises. News. Herding Behavior. Contagion.

AB In the chaotic financial environment of Asia in 1997-1998, daily changes in stock prices of about 10 percent became commonplace. This paper analyzes what type of news moves the markets in those days of market jitters. We find that movements are triggered by local and neighbor-country news, with news about agreements with international organizations and credit rating agencies having the most weight. However, some of those large changes cannot be explained by any apparent substantial news, but seem to be driven by herd instincts of the market itself. The evidence suggests that investors over-react to bad news.

TI Has the Nature of Crises Changed? A Quarter Century of Currency Crises in Argentina. **AU** Choueiri, Nada; Kaminsky, Graciela L.

Kane, Thomas J.

PD June 1999. **TI** Estimating Returns to Schooling When Schooling is Misreported. **AU** Kane, Thomas J.; Rouse, Cecilia Elena; Staiger, Douglas. **AA** Kane: Harvard University and National Bureau of Economic Research. Rouse: Princeton University and National Bureau of Economic Research. Staiger: Dartmouth College and National Bureau of Economic Research. **SR** Princeton Industrial Relations Section Working Paper: 419; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **Website:** www.irs.princeton.edu/pubs/working_papers.html. **PG** 27. **PR** not available. **JE** C51, C52, I21, J31. **KW** Educational Attainment. Returns to Schooling. Measurement Error. Self Reports.

AB We propose a general method of moments technique to identify measurement error in self-reported and transcript-reported schooling using differences in wages, test scores and other covariates to discern the relative verity of each measure. We also explore the implications of such reporting errors for both OLS and IV estimates of the returns to schooling. The results cast a new light on two common findings in the extensive literature on the returns of schooling: First, respondents tend to self-report degree attainment much more accurately than they report educational attainment not corresponding with degree attainment. For instance, we estimate that more than 90 percent of those with associate's or bachelor's degrees accurately report degree attainment, while only slightly over half of those with 1 or 2 years of college credits accurately report their educational attainment. As a result, OLS estimates tend to understate returns per year of schooling and overstate degree effects. Second, because the measurement error in educational attainment is non-classical, IV estimates also tend to be biased, although the magnitude of the bias depends upon the nature of the measurement error in the region of educational attainment affected by the instrument.

Kaplan, D. J.

TI Nonpoint Source Pollution Control Under Incomplete and Costly Information. **AU** Farzin, Y. H.; Kaplan, D. J.

Karni, Edi

PD March 1997. **TI** Hexagon Condition and Additive Representation of Preferences: An Algebraic Approach.

AU Karni, Edi; Safra, Zvi. **AA** Karni: Johns Hopkins University. Safra: Tel Aviv University. **SR** Johns Hopkins Department of Economics Working Paper: 384; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 5. **PR** no charge. **JE** D11, D81. **KW** Thomsen Condition. Hexagon Condition. Additive Representation. Preferences.

AB Within the algebraic approach the Thomsen condition may be replaced with the hexagon condition to imply the existence of additive representation of preferences. In some models the Thomsen condition does not have a natural interpretation whereas the hexagon condition does, which makes it better suited for axiomatic theories.

PD June 1997. **TI** An Extension of a Theorem of Von Neumann and Morgenstern with Application to Social Choice Theory. **AU** Karni, Edi; Safra, Zvi. **AA** Karni: Johns Hopkins University. Safra: Tel Aviv University. **SR** Johns Hopkins Department of Economics Working Paper: 389; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 13. **PR** no charge. **JE** C79, D71, D81. **KW** Expected Utility. Social Welfare. Non-Expected Utility. Social Choice. Risk.

AB We present an analytical framework and an axiomatic theory of behavior under risk that constitutes an extension of the theory of von Neumann and Morgenstern. The extension entails a relaxation of the mixture space structure of the decision set and requires the restriction of the independence axiom of expected utility theory. Application to social choice theory yields an extension of Harsanyi's impartial observer theorem to the case in which individual preferences do not necessarily satisfy the axioms of expected utility theory. Another application to game theory is discussed briefly.

PD June 1998. **TI** Individual Sense of Justice: A Utility Representation. **AU** Karni, Edi; Safra, Zvi. **AA** Karni: Johns Hopkins University. Safra: Tel Aviv University. **SR** Johns Hopkins Department of Economics Working Paper: 403; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 31. **PR** no charge. **JE** D63, D64, D71. **KW** Sense of Justice. Utility Representation. Social Welfare. Fairness. Choice.

AB We present an axiomatic model depicting the choice behavior of a self-interest seeking moral individual over random allocation procedures. The individual preferences are decomposed into a self-interest component and a component representing the individual's value judgment. Each component has a distinct utility representation and the preference relation depicting the choice behavior is representable by a real-valued function defined on the components utilities. The addition of a hexagon condition implies additively separable utility representation of preferences consisting of a monotonic increasing transformation of a linear function representing the self-interest seeking aspect of individual behavior and a quasi-concave function representing his sense of fairness. If the hexagon condition is replaced by a stronger condition called trade-off independence then the function representing the self-interest component is linear.

PD November 1998. **TI** Optimal Unemployment Insurance: A Survey. **AA** Johns Hopkins University. **SR** Johns Hopkins Department of Economics Working Paper: 407; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 38. **PR** no charge. **JE** D82, J65. **KW** Unemployment Insurance. Moral

Hazard. Adverse Selection.

AB Unemployment insurance has been the subject of numerous theoretical and empirical studies. These studies elucidate the benefits and the cost of unemployment insurance, namely, the improved allocation of risk bearing and the reduced incentives for work. In the past two decades a branch of the literature has emerged that deals with the optimal design of unemployment insurance. This literature has been influenced by ideas and methods from the field of information economics and theories from the field of labor economics. The result is a collection of models designed to highlight a variety of issues pertaining to the provision of optimal unemployment insurance. This paper reviews these issues, summarizes the relevant literature, assesses its accomplishments, and points out problems that require further study.

PD December 1998. **TI** Impartiality and Interpersonal Comparisons of Variations in Well-Being. **AA** Johns Hopkins University. **SR** Johns Hopkins Department of Economics Working Paper: 408; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 38. **PR** no charge. **JE** D63, D70. **KW** Impartiality. Utilitarianism. Social Welfare. Value Judgments.

AB The moral imperative requiring "equal treatment of equal claims" or impartiality is introduced within the frameworks of Harsanyi's aggregation and impartial observer theorems as axiomatic restrictions of the underlying moral value judgments. The implications of impartiality for the functional form of the social welfare functions are derived and are shown to entail interpersonal comparisons of variations in well-being. The argument is illustrated with examples.

PD December 1998. **TI** Saving Behavior in Stationary Equilibrium with Random Discounting. **AU** Karni, Edi; Zilcha, Itzhak. **AA** Karni: Johns Hopkins University. Zilcha: Tel Aviv University. **SR** Johns Hopkins Department of Economics Working Paper: 410; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 22. **PR** no charge. **JE** D91, E21. **KW** Saving. Overlapping Generations. Bequests. Random Discounting.

AB In this paper we study the implications of random discount rates of future generations for saving behavior and capital holdings in steady-state competitive equilibrium. We examine conditions under which this randomness is sufficient for households other than the most patient to save, thus providing a simple and natural way to overcome a difficulty encountered in deterministic models.

Karp, Larry

TI Taxes and Quotas for a Stock Pollutant with Multiplicative Uncertainty. **AU** Hoel, Michael; Karp, Larry.

PD May 1999. **TI** Valuing Tradable CO₂ Permits for OECD Countries. **AU** Karp, Larry; Liu, Xuemei. **AA** University of California, Berkeley. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 31/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 30. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** F17, Q28, Q43. **KW** Tradable Permits. Greenhouse Gases. Carbon Reductions. Environmental Kuznets Curve.

AB We estimate a structural model of OECD countries in which GDP and CO₂ emissions are endogenous. We use the estimated model to simulate the price of tradable CO₂ permits

and the efficiency gains from trade. Our estimated prices are high, relative to previous estimates, and the efficiency gains are substantial. We also find, contrary to previous literature, that higher income is associated with reduced emissions.

Katz, Lawrence F.

PD May 1999. TI The High-Pressure U.S. Labor Market of the 1990s. AU Katz, Lawrence F.; Krueger, Alan B. AA Katz: Harvard University and National Bureau of Economic Research. Krueger: Princeton and National Bureau of Economic Research. SR Princeton Industrial Relations Section Working Paper: 416; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. PG 89. PR \$2.50. JE J11, J41, J50, J64. KW Unemployment. Inflation. Wage Pressures. Beveridge Curve.

AB This paper examines the impact of selected labor market changes on the decline in the unemployment rate in the 1990s. We assess the contributions of four labor market factors to the decline of U.S. unemployment from the 1980s to the late 1990s: (1) demographic changes; (2) the surge in the prison population; (3) improvements in labor market matching from the growth of the temporary help industry; and (4) changes in worker bargaining power and job anxiety. We find that changes in the age structure of the labor force and the rise of labor market intermediaries are the most important labor market sources of the decline in unemployment.

Kempfert, Claudia

PD November 1998. TI Energy-Capital-Labor Substitution and the Economic Effects of CO₂ Abatement: Evidence for Germany. AU Kempfert, Claudia; Welsch, Heinz. AA Kempfert: University of Oldenburg and Fondazione Eni Enrico Mattei. Welsch: University of Oldenburg. SR Fondazione Eni Enrico Mattei Note di Lavoro: 76/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 27. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE C05, D05, Q02. KW Substitution Elasticities. CO₂ Tax. General Equilibrium Model.

AB Although the economic effects of CO₂ abatement depend substantially on the degree to which capital and labor can substitute for energy, the issue of energy-capital-labor substitution is surrounded by considerable uncertainty. In this paper we use econometrically estimated, sectorally differentiated elasticities of substitution for Germany to shed some light on this issue. The elasticity estimates are used within a dynamic multi-sector CGE model to assess the economic effects of CO₂ emission limits for Germany. In particular, we consider the implementation of emission limits by means of a carbon tax, assuming two alternative ways of tax revenue recycling, i.e. lump-sum transfer to private households vs. labor cost reduction.

TI Advances of Climate Modelling for Policy Analysis. AU Bosello, Francesco; Carraro, Carlo; Kempfert, Claudia.

Kemsley, Deen

TI Are Dividend Taxes and Tax Imputation Credits Capitalized in Share Values? AU Harris, Trevor S.; Hubbard, Glenn R.; Kemsley, Deen.

Kende, Michael

TI The Dynamics of Technological Adoption in Hardware/Software Systems: The Case of Compact Disc Players. AU Gandal, Neil; Kende, Michael; Rob, Rafael.

Kerr, Suzi

PD June 1999. TI A Carbon Sequestration Supply Function and Development of Feasible Clean Development Mechanism Rules for Tropical Forest Carbon Sinks. AU Kerr, Suzi; Pfaff, Alexander S. P. AA Kerr: Motu Economic Research, New Zealand. Pfaff: Columbia University. SR Columbia University, Department of Economics Discussion Paper Series: 9899/08; Department of Economics, Columbia University, 420 West 118th Street, Room 1022 IAB, New York, NY 10027. Website www.columbia.edu/cu/economics. PG 21. PR \$4 U.S.; \$5 Canada; \$7 all other countries; Subscriptions \$140 U.S.; \$185 all other countries. JE O13, Q23, R14, R52. KW Forestry. Land Use. Carbon. Kyoto. Environmental Policy.

AB Despite growing policy interest in using tropical forests as carbon sinks, relevant evidence is sparse. To provide such evidence, our project advances and integrates two disciplinary analyses, and applies them for a case study of Costa Rica. First, we estimate how much C sequestration will be generated in response to any given monetary reward for C sequestration. This estimate is based on our extension (included through excellent GIS databases) of the frontier of economic, observationally-based modeling of land use, integrated with our extension (included through systematic measurement of aboveground and soil C) of both process-based and empirically-based ecological models of C storage. This estimate provides the information for a C "baseline" that would be necessary for any C market. Second, we perform sensitivity analyses on whether simplified versions of our integrated model (which are easier to use within policy) can maintain sufficient accuracy.

Kim, Jinill

TI Exact Utilities Under Alternative Monetary Rules in a Simple Macro Model With Optimizing Agents. AU Henderson, Dale W.; Kim, Jinill.

Kim, Se-Jik

PD October 1999. TI Corporate Leverage, Bankruptcy, and Output Adjustment in Post-Crisis East Asia. AU Kim, Se-Jik; Stone, Mark R. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/99/143; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 23. PR not available. JE E22, E65, F32, G30, O53. KW Corporate Leverage. Bankruptcy. Capital Sales. East Asian Crisis. Output Contractions.

AB Different levels of corporate leverage are used in this paper to help explain the wide range of post-crisis output adjustment across East Asia. In the model developed here, highly leveraged firms facing a cutoff of capital inflows are threatened by bankruptcy. These firms respond by eliminating investment and selling their capital goods -- at a discount -- to try to stay afloat. Lower investment and wasteful capital sales shrink the aggregate capital stock, trigger deflationary pressures, and contract overall output. The available data are broadly consistent with the assumptions and predictions of the model.

Kimball, Miles

TI Are Technology Improvements Contractionary?
AU Basu, Susanto; Fernald, John G.; Kimball, Miles.

Klemperer, Paul

TI The Tobacco Deal. **AU** Bulow, Jeremy; Klemperer, Paul.

PD June 1999. **TI** Auction Theory: A Guide to the Literature. **AA** Nuffield College, Oxford. **SR** Centre for Economic Policy Research Discussion Paper: 2163; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. **Website:** www.cepr.demon.co.uk. **PG** 92. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** D44. **KW** Auctions. Bidding. Auction Theory. Common-Value Auctions. Private-Value-Auctions. Mechanism Design.

AB This paper provides an elementary, non-technical, survey of auction theory, by introducing and describing some of the critical papers in the subject. The most important of these are reproduced in a companion book, *The Economic Theory of Auctions*, Paul Klemperer (ed.), Edward Elgar (pub.), forthcoming.) We begin with the most fundamental concepts, and then introduce the basic analysis of optimal auctions, the revenue equivalence theorem, and marginal revenues. Subsequent sections address risk-aversion, affiliation, asymmetries, entry, collusion, multi-unit auctions, double auctions, royalties, incentive contracts, and other topics. Appendices contain technical details, some simple worked examples, and bibliographies.

Klette, Tor Jakob

PD October 1999. **TI** Empirical Patterns of Firm Growth and R&D Investment: A Quality Ladder Model Interpretation. **AU** Klette, Tor Jakob; Griliches, Zvi. **AA** Klette: University of Oslo and Statistics Norway. Griliches: Harvard University and National Bureau for Economic Research. **SR** Institute for Fiscal Studies Working Paper: W99/25; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. **PG** 24. **PR** 3 pounds. **JE** D92, L11, O31, O34, O40. **KW** Firm Growth. Research and Development. Innovation. Patents. Productivity.

AB We present a model of endogenous firm growth with R&D investment and stochastic innovation as the engines of growth. The model for firm growth is a partial equilibrium model drawing on the quality ladder models in the macro growth literature, but also on the literature on patent races and the discrete choice models of product differentiation. We examine to what extent the assumptions and the empirical content of our model are consistent with many of the findings that have emerged from empirical studies of growth, productivity, R&D and patenting at the firm level. The analysis shows that the model fits well with a number of empirical patterns such as (i) a skewed size distribution of firms with persistent differences in firm sizes, (ii) firm growth independent of firm size, as stated in the so-called Gibrat's law, and (iii) R&D investment proportional to sales.

Kling, Jeffrey

PD January 1999. **TI** Interpreting Instrumental Variables Estimates of the Returns to Schooling. **AA** Princeton University and National Bureau of Economic Research. **SR** Princeton Industrial Relations Section Working Paper:

415; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **Website:** www.irs.princeton.edu/pubs/working_papers.html. **PG** 23. **PR** not available. **JE** I21, J24, J31, R19. **KW** Returns to Schooling. Instrumental Variables. College Proximity. Disadvantaged Groups.

AB Instrumental variables can identify the return to schooling by allowing comparisons between groups whose differences in schooling levels are uncorrelated with their underlying marginal benefit from schooling and with other aspects of unobserved ability. This paper demonstrates economic insights from methods interpreting instrumental variables estimates as weighted averages of individual-specific causal effects of schooling on wages by synthesizing existing theoretical and econometric work, and by using geographic variation in college proximity as an instrumental variable. Characterizing the groups affected by the college proximity instrument, the largest increase in schooling levels is among individuals from more disadvantaged backgrounds. Although the data is insufficient for group-specific rates of return, the weight each group receives in the overall estimate is computed. In analyzing the level of schooling at which individuals change their behavior in response to the instrument, the paper demonstrates that the instrument has the greatest impact on the transition from high school to college. This supports the economic intuition that changes in the marginal cost of college should be concentrated at this transition. The results suggest that disadvantaged groups are most responsive to policies lowering college costs, and that increases in education for these groups may have high payoff.

Konan, Denise Eby

TI Deep Integration, Non-Discrimination and Euro-Mediterranean Free Trade. **AU** Hoekman, Bernard; Konan, Denise Eby.

Konrad, Kai A.

PD June 1999. **TI** The Market for Protection and the Origin of the State. **AU** Konrad, Kai A.; Skaperdas, Stergios. **AA** Konrad: University of Berlin. Skaperdas: University of California, Irvine. **SR** Centre for Economic Policy Research Discussion Paper: 2173; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. **Website:** www.cepr.demon.co.uk. **PG** 48. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** D33, D72, H11. **KW** Protection. Security. Governance. Origin of State.

AB We examine a stark setting in which security or protection can be provided by self-governing groups or by for-profit entrepreneurs: kings, lords, or mafia dons. Though self-governance is best for the population, it faces problems of long-term viability. Typically, in providing security the stable market structure involves competing lords, a condition that leads to a tragedy of coercion: all the savings from the provision of collective protection are dissipated and welfare can be as low or lower than in the absence of a state.

Kort, P. M.

TI Pollution Abatement Investment When Environmental Regulation is Uncertain. **AU** Farzin, Y. H.; Kort, P. M.

Koskela, Erkki

PD December 1999. **TI** Green Tax Reform and Competitiveness. **AU** Koskela, Erkki; Sinn, Hans-Werner;

Schob, Ronnie. AA Koskela: University of Helsinki. Sinn and Schob: University of Munich. SR Centre for Economic Policy Research Discussion Paper: 2089; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 20. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE H21, H23, J51. KW Green Tax Reform. Involuntary Unemployment. Competitiveness.

AB This paper develops a model of a small open economy that produces an export good with domestic labor and imported energy and is stuck in an unemployment situation resulting from an excessive fixed net-of-tax wage rate. We study a revenue-neutral green tax reform that substitutes energy for wage taxes. A moderate green tax reform will boost employment, improve welfare and increase the economy's competitiveness. The driving force behind these results is the technological substitution process that a green tax reform will bring about by inducing the producers to substitute labor for energy as factors of production. The resulting reduction in unemployment is welfare increasing since energy, which the country has to buy at its true national opportunity cost, is replaced with labor, whose price is above its social opportunity cost. As long as the labor tax rate exceeds the resource tax rate, a revenue-neutral green-tax reform will reduce the domestic firms' unit cost of production and hence increase international competitiveness and output of the economy.

Kostoris, Fiorella Padoa Schioppa

PD March 1999. TI Regional Aspects of Unemployment in Europe and in Italy. AA ISAE. SR Centre for Economic Policy Research Discussion Paper: 2108; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 19. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE H50, J06, J21, O57. KW Unemployment. Regions. Europe.

AB Unemployment in Europe is a worrying phenomenon not so much because it hits 18 million people, but because it almost exclusively affects particular population segments. Italy represents a textbook case of a European country where labor market imbalances only weigh upon certain social components: namely long-term unemployed, women, young people, depressed areas and particularly the Mezzogiorno, a poor region within a rich country. In all European countries suffering from excess labor supply -- with the exception of France and Spain -- some regions enjoy full employment, while others have a very high unemployment rate. Thus, understanding Italian unemployment and finding effective solutions for it is useful to understand and treat the main European labor market pathologies. An appropriate mix of demand and supply management policies, combined with strategies aimed at decreasing mismatch, appears advisable for Italy as a whole and for the reduction of its regional labor market differences. General employment policies are useful to solve regional problems too; the latter do not usually require ad hoc therapies. Some regional industrial policies may have a positive impact on employment, however, provided their core consists of offering services to firms.

Kotlikoff, Laurence J.

TI Simulating the Transmission of Wealth Inequality via Bequests. AU Gokhale, Jagadeesh; Kotlikoff, Laurence J.; Sefton, James; Weale, Martin.

Kramarz, Francis

PD May 1999. TI Working 40 Hours or Not Working 39: Lessons from the 1981 Mandatory Reduction of Weekly Working Hours. AU Kramarz, Francis; Crepon, Bruno. AA Kramarz: INSEE. Crepon: INSEE-CREST. SR Centre for Economic Policy Research Discussion Paper: 2158; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 24. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. 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%. Similar projects are envisaged in other European countries hoping that hours reduction are an efficient way of tackling their unemployment problem.

TI Minimum Wages and Employment in France and the United States. AU Abowd, John M.; Kramarz, Francis; Margolis, David N.

Kranton, Rachel E.

PD July 1999. TI Vertical Integration, Networks, and Markets. AU Kranton, Rachel E.; Minehart, Deborah F. AA Kranton: University of Maryland. Minehart: Boston University. SR Yale Cowles Foundation Discussion Paper: 1231; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. PG 44. PR no charge up to 3 papers; \$3.00 U.S.; 4.00 International. JE D49, D81, L11, L22. KW Vertical Supply. Industrial Structure. Demand Uncertainty. Networks.

AB The organization of supply relations varies across industries. This paper builds a theoretical framework to compare three alternative supply structures: vertical integration, networks, and markets. The analysis considers the relationship between uncertainty in demand for specific inputs, investment costs, and industrial structure. It shows that network structures are more likely when productive assets are expensive and firms experience large idiosyncratic shocks in demand. The analysis is supported by existing evidence and provides empirical predictions as to the shape of different industries.

PD July 1999. TI Competition for Goods in Buyer-Seller Networks. AU Kranton, Rachel E.; Minehart, Deborah F. AA Kranton: University of Maryland. Minehart: Boston University and Yale University. SR Yale Cowles Foundation Discussion Paper: 1232; Yale University, Cowles Foundation

Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. PG 39. PR no charge up to 3 papers; \$3.00 U.S.; 4.00 International. JE C78, D40, L11, L14. KW Bipartite Graphs. Outside Options. Link Externalities. Network Structure.

AB This paper studies competition in a network and how network structure determines agents' individual payoffs. It constructs a general model of competition that can serve as a reduced form for specific models. The paper shows how agents' outside options, and hence their shares of surplus, derive from "opportunity paths" connecting them to direct and indirect alternative exchanges. Analyzing these paths, results show how third parties' links affect an agent's bargaining power. Even distant links may have large effects on an agent's earnings. These payoff results, and the identification of the paths themselves, should prove useful to further analysis of network structure.

Krieger-Boden, Christiane

TI EMU Challenges European Labor Markets. AU Soltwedel, Rudiger; Dohse, Dirk; Krieger-Boden, Christiane.

Krishnamuthy, Arvind

TI Emerging Markets Crisis: An Asset Markets Perspective. AU Caballero, Ricardo J.; Krishnamuthy, Arvind.

Kristrom, Bengt

TI National Income and the Environment. AU Heal, Geoffrey; Kristrom, Bengt.

Kroszner, Randall S.

PD February 2000. TI Obstacles to Optimal Policy: The Interplay of Politics and Economics in Shaping Bank Supervision and Regulation Reforms. AU Kroszner, Randall S.; Strahan, Philip E. AA Kroszner: University of Chicago and NBER. Strahan: Federal Reserve Bank of New York. SR University of Chicago Center for the Study of the Economy and the State Working Paper: 158; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. PG 37. PR \$3.00; make check payable to "The University of Chicago.". JE D72, D78, G21, G28, L51. KW Political Processes. Regulation. Voting. Banking. Reform.

AB This paper provides a positive political economy analysis of the most important revision of the U.S. supervision and regulation system during the last two decades, the 1991 Federal Deposit Insurance Corporation Improvement Act (FDICIA). We analyze the impact of private interest groups as well as political-institutional factors on the voting patterns on amendments related to FDICIA and its final passage to assess the empirical importance of different types of obstacles to welfare-enhancing reforms. Rivalry of interests within the industry (large versus small banks) and between industries (banks versus insurance) as well as measures of legislator ideology and partisanship play important roles and, hence, should be taken into account in order to implement successful change. A "divide and conquer" strategy with respect to the private interests appears to be effective in bringing about legislative reform. The concluding section draws tentative lessons from the political economy approaches about how to increase the likelihood of welfare-enhancing regulatory change.

TI Were the Good Old Days That Good? The Evolution of Managerial Stock Ownership Since the Great Depression. AU Holderness, Clifford G.; Kroszner, Randall S.; Sheehan, Dennis P.

PD June 1997. TI The Political Economy of Deregulation: Evidence from the Relaxation of Bank Branching Restrictions in the United States. AU Kroszner, Randall S.; Strahan, Philip E. AA Kroszner: University of Chicago. Strahan: Federal Reserve Bank of New York. SR University of Chicago Center for the Study of the Economy and the State Working Paper: 136; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. PG 30. PR \$3.00; make check payable to "The University of Chicago.". JE D78, G21, G28, L51. KW Political Economy. Deregulation. Bank Branching. Banking. Positive Analysis.

AB This paper provides a positive political economy analysis of deregulation, focusing on the recent removal of barriers to bank branching. Intra- and inter- state branching restrictions had been in place in most states for more than a century but have largely disappeared during the last 25 years. Branching restrictions primarily benefit small and inefficient banks against competition from large and efficient banks. Competing financial institutions not subject to the branching laws also benefit from restrictions on their rivals. Consumers and small businesses, however, tend to be harmed by these regulations. To explain the shift to deregulation, the authors argue that a recent series of technological and financial innovations caused a change in the long-standing political equilibrium by eroding the value of the restrictions to the beneficiaries. They then use proxies for the relative strength of the potential winners and losers from branching restrictions to explain the pattern and timing of the deregulation across the states. The results support the political economy hypothesis. In addition, the authors analyze voting on the federal deregulation of interstate bank branching in the House and find that the same factors explain the voting behavior of the Representatives.

TI Interests, Institutions, and Ideology in the Republican Conversion to Trade Liberalization, 1934-1945. AU Irwin, Douglas A.; Kroszner, Randall S.

PD June 1999. TI Is the Financial System Politically Independent? Perspectives on the Political Economy of Banking and Financial Regulation. AA University of Chicago. SR University of Chicago Center for the Study of the Economy and the State Working Paper: 151; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. PG 28. PR \$3.00; make check payable to "The University of Chicago.". JE D72, D78, G21, G28, G38. KW Political Economy. Banking. Financial Regulation. Deregulation. Positive Analysis.

AB This paper investigates the relationship between politics and the banking and financial system and explores the implications of this interdependence for understanding regulations and their reforms. Five complementary positive political economy theories are outlined and applied to understand the pattern of regulation and deregulation in banking and corporate finance. First, the public interest approach considers the maximization of social welfare as the prime motivation for regulation. The private interest theory provides a second approach. This theory emphasizes the

strength and organization of interest groups that compete to lobby for protections and privileges. Changing ideology of legislators and voters offers a third alternative. Fourth, the institutional structure of policy-making can affect both the incentives of interest groups to organize and their effectiveness in influencing policy outcomes. Finally, "Leviathan" budgetary considerations of politicians and bureaucrats can motivate regulations that generate funding for government operations. These approaches then help to identify technological, legal, and economic innovations that have been driving the global movement toward financial liberalization and regulatory reform.

PD November 1999. **TI** Does Political Ambiguity Pay? Corporate Campaign Contributions and the Rewards to Legislator Reputation. **AU** Kroszner, Randall S.; Stratmann, Thomas. **AA** Kroszner: University of Chicago and NBER. Stratmann: George Mason University. **SR** University of Chicago Center for the Study of the Economy and the State Working Paper: 155; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. **PG** 26. **PR** \$3.00; make check payable to "The University of Chicago.". **JE** D72, D78, G28, G30. **KW** Reputation. Politicians. Campaign Contributions. Political Processes. Legislatures.

AB Do politicians tend to follow a strategy of ambiguity in their policy positions or a strategy of reputational development to reduce uncertainty about where they stand? Ambiguity could allow a legislator to avoid alienating constituents and to play rival interests off against each other to maximize campaign contributions. Alternatively, reputational clarity could help to reduce uncertainty about a candidate and lead to high campaign contributions from favored interests. We outline a theory that considers conditions under which a politician would and would not prefer reputational development and policy-stance clarity in the context of repeat dealing with special interests. Our proxy for reputational development is the percent of repeat givers to a legislator. Using data on corporate political action committee contributions (PACs) to members of the U.S. House during the seven electoral cycles from 1983/84 to 1995/96, we find that legislators do not appear to follow a strategy of ambiguity and that high reputational development is rewarded with high PAC contributions.

Krueger, Alan B.

TI Empirical Strategies in Labor Economics. **AU** Angrist, Joshua D.; Krueger, Alan B.

PD October 1998. **TI** Forecasting Successful Economics Graduate Students. **AU** Krueger, Alan B.; Wu, Stephen. **AA** Krueger: Princeton University and National Bureau of Economic Research. Wu: Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 403; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. **PG** 23. **PR** \$1.00. **JE** J44. **KW** Job Placement. Economics. Graduate Students. Admissions Criteria.

AB This paper seeks to identify the characteristics of applicants to graduate school in economics that predict successful job placement after completion of graduate school. Although there is considerable uncertainty in predicting the success of prospective Ph.D. students, the results indicate that GRE scores, reference writers, and admissions committee

ratings are significant predictors of job placement.

TI Estimating the Payoff to Attending a More Selective College: An Application of Selection on Observables and Unobservables. **AU** Dale, Stacy Berg; Krueger, Alan B.

PD January 1999. **TI** Education for Growth in Sweden and the World. **AU** Krueger, Alan B.; Lindahl, Mikael. **AA** Krueger: Princeton University and National Bureau of Economic Research. Lindahl: Stockholm University. **SR** Princeton Industrial Relations Section Working Paper: 411; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. **PG** 61. **PR** \$2.00. **JE** E23, I29, J24, O49. **KW** Education. Growth. Income. Human Capital.

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 diverse countries. At a national level, however, recent studies have found 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. The paper also investigates whether economic growth depends positively on the initial stock of human capital. The effect of the initial level of education on growth is sensitive to the econometric assumptions that are imposed on the data (e.g., constant-coefficient assumption), as well as to the other covariates included in the model. The paper provides weak evidence that the initial education level does not have a significant effect on economic growth among OECD countries. The conclusion comments on policy implications for Sweden.

PD January 1999. **TI** Measuring Labor's Share. **AA** Princeton University and National Bureau of Economic Research. **SR** Princeton Industrial Relations Section Working Paper: 413; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. **PG** 10. **PR** not available. **JE** D33, E24, E25, J39. **KW** Labor's Share. Compensation. Workers.

AB This paper considers conceptual and practical issues that arise in measuring labor's share of national income. More importantly: How are workers defined? How is compensation defined? The current definition of labor compensation used by the Bureau of Economic Analysis (BEA) includes the salary of business owners and payments to retired workers in labor compensation. An alternative series to the BEA's standard series is presented. In addition, a simple method for decomposing labor series compensation into a component due to "raw labor" and a component due to human capital is presented. Raw labor's share of national income is estimated using Census and CPS data. The share of national income attributable to raw labor increased from 9.6 percent to 13 percent between 1939 and 1959, remained at 12-13 percent between 1959 and 1979, and then fell to 5 percent by 1996.

TI The High-Pressure U.S. Labor Market of the 1990s. **AU** Katz, Lawrence F.; Krueger, Alan B.

PD September 1999. **TI** From Bismarck to Maastricht: The March to European Union and the Labor Compact. **AA** Princeton University and National Bureau of Economic Research. **SR** Princeton Industrial Relations Section Working Paper: 424; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. Website: www.irs.princeton.edu/pubs/working_papers.html. **PG** 20. **PR** not available. **JE** F15, H53, J38, J61. **KW** European Union. Labor Compact. Economic Integration. Factor Mobility.

AB This paper considers the likely impact that European Union (EU) will have on the labor compact. It is argued that, despite increased economic integration in Europe, countries will still be able to maintain distinct labor practices if they are willing to bear the cost of those practices. The incidence of many social protections probably already falls on workers. In addition, it is argued that imperfect mobility of capital, labor, goods and services will limit the pressure that integration will place on the labor compact. Evidence is presented suggesting that labor mobility among EU countries has not increased after the elimination of remaining restrictions on intra-EU labor mobility in 1993. Moreover, immigration from non-EU countries, which is much larger than intra-EU migration, has declined since 1993. Evidence is also reviewed suggesting that the demand for social protection rises when countries are more open, and therefore subject to more severe external shocks. This finding suggests that increased economic integration and European Monetary Union could lead to greater demand for social protection. The U.S. experience with state worker's compensation insurance programs is offered as an example of enduring differences in labor market protections in highly integrated regional economies with a common currency.

Kruiniger, Hugo

PD July 1998. **TI** Conditional Maximum Likelihood Estimations of Dynamic Panel Data Models. **AA** University College London. **SR** University College London Discussion Papers in Economics: 98/04; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 40. **PR** 4 pounds or \$8.00. **JE** C11, C14, C23. **KW** Dynamic Panel Data. Incidental Parameters. Maximum Likelihood. Bayesian Methods. Heteroskedasticity.

AB This paper considers estimations of dynamic panel data models with fixed effects. First, it shows that the stationary models can be consistently estimated by the Conditional Maximum Likelihood (CML) method and derives the asymptotic distribution of the (CML) estimator. It also establishes a relationship between MLE's that make use of a rank T-1 transformation of the data and "generalized" CMLE's and characterizes the class of consistent MLE's. Then it outlines an alternative minimum distance estimation procedure that makes use of an unrestricted CML estimate of the error covariance matrix. This two-step estimator is shown to be asymptotically equivalent to CMLE and can be given a GMM interpretation. Next, the paper compares the CMLE with GMM estimators that have been considered in the literature and presents more efficient GMM estimators. It also proves consistency of a CMLE for a model that allows for nonparametric heteroskedasticity across individuals. Finally, it shows that CML for dynamic panel data models that condition on the initial observations is inconsistent. Lancaster's (1997) two-step Bayesian procedure for this problem is shown to be

equivalent to a one-step procedure using Jeffrey's prior.

Kuo, Biing-Shen

PD March 1999. **TI** How Sure are we About PPP? Panel Evidence With the Null of Stationary Real Exchange Rates. **AU** Kuo, Biing-Shen; Mikkola, Anne. **AA** Kuo: National Chengchi University. Mikkola: University of Helsinki. **SR** Centre for Economic Policy Research Discussion Paper: 2120; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 22. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** C22, C52, F31, F47. **KW** Real Exchange Rates. Unit Root.

AB There has been serious suspicion of a spurious rejection of the unit roots in panel studies of purchasing power parity (PPP) due to the failure to control for cross-sectional dependence. This article presents evidence of mean-reversion in industrial country real exchange rates in a set-up that accounts naturally for cross-sectional dependence, is invariant to the benchmark currency and capable of detecting against regime changes, and actually tests for the null of interest, i.e. the purchasing power parity. Our results are based on a Kwiatkowski, Phillips, Schmidt and Shin (KPSS, 1992) test for the stationarity null generalized in a multivariate random walk plus noise model by Nyblom and Harvey (1998).

Kurz, Mordecai

PD March 1999. **TI** Endogenous Uncertainty and Market Volatility. **AU** Kurz, Mordecai; Motolese, Maurizio. **AA** Stanford University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 27/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 50. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D05, D84, G12. **KW** Rational Expectations. Rational Beliefs. Endogenous Uncertainty. States of Belief. Stock Price. Discount Bond. Equity Premium. Market Volatility. GARCH. Forward Discount Bias.

AB Endogenous Uncertainty is that component of economic risk and market volatility which is propagated within the economy by the beliefs and actions of agents. The theory of Rational Belief (see Kurz [1994]) permits rational agents to hold diverse beliefs and consequently, a Rational Belief Equilibrium (in short, RBE) may exhibit diverse patterns of Endogenous Uncertainty. This paper shows that most of the observed volatility in financial markets is generated by the beliefs of the agents and the diverse market puzzles which are examined in this paper, such as the equity premium puzzle, are all driven by the structure of market expectations.

Kverndokk, Snorre

TI Optimal Oil Exploration Under Climate Treaties. **AU** Berg, Elin; Kverndokk, Snorre; Rosendahl, Knut Einar.

Kydland, Finn

TI Monetary Aggregates and Output. **AU** Freeman, Scott; Kydland, Finn.

Lakdawalla, Darius

TI The Rise in Old Age Longevity and the Market for Long-Term Care. **AU** Philipson, Tomas J.; Lakdawalla, Darius.

Lane, Philip

PD August 1999. **TI** The External Wealth of Nations: Measures of Foreign Assets and Liabilities for Industrial and Developing Countries. **AU** Lane, Philip; Milesi-Ferretti, Gian Maria. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/115; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 48. **PR** not available. **JE** F21, F32, F34, O16. **KW** Foreign Assets. External Debt. Foreign Direct Investment. Equity Flows.

AB Capital flows are closely monitored, but surprisingly little is known about the stocks of external assets and liabilities held by countries, especially in the developing world. This paper constructs estimates of foreign assets and liabilities and their equity and debt subcomponents for 66 industrial and developing countries for the period 1970-97. It explores the sensitivity of estimates of stock positions to the treatment of valuation effects not captured in balance of payments data. Finally, it characterizes the stylized facts of estimated stocks and asks whether there are trends in net foreign asset positions and differences in debt-equity ratios across countries.

Lane, Philip R.

PD March 1999. **TI** The New Open Economy Macroeconomics: A Survey. **AA** Trinity College Dublin. **SR** Centre for Economic Policy Research Discussion Paper: 2115; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 36. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** F03, F04. **KW** International Macroeconomics. Nominal Rigidities. Imperfect Competition.

AB Since the 1995 publication of Obstfeld and Rogoff's Redux model, there has been an outpouring of research on open-economy dynamic general equilibrium models that incorporate imperfect competition and nominal rigidities. This paper offers an interim survey of this recent literature.

PD March 1999. **TI** Do International Investment Income Flows Smooth Income? **AA** Trinity College Dublin. **SR** Centre for Economic Policy Research Discussion Paper: 2123; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 27. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** F02, F21, F42, G15. **KW** International Investment. Investment Income. Asset Trade. Income-Smoothing.

AB We explore some empirical properties of gross international investment position. In order to provide income-smoothing, net investment income should negatively co-vary with GDP. Moreover, to maximize stabilization of GNP in the face of GDP fluctuations, the yield on foreign assets should move counter-cyclically and yield on foreign liabilities pro-cyclically. In both time-series and panel settings, we reject these hypotheses, suggesting that positive gross international investment positions are not associated with income smoothing at business-cycle frequencies.

Lanza, Alessandro

PD November 1998. **TI** On the Fast Economic Growth of a Small Country Specialised in Tourism. **AU** Lanza, Alessandro; Pigliaru, Francesco. **AA** Lanza: IEA, Paris and University College London. Pigliaru: University of Cagliari, Italy, and CRENoS. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 73/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 14. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** L83, O41, Q26. **KW** Tourism. Economic Growth.

AB Having grown faster than world GDP since the 1950s, international tourism is today one of the most important tradable sectors, with expenditure on tourist goods and services representing some 8% of total world export receipts and 5% of world GDP. Starting from a broad perspective, two main facts could be pointed out: a) in the recent past countries specialized in the tourism sector have experienced good economic performance and b) they have a (relatively) small dimension. This paper examines these facts with particular attention given to the dimension aspect. We use a two-sector endogenous growth model to define the conditions required for small countries with a relatively large natural resource endowment to specialize in tourism and to enter the faster growth path. A model based on the size of the natural resource suitable for tourism development is presented and discussed.

PD January 1999. **TI** Desperately Seeking (Environmental) Kuznets. **AU** Lanza, Alessandro; Galeotti, Marzio. **AA** Lanza: International Energy Agency. Galeotti: Università di Bergamo and Fondazione Eni Enrico Mattei. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 02/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 46. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C12, C23, O13, Q32. **KW** Environment. Growth. CO2 Emissions. Panel Data.

AB The number of studies seeking to empirically characterize the reduced-form relationship between a country's economic growth and the quantity of various pollutants produced has recently increased significantly. In several cases researchers have found evidence in favor of an inverted-U "environmental Kuznets" curve. In the case of a major greenhouse gas, CO₂, however, the evidence is at best mixed. This paper attempts to shed further light on this issue by using a newly developed data set covering over one hundred countries around the world for the last twenty-five years and by considering alternative functional forms together with an effort to rigorously discriminate among competing alternatives.

PD September 1998. **TI** Monotone Matching in Perfect and Imperfect Worlds. **AU** Legros, Patrick; Newman, Andrew F. **AA** Legros: Université de Liège, Université Libre de Bruxelles and ECARE. Newman: Columbia University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 58/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 64. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C07, C78. **KW** Matching Models. Perfect Worlds. Imperfect Worlds.

AB We study frictionless matching models in large production economies with and without market imperfections and/or incentive problems. We provide necessary and sufficient distribution-free conditions for monotone matching which depend on the relationship between what we call the segregation payoff -- a generalization of the individually rational payoff -- and the feasible set for a pair of types. Our approach yields some new techniques for computing equilibria, particularly when utility is not transferable. It also helps to

underscore the effects of imperfections, which have two distinct effects that are relevant for equilibrium matching patterns: they can overwhelm the complementarity properties of the production technology and they can introduce nontransferabilities that make equilibrium matching inefficient. We also use our framework to reveal the source of differences in the comparative static properties of some models in the literature and to explore the effects of distribution on the equilibrium-matching pattern.

Lehmann, Alexander

PD October 1999. **TI** Country Risks and the Investment Activity of U.S. Multinationals in Developing Countries. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/133; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 22. **PR** not available. **JE** D81, F21, F23, F42, O19. **KW** Foreign Direct Investment. Investment. Uncertainty. Multinational Firms.

AB This paper develops a simple real options model that demonstrates the role of country-specific risk and sunk costs in determining a multinational's choice between exports and foreign investment. The hypotheses from the model are tested for the distribution of capital expenditures by U.S.-owned foreign affiliates in 29 developing countries during 1984-95. Political and economic risk ratings are identified as deterrents to foreign capital formation; scale economies, unit wage differentials, trade openness, and agglomeration effects are found to be stimulating. These findings provide an additional rationale for a multilateral investment agreement that could function as an agency of restraint.

Leonard, David K.

TI Asymmetric Information and the Role of NGOs in African Health Care. **AU** Leonard, Kenneth L.; Leonard, David K.

Leonard, Kenneth L.

PD March 2000. **TI** How To Compensate Physicians When Both Patient and Physician Effort are Unobservable. **AU** Leonard, Kenneth L.; Zivin, Joshua. **AA** Columbia University. **SR** Columbia University, Department of Economics Discussion Paper Series: 9900/01; Department of Economics, Columbia University, 420 West 118th Street, Room 1022 IAB, New York, NY 10027. Website www.columbia.edu/cu/economics. **PG** 33. **PR** \$4 U.S.; \$5 Canada; \$7 all other countries; Subscriptions \$140 U.S.; \$185 all other countries. **JE** D24, D82, I11, I12, J30. **KW** Health Care. Asymmetric Information. Moral Hazard. Physician Compensation. Effort.

AB In this paper, we construct a joint production model of health with two-sided asymmetric information and ask the question, "How should physicians be compensated?" We demonstrate theoretically that the preferred physician compensation scheme depends on the illness condition. Outcome-contingent payments are better than effort-contingent payments for illnesses in which the efforts of physicians and patients are highly complementary, or in which both types of effort are important to the outcome. Effort-contingent payments are superior when efforts are not highly complementary, or when either physician or patient effort, but not both, are important to the outcome. Evidence to support this theory is provided by an empirical analysis of patient choice of health

care providers in Africa.

PD May 2000. **TI** African Traditional Healers and Outcome-Contingent Contracts in Health Care. **AA** Columbia University. **SR** Columbia University, Department of Economics Discussion Paper Series: 9900/02; Department of Economics, Columbia University, 420 West 118th Street, Room 1022 IAB, New York, NY 10027. Website www.columbia.edu/cu/economics. **PG** 31. **PR** \$4 U.S.; \$5 Canada; \$7 all other countries; Subscriptions \$140 U.S.; \$185 all other countries. **JE** D82, I11, I12, L14. **KW** Traditional Medicine. Traditional Healers. Asymmetric Information. Contingent Contracts. Health Care.

AB Traditional healers are a source of health care for which Africans have always paid and even with the expansion of modern medicine healers are still popular. This paper advances the unique view that traditional healers neither possess supernatural power nor do they take advantage of their clients: they use important elements of their practice to credibly deliver unobservable medical effort and therefore high quality care. An important element of their practice has previously been ignored: traditional healers use outcome-contingent contracts to deliver unobservable medical effort. This paper presents empirical evidence that, as a result of these contracts, traditional healers are popular because they provide more unobservable medical effort than other providers from which patients can choose.

PD July 1999. **TI** Asymmetric Information and the Role of NGOs in African Health Care. **AU** Leonard, Kenneth L.; Leonard, David K. **AA** Leonard, K. Columbia University. Leonard, D. University of California, Berkeley. **SR** Columbia University, Department of Economics Discussion Paper Series: 9899/09; Department of Economics, Columbia University, 420 West 118th Street, Room 1022 IAB, New York, NY 10027. Website www.columbia.edu/cu/economics. **PG** 35. **PR** \$4 U.S.; \$5 Canada; \$7 all other countries; Subscriptions \$140 U.S.; \$185 all other countries. **JE** D20, I11, I18, L31, O20. **KW** Institutional Economics. Africa. Health Care. NGO's. Nonprofit Institutions.

AB In African health care the "miracle of the market" has not occurred. Patients exhibit willingness to pay for health care and yet practitioners are unable to sell their services. Simultaneously non-governmental organizations (NGOs) are running successful health facilities for which patients are willing to pay. We develop a model of the demand for health care in the presence of asymmetric information that allows us to view African health care in the framework of the New Institutional Economics literature. We use previously published empirical results to support the validity of this view and show that NGOs have the institutional capacity to deliver high quality health care, whereas private practitioners, even with good intentions, will not easily succeed. Having arrived at the well documented conclusion that NGOs provide high quality services through theory allows us to draw policy conclusions on ways to extend the provision of health services.

Levin, Andrew T.

TI What Determines Public Support for Affirmative Action? **AU** Iyigun, Murat F.; Levin, Andrew T.

TI Tradeoffs Between Inflation and Output-Gap Variances in an Optimizing-Agent Model. **AU** Erceg, Christopher J.; Henderson, Dale W.; Levin, Andrew T.

TI Optimal Monetary Policy With Staggered Wage and Price Contracts. **AU** Erceg, Christopher J.; Henderson, Dale W.; Levin, Andrew T.

Levy, Helen

TI Recent Trends in Employer-Sponsored Health Insurance Coverage: Are Bad Jobs Getting Worse? **AU** Farber, Henry S.; Levy, Helen.

Li, Wenli

TI Skill Acquisition and Firm Creation in Transition Economies. **AU** Brixiova, Zuzana; Li, Wenli; Yousef, Tarik.

Liew, Jimmy

TI Managed Commodity Funds. **AU** Edwards, Franklin R.; Liew, Jimmy.

TI Can Book-to-Market, Size and Momentum Be Risk Factors That Predict Economic Growth. **AU** Vassalou, Maria; Liew, Jimmy.

Lindahl, Mikael

TI Education for Growth in Sweden and the World. **AU** Krueger, Alan B.; Lindahl, Mikael.

Liu, Xuemei

TI Valuing Tradable CO2 Permits for OECD Countries. **AU** Karp, Larry; Liu, Xuemei.

Llavador, Humberto

PD August 1999. **TI** An Equal-Opportunity Approach to the Allocation of International Aid. **AU** Llavador, Humberto; Roemer, John E. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 99/10; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website:

polar.ucdavis.edu/econ/workingpapers/workingpapers.html.

PG 26. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** D63, F33, F35, O19, O40. **KW** Equal Opportunity. Growth. Effort. International Aid. Foreign Aid.

AB How should international aid be distributed? The most common view is according to some utilitarian formula: in order to maximize the average growth rate of aid recipients or the growth rate of income of the class of recipient countries. Recently, the World Bank [7] has published a study demonstrating the importance of good economic management, within a recipient country, in transforming aid into economic growth. We identify good economic management with effort, and ask, how should aid be distributed to equalize opportunities [among recipient countries] for achieving growth, according to Roemer's [5] theory of equal opportunity. In addition, we calculate how aid should be distributed according to a utilitarian view. Both the equal-opportunity and utilitarian recommendations are less compensatory than actual aid policy (they would give less to many African countries than present policy does). We discuss the results.

Longhofer, Stanley D.

PD June 1998. **TI** The Importance of Bank Seniority for

Relationship Lending. **AU** Longhofer, Stanley D.; Santos, Joao A. C. **AA** Federal Reserve Bank of Cleveland. **SR** Federal Reserve Bank of Cleveland Working Papers: 9808; Research Department, Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, Ohio 44101-1387. Website: www.clev.frb.org. **PG** 38. **PR** no charge. **JE** G21, G32, L14. **KW** Bank Seniority. Relationship Lending. Banking. Monitoring. Debt.

AB This paper brings together two branches of the banking literature -- the relative priority of bank debt and banks' roles as "relationship lenders." We show that bank seniority plays an important role in encouraging the formation of ongoing bank-firm relationships. The intuition behind our model lies in the fact that when the firm's prospects deteriorate, the most senior claimant is the first to benefit from helping the firm improve its quality. If banks are made junior to other creditors, they benefit little from additional investment in the firm and hence will have little incentive to build relationships that enable them to determine the value of such an investment. As a result, making the bank senior improves its incentives to build a relationship with the firm, thereby fulfilling an important function of intermediated debt.

Longin, Francois M.

PD May 1999. **TI** From Value at Risk to Stress Testing: The Extreme Value Approach. **AA** ESSEC. **SR** Centre for Economic Policy Research Discussion Paper: 2161; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 62. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** C51, G28. **KW** Capital Requirements. Extreme Value Theory. Financial Crises. Financial Regulation. Measure of Risk. Risk Management. Value at Risk. Stress Testing. Aggregation of Risks.

AB This article presents an application of extreme value theory to compute the value at risk of a market position. In statistics, extremes of a random process refer to the lowest observation (the minimum) and to the highest observation (the maximum) over a given time-period. Extreme value theory gives some interesting results about the distribution of extreme returns. In particular, the limiting distribution of extreme returns observed over a long time-period is largely independent of the distribution of returns itself. In financial markets, extreme price movements correspond to market corrections during ordinary periods, and also to stock market crashes, bond market collapses or foreign exchange crises during extraordinary periods. An approach based on extreme values to compute the VaR thus covers market conditions ranging from the usual environment considered by the existing VaR methods to the financial crises, which are the focus of stress testing. Univariate extreme value theory is used to compute the VaR of a fully-aggregated position while multivariate extreme value theory is used to compute the VaR of a position decomposed on risk factors.

Lopez, Ramon

TI Debt, Poverty and Resource Management in a Rural Smallholder Economy. **AU** Barbier, Edward B.; Lopez, Ramon.

Loretan, Mico

PD February 2000. **TI** Evaluating "Correlation

Breakdowns" During Periods of Market Volatility. AU Loretan, Mico; English, William B. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 658; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 31.

PR no charge. JE E52, E58, G12, G21. KW Risk Management. Conditional Correlation. Asset Pricing. Volatility. Contagion.

AB Financial market observers have noted that during periods of high market volatility, correlations between asset prices can differ substantially from those seen in quieter markets. For example, correlations among yield spreads were substantially higher during the fall of 1998 than in earlier or later periods. Such changes in correlations could reflect changes in the underlying distribution of returns or "contagion" across markets that is present only during periods of market turbulence. However, as noted by Boyer, Gibson and Loretan (1999), increases in the volatility of returns are generally accompanied by an increase in sampling correlations even when the true correlations are constant. We show that this result is not just of theoretical interest: When we consider quarterly measures of volatility and correlation for three pairs of asset returns, we find that the theoretical relationship can explain much of the movement in correlations over time. We then examine the implications of this link between measures of volatility and correlation for risk management, bank supervision, and monetary policy making.

Lovett, Andrew A.

TI Transferring Multivariate Benefit Functions Using Geographical Information Systems. AU Bateman, Ian J.; Brainard, Julii; Lovett, Andrew A.

Low, Hamish

PD January 2000. TI Optimal Taxation and Risk Sharing. AU Low, Hamish; Maldoom, Daniel. AA Low: University of Cambridge, Institute for Fiscal Studies and Centre for Economic Policy Research. Maldoom: DotEcon Limited. SR Institute for Fiscal Studies Working Paper: W00/01; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. PG 38. PR 3 pounds. JE D81, H21. KW Optimal Taxation. Risk Aversion. Uncertainty. Effort.

AB This paper analyzes the trade-off between the incentive effects of increased uncertainty and the welfare benefits of risk-sharing in the design of optimal tax schedules. We use numerical methods to characterize the tax schedule and to give comparative static results of changing risk aversion, uncertainty and the cost of effort. Increased uncertainty may increase effort for precautionary reasons, but leads to greater risk sharing in the optimal tax schedule. Similarly, a reduced cost of effort leads to greater risk sharing. Incentives to work are induced through punishment at low output realizations if risk aversion is high, and through reward of high output if risk aversion is low. We also consider introducing extra randomization into the tax schedule to further incentivize individuals. This is only optimal if the form of the tax schedule is constrained, for example to be linear.

TI Long Run Equilibria: Expected Waiting Times with Noisy Selection and Local Interaction. AU Araki, Kasunori; Low, Hamish.

PD September 1999. TI Self-Insurance and Unemployment Benefit in a Life-Cycle Model of Labour Supply and Savings. AA University of Cambridge, Institute for Fiscal Studies and Centre for Economic Policy Research. SR Institute for Fiscal Studies Working Paper: W99/24; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. PG 42. PR 3 pounds. JE D91, E21, H31, J22, J65. KW Precautionary Savings. Unemployment Benefits. Life Cycle Models. Labor Supply. Participation.

AB This paper shows that flexibility in labor supply changes the incentives to save and the welfare cost of uncertainty in the presence of incomplete markets. Flexibility can lead to increased precautionary saving because the utility cost of saving is lower when labor supply is flexible. However, consumption is more smooth and welfare higher. Unemployment benefit provides alternative insurance against negative wage shocks. This reduces the need for asset holdings, but a more generous benefit program can lead to increased asset accumulation because decreased participation means individuals need more assets in order to smooth consumption. Insurance through secondary earner labor supply becomes increasingly effective, and hence reduces precautionary saving, as the correlation between shocks becomes increasingly negative.

Lown, Cara

PD August 1999. TI What was Behind the M2 Breakdown? AU Lown, Cara; Peristiani, Stavros; Robinson, Kenneth J. AA Lown and Peristiani: Federal Reserve Bank of New York. Robinson: Federal Reserve Bank of Dallas. SR Federal Reserve Bank of Dallas Financial Industry Studies Working Paper: 02/99; Federal Reserve Bank of Dallas, Dallas, Texas 75201. Website: www.dallasfed.org. PG 23. PR no charge. JE E41, E47, E51, E52, G21. KW Depository Institutions. Money Supply. Monetary Policy. M2. Banking.

AB A deterioration in the link between the M2 monetary aggregate and GDP, along with large errors in predicting M2 growth, led the Board of Governors to downgrade the M2 aggregate as a reliable indicator of monetary policy in 1993. In this paper, we argue that the financial condition of depository institutions was a major factor behind the unusual pattern of M2 growth in the early 1990's. By constructing alternative measures of M2 based on banks' and thrifts' capital positions, we show that the anomalous behavior of M2 in the early 1990's disappears. Specifically, after accounting for the effect of capital constrained institutions on M2 growth, we are able to explain the unusual behavior of M2 velocity during this time period, obtain superior M2 forecasting results, and produce a more stable relationship between M2 and the ultimate goals of policy. Our work suggests that M2 may contain useful information about economic growth during periods of time when there are no major disturbances to depository institutions.

Lu, Biao

TI Consistent Model and Moment Selection Criteria for GMM Estimation with Application to Dynamic Panel Data Models. AU Andrews, Donald W. K.; Lu, Biao.

Lucifora, Claudio

PD January 1999. TI Wage Inequalities and Low Pay: The Role of Labour Market Institutions. AA Universita Cattolica del "Sacro Cuore", Milano. SR Fondazione Eni

Enrico Mattei Note di Lavoro: 13/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 40. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE J03, J05, P05. KW Wage Inequality. Low-Wage Employment. Labor Market Institutions.

AB In this study, we investigate the role that institutional features play in shaping the distribution of wages across a number of OECD countries. The existence (and persistence) of considerable structural differences -- across countries -- in the level of wage inequality and the incidence of low pay can shed some light on inequality patterns. In particular, we focus on three specific features: the effects of trade unions, the structure of collective bargaining and the existence of regulations on wages. By looking at the different moments of the distribution of earnings various dimensions of low pay have been analyzed, namely the effects of the institutional setting on the mean, the dispersion and the (time) covariance of earnings. Consistent with previous work, our results suggest that institutions are a relevant factor in shaping the distribution of earnings and the incidence of low pay. We show that institutional settings differ substantially across countries and that institutional variety in the labor market is able to explain a great deal of the observed patterns in low pay across countries.

Lumsdaine, Robin L.

PD November 1999. TI Identifying the Common Component in International Economic Fluctuations: A New Approach. AU Lumsdaine, Robin L.; Prasad, Eswar S. AA Lumsdaine: Brown University and National Bureau for Economic Research. Prasad: International Monetary Fund. SR International Monetary Fund Working Paper: WP/99/154; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 27. PR not available. JE C51, E32, E37, F15, F41. KW Economic Fluctuations. Business Cycles. ARCH. International Economics. World Business Cycle.

AB This paper develops an aggregation procedure using time-varying weights for constructing the common component of international economic fluctuations. The methodology for deriving time-varying weights is based on some stylized features of the data documented in the paper. The model allows for a unified treatment of cyclical and seasonal fluctuations and also captures the dynamic propagation of shocks across countries. Correlations of individual country fluctuations with the common component provide evidence of a "world business cycle" and a distinct European common component. The results suggest that macroeconomic fluctuations have become more closely linked across industrial economies in the post-Bretton Woods period.

Lupi, Claudio

TI Regional Disparities and the Italian NAIRU. AU Brunello, Giorgio; Lupi, Claudio; Ordine, Patrizia.

Luttmer, Erzo F. P.

TI Network Effects and Welfare Cultures. AU Bertrand, Marianne; Luttmer, Erzo F. P.; Mullainathan, Sendhil.

Lyon, Thomas P.

TI Self-Regulation and Social Welfare: The Political Economy of Corporate Environmentalism. AU Maxwell, John W.; Lyon, Thomas P.; Hackett, Steven C.

MacDonald, Ronald

TI Monetary Policy Independence in the ERM: Was There Any? AU Edison, Hali J.; MacDonald, Ronald.

MacKinnon, James G.

TI Distributions of Error Correction Tests for Cointegration. AU Ericsson, Neil R.; MacKinnon, James G.

Macve, Richard

TI Principals and Agents in Crisis: Reforms of Accounting and Audit at Lloyd's in 1982-6. AU Gwilliam, David; Macve, Richard; Meeks, Geoffrey.

TI The Costs and Benefits of Increased Accounting Regulation: A Case Study of Lloyd's of London. AU Gwilliam, David; Macve, Richard; Meeks, Geoffrey.

Magill, Michael

PD May 1998. TI Equity, Bonds, Growth and Inflation in a Quadratic Infinite Horizon Economy. AU Magill, Michael; Quinzii, Martine. AA University of California at Davis. SR University of California, Davis, Department of Economics Working Paper: 98/08; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html. PG 33. PR \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. JE D52, D58, D60, D90, G11. KW Infinite Horizon. Incomplete Markets. Quadratic Preferences. Least Variable Income. Optimal Portfolio.

AB This paper exhibits a class of infinite-horizon economies with incomplete markets (GEI) for which the equilibrium can be explicitly derived. We show that if agents have preference orderings represented by expected discounted quadratic utilities and if their endowments are tradable, then the equilibrium consumption and welfare of agents can be expressed as a function of the least variable income stream (LVI) obtainable by trading on the financial markets. If in addition the economy has a Markov structure, then the LVI can be calculated. The model is used to study the behavior of agents on the equity and bond markets in an economy in which the growth and inflation processes are calibrated to fit US data. Two related findings emerge: first, the proportion of bonds in the portfolios of even the most risk-averse agents is small (less than 2%); second, since equity dominates the portfolios of agents, the welfare loss due to variable inflation is small.

PD October 1999. TI The Stock Market in the Overlapping Generations. AU Magill, Michael; Quinzii, Martine. AA Magill: University of Southern California. Quinzii: University of California at Davis. SR University of California, Davis, Department of Economics Working Paper: 99/13; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html. PG 33. PR \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. JE D92, E22, E44, G31, G32. KW Overlapping Generations. Capital Irreversibility. Equity Prices. Replacement Value. Tobin's q.

AB This paper studies a simple OLG model with production

under the assumption that capital investment is completely irreversible. Since firms cannot be dismantled at each generational change without losing their value, their ownership is transmitted from generation to generation through a stock market. The paper shows that the financial price of a firm can be lower than the replacement value of its capital without creating arbitrage or dampening the incentives to invest. This possibility changes the long-run behavior of the equilibrium, but only for economies with under-accumulation. In the stock market dynamics these economies have two steady states, the Diamond steady state and the Golden Rule. The Diamond steady state is locally saddle-point stable and can be reached by only one trajectory on which the financial price and replacement value of firms coincide at all times. All other trajectories on which there is a discount on equity converge (when they converge) to the Golden Rule which is locally stable. On all these trajectories the equity prices are larger than the fundamental value of future dividends and thus include a bubble component.

Mailath, George J.

PD September 1999. TI Repeated Games with Almost-Public Monitoring. AU Mailath, George J.; Morris, Stephen. AA Mailath: University of Pennsylvania. Morris: Yale University. SR Yale Cowles Foundation Discussion Paper: 1236; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. PG 53. PR no charge up to 3 papers; \$3.00 U.S.; 4.00 International. JE C71, C72, C73, D82. KW Repeated Games. Imperfect Monitoring. Private Monitoring. Folk Theorem.

AB In repeated games with imperfect public monitoring, players can use public signals to coordinate their behavior perfectly, and thus support co-operative 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.

Maldoom, Daniel

TI Optimal Taxation and Risk Sharing. AU Low, Hamish; Maldoom, Daniel.

Mandelbrot, Benoit

PD October 1999. TI Survey of Multifractality in Finance. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1238; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. PG 26. PR no charge up to 3 papers; \$3.00 U.S.; 4.00 International. JE C13, C51, C53, G12. KW Multifractal Model. Asset Returns. Stochastic Process. Scaling Laws.

AB The main ambition of this survey is to contribute to a better understanding of price variation. It criticizes previously held views on this topic, particularly, the "coin tossing model."

The point of departure is that financial prices, including those of securities, commodities, foreign exchange or interest rates, are largely unpredictable. The first step-but far from the last!-is to represent different instances of price variation by suitable random processes. Coin tossing is the oldest and by far the most widely used model of price variation. However, the term, random, has a far broader meaning, allowing the coin tossing model to be replaced by alternatives. Many of the alternatives are "unsuitable", but the alternative based on "multifractals" is very suitable and realistic. This book argues that tools needed to acquire some mastery of the intensities of financial hurricanes are already available. They are those of fractal and multifractal geometry, a discipline better known as describing the shapes of coastlines and clouds and the distribution of galaxies and as having led to the discovery of the Mandelbrot. The author's claim is that it also describes the growth and collapse of financial prices.

Marcucci, Edoardo

PD January 1999. TI Road Pricing: Old Beliefs, Present Awareness and Future Research Patterns. AA Universita di Urbino. SR Fondazione Eni Enrico Mattei Note di Lavoro: 04/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 22. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE R41, R48. KW Congestion. Congestion Charging.

AB The theoretical evolution of academic beliefs and practical policymakers' perceptions of road pricing as an instrument of efficient and equitable allocation of resources are described and analyzed. The aim of the paper is to reconstruct the logical evolution of the theory behind road pricing in order to understand why there has been scarce policy impact in spite of a long theoretical tradition. In so doing I try to bring to the fore the fundamental issues that will have to be tackled by future research in order to generate consensus around this policy instrument.

TI Bottleneck Congestion and Modal Split Revisited. AU Danielis, Romeo; Marcucci, Edoardo.

Margolis, David N.

TI Worker Displacement in France and Germany. AU Bender, Stefan; Dustmann, Christian; Margolis, David N.; Meghir, Costas.

TI Minimum Wages and Employment in France and the United States. AU Abowd, John M.; Kramarz, Francis; Margolis, David N.

Marimon, Ramon

PD April 1999. TI Employment and Distributional Effects of Restricting Working Time. AU Marimon, Ramon; Zilibotti, Fabrizio. AA Marimon: European University Institute. Zilibotti: Stockholm University. SR Centre for Economic Policy Research Discussion Paper: 2127; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 52. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE E24, E25, J22, J23, J30, J41. KW Hours Reduction. Leisure. Search. Unemployment. Wage. Working Time. Work Sharing.

AB We study the employment and distributional effects of regulating (reducing) working time in a general equilibrium

model with search- matching frictions. Job creation entails some fixed costs, but existing jobs are subject to diminishing returns. We characterize the equilibrium in the deregulated economy where large firms and individual workers freely negotiate wages and hours. Then, we consider the effects of a legislation restricting the maximum working time, while we let wages respond endogenously. In general, this regulation benefits workers, both unemployed and employed (even if wages decrease), but reduces profits and output. Employment effects are sensitive to the representation of preferences. In our benchmark, small reductions in working time, starting from the laissez-faire equilibrium solution, always increase employment, while larger reductions reduce employment. However, the employment gains from reducing working time are relatively small.

Markovich, Sarit

TI Estimating the Effects of Tax Reform in Differentiated Product Oligopolistic Markets. AU Fershtman, Chaim; Markovich, Sarit; Gandal, Neil.

Marquez, Jaime

TI A Framework for Economic Forecasting. AU Ericsson, Neil R.; Marquez, Jaime.

Marra, Teye

TI Ownership and Control in The Netherlands. AU de Jong, Abe; Kabir, Rezaul; Marra, Teye; Roell, Ailsa.

Maschler, M.

TI Voting for Voters: A Model of Electoral Evolution. AU Barbera, S.; Maschler, M.; Shalev, Jonathan.

Massarutto, Antonio

PD May 1999. TI Agriculture, Water Resources and Water Policies in Italy. AA Universita di Udine. SR Fondazione Eni Enrico Mattei Note di Lavoro: 33/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 24. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE K32, Q18, Q25. KW Water Policy. Environmental Impact. Groundwater Protection. Environmental Instruments.

AB This paper provides an overview of the Italian water management system, with particular reference to the links between agriculture and water resources, and emphasis on underground resources. Our objective is mainly descriptive at this level; nonetheless, we try to evaluate patterns of interaction between agriculture and water resources policy from the point of view of water sustainability. After a short description of the main hydrologic and institutional aspects, the paper goes into the analysis of the most important issues and ongoing policies. We show that the link between agriculture and groundwater is but very weak in "Mediterranean" Italy.

Matsuyama, Kiminori

PD March 1999. TI A Ricardian Model with a Continuum of Goods under Nonhomothetic Preferences: Demand Complementarities, Income Distribution, and North-South Trade. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1241; Center for Mathematical Studies in Economics

and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 33. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE D31, F11, O11, O33. KW Technology and Trade. North-South Trade. Product Cycle. Nonhomothetic Preferences.

AB This paper develops a Ricardian model with a continuum of goods when consumers have non-homothetic preferences. Goods are indexed in terms of priority, and the households add higher-indexed goods to their consumption baskets, as they become richer. South (North) has comparative advantage in a lower (higher) spectrum of goods, hence specializing in goods with lower (higher) income elasticities of demand. Due to the income elasticity difference, a variety of exogenous changes have asymmetric effects on the terms of trade, patterns of specialization, and welfare. Product cycles, accompanied by a southern terms of trade deterioration, occur as a consequence of a faster population growth in South, a uniform productivity growth in South, as well as a global productivity improvement. South's domestic policy to redistribute income from the rich to the poor can improve its terms of trade so much that all the households in South may be better off, at the expense of North.

Matthias, Rudolf C.

PD October 1997. TI The Financial System and Corporate Investment: A Comparative Analysis of Malaysia, Thailand and Industrialized Countries. AA University of Cambridge. SR University of Cambridge Discussion Papers in Accounting and Finance: AF36; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: www.econ.cam.ac.uk/dae. PG 23. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE G20, G31, G32, G38, O16. KW Investment. Industrializing Countries. Thailand. Malaysia. Corporate Finance.

AB How do industrial and industrializing country corporations finance their investment and what role do the systems of industrial finance and governments play in this process? These explorations reveal that the corporate sectors in industrializing countries finance their investment in a remarkably similar way to those in advanced countries. Although there has been marginally greater use of emerging stock market financing, the patterns which emerge are in many respects similar to those in advanced countries. These industrializing countries can therefore be grouped into the "market-based" or "bank-based" classifications usually used to describe advanced countries. Thailand relies predominantly on external financing from bank loans, as is the case in Japan, whereas Malaysia, like the UK and the US, finances a large proportion of its investment from retained profits.

Maurel, Mathilde

TI An Optimal Currency Area Perspective of the EU Enlargement to the CEECs. AU Boone, Laurence; Maurel, Mathilde.

Mauro, Paolo

TI The Suitability of ASEAN for a Regional Currency Arrangement. AU Bayoumi, Tamim; Mauro, Paolo.

Maxwell, John W.

PD September 1998. **TI** Self-Regulation and Social Welfare: The Political Economy of Corporate Environmentalism. **AU** Maxwell, John W.; Lyon, Thomas P.; Hackett, Steven C. **AA** Maxwell and Lyon: Kelley Indiana University. Hackett: Humboldt State University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 55/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 43. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D72, K32, L51, Q28. **KW** Regulation. Environment. Self-Regulation. Political Economy.

AB We extend the economic theory of regulation to allow for strategic self-regulation that preempts political action. When political "entry" is costly for consumers, firms can deter it through voluntary restraints. Unlike standard entry models, deterrence is achieved by over-investing to raise the rival's welfare in the event of entry. Empirical evidence on releases of toxic chemicals shows that an increased threat of regulation (as proxied by increased membership in conservation groups) indeed induces firms to reduce toxic releases. We establish conditions under which self-regulation, if it occurs, is a Pareto improvement once costs of influencing policy are included.

PD November 1998. **TI** Resource Scarcity and Conflict: An Economic Analysis. **AU** Maxwell, John W.; Reuveny, Rafael. **AA** Indiana University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 74/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 32. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** O10, Q21, Q28, Q29. **KW** Renewable Resources. Scarcity. Conflict.

AB As time passes, renewable resource scarcities are becoming more common throughout the world. There is increasing evidence that these scarcities are a causal factor in civil unrest and violent conflict, especially in developing countries. We present a simple model of renewable resource dynamics, population dynamics and conflict. Conflict is triggered by per capita resource scarcity. We examine the role and nature of conflict on the bio-economic system. We find that conflict is Nature's way of protecting vital renewable resources from human exploitation. Conflict, as modeled, increases the death rate of the human population, damages the resource, and diverts resources away from harvesting the natural resource. These effects speed the return to a peaceful steady state, at the same time however if conflict results in resource destruction it may destabilize the system leading it towards collapse.

Mayer, Thomas

PD November 1997. **TI** Boettke's Austrian Critique of Mainstream Economics: An Empiricist's Response. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 97/31; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html.

PG 26. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** B41. **KW** Austrian Economics. Boettke. Formalism.

AB Many of Boettke's criticisms of formalist economics are justified. However, he defines it so broadly that it becomes practically synonymous with mainstream economics. Yet he

blames it for the specific sins of formalist economics more narrowly defined. And since he treats Austrian economics as the only viable alternative to mainstream economics he incorrectly awards victory to Austrian economics. It has some valuable ideas to contribute to mainstream economics, but is not a good replacement for it, since it has serious deficiencies.

PD September 1998. **TI** The Domain of Theories and Tests by the Realism of Assumptions. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 98/11; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html.

PG 17. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** B41. **KW** Realism of Assumptions. Rationality Assumption. Domain of Theories. Economic Methodology.

AB The principle that theories should be tested by the accuracy of their predictions but not by the realism of their assumptions needs to be qualified. As a practical matter we often need to evaluate the applicability of theories to cases for which they have not been tested by their predictions. Here we rely on the fact that theories are applicable only within a specific domain. In determining whether a specific case, for which no direct tests are available, is within the theory's domain, we look primarily at whether the assumptions of the theory are as applicable to it as they are to the cases for which the theory has been successfully tested.

PD September 1999. **TI** Using Government Documents to Assess the Influence of Academic Research on Macroeconomic Policy. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 99/04; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html.

PG 29. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** A11, B41, E61, P10. **KW** Economist's Influence. Economics in Government. Government Documents. Macroeconomic Policy.

AB How can one tell whether academic research influences macroeconomic policy? One possibility is to look at government documents that set forth macro policy. This paper looks for such traces in U.S., European and Japanese documents. Because of ease of access it focuses on U.S. documents. Numerous traces of academic research can be found. But the road from government documents to policy is a precarious one; references and allusions to academic literature may merely be rationalizations for policies adopted for other reasons. Similarly, governments may use the results of academic research without this showing up in government documents.

PD September 1999. **TI** Some Practical Aspects of Pluralism in Economics Truth is so Important, However, That it Behooves us not to Jump to Conclusions About it (Samuels, 1997). **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 98/05; One Shields Avenue,

Department of Economics, Davis, California 95616-8578.
Website:

polar.ucdavis.edu/econ/workingpapers/workingpapers.html.

PG 24. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** A11, A13, B41, E61. **KW** Pluralism. Warren Samuels. Inconsistent Theories. Advice. Economic Methodology.

AB This contribution to a *Festschrift* for Warren Samuels argues that in giving policy advice economists should seek diversification and consider the probability of error, and also the loss function and risk aversion. And since advocacy of a theory is in a relevant way like a policy decision, the same applies to theories. If this means employing contradictory theories, then that is consistent with rational behavior. In choosing a methodology, too, a sharp dichotomy of right and wrong is not useful, as the example of new classical reductionism illustrates. Similarly, there is a role for probabilistic pluralism in making value judgments.

Mayeres, Inge

PD January 1999. **TI** The Distributional Impacts of Policies for the Control of Transport Externalities: An Applied General Equilibrium model. **AA** Katolieke Universiteit Leuven. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 08/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 53. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D58, H02, H23, R41. **KW** Cost of Public Funds. Externalities. Equity. General Equilibrium Model.

AB The paper uses an applied general equilibrium model, calibrated to the situation in Belgium in 1990, to evaluate the welfare effects of small policy changes in the presence of transport externalities. The model incorporates three types of externalities: congestion, which has a feedback effect on the behavior of the economic agents, air pollution and accidents. The model is used to perform balanced budget incidence simulations in which the marginal cost of public funds is calculated for four alternative policy instruments: a lump sum tax, the labor income tax, the fuel taxes and peak road pricing. For each of these instruments the marginal cost of public funds is calculated. The results of the model are compared with those of a model in which congestion, air pollution and accidents are assumed to remain constant at their initial level.

McDermott, John C.

TI Booms and Slumps in World Commodity Prices.
AU Cashin, Paul; McDermott, John C.; Scott, Alasdair.

McLaren, John

TI On the Dynamics of Trade Diversion: Evidence From Four Trade Blocs. **AU** Freund, Caroline L.; McLaren, John.

McMillan, John

PD February 1999. **TI** Contract Enforcement in Transition. **AU** McMillan, John; Woodruff, Christopher; Johnson, Simon. **AA** Mcmillan and Woodruff: University of California, San Diego. Johnson: Massachusetts Institute of Technology. **SR** Centre for Economic Policy Research Discussion Paper: 2081; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom.

Website: www.cepr.demon.co.uk. **PG** 60. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** K12, M13, P31. **KW** Courts. Relational Contracting. Transition.

AB The mix of formal and informal mechanisms for contract enforcement is examined using survey data from Russia, Ukraine, Romania, Poland, and Slovakia. Using the size of trade credit to quantify the success of contracting, we ask: Do the courts have a perceptible effect on contracting? When can a firm rely on its customer to repay trade credit voluntarily? Which is more effective, the courts or relational contracting? Do trade associations play a role in contract enforcement? Does relational contracting entail inefficiencies? Is the reliance on relation contracting merely a transitory phenomenon, reflecting the inadequacy of these countries' legal systems?.

TI Why do Firms Hide? Bribes and Unofficial Activity After Communism. **AU** Johnson, Simon; McMillan, John; Woodruff, Christopher.

Meeks, Geoffrey

TI Principals and Agents in Crisis: Reforms of Accounting and Audit at Lloyd's in 1982-6. **AU** Gwilliam, David; Macve, Richard; Meeks, Geoffrey.

TI The Costs and Benefits of Increased Accounting Regulation: A Case Study of Lloyd's of London. **AU** Gwilliam, David; Macve, Richard; Meeks, Geoffrey.

Meggison, William L.

PD January 1999. **TI** From State to Market: A Survey of Empirical Studies on Privatization. **AU** Meggison, William L.; Netter, Jeffery M. **AA** Meggison: University of Oklahoma. Netter: University of Georgia. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 01/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 59. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** E22, E24, G24, G32, H27, L32, L33. **KW** Capital. Investment. Employment. Financing Policy. Ownership Structure. Investment Banking. Venture Capital. Brokerage. Public Economics. Revenue Sources. Public Enterprises. Privatization. Contracting Out.

AB This study surveys the academic and professional literature examining the privatization of state-owned enterprises (SOEs), with a focus on empirical studies. Countries have adopted large-scale privatization programs primarily for two reasons: first, the conclusive evidence that privately owned firms outperform SOEs and, second, the empirical evidence shows that privatization significantly improves the operating and financial performance of divested firms. Governments can also raise significant revenues by selling SOEs. While the choice between privatization via public share offering versus asset sales is still imperfectly understood, factors such as firm size, government fiscal condition, and the state of national economic development are important influences. Governments have great discretion in pricing the SOE's they sell, especially those being sold via public share offering, and they use this discretion to pursue political and economic ends. Finally, investors who purchase the shares of firms being privatized earn significantly positive excess returns both in the short-run (due to deliberate under-pricing of share issues by the government) and over one, three, and five-year investment horizons.

Meghir, Costas

PD March 1999. **TI** Assessing the Effect of Schooling on Earnings Using a Social Experiment. **AU** Meghir, Costas; Palme, Marten. **AA** Meghir: University College London. Palme: Stockholm School of Economics. **SR** Institute for Fiscal Studies Working Paper: W99/10; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, England. **PG** 42. **PR** 3 pounds. **JE** J24, J31, I21, I28. **KW** Education. Returns to Schooling. Wages. Social Experiments. Sweden.

AB The implementation of the 1950 Swedish comprehensive school reform was preceded by a unique social experiment. During this experiment between 1949 and 1962 the new school system was implemented in stages. This allows us to study the same cohort of individuals going through two different school systems, one of them implying at least one year of prolonged compulsory schooling, in a very similar environment. We use this exogenous variation in educational outcomes to estimate the average returns to education allowing for heterogeneity in the returns across individuals. We also use an ability measure (IQ scores and grades obtained at age 12 or 13) to allow for heterogeneous returns to observed ability.

TI Worker Displacement in France and Germany. **AU** Bender, Stefan; Dustmann, Christian; Margolis, David N.; Meghir, Costas.

Mehra, Rajnish

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

Melitz, Jacques

PD May 1999. **TI** Interregional and International Risk Sharing and Lessons for EMU. **AU** Melitz, Jacques; Zumer, Frederic. **AA** Melitz: INSEE. Zumer: OFCE. **SR** Centre for Economic Policy Research Discussion Paper: 2154; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 52. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** C33, F21, F36. **KW** Risk Sharing. Insurance and Credit. Fiscal Federalism. EMU.

AB How much risk sharing takes place between regions within countries, between countries internationally, and what are the lessons for EMU? We study these questions based on regional data from the US, Canada, the UK and Italy, and national data from an international sample of 23 OECD countries, including all 15 EU members, and do so with the aid of a modified version of a model by Asdrubali, Sorensen and Yosha. In conclusion, we find that even though the surrender of monetary policy will reduce the capacity of the members of EMU to smooth shocks via macroeconomic policy, the regime will promote smoothing of shocks via market channels.

Merlo, Antonio

TI An Empirical Investigation of Coalitional Bargaining Procedures. **AU** Diermeier, Daniel; Merlo, Antonio.

Michelacci, Claudio

PD December 1998. **TI** Cross-Sectional Heterogeneity and the Persistence of Aggregate Fluctuations. **AA** Centro de Estudios Monetarios y Financieros, Madrid. **SR** Fondazione

Eni Enrico Mattei Note di Lavoro: 78/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 48. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C43, E01, E32, L11. **KW** Persistence. Gibrat's Law. Cross-Sectional Heterogeneity. Fractional Integration.

AB A well-known fact in the time series of aggregate output is the persistence of shocks. This paper argues that the empirical relation between the expected growth rate of a firm and its size provides a microfoundation of aggregate persistence. In fact, the empirical evidence claims that small firms grow faster than big ones. If this is true, a shock that reallocates units across sizes will be absorbed, yet at very low decreasing rates. Once the shock hits the system, firms are reallocated across sizes. If small firms grow faster than big ones, the shock will then be absorbed. However, fast growing small firms eventually become big and grow as big firms. Thus the number of small firms shrinks over time as well as the rate at which the shock is absorbed.

Mikkola, Anne

TI How Sure are we About PPP? Panel Evidence With the Null of Stationary Real Exchange Rates. **AU** Kuo, Biing-Shen; Mikkola, Anne.

Milesi-Ferretti, Gian Maria

TI The External Wealth of Nations: Measures of Foreign Assets and Liabilities for Industrial and Developing Countries. **AU** Lane, Philip; Milesi-Ferretti, Gian Maria.

Miller, Douglas

TI Public Policy and Extended Families: Evidence from South Africa. **AU** Bertrand, Marianne; Miller, Douglas; Mullainathan, Sendhil.

Miller, Paul W.

TI The "Double Negative" Effect on Earnings of Limited Language Proficiency Among Immigrants in Canada. **AU** Chiswick, Barry R.; Miller, Paul W.

TI The Language Practice Among Immigrants in Canada. **AU** Chiswick, Barry R.; Miller, Paul W.

TI Immigrant Earnings: Language Skills, Linguistic Concentrations and the Business Cycle. **AU** Chiswick, Barry R.; Miller, Paul W.

Minehart, Deborah F.

TI Vertical Integration, Networks, and Markets. **AU** Kranton, Rachel E.; Minehart, Deborah F.

TI Competition for Goods in Buyer-Seller Networks. **AU** Kranton, Rachel E.; Minehart, Deborah F.

Mitchell, Olivia S.

TI Would a Privatized Social Security System Really Pay a Higher Rate of Return? **AU** Geanakoplos, John; Mitchell, Olivia S.; Zeldes, Stephen P.

TI Social Security Money's Worth. **AU** Geanakoplos, John; Mitchell, Olivia S.; Zeldes, Stephen P.

Moe, Karine E.

TI The Dynamics of Informal Employment. **AU** Ihrig,

Jane; Moe, Karine E.

Moffitt, Robert A.

PD May 1998. **TI** Taxation and the Labor Supply Decisions of the Affluent. **AU** Moffitt, Robert A.; Wilhelm, Mark. **AA** Moffitt: Johns Hopkins University. Wilhelm: Pennsylvania State University. **SR** Johns Hopkins Department of Economics Working Paper: 402; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 64. **PR** no charge. **JE** H24, H31, J22, J31. **KW** Taxation. Labor Supply. Tax Reform. Wages.

AB We examine the effect of the 1986 Tax Reform Act on the labor supply of affluent men. The Act reduced marginal tax rates for the affluent more than for other taxpayers. Using instrumental-variables methods with a variety of identifying variables, we find essentially no responsiveness of the hours of work of high-income men to the tax reduction. However, we do not find that hourly wage rates of such men increased over the period.

Moon, Hyungsik R.

PD May 1999. **TI** Estimation of Autoregressive Roots Near Unity Using Panel Data. **AU** Moon, Hyungsik R.; Phillips, Peter C. B. **AA** Moon: University of California, Santa Barbara. Phillips: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1224; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 63. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C22, C23. **KW** Bias. Local To Unity. Pooled Regression. Sub-Group Testing.

AB Time series data are often well modeled by using an autoregressive root that is local to unity. Unfortunately, the localizing parameter (c) is not consistently estimable using existing time series econometric techniques and the lack of a consistent estimator complicates inference. This paper develops procedures for the estimation of a common localizing parameter using panel data. Pooling information across individuals in a panel aids the identification and estimation of the localizing parameter and leads to consistent estimation in simple panel models. However, in the important case of models with concomitant deterministic trends, it is shown that pooled panel estimators of the localizing parameter are asymptotically biased. Some techniques are developed to overcome this difficulty and consistent estimators of c in the region $c < 0$ are developed for panel models with deterministic and stochastic trends. A limit distribution theory is established and test statistics are constructed for exploring interesting hypotheses, like the equivalence of local to unity parameters across subgroups of the population. The methods are applied to the empirically important problem of the efficient extraction of deterministic trends. They are shown to deliver consistent estimates of distancing parameters in non-stationary panel models where the initial conditions are in the distant past.

PD December 1999. **TI** Maximum Likelihood Estimation in Panels with Incidental Trends. **AU** Moon, Hyungsik R.; Phillips, Peter C. B. **AA** Moon: University of California, Santa Barbara. Phillips: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1246; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 30. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C32, C33. **KW** Deterministic Trends. Dynamic Panels.

Maximum Likelihood. Local to Unity.

AB It is shown that the maximum likelihood estimator of a local to unity parameter can be consistently estimated with panel data when the cross section observations are independent. Consistency applies when there are no deterministic trends or when there is a homogenous deterministic trend in the panel model. When there are heterogeneous deterministic trends the panel MLE of the local to unity parameter is inconsistent. This outcome provides a new instance of inconsistent ML estimation in dynamic panel, and, unlike earlier results of this type, applies when both T approaches infinity and N approaches infinity.

Moore, Michael J.

TI Alcohol. **AU** Cook, Philip J.; Moore, Michael J.

Mora, Jose V. Rodriguez

TI Equilibrium Unemployment Insurance. **AU** Zilibotti, Fabrizio; Hassler, John; Mora, Jose V. Rodriguez; Storesletten, Kjetil.

TI Equilibrium Unemployment Insurance. **AU** Zilibotti, Fabrizio; Hassler, John; Mora, Jose V. Rodriguez; Storesletten, Kjetil.

Morelli, Massimo

PD July 1998. **TI** Stable Demands and Bargaining Power in Majority Games. **AA** Iowa State University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 39/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 43. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C71, C72, C78. **KW** Aspirations. Demands. Bargaining Set. Weighted Majority Games. Coalitional Bargaining. Proportional Payoffs.

AB This paper provides a co-operative as well as a non-cooperative analysis of weighted majority games. The co-operative solution concept introduced here, the Stable Demand Set, yields a meaningful selection within the Mas-Colell Bargaining Set, it contains the Core, it eliminates the "dominated" coalition structures, and has sharp implications for weighted majority games: for such games it is non-empty, it predicts a unique stable demand vector for every homogeneous representation, and every agent within the winning coalition is expected to obtain a payoff share proportional to her relative bargaining power. The set of stable demand vectors coincides with the set of balanced aspirations defined in Bennet (1983), but it is obtained in the space of individually rational payoff configurations, rather than restricting attention to the aspirations domain. I then define two different kinds of non-cooperative coalitional bargaining games, showing that the set of Symmetric Stationary Subgame-Perfect Equilibria of one of them, and the set of Subgame-Perfect Equilibria of the other, have a one-to-one correspondence with the Stable Demand Set for homogeneous weighted majority games.

PD September 1998. **TI** Party Formation and Policy Outcomes Under Different Electoral Systems. **AA** Iowa State University. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 66/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 33. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C07, D72. **KW** Party Formation. Electoral Systems. Majoritarian Bargaining. Representative Democracy.

AB This paper provides a game-theoretic model of representative democracy with endogenous party formation. Coalition formation may occur before and after elections, and the expected payoffs from the after-election majority game affect incentives to form parties before the elections. In this way Duverger's hypothesis can be formally explained by the strategic behavior of political elites. If politicians care primarily about private benefits, the equilibrium policy outcome under a proportional electoral system coincides with the median party's position. On the other hand, with quasi-linear utility, the distance from the median voter outcome may be lower with plurality rule.

Moretto, Michele

TI Is Ecolabelling a Reliable Environmental Policy Measure? **AU** Dosi, Cesare; Moretto, Michele.

PD March 1999. **TI** Optimal Capacity Adjustment by a Multiplant Firm. **AA** University of Padova and Fondazione Eni Enrico Mattei. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 28/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 13. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D92, L11. **KW** Exit. Option Value. Irreversibility.

AB The paper studies the effect of scale economies on the optimal capacity adjustment of a multiplant firm. It is shown that with increasing economies of scale, plants are ranked in decreasing order, after which the optimal choice is to scrap the largest one. On the contrary, if there are decreasing economies of scale the optimal policy would be to wait before abandoning intermediate plants. That is, decreasing economies of scale amplify the effect of uncertainty on disinvestment and tend to increase the plant's life.

PD March 1999. **TI** Labour Participation in Different Firm Organisations. **AU** Moretto, Michele; Rossini, Gianpaolo. **AA** Moretto: University of Padova. Rossini: University of Bologna. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 29/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 48. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D92, L22, L29. **KW** Labor Participation. Firm Organization.

AB The main issue is the organization of firms when different degrees of labor participation are taken into account. We start reviewing the literature on the LM firm. We then consider a less radical labor participation, i.e. the Aoki firm. We survey extensions of the Aoki's firm to the case of market uncertainty, where also the question of the optimal allocation of the shut down decision is tackled, when shareholders are not able to maximize the total payoff accruing to both workers and owners. By and large, it appears that the degree of labor participation in decisions and rent sharing in a firm is not a settled question, even though it seems to depend on the respective degree of firm specificities of production factors.

Morris, Stephen

TI Repeated Games with Almost-Public Monitoring. **AU** Mailath, George J.; Morris, Stephen.

PD November 1999. **TI** Political Correctness. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1242; 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** C73, D72, D82. **KW** Cheap Talk. Repeated Game. Reputation. Political Correctness.

AB An informed advisor wishes to convey her valuable information to an uninformed decision maker with identical preferences. Thus she has a current incentive to truthfully reveal her information. But if the decision maker thinks the advisor might be biased in favor of one decision, and the advisor does not wish to be thought to be biased, the advisor has a reputational incentive to lie. If the advisor is sufficiently concerned about her reputation, no information is conveyed in equilibrium. In a repeated version of this game, the advisor will care (instrumentally) about her reputation simply because she wants her valuable and unbiased advice to have an impact on future decisions.

PD December 1999. **TI** Coordination Risk and the Price of Debt. **AU** Morris, Stephen; Shin, Hyun Song. **AA** Morris: Yale University. Shin: Oxford University. **SR** Yale Cowles Foundation Discussion Paper: 1241; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 22. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C72, D82, G12, G33. **KW** Coordination. Debt. Liquidity. Transparency.

AB Creditors of a distressed borrower face a coordination problem. Even if the fundamentals are sound, fear or premature foreclosure by others may lead to pre-emptive action, undermining the project. Recognition of this problem lies behind corporate bankruptcy provisions across the world, and it has been identified as a culprit in international financial crises, but has received scant attention from the literature on debt pricing. The apparent multiplicity of equilibria is only apparent. Without common knowledge of fundamentals, the incidence of failure is uniquely determined provided that private information is precise enough. This affords a way to price the coordination failure. There are two further conclusions. First, coordination is more difficult to sustain when fundamentals deteriorate. Thus, when fundamentals deteriorate, the onset of crisis can be very swift. Second, "transparency" -- in the sense of greater provision of information to the market -- does not generally mitigate the coordination problem. Transparency is not a panacea.

Morsink, James

PD October 1999. **TI** A Peek Inside the Black Box: The Monetary Transmission Mechanism in Japan. **AU** Morsink, James; Bayoumi, Tamim. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/137; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 22. **PR** not available. **JE** E51, E52, G21. **KW** Monetary Transmission. Banking. Monetary Policy. Borrowing. Investment.

AB This paper uses vector autoregressions to examine the monetary transmission mechanism in Japan. The empirical results indicate that both monetary policy and banks' balance sheets are important sources of shocks, that banks play a crucial role in transmitting monetary shocks to economic activity, that corporations and households have not been able to substitute borrowing from other sources for a shortfall in bank borrowing, and that business investment is especially sensitive to monetary shocks. We conclude that policy measures to strengthen banks are probably a prerequisite for restoring the effectiveness of the

monetary transmission mechanism.

Motolese, Maurizio

TI Endogenous Uncertainty and Market Volatility.
AU Kurz, Mordecai; Motolese, Maurizio.

Mullainathan, Sendhil

TI Executive Compensation and Incentives: The Impact of Takeover Legislation. AU Bertrand, Marianne; Mullainathan, Sendhil.

TI Network Effects and Welfare Cultures. AU Bertrand, Marianne; Luttmer, Erzo F. P.; Mullainathan, Sendhil.

TI Is There Discretion in Wage Setting? A Test Using Takeover Legislation. AU Bertrand, Marianne; Mullainathan, Sendhil.

TI Public Policy and Extended Families: Evidence from South Africa. AU Bertrand, Marianne; Miller, Douglas; Mullainathan, Sendhil.

Mulligan, Casey B.

PD February 2000. TI Can Monopoly Unionism Explain Publically Induced Retirement? AA University of Chicago and NBER. SR University of Chicago Center for the Study of the Economy and the State Working Paper: 157; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. PG 24. PR \$3.00; make check payable to "The University of Chicago.". JE H55, J14, J23, J26, J51. KW Public Pensions. Retirement. Trade Unions. Labor Markets. Elderly.

AB It has long been suggested that trade unions take actions and favor public policies that reduce the quantity of labor so that union members might enjoy greater labor incomes. Can this explain the prevalence of generous public pension programs inducing retirement? I formalize the monopoly unionism model and show how labor's interest in reducing the quantity of labor cannot explain why the old are induced to retire rather than discouraging work among workers of all ages. Discouraging work of a subset of union workers introduces allocative inefficiencies without promoting the objectives of the monopoly union. And, unless the old have a disproportionate influence within the union, union interests cannot explain why public pension programs are so generous.

PD April 2000. TI Merit Motives & Government Intervention: Public Finance in Reverse. AU Mulligan, Casey B.; Philipson, Tomas J. AA University of Chicago. SR University of Chicago Center for the Study of the Economy and the State Working Paper: 159; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. PG 50. PR \$3.00; make check payable to "The University of Chicago.". JE H21, H22, H23, H50. KW Public Finance. In-Kind Transfers. Redistribution. Efficiency. Progressivity.

AB A common view in public finance is that there is an efficiency-redistribution tradeoff in which distortions are tolerated in order to redistribute income. However, the fact that so much public and private redistributive activity involves in-kind transfers rather than cash may be indicative of merit motives on the part of the payers rather than a preference for the well-being of the recipients. Efficiency-enhancing public policy in a merit good economy has the primary purpose of creating distortions and may only redistribute income from rich

to poor in order to create those distortions -- the reverse of the conventional efficiency-redistribution tradeoff. The authors discuss why the largest programs on the federal and local level in the US -- including Social Security, Medicare and Medicaid, and Public Schooling -- seem consistent with the reverse tradeoff. Transfers are not lump sum in a merit good economy, and explicitly accounting for this when calculating tax incidence reduces the estimated progressivity of government policy. For example, the authors calibrate the conventional life-cycle model to show how the amount of over-saving induced on the poor by Social Security hurts them at least as much as the "progressive" benefits help them.

TI Deadweight Costs and the Size of Government.
AU Becker, Gary S.; Mulligan, Casey B.

PD October 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, Universitat Pompeu Fabra, NBER. SR University of Chicago Center for the Study of the Economy and the State Working Paper: 154; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. PG 54. PR \$3.00; make check payable to "The University of Chicago.". JE D72, H55, J14, J26. KW Elderly. Political Processes. Interest Groups. Retirement. Social Security.

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 everybody is likely to become elderly at some point, while it is relatively unlikely that gender, race, sexual orientation, or even occupation will be changed. The model has a variety of implications for the design of social security programs, which are tested 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 the authors verify 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.

Mullin, Charles

PD May 1997. TI The Future of Old-Age Longevity: Competitive Pricing of Mortality Contingent Claims. AU Mullin, Charles; Philipson, Tomas J. AA University of Chicago. SR University of Chicago Center for the Study of the Economy and the State Working Paper: 134; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. PG 23. PR \$3.00; make check payable to "The University of Chicago.". JE D82, G22, H51, H55, I12. KW Mortality. Longevity. Public Expenditures. Insurance. Social Security.

AB The future course of old-age mortality is of great importance to public sector expenditures in countries where old-age programs, such as Social Security and Medicare in the US, account for large fractions of the public budget. This paper

argues that the competitive market prices of mortality contingent claims, such as annuities and life-insurance, contain information which allow one to infer the opinion of the market regarding the pace of the continued increase in old-age longevity. The paper develops methods to identify and estimate the mortality implicit in the market prices of such claims by identifying survival functions from prices of contracts that differ in their duration. Utilizing these methods, we provide estimates using cohort-specific prices of US term life insurance contracts in 1990-96 for individuals aged 60 in each calendar year. Our main finding is that the mortality patterns inferred from these prices indicate a continued decline in cohort-specific mortality at rates equal to or greater than recent historical trends; about a 5 percent reduction in relative terms in the mortality hazards per successive cohort.

Murphy, Kevin M.

TI Status, Lotteries and Inequality. **AU** Becker, Gary S.; Murphy, Kevin M.; Werning, Ivan.

Myerson, Roger B.

PD September 1998. **TI** Informational Origins of Political Bias Towards Critical Groups of Voters. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1242; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 15. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C62, D72, D73, H11. **KW** Asymmetric Equilibrium. Voters. Elected Officials. Administration.

AB We show how non-symmetric politicization can arise in democracy where voters are distributed across several ex-ante symmetric sectors. The voters are uncertain about the administrative ability of an elected official. They observe the quality of her performance, which depends on her ability and her effort. The official can allocate her efforts symmetrically or non-symmetrically across sectors. We show the existence of a non-symmetric equilibrium, in which the official allocates more effort to administering one critical sector, because voters in other sectors rationally respond less to what they observe about the quality of her administration.

PD September 1998. **TI** Theoretical Comparisons of Electoral Systems. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1261; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 41. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D72. **KW** Electoral Systems. Party Structure. Cox's Threshold. Duverger's Law.

AB Elements of an economic theory of political institutions are introduced. A variety of electoral systems are reviewed. Cox's threshold is shown to measure incentives for diversity and specialization of candidate's position, when the number of serious candidates is given. Duverger's law and its generalizations are discussed, to predict the number of serious

candidates. Duverger's law is interpreted as a statement about electoral barriers to entry, and this idea is linked to the question of the effectiveness of democratic competition as a deterrent to political corruption. The impact of post-electoral bargaining on party structure in presidential and parliamentary systems is discussed.

Nason, James M.

PD October 1999. **TI** Investment and the Current Account in the Short Run and the Long Run. **AU** Nason, James M.; Rogers, John H. **AA** Nason: University of British Columbia. Rogers: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 647; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 57. **PR** no charge. **JE** E22, F32, F41. **KW** Small Open Economy. Intertemporal Model. Identification. Investment. Current Account.

AB Theoretical models of the relationship between investment and the current account impose restrictions on the joint dynamic behavior of these variables. These restrictions come in two forms. One imposes causal orderings on investment and the current account. The other restriction concerns the permanent responses of these variables to different shocks. We use these restrictions to identify empirically structural shocks from vector autoregressions of investment and the current account for Canada. Under certain identifications, our results support the implications of the intertemporal, small open economy model. However, these results are sensitive to perturbations of the identifications.

Nehring, Klaus

PD January 1998. **TI** Incentive-Compatible and Efficient Resource Allocation in Large Economies: An Exact and Local Approach. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 98/01; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html.

PG 29. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** D41, D51, D61, D82. **KW** Perfect Competition. Strategy-Proofness. Large Economies. Decentralization. Envy-Freeness.

AB The main result of this paper characterizes possibly non-symmetric strategy-proof and efficient choice functions as Perfectly Competitive. Efficiency is defined as impossibility of improvement by reallocation of commodity among finite sets of agents, and largeness of the economy is captured by a weak aggregation-condition called "local separability." Individual rationality constraints with respect to an assignment of endowments imply that the resulting allocations must be Walrasian relative to the assignment of endowments. The exact, local approach combined with a normality assumption on the domain of preferences allows the proofs to remain elementary throughout.

PD January 1998. **TI** Monotonicity Implies Strategy-Proofness for Correspondences. **AA** University of California at Davis. **SR** University of California, Davis, Department of

Economics Working Paper: 98/02; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website:

polar.ucdavis.edu/econ/workingpapers/workingpapers.html.

PG 20. PR \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. JE D71. KW Strategy Proofness. Social Choice Correspondences. Nash Implementation. Effectivity Function.

AB We show that Maskin monotone social choice correspondences on sufficiently rich domains satisfy a generalized strategy-proofness property, thus generalizing Muller and Satterthwaite's (1977) theorem to correspondences. From the point of view of Nash implementation theory, the result yields a partial characterization of the restrictions entailed by Nash implementability. Alternatively, the result can be viewed as a possibility theorem on the dominant-strategy-implementability of monotone SCCs via set-valued mechanisms for agents who are completely ignorant about the finally selected outcome. It is shown by examples that stronger strategy-proofness properties fail easily.

TI Intersubjective Consistency of Knowledge and Belief. AU Bonanno, Giacomo; Nehring, Klaus.

TI Varieties of Interpersonal Compatibility of Beliefs. AU Bonanno, Giacomo; Nehring, Klaus.

Netter, Jeffery M.

TI From State to Market: A Survey of Empirical Studies on Privatization. AU Megginson, William L.; Netter, Jeffery M.

Newman, Andrew F.

TI Monotone Matching in Perfect and Imperfect Worlds. AU Legros, Patrick; Newman, Andrew F.

Neyer, Gerda

TI Third Births in Austria: The Effect of Public Policies, Educational Attainment and Labour-Force Attachment. AU Hoem, Jan Michael; Furnkranz-Prskawetz, Alexia; Neyer, Gerda.

Ng, David Tat-Chee

TI Uncovering Country Risk in Emerging Market Bond Prices. AU Durbin, Erik; Ng, David Tat-Chee.

Nielsen, Helena S.

PD April 1999. TI Declining Employment Assimilation of Immigrants in Sweden: Observed or Unobserved Characteristics? AU Nielsen, Helena S.; Bevelander, Pieter. AA Nielsen: Aarhus University. Bevelander: Lund University. SR Centre for Economic Policy Research Discussion Paper: 2132; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 48. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE J22, J23, N30. KW Employment Assimilation. Discrimination. Qualifications. Sweden.

AB Weak labor market attachment is a primary reason for unsuccessful integration of immigrants. Therefore, it is interesting to know what affects the probability that immigrants become employed, and hence gain stronger labor market attachment. We study what determines the probability of being

employed in Sweden in 1970 and 1990. And, in a decomposition analysis, we investigate whether the decline in employment probability for immigrants over time is due to observed or unobserved differences between the Swedes and the immigrants.

Olarreaga, Marcelo

TI Who Determines Mexican Trade Policy? AU de Melo, Jaime; Olarreaga, Marcelo; Grether, Jean-Marie.

Ordine, Patrizia

TI Regional Disparities and the Italian NAIRU. AU Brunello, Giorgio; Lupi, Claudio; Ordine, Patrizia.

Ottaviano, Gianmarco I.

PD May 1999. TI Monopolistic Competition, Multiproduct Firms and Optimum Product Diversity. AU Ottaviano, Gianmarco I.; Thisse, Jacques-Francois. AA Ottaviano: Universita di Bologna. Thisse: Universite Catholique de Louvain. SR Centre for Economic Policy Research Discussion Paper: 2151; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 36. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE D43, L13. KW Monopolistic Competition. Product Variety. Multiproduct Firms.

AB This paper tackles the issue of optimum product diversity in an imperfectly competitive market with small or large firms. First, it develops a quadratic utility model of monopolistic competition with horizontal product differentiation, which avoids some of the main pitfalls of the S-D-S approach. Second, it extends the model to the case of multiproduct firms showing how product diversity is affected with respect to monopolistic competition. In particular, it is shown that monopolistic competition with single-product firms is the limiting case of oligopolistic competition with multiproduct firms when either varieties gets more and more differentiated or when the entry cost goes further and further down.

Overgaard, Per Baltzer

TI Price Competition and Advertising Signals -- Signaling by Competing Senders. AU Hertzendorf, Mark N.; Overgaard, Per Baltzer.

Overland, Jody

TI Comparison Utility in a Growth Model. AU Carroll, Christopher D.; Overland, Jody; Weil, David N.

Owen, Ann L.

TI From Indoctrination to the Culture of Change: Technological Progress, Adaptive Skills, and the Creativity of Nations. AU Iyigun, Murat F.; Owen, Ann L.

Packer, Frank

TI How Consistent are Credit Ratings? A Geographic and Sectoral Analysis of Default Risk. AU Ammer, John; Packer, Frank.

Palacios, Robert

TI Individual Choice of Pension Arrangement as a Pension Reform Strategy. AU Disney, Richard; Palacios, Robert; Whitehouse, Edward.

Palme, Marten

TI Assessing the Effect of Schooling on Earnings Using a Social Experiment. **AU** Meghir, Costas; Palme, Marten.

Parigi, Bruno

TI Ownership or Performance: What Determines Board of Directors' Turnover in Italy?. **AU** Brunello, Giorgio; Graziano, Clara; Parigi, Bruno.

Park, Joon Y.

PD May 1999. **TI** Nonstationary Binary Choice. **AU** Park, Joon Y.; Phillips, Peter C. B. **AA** Park: Seoul National University. Phillips: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1223; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 35. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C22, C25. **KW** Binary Choice. Brownian Motion. Local Time. Dual Convergence-Rates.

AB This paper develops asymptotic theory for time series binary choice models with nonstationary explanatory variables generated as integrated processes. The maximum likelihood (ML) estimator is consistent, but consists of two components, one parallel and the other orthogonal to the true parameter vector. The estimator converges at a rate of $n^{3/4}$ along its principal component but converges at $n^{1/4}$ in all other directions. This seems to be the first instance of multiple convergence rates with regressors of the same stochastic order and parameters appearing in linear forms of these regressors. It stems from the fact that the estimating equations involve nonlinear integrable transformations of linear forms of integrated processes as well as polynomials in these processes, which have quite different asymptotic behavior. The limit distribution of the ML estimator is a mixture of two mixed normal distributions with mixing variates dependent upon both Brownian local time and Brownian motion. The sample proportion of binary choices follows an arc sine law, spending most of its time around zero or unity. For binary choice policy decisions which depend on economic fundamentals involving stochastic trends, this limit theory shows that policy is likely to manifest streams of little intervention or intensive intervention.

TI Nonlinear Econometric Models with Cointegrated and Deterministically Trending Regressors. **AU** Chang, Yoosoon; Park, Joon Y.; Phillips, Peter C. B.

Pashigian, B. Peter

PD September 1998. **TI** Contracts, Externalities and Incentives in Shopping Malls: An Empirical Analysis. **AU** Pashigian, B. Peter; Gould, Eric D. **AA** University of Chicago. **SR** University of Chicago Center for the Study of the Economy and the State Working Paper: 143; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. **PG** 25. **PR** \$3.00; make check payable to "The University of Chicago." **JE** D62, D82, L14, L20, L81. **KW** Shopping Malls. Externalities. Agency Problems. Contracts. Rent.

AB Most economists view the shopping mall as a mechanism which primarily economizes on search costs. This belief disregards the huge subsidies that are given to large department stores. Using a far richer data set than has ever been available on this issue, this study analyzes a large sample of malls with store-level data on rent, sales, and contractual specifications. In

the sample, anchors occupy about 60% of mall space, but pay less than 10% of the total rent collected by the developer. The evidence strongly suggests that malls solve an important externality problem: anchors generate customer traffic which benefits their neighboring stores. Malls represent a market solution to this problem since it provides a way for anchors to be compensated for the externalities they generate. In addition, the authors study the contractual provisions of anchors and non-anchors within the context of externality and agency issues. Non-anchor stores pay a fixed rent plus an "overage" rent which is a fraction of their sales when their sales exceed a certain threshold. In contrast, anchor stores pay much lower fixed portions and are taxed at a much lower rate on their sales above their thresholds. This result is consistent with the externality hypothesis.

PD June 1999. **TI** Firm Responses to Growing Inequality in Income and the Cost of Time. **AU** Pashigian, B. Peter; Sun, Jeanne-Mey. **AA** University of Chicago. **SR** University of Chicago Center for the Study of the Economy and the State Working Paper: 153; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. **PG** 27. **PR** \$3.00; make check payable to "The University of Chicago." **JE** D10, D31, J20, L81, R20. **KW** Income Inequality. Retail. Cost of Time. Supermarkets. Time Allocation.

AB This paper uses a cost-of-time framework to link two seemingly unrelated trends. First, greater aggregate income inequality has been accompanied by greater geographic income specialization. Second, compensation costs (relative to sales) of suburban retail stores have risen, compared to city retail stores. The cost of time model predicts that greater geographic income inequality should cause greater inequality in the time-saving conveniences offered by stores located in suburbs versus those in cities. The authors results indicate that cross-sectional differences in service intensity have widened over time as income inequality has increased. To disentangle income from cost of time effects, they determine whether the provision of store services depends only on the level of household income or on the composition of income within the family. The authors find that the provision of services is better explained by the earnings of females than it is by the earnings of males. The second part of the paper uses a household survey to determine how a consumer's opportunity cost of time affects total grocery shopping time. The authors find that higher income consumers economize on their supermarket shopping time relative to lower income shoppers.

Pedersen, Christian S.

PD March 1998. **TI** Separating Risk and Return in the CAPM: A General Utility-Based Model. **AA** University of Cambridge. **SR** University of Cambridge. Discussion Papers in Accounting and Finance: AF39; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: www.econ.cam.ac.uk/dae/. **PG** 13. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** G12. **KW** Finance. Decision Theory. Risk-Return Separation. CAPM. Asset Pricing.

AB Motivated by developments in risk-value theory, the author proposes a new utility function which can capture trade-offs between favorable notions of risk and return while exhibiting desirable properties for a financial investor. This

function is shown to be sufficient for two fund money separation and forms the basis for an extension to the Capital Asset Pricing Model which contains as special cases many other such extensions, in particular those relying upon downside risk measurement. Finally, given the properties of the utility function, the results offer a natural link between axiomatized risk measures, risk-return separation and equilibrium asset pricing.

PD December 1998. **TI** Empirical Tests for Differences in Equilibrium Risk Measures with Application to Downside Risk in Small and Large UK Companies. **AA** University of Cambridge. **SR** University of Cambridge Discussion Papers in Accounting and Finance: AF41; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: www.econ.cam.ac.uk/dae. **PG** 37. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** C12, G12, O16. **KW** Downside Risk. CAPM. Nested Comparison Tests. Asset Pricing. Hypothesis Testing.

AB Several authors have proposed CAPM-style linear pricing models which utilize alternative notions of risk than the variance. The question then arises of whether these models produce equilibrium measures of risk, i.e. "Betas", which are statistically different from that of the mean-variance CAPM. This paper surveys the models testing for such differences, a procedure involving making a distributional assumption for the excess return on the market portfolio which allows re-estimation of the model so that the maintained hypothesis is tested. This augmented procedure is then applied to a range of different datasets, including both emerging markets and small and large UK companies. The emerging markets data are found to be unsuitable for testing as the CAPM-style models are inappropriate for modeling extreme events while, for the UK data, smaller companies are more likely than larger ones to reject the mean-variance CAPM in favor of either the mean-semivariance CAPM or an unspecified alternative.

Peltzman, Sam

PD July 1998. **TI** Prices Rise Faster Than They Fall. **AA** University of Chicago. **SR** University of Chicago Center for the Study of the Economy and the State Working Paper: 142; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. **PG** 63. **PR** \$3.00; make check payable to "The University of Chicago.". **JE** D40, E31, L16, L81. **KW** Pricing. Asymmetries. Input Costs. Market Behavior. Cost Shocks.

AB When the cost of an important input rises output prices tend to respond faster than when costs decline. This tendency is found as frequently in producer good markets as in consumer good markets. In both kinds of markets the asymmetric response to cost shocks is substantial and durable. On average the immediate response to a positive cost shock is at least twice the response to a negative shock, and that difference is sustained for at least 5 to 8 months. Unlike past studies, which documented similar asymmetries in selected markets, this one uses large samples of diverse products: 77 consumer and 165 producer goods. Accordingly the results suggest a gap in an essential part of economic theory. As a start on filling this gap the study finds no asymmetry in the response of an individual decision maker (a supermarket chain) to its costs, but it finds above average asymmetry where a cost shock is filtered through a fragmented wholesale distribution system. It also finds a

negative correlation between the degree of asymmetry and input price volatility and no correlation with proxies for inventory costs, asymmetric menu costs of price changes and imperfect competition.

Perez, Stephen D.

TI Data Mining Reconsidered: Encompassing and the General-to-Specific Approach to Specification Search. **AU** Hoover, Kevin D.; Perez, Stephen D.

Peri, Giovanni

PD July 1998. **TI** Human Capital Externalities in US Cities. **AA** University of California, Berkeley. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 47/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 36. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** O04, R23. **KW** Cities. Human-Capital Externalities. Skill Premium.

AB In an empirical analysis, considering 236 U.S. cities in the period 1980-1990, we document a strong positive correlation between local supply of skills and their return. In SMSA's where the average education of workers is high the education premium is also high. This is true both considering the levels of the variables in 1980, 1990 and considering their changes. Technical progress, as well as physical capital investments, may be driven by local pressures to enhance the productivity of those factors which are locally abundant. Therefore we may interpret this regularity as a sign that in cities where educated workers are abundant firms will invest in skill-complementary machines and techniques. Acemoglu (1998) claims that this idea could explain the time evolution of education premia in the 80's. Here I bring some compelling evidence that it may provide an explanation for the behavior of education premia across cities.

Peristiani, Stavros

TI What was Behind the M2 Breakdown? **AU** Lown, Cara; Peristiani, Stavros; Robinson, Kenneth J.

Perotti, Enrico C.

PD March 1999. **TI** Dominant Investors and Strategic Transparency. **AU** Perotti, Enrico C.; von Thadden, Ernst-Ludwig. **AA** Perotti: University of Amsterdam and Centre for Economic Policy Research. von Thadden: University of Lausanne and Centre for Economic Policy Research. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 24/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 39. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** G14, G21, L11. **KW** Transparency. Bank Control. Product Competition.

AB This paper studies product market competition under a strategic transparency decision. Dominant investors can influence information collection in the financial market, and thereby corporate transparency, by affecting market liquidity or the cost of information collection. More transparency on a firm's competitive position has both strategic advantages and disadvantages: in general, transparency results in higher variability of profits and output. Thus lenders prefer less information revelation through stock market trading, since this protects firms when in a weak competitive position, while equity holders prefer more to make full use of the strategic

advantage of a strong firm. We show that bank-controlled firms will tend to discourage trading to reduce price informativeness, while shareholder-run firms prefer more transparency. Our comparative statics show that bank control may fail to keep firms less transparent as global trading volumes rise.

Pesaran, M. Hashem

TI Neglected Heterogeneity and Dynamics in Cross-Country Savings Regressions. **AU** Ul Haque, Nadeem; Pesaran, M. Hashem; Sharma, Sunil.

Petrakis, Emmanuel

PD December 1998. **TI** Does Government Precommitment Promote Environmental Innovation? **AU** Petrakis, Emmanuel; Xepapadeas, Anastasios. **AA** University of Crete. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 88/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 18. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** L12, Q25, Q28. **KW** Monopoly. Non-Credible Policies. Precommitment. Emission Tax. Abatement Effort.

AB This paper investigates the effect of credibility of environmental policies on environmental innovation and welfare. When the government precommits to an emission tax, the monopolist's abatement effort is lower than if the environmental policy is at the government's discretion. Time consistent emission tax is lower than optimal emission tax under precommitment. Finally, welfare is always higher if the government can commit to an emission tax.

Petrucci, Alberto

PD March 1999. **TI** Money, Endogenous Fertility and Economic Growth. **AA** Universita del Molise, Campobasso and LUISS G. Carli, Roma. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 26/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 21. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** J13, O11, O42. **KW** Money Superneutrality. Fertility. Capital Accumulation.

AB This paper analyses the issue of money superneutrality through an intertemporal optimizing model of capital accumulation and inflation with endogenous fertility, i.e. endogenous population growth. The model establishes an inverse relation between capital-labor ratio and population growth, which represents the crucial element for having non-superneutrality of money. A higher monetary growth rate increases fertility, since it reduces its opportunity cost, and hence diminishes capital intensity, per capita output and consumption. The reverse Tobin effect on capital-labor ratio and per capita output is matched by an increase in aggregate capital and output growth rates. In this framework, the optimal monetary growth rule, which is a distorted Friedman rule, can call for either a contraction or an expansion of the money supply.

Pfaff, Alexander S. P.

TI Household Production, the Bundling of Services and Degradation and Non-Monotonic Environmental Engel Curves. **AU** Chaudhuri, Shubham; Pfaff, Alexander S. P.

TI A Carbon Sequestration Supply Function and

Development of Feasible Clean Development Mechanism Rules for Tropical Forest Carbon Sinks. **AU** Kerr, Suzi; Pfaff, Alexander S. P.

Philipson, Tomas J.

TI Merit Motives & Government Intervention: Public Finance in Reverse. **AU** Mulligan, Casey B.; Philipson, Tomas J.

TI An Empirical Examination of Information Barriers to Trade in Insurance. **AU** Cawley, John; Philipson, Tomas J.

TI The Future of Old-Age Longevity: Competitive Pricing of Mortality Contingent Claims. **AU** Mullin, Charles; Philipson, Tomas J.

PD October 1998. **TI** The Rise in Old Age Longevity and the Market for Long-Term Care. **AU** Philipson, Tomas J.; Lakdawalla, Darius. **AA** University of Chicago. **SR** University of Chicago Center for the Study of the Economy and the State Working Paper: 146; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. **PG** 24. **PR** \$3.00; make check payable to "The University of Chicago.". **JE** H51, I11, I12, J14. **KW** Elderly. Health Care. Long-Term Care. Longevity.

AB This paper analyzes how markets for old-age care respond to the aging of populations. The authors argue that aging many times may lower the demand for market care by increasing the supply of family-provided care, which substitutes for market care. By providing healthy spouses, aging may increase the supply of family care-givers. Unexpectedly, this implies that relative growth in healthy elderly males may contract the long-term care market, while relative growth in healthy elderly females may expand that market. The authors examine these implications empirically and find substantial support for them. The authors then decompose the per capita growth in long-term care output over the last three decades into the component accounted for by improvements in health and that accounted for by relative growth among elderly males. The novel effects of unbalanced gender growth among the elderly appear important in explaining the net decline in US per-capita output over the last 30 years, a decline which seems remarkable given the simultaneous rise in demand subsidies for long-term care, declining fertility rates, rising female labor-force participation, and the deregulation of entry barriers to the nursing home industry.

Phillips, Peter C. B.

TI Nonstationary Binary Choice. **AU** Park, Joon Y.; Phillips, Peter C. B.

TI Estimation of Autoregressive Roots Near Unity Using Panel Data. **AU** Moon, Hyungsik R.; Phillips, Peter C. B.

PD December 1999. **TI** Discrete Fourier Transforms of Fractional Processes. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1243; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 58. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C14, C22. **KW** Fourier Transform. Brownian Motion. Fractional Integration. Operator Decomposition.

AB Discrete Fourier Transforms (dft's) of fractional processes are studied and an exact representation of the dft is

given in terms of the component data. The new representation gives the frequency domain form of the model for a fractional process, and is particularly useful in analyzing the asymptotic behavior of the dft and periodogram in the nonstationary case when the memory parameter $d \geq 1/2$. Various asymptotic approximations are suggested. It is shown that smoothed periodogram spectral estimates remain consistent and converge weakly to random variates. Applications of the theory to log periodogram regression and local Whittle estimation of the memory parameter are discussed and some modified versions of these procedures are suggested.

PD December 1999. **TI** Unit Root Log Periodogram Regression. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1244; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 22. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C14, C22, C52. **KW** Fourier Transform. Brownian Motion. Fractional Integration. Memory Parameter.

AB Log periodogram (LP) regression is shown to be consistent and to have a mixed normal limit distribution when the memory parameter $d=1$. Gaussian errors are not required. Tests of $d=1$ based on LP regression are consistent against $d < 1$ alternatives but inconsistent against $d > 1$ alternatives. A test based on a modified LP regression that is consistent in both directions is provided.

TI Nonlinear Econometric Models with Cointegrated and Deterministically Trending Regressors. **AU** Chang, Yoosoon; Park, Joon Y.; Phillips, Peter C. B.

TI Maximum Likelihood Estimation in Panels with Incidental Trends. **AU** Moon, Hyungsik R.; Phillips, Peter C. B.

Pigliaru, Francesco

TI On the Fast Economic Growth of a Small Country Specialised in Tourism. **AU** Lanza, Alessandro; Pigliaru, Francesco.

Pischke, Jorn-Steffen

TI Minimum Wages and On-the-Job Training. **AU** Acemoglu, Daron; Pischke, Jorn-Steffen.

Pistaferri, Luigi

PD March 1998. **TI** Superior Information, Income Shocks and the Permanent Income Hypothesis. **AA** University College London. **SR** University College London Discussion Papers in Economics: 98/03; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 31. **PR** 4 pounds or \$8.00. **JE** D84, D91, E21. **KW** Subjective Expectations. Income Shocks. Permanent Income. Saving.

AB In this Paper I test for the "saving for a rainy day" hypothesis using subjective income expectations available for a sample of Italian households drawn from the 1989 and 1991 Bank of Italy Survey of Household Income and Wealth. According to the permanent income hypothesis with quadratic preferences, household saving should only react to transitory income shocks, as permanent shocks are entirely consumed. The problem is that income shock components are not separately observable and that their econometric identification relies on very strong assumptions. I show how subjective

expectations available for at least two consecutive time periods can help to identify separately the transitory and the permanent shock to income, thus providing a very powerful test of the theory.

TI Consumption Insurance or Consumption Mobility. **AU** Jappelli, Tullio; Pistaferri, Luigi.

Ponti, Giovanni

PD 1997. **TI** Conventions and Social Mobility in Bargaining Situations. **AU** Ponti, Giovanni; Seymour, Robert M. **AA** Ponti: University of California, Santa Barbara and University College London. Seymour: University College London. **SR** University College London Discussion Papers in Economics: 97/04; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 36. **PR** 4 pounds or \$8.00. **JE** C73, C78, D31, D83. **KW** Conventions. Social Mobility. Evolutionary Game Theory. Learning Theory. Bargaining.

AB This paper studies the evolution of a population whose members use their social class to coordinate their actions in a simple tacit bargaining game. In the spirit of Rosenthal and Landau (1979), we interpret the equilibrium behaviors that the players may adopt, as a function of their class, as customs. Players may change their class depending on the outcome of the game, and may also change their custom, as a result of some learning process. We are interested in the characterization of the fixed points of the adjustment process over the space of classes and customs from a distributional point of view. We find that, although any custom (when it operates alone) generates the same limiting class distribution as any other, these limiting distributions can be ranked with respect to their mobility. If players are allowed to change their custom when they find it unsatisfactory, then social mobility appears to be the key variable to predict the type of custom which will predominate in the long run even though, in general, no one custom is dominant. In particular, customs which promote social mobility appear to exhibit, in all the cases we have analyzed, stronger stability properties.

TI Friends Do Matter: Strategic Uncertainty and Vertical Contractual Relations. **AU** Cottica, Alberto; de Propris, Lisa; Ponti, Giovanni.

Powell, Robert

TI From Toronto Terms to the HIPC Initiative: A Brief History of Debt Relief for Low-Income Countries. **AU** Daseking, Christina; Powell, Robert.

Powers, Michael R.

PD June 1999. **TI** Toward a Theory of Reinsurance and Retrocession. **AU** Powers, Michael R.; Shubik, Martin. **AA** Powers: Temple University. Shubik: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1227; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. **PG** 47. **PR** no charge up to 3 papers; \$3.00 U.S.; 4.00 International. **JE** C22, C72, G22. **KW** Reinsurance. Retrocession. Strategic Behavior. Market Game.

AB There is a natural tradeoff between the benefits of increasing the number of competitors in an insurance market and the drawback to the weakening of the law of large numbers due to the diminishing of average reserves. In this investigation

we consider the possibility for optimal layers of reinsurance and retrocession in the design of the insurance industry. A general question which may be asked of all financial institutions is what factors limit the number of layers of paper which can be constructed.

Prasad, Eswar S.

TI Identifying the Common Component in International Economic Fluctuations: A New Approach. **AU** Lumsdaine, Robin L.; Prasad, Eswar S.

Prat, Andrea

PD May 1999. **TI** Campaign Advertising and Voter Welfare. **AA** CentER and Tilburg University. **SR** Centre for Economic Policy Research Discussion Paper: 2152; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 56. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** D72, D82, M37. **KW** Campaign Contributions. Advertising. Voter Welfare. Split Contributions. Elections.

AB This paper investigates the role of campaign advertising and the opportunity of legal restrictions on it. An electoral race is modeled as a signaling game with three classes of players: a continuum of voters, two candidates, and one interest group. The group has non-verifiable insider information on the candidates' valence and, on the basis of this information, offers a contribution to each candidate in exchange for a favorable policy position. Candidates spend the contributions they receive on non-directly informative advertising. This paper shows that: (1) A separating equilibrium exists in which the group contributes to a candidate only if the insider information about that candidate is positive; (2) Although voters are fully rational, a ban on campaign advertising can be welfare-improving; and (3) Split contributions may arise in equilibrium (and should be prohibited).

Profit, Stefan

PD April 1999. **TI** Twin Peaks in Regional Unemployment and Returns to Scale in Job-Matching in the Czech Republic. **AA** Humboldt University, Berlin. **SR** Centre for Economic Policy Research Discussion Paper: 2135; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 48. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** E24, J64. **KW** Regional Labor Markets. Matching Functions. Scale Economies. Multiple Equilibria. Job Search. Job Competition. Czech Republic.

AB The regional distribution of unemployment rates in the Czech Republic during the transition period is shown to be characterized by twin peaks, i.e. a high and a low unemployment equilibrium. The emergence of strong regional disparities at the beginning of the 1990s can, at least partially, be explained by regionally different degrees of competition between the emerging private sector and state-owned enterprises for skilled labor and the role of on-the-job transitions on the parameters of the matching function. This study presents a formalization of these effects and estimates empirical matching functions for a panel of labor market districts of the Czech Republic between January 1992 and July 1994. When dynamics of unemployment to job exits are taken into account and dynamic panel estimators are applied, the

Czech matching function is shown to exhibit increasing returns to scale. This is consistent with the finding of multiple unemployment equilibria.

Proost, Stef

PD November 1998. **TI** Effectiveness and Welfare Impacts of Alternative Policies to Address Atmospheric Pollution in Urban Road Transport. **AU** Proost, Stef; Van Dender, Kurt. **AA** Center for Economic Studies K.U. Leuven, Belgium. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 72/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 24. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** H23, Q25, Q48, R48. **KW** Urban Transport. Alternative Policies.

AB In this paper we compare the effectiveness and welfare effects of alternative fuel efficiency, environmental and transport policies for a given urban area. The urban transport activities are represented as a set of interrelated markets, one for each mode of transport and type of vehicle. For each market, four different marginal external costs are computed in the present equilibrium: air pollution, accidents, noise and congestion. The gap between marginal social costs and prices shows that congestion and unpaid parking are the dominant sources of inefficiencies.

Quah, Danny

PD March 1999. **TI** The Weightless Economy in Economic Development. **AA** London School of Economics. **SR** Centre for Economic Policy Research Discussion Paper: 2094; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 33. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** N15, O11, O14, O33. **KW** China. Copyright. Growth. Information Technology. Intellectual Property. Knowledge-Product. Patent. Software. Superstars. Tacit Knowledge.

AB Can the increasing significance of knowledge-products in national income -- the growing weightless economy -- influence economic development? Those technologies reduce "distance" between consumers and knowledge production. This paper analyzes a model embodying such a reduction. The model shows how demand-side attributes -- consumer attitudes on complex goods: training, education and skills for consumption (rather than production) -- can importantly affect patterns of economic growth and development. Evidence from the failed Industrial Revolution in fourteenth-century China illustrates the empirical relevance of the analysis.

Quinzii, Martine

TI Equity, Bonds, Growth and Inflation in a Quadratic Infinite Horizon Economy. **AU** Magill, Michael; Quinzii, Martine.

TI The Stock Market in the Overlapping Generations. **AU** Magill, Michael; Quinzii, Martine.

Ramey, Garey

PD May 1999. **TI** Conditioning Institutions and Renegotiation. **AU** Ramey, Garey; Watson, Joel. **AA** Ramey: University of California, San Diego. Watson: University of California, San Diego and Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1225; Yale

University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. PG 39. PR no charge up to 3 papers; \$3.00 U.S.; 4.00 International. JE C73, C78, C79, D74. KW Long-Term Relationships. Contract Institutions. Social Conventions. Renegotiation.

AB We propose a theory of contracting in long-term relationships, emphasizing the role of social institutions in conditioning players' joint selection of equilibria. Players adopt a social conditioning system in order to place boundaries on their recurrent negotiation and thereby sustain a desirable joint selection of equilibrium. Social conventions have value because players cannot freely reinterpret the labels attached to histories, in contrast to labels that the players might assign internally. We present examples of social conventions that are useful for sustaining cooperative interaction. Our model combines an explicit bargaining technology with a renegotiation concept, coherent equilibrium, that builds on internal consistency. Coherent equilibria exist in general and, for an important class of games, induce unique outcomes.

PD September 1999. TI Contractual Intermediaries. AU Ramey, Garey; Watson, Joel. AA University of California, San Diego. SR Yale Cowles Foundation Discussion Paper: 1235; 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 C70, D74, K12. KW Contract Enforcement. Institutions. Dispute Resolution. Hold-Up Problem.

AB This paper analyzes the role of third party intermediaries, such as courts and arbitrators, in contract enforcement. In our model, intermediaries compel contracted transfers and resolve disputes when requested to do so by the contracting agents. When the variability of information is limited, successful enforcement requires that dispute resolution costs be sufficiently great. Optimal enforcement systems economize on dispute resolution and information costs, and may involve establishment of specific systems tailored to particular groups. We show further that the "holdup problem" may be resolved via an appropriately designed dispute resolution system.

Ramieri, Emiliano

PD September 1998. TI Indicators of Sustainable Development for the City and the Lagoon of Venice. AU Ramieri, Emiliano; Cogo, Valentina. AA Fondazione Eni Enrico Mattei. SR Fondazione Eni Enrico Mattei Note di Lavoro: 57/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 39. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE I18, J11, R11, Z00. KW Sustainability Indicators. Sustainable Targets. Venice. Environmental Quality. Quality of Life. Economic Development. Urban Areas. Industrial Areas.

AB In the past few years sustainability and sustainable development have become important concepts widespread over the world. There is no agreement on a common definition of sustainability, but there is a general need to measure and assess sustainability in different geographical and spatial contexts. Indicators of sustainable development have been defined in order to satisfy those requirements. Such indicators are very useful to improve the process towards sustainability in local systems, such as cities and towns, where they can be related to local Agenda 21 experiences. The present paper discusses the

result of an investigation concerning the definition, selection and calculation of a set of indicators of sustainable development for the city and lagoon of Venice.

Raphael, Steven

TI Identifying the Effect of Unemployment on Crime. AU Winter-Ebmer, Rudolf; Raphael, Steven.

Rauch, James E.

TI Anonymous Market and Group Ties in International Trade. AU Casella, Alessandra; Rauch, James E.

Rausser, Gordon C.

PD October 1998. TI Bioprospecting with Patent Races. AU Rausser, Gordon C.; Small, Arthur A. AA Rausser: University of California, Berkeley. Small: Columbia University. SR Columbia PaineWebber Working Paper Series in Money, Economics and Finance: PW/98/07; Graduate School of Business, 6N Uris Hall, Columbia University, 3022 Broadway, New York, NY 10027. Website: www.columbia.edu/dlc/wp/. PG 17. PR \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). JE L70, O31, O34, Q20. KW Conservation. Genetic Resources. Patents. Biodiversity.

AB Previous work on bioprospecting has suggested that the potential market returns to genetic resource conservation are likely to be inconsequential. This article shows that when the buyers of genetic resource options are also competitors in patent races, sellers can extract all the surplus associated with their holdings. Under reasonable conditions, the ex ante return to genetic resource assets will then be determined, not by their marginal contribution to surplus, but by their average contribution. The result implies that several bioeconomic studies reporting large average species values provide credible estimates of the strength of market incentives for biodiversity conservation.

Ray, Debraj

PD July 1998. TI A Theory of Endogenous Coalition Structures. AU Ray, Debraj; Vohra, Rajiv. AA Ray: Boston University and Universitat Autònoma de Barcelona. Vohra: Brown University. SR Fondazione Eni Enrico Mattei Note di Lavoro: 44/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 54. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE C71, C72, C78, D62. KW Externalities. Bargaining. Partition Function. Coalition Structures.

AB Consider an environment with widespread externalities, and suppose that binding agreements can be written. We study coalition formation in such a setting. Our analysis proceeds by defining on a partition function an extensive form bargaining game. We establish the existence of a stationary subgame perfect equilibrium for such a game. Our main results are concerned with the characterization of equilibrium coalition structures. We develop an algorithm that generates (under certain conditions) an equilibrium coalition structure. Our characterization results are especially sharp for symmetric partition functions. In particular, we provide a uniqueness theorem and apply our results to a Cournot oligopoly.

Razzak, W. A.

TI Nominal Exchange Rates and Nominal Interest Rate Differentials. **AU** Simone, Francisco Nadal-De; Razzak, W. A.

Rebelo, Sergio

TI Hedging and Financial Fragility in Fixed Exchange Rate Regimes. **AU** Burnside, Craig; Eichenbaum, Martin; Rebelo, Sergio.

Redding, Stephen

TI Mapping the Two Faces of R&D: Productivity Growth in a Panel of OECD Industries. **AU** Griffith, Rachel; Redding, Stephen; Reenen, John Van.

Reed, Howard

TI Interpreting Movement in Aggregate Wages: The Role of Labor Market Participation. **AU** Blundell, Richard; Reed, Howard; Stoker, Thomas.

Reenen, John Van

TI Mapping the Two Faces of R&D: Productivity Growth in a Panel of OECD Industries. **AU** Griffith, Rachel; Redding, Stephen; Reenen, John Van.

TI Export Market Performance of OECD Countries: An Empirical Examination of the Role of Cost Competitiveness. **AU** Carlin, Wendy; Glyn, Andrew; Reenen, John Van.

TI Organization, Skills and Technology: Evidence From a Panel of British and French Establishments. **AU** Caroli, Eve; Reenen, John Van.

TI Has Technology Hurt Less Skilled Workers? An Econometric Survey of the Effects of Technical Change on the Structure of Pay and Jobs. **AU** Chennells, Lucy; Reenen, John Van.

Reeve, Trevor A.

TI Human Capital, Unemployment, and Relative Wages in a Global Economy. **AU** Davis, Donald; Reeve, Trevor A.

Reiffen, David

TI Pricing Behavior of Multi-Product Retailers. **AU** Hosken, Daniel; Reiffen, David.

Reinhart, Carmen M.

TI Capital Controls During Financial Crises: The Case of Malaysia and Thailand. **AU** Edison, Hali J.; Reinhart, Carmen M.

Reiter, Stanley

PD June 1999. **TI** Coordination of Economic Activity: An Example by Stanley Reiter. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1263; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 31. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D51, L11, L22, L23. **KW** Coordination. Production. Markets. Hierarchies.

AB This paper considers issues of coordination of productive activity, beginning with a classic question; "Which economic activities are (or should be) coordinated by markets, and which by other means?" "Other means" usually refers to administrative or bureaucratic mechanisms; sometimes the word "hierarchies" is used. This paper presents a formal model and an example in which efficient coordination means just-in-time production. The example has two cases, which differ in only one respect. In Case 1 it is shown that the market mechanism cannot achieve efficient coordination, even though there are market equilibria. There does exist a direct mechanism which achieves efficient coordination. In Case 2 both types of mechanism achieve efficient coordination, but the market mechanism has higher informational costs.

Renneboog, Luc

TI Strong Managers and Passive Institutional Investors in the UK. **AU** Goergen, Marc; Renneboog, Luc.

Repullo, Rafael

PD March 1999. **TI** Venture Capital Finance: A Security Design Approach. **AU** Repullo, Rafael; Suarez, Javier. **AA** CEMFI. **SR** Centre for Economic Policy Research Discussion Paper: 2097; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 31. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** D92, G24, G32. **KW** Venture Capital. Stage Financing. Incomplete Contracts. Start-Ups. Warrants. Convertible Preferred Stock.

AB This paper provides a theory of venture capital financing based on the complementarity between the financing and advising roles of venture capitalists. We examine the interaction between the staging of investment that characterizes young firms with a high growth potential and the double-sided moral hazard problem that arises from the managerial contributions of entrepreneurs and venture capitalists. The optimal contract combines an incentive-related insurance motive that makes the initial financiers bear the start-up's downside risk and a financing motive that protects their claims against dilution. These motives can explain the widespread use of convertible preferred stock in venture capital financing.

Reuveny, Rafael

TI Resource Scarcity and Conflict: An Economic Analysis. **AU** Maxwell, John W.; Reuveny, Rafael.

Rey, Patrick

TI Competition, Financial Discipline and Growth. **AU** Aghion, Philippe; Dewatripont, Mathias; Rey, Patrick.

TI Agency Costs, Firm Behaviour and the Nature of Competition. **AU** Aghion, Philippe; Dewatripont, Magnus; Rey, Patrick.

Ribas, Armando

TI The 1994 Mexican Economic Crisis: The Role of Government Expenditure and Relative Prices. **AU** Kalter, Eliot; Ribas, Armando.

Richards, Anthony J.

PD November 1999. **TI** Idiosyncratic Risk: An Empirical Analysis, with Implications for the Risk of Relative-Value Trading Strategies. **AA** International Monetary Fund.

SR International Monetary Fund Working Paper: WP/99/148; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 24. **PR** not available. **JE** G11, G12, G15. **KW** Idiosyncratic Risk. Dispersion. Risk Management. Hedge Funds. Asset Pricing.

AB This paper models the idiosyncratic or asset-specific return of an asset as the return on a portfolio that is long in that asset and short in other assets in the same class, thereby removing the common components of returns. This is the type of "hedged" position that is held by relative-value investors. Weekly returns data for seven different asset classes suggest that idiosyncratic risk is: higher at times of large return outcomes for the asset class as a whole; positively autocorrelated; and correlated across different asset classes. The implications for risk management are discussed.

PD November 1999. **TI** Bank Rating Changes and Bank Stock Returns -- Puzzling Evidence from the Emerging Markets. **AU** Richards, Anthony J.; Deddouche, David. **AA** Richards: International Monetary Fund. Deddouche: Societe Generale, Paris. **SR** International Monetary Fund Working Paper: WP/99/151; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 24. **PR** not available. **JE** G15, G21, O16. **KW** Event Study. Rating Changes. Bank Stock Prices. Banking. Emerging Markets.

AB This paper examines the performance of emerging market bank stocks around the time of rating changes by major international agencies. The data suggest that downgrades on average have followed periods of negative cumulative abnormal returns for banks, although upgrades have not followed periods of positive returns. More important, stock prices either do not respond to rating changes or respond in the opposite direction to what would be expected if announcements conveyed value-relevant information. The paper concludes that there are limits to the extent that supervisors in emerging markets can rely on market participants to monitor the safety and soundness of banks.

Rios-Rull, Jose-Victor

TI Earnings and Wealth Inequality and Income Taxation: Quantifying the Trade-Offs of Switching to a Proportional Income Tax in the U.S. **AU** Castaneda, Ana; Diaz-Gimenez, Javier; Rios-Rull, Jose-Victor.

Rob, Rafael

TI The Dynamics of Technological Adoption in Hardware/Software Systems: The Case of Compact Disc Players. **AU** Gandal, Neil; Kende, Michael; Rob, Rafael.

Robin, Jean-Marc

TI Estimation in Large and Dissaggregated Demand Systems: An Estimator for Conditionally Linear Systems. **AU** Blundell, Richard; Robin, Jean-Marc.

TI Latent Separability: Grouping Goods Without Weak Separability. **AU** Blundell, Richard; Robin, Jean-Marc.

Robinson, Kenneth J.

TI The Determinants of the Wealth Effects of Banks' Expanded Securities Powers. **AU** Ely, David P.; Robinson, Kenneth J.

TI What was Behind the M2 Breakdown? **AU** Lown, Cara; Peristiani, Stavros; Robinson, Kenneth J.

Rochet, Jean-Charles

PD March 1999. **TI** Cooperation Among Competitors: The Economics of Credit Card Associations. **AU** Rochet, Jean-Charles; Tirole, Jean. **AA** Institut D'Economie Industrielle. **SR** Centre for Economic Policy Research Discussion Paper: 2101; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 21. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** G21, L31, L42. **KW** Credit Cards. Association. Discrimination. Interchange Fee.

AB The paper analyzes two controversial features of the credit card industry. The first is the cooperative determination of the interchange fee (or "access charge") by member banks in credit card associations (Visa and MasterCard). The second practice is no-discrimination (or no-cash-discount rule). We analyze these practices in a framework in which banks and merchants may have market power and consumers and merchants decide rationally on whether to buy or accept a credit card. Under the no-cash discount rule, an increase in the interchange fee increases the usage of credit cards, as long as the interchange fee does not exceed a threshold level at which merchants no longer accept credit cards. The interchange fee selected by the credit card association either is socially optimal or leads to an overprovision of credit card services. Last, if the no-cash-discount rule is lifted, the interchange fee no longer impacts the level of credit card services. The merchant price for cardholders is increased and that for non-cardholders decreased. Credit cards services are reduced by merchant price discrimination regardless of whether the interchange fee is set by the credit card association or by a social planner.

Rodriguez, F.

TI Trade Policy and Economic Growth: A Sceptic's Guide to the Cross-National Evidence. **AU** Rodrik, Dani; Rodriguez, F.

Rodrik, Dani

PD May 1999. **TI** Trade Policy and Economic Growth: A Sceptic's Guide to the Cross-National Evidence. **AU** Rodrik, Dani; Rodriguez, F. **AA** Rodrik: Harvard University. Rodriguez: University of Maryland. **SR** Centre for Economic Policy Research Discussion Paper: 2143; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 88. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** F13, O57. **KW** Trade Policy. Economic Growth.

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 have 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.

Roell, Ailsa

TI Ownership and Control in The Netherlands. **AU** de Jong, Abe; Kabir, Rezaul; Marra, Teye; Roell, Ailsa.

Roemer, John E.

PD April 1998. **TI** Distributive Class Politics and the Political Geography of Interwar Europe. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 98/07; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html. **PG** 47. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** C70, D31, D72, N34. **KW** Political Economy. Income Distribution. Economic History. Class Politics. Socialists.

AB Why did socialists win elections in some countries in Europe, and fascists in others, during the interwar period? Many political historians have viewed "distributive class politics" as the appropriate characterization of this period and place, but heretofore, formal politico-economic analysis has not been employed to study the question. Here, a new conception of political competition between parties, which yields Nash equilibria when the policy space is multi-dimensional, is harnessed to the task. Each party proposes a class distribution of income, chosen from a (multi-dimensional) issue simplex. The theory, proposed by G. Luebbert, that active class conflict between the landed peasantry and landless laborers was the necessary and sufficient condition of fascist victory is modeled, and is largely, but not conclusively, confirmed.

TI Equalizing Educational Opportunity Through Educational Finance Reform. **AU** Betts, Julian R.; Roemer, John E.

PD June 1999. **TI** What We Owe Our Children, They Their Children, and ... **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 99/09; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website: polar.ucdavis.edu/econ/workingpapers/workingpapers.html. **PG** 27. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** D63, H11, I31. **KW** Intergenerational Equity. Equal Opportunity. Welfare.

AB Egalitarian theorists, since Rawls, have in the main advocated equalizing some objective standard of individual well-being, such as primary goods, functioning, or resources, rather than subjective welfare. This discussion, however, has assumed, implicitly, a static environment, with a single or perhaps a small number of generations. By studying the problem of equality of opportunity in a society that survives for many generations, we demonstrate that equality of opportunity for some objective condition of individuals is incompatible with a natural notion of human development over time. We argue that this incompatibility can be resolved by equalizing opportunities for welfare. Thus, "subjectivism" seems necessary if we are to hope for a society which can both equalize opportunities and support the development of human

capacity over time.

TI An Equal-Opportunity Approach to the Allocation of International Aid. **AU** Llavador, Humberto; Roemer, John E.

PD October 1999. **TI** Equity in Health Care Delivery and Finance. **AA** University of California at Davis. **SR** University of California, Davis, Department of Economics Working Paper: 99/11; One Shields Avenue, Department of Economics, Davis, California 95616-8578. Website:

polar.ucdavis.edu/econ/workingpapers/workingpapers.html.

PG 28. **PR** \$3.00 U.S. and Canada, \$4.00 international (checks must be drawn on U.S. banks); make checks payable to Regents of the University of California. We do not invoice, accept purchase orders, or cash. **JE** D63, I11, I12, I18, I31. **KW** Equal Opportunity. Effort. Circumstances. Health Care. Longevity.

AB How should health services be allocated if we wish to equalize opportunities among citizens of a country for longevity, or quality-adjusted life years (QALEs)? Equalizing opportunities means leveling off the differences in the objective (say, longevity) due to circumstances beyond the individual's control, but not trying to neutralize differences in longevity due to differential "effort," here interpreted as aspects of life style. (Equality of opportunity does not require equalizing life expectancies of Everest climbers and other people). We argue that equalizing opportunities, so conceived, for health status is the right ethic, and show, using the theory propounded in Roemer (1998), how to compute the allocation of health services in an example.

Rogers, John H.

TI Deviations from Purchasing Power Parity: Causes and Welfare Costs. **AU** Engel, Charles; Rogers, John H.

TI Relative Price Volatility: What Role Does the Border Play? **AU** Engel, Charles; Rogers, John H.

TI Inflation and the Great Ratios: Long-Term Evidence from the U.S. **AU** Ahmed, Shaghil; Rogers, John H.

TI Violating The Law of One Price: Should We Make a Federal Case Out of It? **AU** Engel, Charles; Rogers, John H.

TI Investment and the Current Account in the Short Run and the Long Run. **AU** Nason, James M.; Rogers, John H.

TI Monetary Policy's Role in Exchange Rate Behavior. **AU** Faust, Jon; Rogers, John H.

Rose, A. K.

PD May 1999. **TI** Noise Trading and Exchange Rate Regimes. **AU** Rose, A. K.; Jeanne, Olivier. **AA** Rose: University of California, Berkeley. Jeanne: International Monetary Fund. **SR** Centre for Economic Policy Research Discussion Paper: 2142; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 48. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** F33, G15. **KW** Multiple. Equilibria. Fundamentals. Entry. Risk. Volatility.

AB Both the literature and new empirical evidence show that exchange rate regimes differ primarily by the noisiness of the exchange rate, not by measurable macroeconomic fundamentals. This motivates a theoretical analysis of exchange rate regimes with noise traders. The presence of noise traders

can lead to multiple equilibria in the foreign exchange market. The entry of noise traders alters the composition of the market and generates excess exchange rate volatility, since noise traders both create and share the risk associated with exchange rate volatility. In such circumstances, monetary policy can be used to lower exchange rate volatility without altering macroeconomic fundamentals.

Rosen, Sherwin

PD not available. **TI** Austrian and Neoclassical Economics: Any Gains From Trade? **AA** University of Chicago. **SR** University of Chicago Center for the Study of the Economy and the State Working Paper: 133; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. **PG** 23. **PR** \$3.00; make check payable to "The University of Chicago.". **JE** D40, D82, E13, E19, L10. **KW** Austrian Economics. Neoclassical Economics. Evolution. Competition. Incomplete Information.

AB The systems aspects of Austrian economic thought pertaining to the process of competition deserve a prominent place in modern economic thinking. The paper illustrates the differences between the Austrian view of competition as an evolutionary process, and the neoclassical emphasis on determining market equilibrium under known or given conditions. These bear importantly on the fundamental way we think about decentralization of economic activities among highly specialized agents with incomplete knowledge and information. The role of competition as a selection device that often encourages survival of the fittest and solves some types of agency problems is still worth thinking about.

PD not available. **TI** Potato Paradoxes. **AA** University of Chicago. **SR** University of Chicago Center for the Study of the Economy and the State Working Paper: 135; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. **PG** 20. **PR** \$3.00; make check payable to "The University of Chicago.". **JE** D24, E22, N53, Q11, Q12. **KW** Great Famine. Potatoes. Inventory. Agriculture. Economic History.

AB Potato cultivation in Ireland during the Great Famine is analyzed in economic terms. Economic dynamics are complicated in crops which serve both as consumption and capital goods. "Seed" potatoes must be carried over for planting the following season. These inventories are a form of savings and account for a sizable portion of total output. The intertemporal tradeoffs associated with seed crop inventory decisions can produce unusual dynamic responses that could be confused with pathological behavior, such as Giffen goods. In fact, price and output data in Ireland of the 1940's are inconsistent with the Giffen paradox. Instead, the tragic events there are well described by a model in which a permanent decline in potato productivity (the blight) was at first mistaken as a transitory crop failure. These mistaken judgments provoked "over saving" of seed crop among a population in dire circumstances. Since the blight was unknown prior to the 1840's, the Irish experience can be expressed as an unfortunate form of Knightian uncertainty combined with conventional intertemporal dynamics. Expectational errors about potato productivity delayed necessary agricultural adjustments and contributed to the catastrophe in later years.

Rosenberg, Dinah

PD May 1999. **TI** Stopping Games with Randomized

Strategies. **AU** Rosenberg, Dinah; Solan, Eilon; Vieille, Nicolas. **AA** Rosenberg: Tel Aviv University. Solan: Northwestern University. Vieille: Universite Bordeaux-IV. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1258; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 18. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C72, C73. **KW** Stopping Games. Neveu. Uniform Value. Randomized Strategies.

AB We study stopping games in the setup of Neveu. We prove the existence of a uniform value (in a sense defined below), by allowing the players to use randomized strategies. In contrast with previous work, we make no comparison assumption on the payoff processes. Moreover, we prove that the value is the limit of discounted values, and construct epsilon-optimal strategies.

Rosendahl, Knut Einar

TI Optimal Oil Exploration Under Climate Treaties. **AU** Berg, Elin; Kverndokk, Snorre; Rosendahl, Knut Einar.

Roson, Roberto

PD November 1998. **TI** Social Cost Pricing When Public Transport is an Option Value. **AA** University of Venice. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 67/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 21. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** H21, R48. **KW** Urban Transportation. Option Value. Optimal Taxation. Modal Choice.

AB A well-known principle of welfare economics states that an efficient resource allocation can be achieved in a competitive economy when market prices are in line with social marginal costs. When applied to the transport sector, this implies that the price of the various transport modes should be made equal to the sum of marginal production and external costs, like congestion, accidents, pollution, and road maintenance. It is sometimes argued that the internalization of external costs would bring about a change in demand patterns with a shift towards public transport and cleaner modes.

Rossi, Nicola

PD May 1999. **TI** Is the Kuznets Curve Still Alive? Evidence from Italy's Household Budgets, 1881-1961. **AU** Rossi, Nicola; Toniolo, Gianni.; Vecchi, Giovanni. **AA** Rossi: Universita di M. Toniolo: Universita Ca'Foscari di Venezia. Vecchi: Universita di Roma. **SR** Centre for Economic Policy Research Discussion Paper: 2140; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 64. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** C14, D31, N33, N34. **KW** Expenditure Inequality. Kuznets Curve. Italy 1881-1961. Non-Parametric Bootstrap. Missing Data. Hot Deck.

AB This paper investigates secular changes in the distribution of personal expenditure in Italy over the period 1881-1961. To do so, the authors constructed a new dataset, the Italian Household Budgets Database (IHBD), consisting of 4,370 family-level budgets. Methodologically, this paper

improves upon most existing studies in that: (i) the entire distribution of the expenditure curve is investigated, rather than just sections or likely determinants of it; (ii) confidence intervals are attached to the point estimates (Gini coefficients); and (iii) significance tests ascertain that the estimated path of inequality is not due to sampling variation. The secular trend in consumption expenditure inequality is found to be downward sloped. Inequality declines sharply at the beginning of the century, increases during the great depression, and falls again thereafter. These findings cast considerable doubt on the existence of an inverted-U shaped Kuznets curve, as far as the Italian case is concerned.

Rossini, Gianpaolo

TI Labour Participation in Different Firm Organisations. **AU** Moretto, Michele; Rossini, Gianpaolo.

Rouse, Cecilia Elena

TI Schooling, Intelligence, and Income in America: Cracks in the Bell Curve. **AU** Ashenfelter, Orley; Rouse, Cecilia Elena.

TI Estimating Returns to Schooling When Schooling is Misreported. **AU** Kane, Thomas J.; Rouse, Cecilia Elena; Staiger, Douglas.

Rovelli, Riccardo

TI Modelling and Identifying Central Banks' Preferences. **AU** Favero, Carlo A.; Rovelli, Riccardo.

Rubinstein, Yona

TI Coping with Technological Progress: The Role of Ability in Making Inequality so Persistent. **AU** Tsiddon, Daniel; Rubinstein, Yona.

Rupert, Peter

TI Measuring the Rate of Technological Progress in Structures. **AU** Gort, Michael; Greenwood, Jeremy; Rupert, Peter.

Rust, John

TI An Empirical Model of Inventory Investment by Durable Commodity Intermediaries. **AU** Hall, George; Rust, John.

Rutherford, Thomas F.

PD September 1998. **TI** Trade Liberalization and Endogenous Growth in a Small Open Economy: A Quantitative Assessment. **AU** Rutherford, Thomas F.; Tarr, David G. **AA** Rutherford: University of Colorado. Tarr: University of Colorado and The World Bank. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 60/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 34. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C68, F12, F13, F43. **KW** Trade Liberalization. Endogenous Growth. Product Varieties. Dynamic GE Model.

AB Although trade liberalization has been linked econometrically and through casual empiricism to large income increases, attempts to quantify its impact in static simulation models have shown small estimated gains. This paper shows that when the endogenous dynamic effects of trade liberalization are built into simulation models, the estimated gains are indeed very large. In the authors' model, intermediate

inputs affect aggregate output through a Dixit-Stiglitz- Ethier function so that additional varieties provide the engine of growth. But complementary regulatory, financial market and macroeconomic reforms are important to realize the largest gains. The authors apply the model to five developing countries.

Saari, Donald G.

PD September 1999. **TI** Some Surprising Properties of Power Indices. **AU** Saari, Donald G.; Sieberg, Katri K. **AA** Saari: Northwestern University. Sieberg: College of William and Mary. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1271; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 20. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C71. **KW** Power Indices. Rankings.

AB A troubling aspect about power indices is how the values assigned to players can depend upon the index. As shown, the problem is more severe; different indices can even generate radically different rankings; e.g. a 15-player game exists with over a trillion different strict power index rankings of the players. It is shown that certain assumptions affect the outcomes. This includes demonstrating how the rankings change when players drop out of a game.

Sacco, Pier Luigi

PD September 1998. **TI** Critical Mass Effect and Restructuring in the Transition Towards a Market Economy. **AU** Sacco, Pier Luigi; Scarpa, Carlo. **AA** Sacco: University of Firenze. Scarpa: University of Bologna. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 65/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 28. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** L11, L16, P23, P27. **KW** Critical Mass Effect. Restructuring. Transition Economy. Market Economy.

AB Restructuring firms in a transition economy produces a sort of network externality, in that the profitability of restructuring depends on the number of firms that already adopted this strategy. We investigate under what conditions a "critical mass" exists, i.e. a situation in which such externality is positive, and restructuring spurs imitation, possibly leading to the eventual transformation of the whole economy. We find a critical mass effect when the main effect of restructuring is an increase in value added (i.e., aggregate demand) rather than an increase in the firm's ability to compete against rival home firms. The critical mass case becomes the typical one when competition spurs firms' efficiency.

Safra, Zvi

TI Hexagon Condition and Additive Representation of Preferences: An Algebraic Approach. **AU** Karni, Edi; Safra, Zvi.

TI An Extension of a Theorem of Von Neumann and Morgenstern with Application to Social Choice Theory. **AU** Karni, Edi; Safra, Zvi.

TI Individual Sense of Justice: A Utility Representation. **AU** Karni, Edi; Safra, Zvi.

Saggi, Kamal

PD March 1999. TI On Intra-brand and Inter-brand Competition: The Strategic Role of Fees and Royalties. AU Saggi, Kamal; Vettas, Nikolaos. AA Saggi: Southern Methodist University. Vettas: Duke University. SR Centre for Economic Policy Research Discussion Paper: 2110; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 41. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE L13, L14, L22, L42. KW Intra-brand Competition. Strategic Contracting. Two-Part Tariffs. Royalties.

AB We examine oligopolistic markets with both intra-brand and inter-brand competition. We characterize equilibrium contracts involving a royalty (or wholesale price) and a fee when each upstream firm contracts with multiple downstream firms. Royalties control competition between their own downstream firms at the expense of making them passive against rivals. When we endogenize the number of downstream firms, we find that each upstream firm chooses to have only one downstream firm. This result is in sharp contrast to previous literature where competitors benefit by having a larger number of independent downstream firms under only fixed fee payments. We discuss how allowing for contracts that involve both fees and per-unit payments dramatically alters the strategic incentives.

Saint-Paul, Gilles

PD March 1999. TI The Political Economy of Employment Protection. AA Universitat Pompeu Fabra. SR Centre for Economic Policy Research Discussion Paper: 2109; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 33. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE E06, E24, J03, J06. KW Vintage Capital. Obsolescence. Political Economy. Firing Costs. Creative Destruction.

AB This paper develops a model of job creation and job destruction in a growing economy with embodied technical progress, which we use to analyze the political support for employment protection legislations such as the ones that are observed in most European countries. We analyze the possibility of Condorcet cycles due to the fact that workers about to become unemployed prefer both an increase and a reduction in firing costs to the status quo. Despite this problem, we show the existence of local and sometimes global majority winners. In voting in favor of employment protection, incumbent employees trade off lower living standards (because employment protection maintains workers in less productive activities) against longer job duration. We show that the gains from and consequently the political support for employment protection (as defined by maximum job tenure) are larger, the lower the rate of creative destruction and the larger the worker's bargaining power. Numerical simulations suggest a hump-shaped response of firing costs to these variables, as well as a negative impact of exogenous turnover on employment protection.

PD April 1999. TI Assessing the Political Viability of Labour Market Reform: The Case of Employment Protection. AA Universitat Pompeu Fabra and Centre for Economic Policy Research. SR Centre for Economic Policy Research Discussion Paper: 2136; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom.

Website: www.cepr.demon.co.uk. PG 40. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE E06, E24, J03, J06. KW Vintage Capital. Obsolescence. Political Economy. Firing Costs. Creative Destruction.

AB This paper develops a model of job creation and job destruction in a growing economy with embodied technical progress that we use to analyze the political support for employment protection legislations such as the ones that are observed in most European countries. We analyze the possibility of Condorcet cycles due to the fact that workers about to become unemployed prefer both an increase and a reduction in firing costs to the status quo. Despite this problem, we show the existence of local, and sometimes global majority winners. In voting in favor of employment protection, incumbent employees trade off lower living standards (because employment protection maintains workers in less productive activities) against longer job duration. We show that the gains from, and consequently the political support for employment protection (as defined by maximum job tenure) are larger, the lower the rate of creative destruction and the larger the worker's bargaining power. Numerical simulations suggest a hump-shaped response of firing costs to these variables, as well as a negative impact of exogenous turnover on employment protection.

Sala-i-Martin, Xavier

TI Gerontocracy, Retirement, and Social Security. AU Mulligan, Casey B.; Sala-i-Martin, Xavier.

Salazar, Natalia

TI Foreign Investment in Colombia's Financial Sector. AU Barajas, Adolfo; Steiner, Roberto; Salazar, Natalia.

Salyer, Kevin D.

TI Technology Shocks or Colored Noise? Why Real-Business-Cycle Models Cannot Explain Actual Business Cycles. AU Hoover, Kevin D.; Salyer, Kevin D.

Samakovlis, Eva

TI On International Harmonization of Policy Instruments to Promote Paper Recycling in Europe. AU Huhtala, Anni; Samakovlis, Eva.

Santagata, Walter

PD September 1998. TI Contingent Valuation and Cultural Policy Design: The Case of "Napoli Musei Aperti". AU Santagata, Walter; Signorello, Giovanni. AA Santagata: University of Turin. Signorello: University of Catania. SR Fondazione Eni Enrico Mattei Note di Lavoro: 54/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 22. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE D60, H41, Q26, Z10. KW Contingent Valuation. Public Goods. Cultural Goods. Logit-Spike Model. Turnbull Estimator. Cultural Policy.

AB The aim of the paper is twofold: to carry out a contingent valuation study of "Napoli Musei Aperti", a cultural public good provided by the city of Naples, and to explore some alternative schemes of cultural policy. The paper is divided in two parts. In the first one some results from the contingent valuation study are presented. In the second one the use of the contingent valuation as a policy instrument in the public cultural sector is discussed.

Santos, Joao A. C.

TI The Importance of Bank Seniority for Relationship Lending. **AU** Longhofer, Stanley D.; Santos, Joao A. C.

Saporta, Victoria

TI The Effects of Hyper-Inflation on Accounting Ratios: Financing of Corporate Growth in Industrialising Countries. **AU** Whitting, Geoffrey; Saporta, Victoria; Singh, Ajit.

Sarno, Lucio

TI The Persistence of Capital Inflows and the Behaviour of Stock Prices in East Asia Emerging Markets: Some Empirical Evidence. **AU** Taylor, Mark P.; Sarno, Lucio.

Sartzetakis, Eftichios Sophocles

PD December 1998. **TI** Environmental Advertisement: An Alternative Policy to Control Consumption Pollution. **AU** Sartzetakis, Eftichios Sophocles; Xepapadeas, Anastasios. **AA** Sartzetakis: University College of the Cariboo, Canada. Xepapadeas: University of Crete. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 93/98; *Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it.* **PG** 13. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D62, Q28. **KW** Environmental Advertisement. Pollution Taxation. Dynamic Optimization. Second Best Optimum.

AB This paper examines the efficiency enhancing potential of supplementing existing policies of controlling consumption pollution with environmental advertisement. Our definition of environmental advertisement includes both information dissemination and persuasion. While incentive-based regulations that are based on coercion are effective immediately, environmental advertisement that is based on inducing voluntary action requires time. We formalize this argument by assuming that the shift of consumers' preference towards the desirable environmentally friendly goods or behavior depends on the stock rather than the flow of advertisement. We assume homogeneous consumers, having the choice of consuming two goods, one of which generates pollution. We treat environmental advertisement as a separate good within consumers' utility.

Satchell, Stephen E.

TI Market Risk and the Concept of Fundamental Volatility: Measuring Volatility Across Asset and Derivative Markets and Testing for the Impact of Derivatives Markets on Financial Markets. **AU** Hwang, Soosung; Satchell, Stephen E.

TI Implied Volatility Forecasting: A Comparison of Different Procedures Including Fractionally Integrated Models with Applications to UK Equity Options. **AU** Hwang, Soosung; Satchell, Stephen E.

Satterthwaite, Mark A.

PD March 1999. **TI** Strategy-Proofness and Markets. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1255; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. *Website: www.kellogg.nwu.edu/research/math.* **PG** 19. **PR** \$3.00

domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C11, C70, D51, D71. **KW** Social Choice. Strategy-Proof Market. Bayesian Game. Double Auction.

AB If a market is considered to be a social choice function, then the domain of admissible preferences is restricted and standard social choice theorems do not apply. A substantial body of analysis, however, strongly supports the notion that attractive strategy-proof social choice functions do not exist in market settings. Yet price theory, which implicitly assumes the strategy-proofness of markets, performs quite well in describing many real markets. This paper resolves this paradox in two steps. First, given that a market is not strategy-proof, it should be modeled as a Bayesian game of incomplete information. Second, a double auction market, which is perhaps the simplest operationalization of supply and demand as a Bayesian game, is approximately strategy-proof even when the number of traders on each side of the market is quite moderate.

PD April 1999. **TI** The Optimality of a Simple Market Mechanism. **AU** Satterthwaite, Mark A.; Williams, Steven R. **AA** Satterthwaite: Northwestern University. Williams: University of Illinois. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1256; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. *Website: www.kellogg.nwu.edu/research/math.* **PG** 27. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C60, D44, D51, D82. **KW** Market Mechanisms. Ranking Algorithms. Efficiency. K-Double Auction.

AB Strategic behavior in a finite market can cause inefficiency in the allocation, and market mechanisms differ in how successfully they limit this inefficiency. A method of ranking algorithms in computer science is adapted here to rank market mechanisms according to how quickly inefficiency diminishes as the size of the market increases. It is shown that trade at a single market-clearing price in the k-double auction is worst-case asymptotic optimal among all plausible mechanisms: evaluating mechanisms in their least favorable trading environments for each possible size of the market, the k-double auction is shown to force the worst-case inefficiency to zero at the fastest possible rate.

Sayers, Chera L.

TI Can A Shorter Workweek Induce Higher Employment? Mandatory Reductions in the Workweek and Employment Subsidies. **AU** Erbas, S. Nuri; Sayers, Chera L.

Scarpa, Carlo

TI Critical Mass Effect and Restructuring in the Transition Towards a Market Economy. **AU** Sacco, Pier Luigi; Scarpa, Carlo.

Scarpa, Riccardo

PD July 1998. **TI** Does a Third Bound Help? Parametric and Nonparametric Welfare Measures From a CV Interval Data Study. **AU** Scarpa, Riccardo; Bateman, Ian J. **AA** Scarpa: University of Tuscia, University of Wisconsin-Madison and University of Newcastle. Bateman: CSERGE, University of East Anglia. **SR** Fondazione Eni Enrico Mattei Note di

Lavoro: 51/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 27. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE C14, C42, H41. KW Parametric. Nonparametric. Welfare Measures. Contingent Valuation. Willingness To Pay.

AB Positive response density estimation from CV interval data affords efficiency gains, which must be weighed against the risk of introducing potential bias during questions iteration. This study examines the effect of eliciting a third response on a set of often-used welfare measures derived in a conventional parametric setting. It then compares these with distribution-free nonparametric estimates. A third bound increases censoring probability, introduces welfare estimates sensitivity to inclusion of a theoretically relevant covariate such as wealth that also affects efficiency gains. This might well introduce complications that outweigh the expected efficiency gain. This empirical finding supports and complements previous results obtained via simulation.

PD January 1999. **TI** Valuing the Recreational Benefits From the Creation of Nature Reserves in Irish Forests. **AU** Scarpa, Riccardo; Chilton, Susan M.; Hutchinson, W. George; Buongiorno, Joseph. **AA** Scarpa: Università degli Studi della Tuscia, Italy and University of Newcastle Upon Tyne. Chilton: University of Newcastle Upon Tyne. Hutchinson: Queens University. Buongiorno: University of Wisconsin. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 11/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 31. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE Q23, Q26. KW Non-Market Valuation. Contingent Valuation. Forest Attributes. Nature Reserves.

AB Data from a large-scale contingent valuation study are used to investigate the effects of forest attributes on willingness to pay for forest recreation in Ireland. In particular, the presence of a nature reserve in the forest is found to significantly increase the visitors' willingness to pay. A random utility model is used to estimate the welfare change associated with the creation of nature reserves in all the Irish forests currently without one. The yearly impact on visitors' economic welfare of new nature reserves approaches half a million pounds per annum, exclusive of non-recreational values.

Scarsi, Gian Carlo

PD January 1999. **TI** Local Electricity Distribution in Italy: Comparative Efficiency Analysis and Methodological Cross-Checking. **AA** London Economics, Ltd. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 16/99; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 39. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE L51, L94, L98. KW Electricity. Government Policy. Efficiency.

AB This paper analyses technical efficiency of local electricity distribution in Italy (1994, 1996) by using both econometric (deterministic frontier, stochastic frontier) and linear programming (Data Envelopment Analysis) tools. Cross-sectional data were examined with respect to: (a) ENEL -- the Italian electricity monopolist; (b) municipal authorities (MUNIs), i.e. town-based electric utilities which sometimes hold franchises for electricity distribution within city limits. The results suggest that Italy's regulatory and governmental

authorities when dealing with the territorial reform of electricity distribution should adopt a case-by-case approach. Similarly, any ownership transfers and/or mergers involving ENEL's units and MUNIs should depend on the varied efficiency records, which were detected according to different regional and economic scenarios.

Schaling, Eric

TI A Theory of Interest Rate Stepping: Inflation Targeting in a Dynamic Menu Cost Model. **AU** Eijffinger, Sylvester; Schaling, Eric; Verhagen, Willem.

Schinasi, Garry J.

PD October 1999. **TI** Portfolio Diversification, Leverage, and Financial Contagion. **AU** Schinasi, Garry J.; Smith, Todd R. **AA** Schinasi: International Monetary Fund. Smith: University of Alberta, Edmonton, Canada. **SR** International Monetary Fund Working Paper: WP/99/136; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 22. PR not available. JE F36, G11, G15. KW Financial Contagion. Portfolio Choice. Leverage. Value at Risk.

AB Models of "contagion" rely on market imperfections to explain why adverse shocks in one asset market might be associated with asset sales in many unrelated markets. This paper demonstrates that contagion can be explained with basic portfolio theory without recourse to market imperfections. It also demonstrates that "Value-at-Risk" portfolio management rules do not have significantly different consequences for portfolio rebalancing and contagion than other rules. The paper's main conclusion is that portfolio diversification and leverage may be sufficient to explain why investors would find it optimal to sell many higher-risk assets when a shock to one asset occurs.

Schmidt, Karsten

PD September 1998. **TI** Incentives for International Environmental Cooperation: Theoretic Models and Economic Instruments. **AA** University of Konstanz. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 56/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 46. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE D07, D62, F02, H21, Q28. KW International Agreements. Co-operation. Transboundary Externalities. Environmental Externalities. Incentive Compatibility. Enforcement.

AB This paper surveys the rapidly growing theoretical literature on international environmental agreements. The surveyed contributions are classified according to the conceivable strategies to create incentives for the participation in and compliance with environmental conventions. The proposed taxonomy of instruments consists of (i) the choice and particular form of the internalization instrument; (ii) carrot-stick strategies that make co-operative pollution reductions dependent on the past behavior of other countries (internal stabilization); (iii) transfers and sanctions of various forms (external stabilization); (iv) unilateral and accompanying measures by single countries or subcoalitions; and (v) long-term provisions to increase the flexibility of agreements and to improve the framework conditions for international negotiations.

Schmukler, Sergio L.

TI What Triggers Market Jitters: A Chronicle of the Asian Crisis. **AU** Kaminsky, Graciela L.; Schmukler, Sergio L.

Schob, Ronnie

TI Green Tax Reform and Competitiveness. **AU** Koskela, Erkki; Sinn, Hans-Werner; Schob, Ronnie.

Schuknecht, Ludger

TI Trade in Financial Services: Procompetitive Effects and Growth Performance. **AU** Francois, Joseph F.; Schuknecht, Ludger.

Scotchmer, Suzanne

TI Constitutional Rules of Exclusion in Jurisdiction Formation. **AU** Jehiel, Philippe; Scotchmer, Suzanne.

Scott, Alasdair

TI Booms and Slumps in World Commodity Prices. **AU** Cashin, Paul; McDermott, John C.; Scott, Alasdair.

Scott, Andrew

PD June 1999. **TI** Does Tax Smoothing Imply Smooth Taxes? **AA** London Business School. **SR** Centre for Economic Policy Research Discussion Paper: 2172; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. **Website:** www.cepr.demon.co.uk. **PG** 28. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** E06, H06. **KW** Fiscal Policy. Incomplete Markets. Optimal Taxation. Tax Smoothing.

AB Using a stochastic growth model we derive analytic expressions for optimal labor and capital tax rates under both complete and incomplete markets. We find taxes are driven by two factors reflecting: (a) Ramsey efficiency considerations and (b) the financing needs of the government, which varies with the excess burden of taxation. In the case of complete markets the government insures against variations in the excess burden of taxation and taxes change purely for efficiency reasons. The serial correlation and volatility of labor taxes are determined by those of employment and do not necessarily imply smooth tax rates. Under incomplete markets both Ramsey considerations and variations in the excess burden of taxation lead to changes in taxes with the latter providing a unit root component to optimal labor taxes. Using US data we find that the majority of fluctuations in marginal tax rates are due to fluctuations in the excess burden of taxation rather than exploitation of Ramsey considerations.

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.

Segerson, Kathleen

PD December 1998. **TI** Voluntary vs. Mandatory Approaches to Nonpoint Pollution Control: Complements or Substitutes? **AA** University of Connecticut. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 92/98;

Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. **Website:** www.feem.it. **PG** 37. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** Q02, Q25, Q28. **KW** Voluntary Approach. Mandatory Approach. Water. Pollution Control.

AB This paper develops a simple economic model of the interaction between a regulator and farmer that allows us to analyze the use of a policy that combines a voluntary, cost-sharing approach to improving water quality with a background threat of imposition of mandatory controls or taxes if the voluntary approach is unsuccessful in meeting a pre-specified water quality goal. In particular, we use the model to examine the conditions under which a welfare-maximizing regulator would want to offer such a policy to farmers, and whether the regulator can use such a policy to induce cost-minimizing abatement decisions without the need for farm-specific information about pollution-related characteristics that would be needed to implement first best mandatory policies (such as ambient taxes). We first consider the simpler case where there is a single farm in a given watershed. We then extend the analysis to consider multiple farms, and ask whether the policy can be designed to avoid free-riding in this context.

Sentana, Enrique

PD February 1999. **TI** Least Squares Predictions and Mean-Variance Analysis. **AA** CEMFI. **SR** Centre for Economic Policy Research Discussion Paper: 2088; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. **Website:** www.cepr.demon.co.uk. **PG** 32. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** C53, G11. **KW** Sharpe Ratios. Portfolio Allocation. Market Timing Strategies. Forecasting.

AB We compare the Sharpe ratios of investment funds which combine one riskless and one risky asset following: i) timing strategies which forecast excess returns using simple regressions; ii) a strategy which uses multiple regression instead; and iii) a passive allocation which combines the funds in i) with constant weightings. We show that iii) dominates i) and ii), as it implicitly uses the linear forecasting rule that maximizes the Sharpe ratio of actively traded portfolios, but the relative ranking of i) and ii) is generally unclear. We also discuss under what circumstances the performance of ii) and iii) coincides.

Seymour, Robert M.

TI Conventions and Social Mobility in Bargaining Situations. **AU** Ponti, Giovanni; Seymour, Robert M.

Shah, Sukhdev

TI Suriname: A Case Study of High Inflation. **AU** Braumann, Benedikt; Shah, Sukhdev.

Shalev, Jonathan

TI Voting for Voters: A Model of Electoral Evolution. **AU** Barbera, S.; Maschler, M.; Shalev, Jonathan.

Sharma, Sunil

TI Neglected Heterogeneity and Dynamics in Cross-Country Savings Regressions. **AU** Ul Haque, Nadeem; Pesaran, M. Hashem; Sharma, Sunil.

Sheehan, Dennis P.

TI Were the Good Old Days That Good? The Evolution of Managerial Stock Ownership Since the Great Depression. **AU** Holderness, Clifford G.; Kroszner, Randall S.; Sheehan, Dennis P.

Shiller, Robert J.

TI World Income Components: Measuring and Exploiting Risk-Sharing Opportunities. **AU** Athanasoulis, Stefano G.; Shiller, Robert J.

Shin, Hyukseung

TI Endogenous Formation of Research Coalitions with Spillovers. **AU** Yi, Sang-Seung; Shin, Hyukseung.

Shin, Hyun Song

TI Coordination Risk and the Price of Debt. **AU** Morris, Stephen; Shin, Hyun Song.

Shubik, Martin

TI Toward a Theory of Reinsurance and Retrocession. **AU** Powers, Michael R.; Shubik, Martin.

TI Default in a General Equilibrium Model with Incomplete Markets. **AU** Dubey, Pradeep; Geanakoplos, John; Shubik, Martin.

Sibert, Anne

TI UDROP: A Small Contribution to the New International Financial Architecture. **AU** Buiter, Willem H.; Sibert, Anne.

Sieberg, Katri K.

TI Some Surprising Properties of Power Indices. **AU** Saari, Donald G.; Sieberg, Katri K.

Siegler, Mark V.

TI Two Centuries of Taxes and Spending: A Causal Investigation of the Federal Budget Process, 1791-1990. **AU** Hoover, Kevin D.; Siegler, Mark V.

Signorello, Giovanni

TI Contingent Valuation and Cultural Policy Design: The Case of "Napoli Musei Aperti". **AU** Santagata, Walter; Signorello, Giovanni.

Simone, Francisco Nadal-De

PD October 1999. **TI** Nominal Exchange Rates and Nominal Interest Rate Differentials. **AU** Simone, Francisco Nadal-De; Razzak, W. A. **AA** Simone: International Monetary Fund. Razzak: Reserve Bank of New Zealand. **SR** International Monetary Fund Working Paper: WP/99/141; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 17. **PR** not available. **JE** C13, F31, F41. **KW** Exchange Rates. Interest Rate Differential. Bonds. Cointegration. Common Cycles.

AB This paper reexamines some unsettled theoretical and empirical issues regarding the relationship between nominal exchange rates and interest rate differentials and provides a model for the behavior of exchange rates in the long run, where interest rates are determined in the bond market. The model predicts that an increase in the interest rate differential appreciates the home currency. We test the model for the U.S.

dollar against the Deutsche mark, the British pound, the Japanese yen, and the Canadian dollar. The first two pairs of exchange rates -- for which purchasing power parity seems to hold -- display a strong relationship with interest rate differentials.

Simpson, Helen

TI The Geographic Distribution of Production Activity in the UK. **AU** Devereux, Michael P.; Griffith, Rachel; Simpson, Helen.

Singh, Ajit

PD December 1996. **TI** Financial Liberalisation, Stock Markets and Economic Development. **AA** University of Cambridge. **SR** University of Cambridge Discussion Papers in Accounting and Finance: AF29; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: www.econ.cam.ac.uk/dae. **PG** 21. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** E44, G15, G18, O14, O16. **KW** Financial Liberalization. Stock Markets. Development. Industrialization. Growth.

AB There has been an extraordinary expansion of stock markets in developing countries in the 1980s and 1990s. These emerging markets have played an important role in the internal as well as external financial liberalization processes which many industrializing countries have undertaken in this period. The paper investigates the question: what is likely to be the impact of these developments on industrialization and long-term economic growth? It provides analysis and evidence to suggest that on balance this evolution is likely to hinder rather than to assist economic development.

TI The Effects of Hyper-Inflation on Accounting Ratios: Financing of Corporate Growth in Industrialising Countries. **AU** Whitting, Geoffrey; Saporta, Victoria; Singh, Ajit.

PD December 1996. **TI** Profits, Savings, Investment and Fast Economic Growth: A Perspective on Asian Catch Up and Implications for Latin America. **AA** University of Cambridge. **SR** University of Cambridge Discussion Papers in Accounting and Finance: AF33; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: www.econ.cam.ac.uk/dae. **PG** 32. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** E22, G31, G38, O16, O40. **KW** Savings. Investment. Profits. Corporate Finance. Policy.

AB The East Asian countries have been catching up with the West for most of the post World War II period. This paper attempts to make analytic sense of this extraordinary Asian drama. It concentrates on the extremely high rates of corporate savings and investment achieved by these economies. The accumulation story is conceptualized here in Kaldorian terms and emphasizes the investment-profits-savings nexus. The essential argument is that high corporate savings and investments in countries like Japan and Korea were not simply the outcome of the invisible hand of the market, but rather, government-business interactions and the relationship between the corporations and the financial system were crucial in the process. The last part considers the implications of the analysis for Latin America. Despite Latin American countries' deficits in this area, it is suggested that their current political conjuncture will prevent them from accepting any dirigiste

advice however beneficial. Unlike the "reluctant" Asians, the Latin Americans, following the Washington Consensus, have been enthusiastic liberalizers. The paper poses the question whether such financial liberalization in particular is wise for the real production side of the economy.

PD May 1997. **TI** Liberalisation, the Stock Market and the Market for Corporate Control: A Bridge Too Far for the Indian Economy. **AA** University of Cambridge. **SR** University of Cambridge Discussion Papers in Accounting and Finance: AF35; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: www.econ.cam.ac.uk/dae. **PG** 24. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** G10, G30, O16. **KW** India. Liberalization. Stock Markets. Corporate Control. Economic Reform.

AB An outstanding feature of the Indian economic reform in the recent period has been the fast expansion of stock markets and their growing role in the economy. The paper first reviews the stock market reforms and analyzes the effects of stock market expansion on corporate growth and the real economy. Second, it examines the proposed next stage of the reforms: the establishment of a market for corporate control. The paper offers analyses and evidence to suggest that this reform is more likely to harm than help the real economy at India's present stage of development, and should therefore be resisted.

PD March 1998. **TI** Emerging Stock Markets, Portfolio Capital Flows and Long-Term Economic Growth: Micro and Macroeconomic Perspectives. **AU** Singh, Ajit; Weisse, Bruce A. **AA** University of Cambridge. **SR** University of Cambridge Discussion Papers in Accounting and Finance: AF40; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: www.econ.cam.ac.uk/dae. **PG** 28. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** E44, F31, G32, G38, O16. **KW** Stock Markets. Capital Flows. Financial Systems. Latin America. East Asia.

AB The paper examines two major components of financial liberalization, stock market development and portfolio capital flows, in the context of LDCs. The paper considers microeconomic and macroeconomic perspectives on their implications for long-term development and economic growth. It concentrates on (i) the role of stock markets in financing corporate growth; (ii) the implications of stock market volatility for resource allocation and productive efficiency; and (iii) the interactions between the foreign exchange and stock markets in the context of economic shocks. Its policy recommendations are that LDCs should promote bank-based systems, influence the scale and composition of capital inflows, and prevent a market for corporate control from emerging.

TI National Competitiveness, Dynamics of Adjustment and Long-Term Economic Growth: Conceptual, Empirical and Policy Issues. **AU** Howes, Candace; Singh, Ajit.

Siniscalchi, Marciano

TI An Epistemic Characterisation of Extensive Form Rationalisability. **AU** Battigalli, Pierpaolo; Siniscalchi, Marciano.

Siniscalco, Domenico

TI Regulation and Privatisation: The Case of Electricity.

AU Bortolotti, Bernardo; Fantini, Marcella; Siniscalco, Domenico.

Sinn, Hans-Werner

PD March 1999. **TI** Inflation and Welfare: Comment on Robert Lucas. **AA** University of Munich. **SR** Centre for Economic Policy Research Discussion Paper: 2111; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 11. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** E31, F41. **KW** Inflation. Cost of Inflation.

AB The paper argues that Lucas overestimates the Friedman-Bailey type of welfare cost of inflation and neglects other important welfare effects. With an alternative interpretation of the non-observability of low interest rates to the one Lucas gave and the introduction of taxes that reduce the opportunity cost of money holding, the welfare cost shrinks to one-third of Lucas' estimate. The neglected welfare effects of inflation include an adverse Baumol-Tobin effect on growth and international capital movements, historical cost accounting for tax purposes, uncertainty about the price level and the relationship between inflation, relative prices and structural change.

PD June 1999. **TI** EU Enlargement, Migration and Lessons from German Unification. **AA** University of Munich. **SR** Centre for Economic Policy Research Discussion Paper: 2174; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 24. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** F15, F22, H05. **KW** EU Enlargement. Migration. Welfare State.

AB The paper studies the role of international implications after EU enlargement. Based on a formal model with migration costs for both capital and labor, it predicts a two-sided migration from the new to the old EU countries, which is later reversed. As the migration pattern chosen by market forces turns out to be efficient, migration should not be artificially reduced by means of legal constraints or subsidies to the new member countries. The paper draws the parallel with German unification and points out the lessons to be learned by Europe. The analysis concludes with a brief discussion of the second best problem posed by the existence of welfare states in the old member countries.

PD June 1999. **TI** The Crisis of Germany's Pension Insurance System and How It Can Be Resolved. **AA** University of Munich. **SR** Centre for Economic Policy Research Discussion Paper: 2175; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 32. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** E21, H55. **KW** Pension Insurance. Pay-As-You-Go System. Savings. Germany.

AB The paper discusses the options for a reform of the German pension system using a model developed at CES for the German Council of economic advisors to the Federal Ministry of Economics and Research. It is argued that the German pay-as-you-go-system is efficient in a present value sense but will nevertheless need the support of a funded system to avoid a financial crisis. The paper recommends obligatory private savings at a variable rate where the time path of the savings rate is chosen so as to stabilize the sum of this rate and

the pay-as-you-go contribution rate, given the time path of pensions as defined in the present system.

TI Green Tax Reform and Competitiveness. **AU** Koskela, Erkki; Sinn, Hans-Werner; Schob, Ronnie.

Skaperdas, Stergios

TI The Market for Protection and the Origin of the State. **AU** Konrad, Kai A.; Skaperdas, Stergios.

Slaughter, Matthew

TI Trade, Technology and UK Wage Inequality. **AU** Haskel, Jonathan; Slaughter, Matthew.

Slok, Torsten

TI Inflation and Growth in Transition: Are the Asian Economies Different? **AU** Kalra, Sanjay; Slok, Torsten.

Small, Arthur A.

TI Bioprospecting with Patent Races. **AU** Rausser, Gordon C.; Small, Arthur A.

Small, David

TI Monetary Policy and Price Stability. **AU** Johnson, Karen; Small, David; Tryon, Ralph.

Smith, Todd R.

TI Portfolio Diversification, Leverage, and Financial Contagion. **AU** Schinasi, Garry J.; Smith, Todd R.

Smith, Zoe

TI What Can We Learn About Pension Reform From Generational Accounts for the UK? **AU** Banks, James; Disney, Richard; Smith, Zoe.

Soderlind, Paul

PD June 1999. **TI** Performance and Characteristics of Swedish Mutual Funds 1993-97. **AU** Soderlind, Paul; Dahlquist, Magnus; Engstrom, Stefan. **AA** Stockholm University. **SR** Centre for Economic Policy Research Discussion Paper: 2166; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 44. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** G11, G12, G23. **KW** Net-flows. Persistence. Portfolio Evaluation. Survivorship Bias. Style Analysis.

AB The performance, and its characteristics, of Swedish-based equity and bond mutual funds are studied in detail. Accounting for survivorship biases, regular equity funds have a slight over performance, equity funds with certain tax advantages have a negative performance (before tax), and bond funds a clear underperformance. The performance is related to fund specific characteristics such as net-flows of new money into funds, past performance, expense measures, commissions paid by the funds, turnover, and the size of funds. The economic importance of the cross-sectional differences is quantified by investigating various trading strategies.

Solan, Eilon

TI Stopping Games with Randomized Strategies. **AU** Rosenberg, Dinah; Solan, Eilon; Vieille, Nicolas.

TI Equilibrium Existence in Games with Incomplete

Information: The Countable Case. **AU** Al-Najjar, Nabil; Solan, Eilon.

PD July 1999. **TI** Games with Espionage. **AU** Solan, Eilon; Yariv, Leeat. **AA** Solan: Northwestern University. Yariv: Harvard University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1257; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 25. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C72, D82. **KW** Espionage. Subgame Perfect Equilibria. Information. Timing.

AB We consider extensive form and normal form games in which players decide on their strategies before the start of play and can purchase noisy information about their opponents' decisions concerning future response policies (i.e., spy on their opponents' decisions). This addition to the agent's optimization problem naturally changes the set of subgame perfect equilibria (SPE). For example, in the chain-store model, for sufficiently small costs of espionage, the population of Incumbents splits into a positive fraction that accommodates and a positive fraction that fights. For general 2x2 games in extensive form, the existence of equilibria with espionage turns out to depend on the difference between the Stackelberg equilibrium payoffs and the SPE payoffs. We characterize the set of equilibria with espionage as a subset of the set of correlated equilibria. Welfare and Pareto properties of such equilibria are also explored.

PD October 1999. **TI** Correlated Equilibrium, Public Signalling and Absorbing Games. **AU** Solan, Eilon; Vohra, Rakesh V. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1272; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 50. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C72, C73. **KW** Absorbing Games. Correlated Equilibrium. Public Signaling. Uniform Payoff.

AB An absorbing game is a repeated game where some of the action combinations are absorbing, in the sense that whenever they are played, there is a positive probability that the game terminates, and the players receive some terminal payoff at every future stage. We prove that every n-player absorbing game admits a correlated equilibrium. In other words, for every $\epsilon > 0$ there exists a probability distribution p -sub- ϵ over the space of pure strategy profiles such that if a pure strategy profile is chosen according to p -sub- ϵ and each player is informed of his pure strategy, no player can profit more than ϵ in any sufficiently long game by deviating from the recommended strategy.

Soltwedel, Rudiger

PD September 1999. **TI** EMU Challenges European Labor Markets. **AU** Soltwedel, Rudiger; Dohse, Dirk; Krieger-Boden, Christiane. **AA** Kiel Institute for World Economics, Kiel, Germany. **SR** International Monetary Fund Working Paper: WP/99/131; International Monetary Fund, 700

19th Street, Washington, DC 20431. **PG** 24. **PR** not available. **JE** E24, E42, F15, J30, R11. **KW** European Monetary Union. Regional Economics. Labor Markets. Adjustment to Shocks. Unemployment.

AB This paper discusses the challenges that European Monetary Union (EMU) poses for European labor markets, emphasizing in particular the regional dimension of the European unemployment problem. The authors argue that the inability of labor markets to adjust to shocks is largely a regional problem within EMU member countries, requiring structural reforms to enhance labor market flexibility but also a decentralization of competencies and greater diversity of labor market outcomes. Any attempt to successfully reform European labor markets and "make them fit for EMU" has to take into account the regional -- and even a more decentralized firm -- perspective.

Soubeyran, Antoine

PD July 1998. **TI** Learning-by-Doing and the Development of Industrial Districts. **AU** Soubeyran, Antoine; Thisse, Jacques-Francois. **AA** Soubeyran: GREQAM, Universite de la Mediterranee. Thisse: Universite Catholique de Louvain and CERAS, Ecole Nationale des Ponts et Chaussees. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 46/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 20. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** O14, R12. **KW** Industrial District. Learning-by-Doing. Economic Geography.

AB Marshallian districts are locales that accommodate a large number of small firms producing similar goods to be exported and benefit from the accumulation of know-how associated with workers residing there. We study the making of such districts by assuming that the cost function of a firm is a decreasing function of the total output produced in the past by the firms established in the locale. The dynamics are described by a sequence of temporary equilibria in which firms equalize profits between locales at each period. Hence changing the spatial distribution of firms affects the production history of each district. When new firms set up in a locale, they exacerbate competition on the corresponding labour market, thus leading to a wage rise that reduces the incentives for firms to locate in the most efficient district. The short-run equilibrium distribution of firms is studied as well as the long-run properties of the adjustment process.

Sougiannis, Theodore

TI Analysts' Interpretation and Investors' Valuation of Tax Carryforwards. **AU** Amir, Eli; Sougiannis, Theodore.

Spagat, Michael

TI The Politics of Cooptation. **AU** Bertocchi, Graziella; Spagat, Michael.

Spatafora, Nikola

PD October 1999. **TI** Macroeconomic and Sectoral Effects of Terms-of-Trade Shocks: The Experience of the Oil-Exporting Developing Countries. **AU** Spatafora, Nikola; Warner, Andrew. **AA** Spatafora: International Monetary Fund. Warner: Harvard University. **SR** International Monetary Fund Working Paper: WP/99/134; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 30. **PR** not available. **JE** E22, F32, F41, F43, O13.

KW Terms of Trade. Natural Resources. Dutch Disease. Investment. Current Account.

AB This paper investigates the impact of long-run terms-of-trade shocks. Analytically, we show that, if capital goods are largely importable or the labor supply is sufficiently elastic, then natural-resource booms increase aggregate investment and worsen the current account, but Dutch "Disease" effects are weak. We then examine 18 oil-exporting developing countries during 1965-89. Favorable terms-of-trade shocks increase investment and (especially government) consumption, but reduce medium-term savings; hence, the current account deteriorates. Nontradable output increases, in response to real appreciations, but Dutch Disease effects are strikingly absent. Investment, consumption, and nontradable output respond more to a terms-of-trade decline than to an increase.

Squintani, Francesco

PD July 1999. **TI** Moral Hazard. Renegotiation and Forgetfulness. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1269; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 23. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C73, D81, D82, D83. **KW** Principle-Agent. Renegotiation. Incentive Contracts. Social Learning.

AB When a principal and an agent operate with simple contracts, at equilibrium, renegotiation will occur after the action is taken. Also, since renegotiation makes incentive contracts non-credible, the principal may prefer non-renegotiable monitoring options. Current literature does not fully reconcile these predictions with the observation of simple non-renegotiated incentive contracts. We reconcile these predictions with the observation of simple non-renegotiated incentive contracts. We model a principal-agent interaction in a social learning framework, and assume that when renegotiation is not observed, players may forget its feasibility, with infinitesimal probability. The unique stable state of our model predicts that the second-best simple incentive contracts occur with non-negligible frequency.

PD August 1999. **TI** Enforceable Contracts under Generalized Information of the Court. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1268; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 15. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C79, D52, D82, K12. **KW** Court's Verifiability. Partitional Correspondence. Product Correspondences. Joint Liability.

AB Bernheim and Whinston (1997) (henceforth BW) formalize court's verifiability as a correspondence mapping actually played actions into events (i.e. sets of actions) verified by the court. Their normal-form analysis restricts attention to partitional product correspondences. They define any element in the partition a "complete" enforceable contract. After motivating the discussion of non-partitional and non-product

correspondences by means of simple examples, we show that the BW approach may fail to capture all feasible outcomes for product non-partitional correspondences, and that is valid against all partitional non-product ones only if one allows for a joint liability regime. Even in the case of joint liability regimes, the BW approach may be extended only to deal with non-product or non-partitional correspondences. Therefore, a definition of enforceable contract that is independent of the player's payoffs may not capture all feasible outcomes.

PD August 1999. **TI** Games with Small Forgetfulness. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1273; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 32. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C71, C73, D83. **KW** Small Forgetfulness. Backward Induction. Trembling Hand. Learning.

AB While it is known how players may learn to play in a game they know, the issue of how their model of the game evolves over time is largely unexplored. This paper introduces small forgetfulness and shows that it may destabilize standard full-memory solutions. Players are repeatedly matched to play a game. After any match, they forget with infinitesimal probability the feasibility of any opponent's unobserved action, and they are reminded of all actions that they observe. During each period, they play an equilibrium consistent with their perception of the game. We show that the unique backward induction path drifts into a non-Nash, self-confirming equilibrium, in a class of extensive-form games that are fully characterized. Such a long-run prediction is always Pareto-undominated, and may Pareto dominate the original backward induction path. In one-shot simultaneous-move games, forgetfulness yields a refinement stronger than trembling hand perfection. Our results imply that there are games that players may never fully learn.

PD August 1999. **TI** On-the-Job Signalling and Self-Confidence. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1274; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 22. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** D82, D83, J31. **KW** Worker Ability. Overconfidence. On-the-Job Signaling. Separating Equilibrium.

AB The labor economics literature on signaling assumes workers know their own abilities. Well-settled experimental evidence contradicts that assumption: in the absence of hard facts, subjects are on average overconfident. First we show that in any equilibrium of any signaling model, overconfidence cannot make players better off. In order to obtain more detailed predictions, we then introduce a specific on-the-job signaling model. We show that at fully-separating equilibrium, overconfident workers choose tasks that are too onerous, fail them, and, dejected by such a failure, settle down for a position inferior to their potential. Such a pattern leads to permanent

underemployment of workers, and inefficiency of the economy. For the case of unbiased workers uncertain about their own value, we determine a necessary and sufficient condition for the existence of fully-separating equilibrium.

TI Deliberations with Double-Sided Information. **AU** Doraszelski, Ulrich; Gerardi, Dino; Squintani, Francesco.

PD October 1999. **TI** Imitation and Experimentation in Contests. **AU** Squintani, Francesco; Valimaki, Juuso. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1275; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. **PG** 19. **PR** \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. **JE** C73, D83, D84. **KW** Imitation Strategies. Myopic Decisions. Coordination. Changing Environment.

AB This paper analyzes the equilibrium play in a random matching model with a changing environment. Under myopic decision making, players adopt imitation strategies similar to those observed in evolutionary models with sampling from past play in the population. If the players are patient, equilibrium strategies display elements of experimentation in addition to imitation. If the changes in the environment are infrequent enough, these strategies succeed in coordinating almost all of the players on the dominant action all of the time. The myopic rules, on the other hand, result in mis-coordination for a positive fraction of time.

Staiger, Douglas

TI Estimating Returns to Schooling When Schooling is Misreported. **AU** Kane, Thomas J.; Rouse, Cecilia Elena; Staiger, Douglas.

Steiner, Roberto

TI Foreign Investment in Colombia's Financial Sector. **AU** Barajas, Adolfo; Steiner, Roberto; Salazar, Natalia.

Stevens, Ed

PD November 1998. **TI** Non-Par Banking: Competition and Monopoly in Markets for Payments Services. **AA** Federal Reserve Bank of Cleveland. **SR** Federal Reserve Bank of Cleveland Working Papers: 9817; Research Department, Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, Ohio 44101-1387. Website: www.clev.frb.org. **PG** 21. **PR** no charge. **JE** D40, E58, G21, G28, N22. **KW** Payments System. Non-Par Banking. Central Banks. Payment Services. Check Collection. **AB** Much of the literature treats the existence of non-par banking as a legal matter, emphasizing the Board of Governors' legal struggle to force non-par banks to pay Reserve banks at par. This treatment is not satisfactory. In competitive markets, par paying banks should have been able to undercut non-par banks' prices, once the Reserve banks had eliminated exchange charges by integrating their balance sheets. More likely, the survival of non-par banking reflected the absence of competition in the markets in which non-par banks operated. Past empirical evidence is consistent with this conclusion: non-par banks typically were monopolists in isolated rural markets for banking services.

Stevens, Margaret

PD March 1999. **TI** Should Firms Be Required to Pay for Vocational Training? **AA** University of Oxford. **SR** Centre for Economic Policy Research Discussion Paper: 2099; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 34. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** J24, J31, J38. **KW** Vocational Training. Human Capital. Credit Constraints. Uncertainty. Labor Market Frictions. **AB** Failure in the training market may result from credit constraints and the inability to insure against labor income uncertainty. Detering potential trainees, or labor market imperfections that create external benefits for firms. This paper constructs a model of a training market affected by both problems and examines the rationale for training levy schemes intended to make firms increase investment in vocational training. It is shown that regulating firms, or equivalently financing a subsidy by taxation of profits, can achieve a Pareto improvement irrespective of the cause of under-investment. When the levy is assessed as a proportion of wages, however, the effect is to address capital market imperfections only.

Stoker, Thomas

TI Interpreting Movement in Aggregate Wages: The Role of Labor Market Participation. **AU** Blundell, Richard; Reed, Howard; Stoker, Thomas.

Stone, Mark R.

TI Corporate Leverage, Bankruptcy, and Output Adjustment in Post-Crisis East Asia. **AU** Kim, Se-Jik; Stone, Mark R.

Strahan, Philip E.

TI Obstacles to Optimal Policy: The Interplay of Politics and Economics in Shaping Bank Supervision and Regulation Reforms. **AU** Kroszner, Randall S.; Strahan, Philip E.

TI The Political Economy of Deregulation: Evidence from the Relaxation of Bank Branching Restrictions in the United States. **AU** Kroszner, Randall S.; Strahan, Philip E.

Stratmann, Thomas

TI Does Political Ambiguity Pay? Corporate Campaign Contributions and the Rewards to Legislator Reputation. **AU** Kroszner, Randall S.; Stratmann, Thomas.

Straubhaar, Thomas

TI Discrimination in the Swiss Labour Market: An Empirical Analysis. **AU** Golder, Stefan M.; Straubhaar, Thomas.

Strazzeria, Elisabetta

TI Bias and Efficiency of Single vs Double Bound Models for Contingent Valuation Studies: A Monte Carlo Analysis. **AU** Calia, Pinuccia; Strazzeria, Elisabetta.

Suarez, Javier

TI Venture Capital Finance: A Security Design Approach. **AU** Repullo, Rafael; Suarez, Javier.

Sun, Jeanne-Mey

TI Firm Responses to Growing Inequality in Income and the Cost of Time. **AU** Pashigian, B. Peter; Sun, Jeanne-Mey.

Sundararajan, V.

TI Recapitalizing Banks with Public Funds: Selected Issues. **AU** Enoch, Charles; Garcia, Gillian; Sundararajan, V.

Svensson, Lars E. O.

TI The Equilibrium Degree of Transparency and Control in Monetary Policy. **AU** Faust, Jon; Svensson, Lars E. O.

Swenson, Deborah L.

TI Offshore Assembly from the United States: Production Characteristics of the 9802 Program. **AU** Feenstra, Robert C.; Hanson, Gordon H.; Swenson, Deborah L.

Szroeter, Jerzy

PD July 1998. **TI** Gross Non-Normality and the Quality of a Simple Approximation to the P-Value of a Routine Test of Non-Nested Regressions. **AA** University College London. **SR** University College London Discussion Papers in Economics: 98/05; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 15. **PR** 4 pounds or \$8.00. **JE** C10, C20, C40, C52. **KW** Non-Nested Regressions. P-Values. Size. Non-Normality. Point Approximation.

AB The distribution of certain test statistics for non-nested regressions can be so grossly non-normal that p-values computed on the assumption of approximate normality cannot be safely used for routine inference. This paper presents results on the quality of a new more accurate yet still user-friendly p-value approximation which embodies an inverse measure of the strength of relationship between regressors of competing models. This easily-computed measure is equivalent to the sum of Eigenvalues which have recently been shown to characterize the exact finite-sample distribution of the test statistic.

Tanner, Evan

PD August 1999. **TI** Exchange Market Pressure and Monetary Policy: Asia and Latin America in the 1990s. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/114; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 38. **PR** not available. **JE** E40, E52, F31, F32, F40. **KW** Exchange Market Pressure. Domestic Credit. Exchange Rates. Reserves. Vector Autoregression.

AB Exchange market pressure (EMP), the sum of exchange rate depreciation and reserve outflows (scaled by base money), summarizes the flow excess supply of money in a managed exchange rate regime. Examining Brazil, Chile, Mexico, Indonesia, Korea, and Thailand, this paper finds that monetary policy affects EMP as generally expected: contractionary monetary policy helps reduce EMP. The monetary policy stance is best measured by domestic credit growth (since interest rates contain both policy- and market-determined elements). In response to higher EMP, monetary authorities boosted domestic credit growth both in Mexico (confirming previous research) and in the Asian countries.

Tanner, Sarah

TI What Can We Learn From Retirement Expectations Data? **AU** Disney, Richard; Tanner, Sarah.

Tarr, David G.

TI Trade Liberalization and Endogenous Growth in a Small Open Economy: A Quantitative Assessment. **AU** Rutherford, Thomas F.; Tarr, David G.

Taube, Gunther

TI On the Fast Track to EU Accession: Macroeconomic Effects and Policy Challenges for Estonia. **AU** Weber, Rene; Taube, Gunther.

Taylor, Christopher T.

TI R&D Activity and Acquisitions in High Technology Industries: Evidence From the U.S. Electronic and Electrical Equipment Industries. **AU** Blonigen, Bruce A.; Taylor, Christopher T.

Taylor, Mark P.

PD February 1999. **TI** Self-Employment and Windfall Gains in Britain: Evidence From Panel Data. **AA** University of Essex. **SR** Centre for Economic Policy Research Discussion Paper: 2084; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 44. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** J22, J23, J31. **KW** Self-Employment. Labor Supply. Panel Data.

AB Liquidity constraints can affect self-employment in a number of ways. They can prohibit potential entrepreneurs from starting up in business, they can restrict the growth of existing entrepreneurial activities and, in the extreme, they can result in small business failure. This paper uses British panel data to investigate the effects of relaxing liquidity constraints on self-employment through the unanticipated receipt of windfall gains. The results suggest that the amount of payment received has a positive and concave effect on the probability of entering self-employment and on the performance of an existing self-employment enterprise, consistent with the liquidity constraint hypothesis.

PD May 1999. **TI** The Persistence of Capital Inflows and the Behaviour of Stock Prices in East Asia Emerging Markets: Some Empirical Evidence. **AU** Taylor, Mark P.; Sarno, Lucio. **AA** University of Oxford. **SR** Centre for Economic Policy Research Discussion Paper: 2150; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 52. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** E44, F23, F34, G01. **KW** Emerging Markets. Capital Flows. Asset Market Bubbles. East Asian Crisis.

AB We examine the view that the recent East Asian crisis was precipitated by bursting asset price bubbles, which had been fuelled by strong capital inflows which were largely the result of a moral hazard problem in financial intermediation, and was exacerbated by a vicious cycle of asset price deflation and incipient and actual capital flight. We find evidence of stock market bubbles in all East Asian economies examined, although not in Australia. We examine various categories of capital flows to these countries and find, in particular, relatively high reversible components in portfolio flows to East Asian economies.

Thisse, Jacques-Francois

TI Learning-by-Doing and the Development of Industrial Districts. **AU** Soubeyran, Antoine; Thisse, Jacques-Francois.

TI Wage Competition with Heterogeneous Workers and Firms. **AU** Hamilton, Jonathan; Thisse, Jacques-Francois; Zenou, Yves.

TI Monopolistic Competition, Multiproduct Firms and Optimum Product Diversity. **AU** Ottaviano, Gianmarco I.; Thisse, Jacques-Francois.

Thomas, Charles J.

PD August 1998. **TI** The Competitive Effects of Mergers Between Asymmetric Firms. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 220; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave., NW, Room 7634, Washington, D.C. 20580. Website: bperson@ftc.gov. **PG** 29. **PR** no charge. **JE** D44, G34, G38, L40. **KW** Mergers. Asymmetric Firms. Incomplete Information. Competition. Auctions.

AB The 1992 Horizontal Merger Guidelines suggest that the merger of two relatively weak competitors may result in a strong competitor and may lead to lower prices, despite the resulting increase in concentration. This paper introduces incomplete information into a simple model of repeated competition among firms that are asymmetric in their likely degree of efficiency at each stage of competition. In such a setting there do exist profitable yet price-reducing mergers among weaker firms. This model reasonably describes mergers between asymmetric firms that participate in auction or procurement settings and strengthens insights from the literature on asymmetric auctions regarding postmerger incentives for aggressive pricing. Finally, this model illustrates that the efficiencies described in the typical modeling of mergers in the asymmetric auction literature have private but not social benefits, and thus should not be permitted as a justification for merger.

PD January 1999. **TI** Multimarket Contact and Imperfect Information. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 224; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave., NW, Room 7634, Washington, D.C. 20580. Website: bperson@ftc.gov. **PG** 32. **PR** no charge. **JE** C61, C72, D43, D82, L13. **KW** Maximal Collusion. Repeated Games. Imperfect Monitoring. Imperfect Information. Oligopoly.

AB With perfect information about relevant strategic variables, economic theory predicts that firms engaged in competition across several markets sometimes can use their multimarket contact to blunt competitive forces. In practice, perfect information likely is not available, and it is well known that the existence of imperfect information can impede firms' collusive efforts. I extend a standard oligopoly supergame to examine simultaneously the effects of imperfect information and multimarket contact on the degree of cooperation that firms can sustain. The central theme of the results is that a market must generate sufficiently noisy signals for it to benefit another market through strategic linkage. This contrasts with the finding in individual markets that collusion decreases as the level of noise increases.

Thomas, Jonathan M.

PD April 1997. **TI** Ethnic Variation in Commuting Propensity and Unemployment Spells: Some UK Evidence. **AA** University College London. **SR** University College

London Discussion Papers in Economics: 97/02; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. PG 13. PR 4 pounds or \$8.00. JE J15, J61, J64, R23. KW Commuting. Unemployment. Ethnic Minorities. Spatial Mismatch. Duration.

AB This paper uses 1987/88 UK survey data from the unemployment inflow to investigate the ability of ethnic variation in commuting willingness to account for longer non-white unemployment spells. The study is motivated by the possibility that ethnic minorities are at greater risk of spatial mismatch unemployment because they are more geographically restrictive in their jobseeking activities. Our findings support this hypothesis and indicate that lower commuting willingness explains about 20% of the differential between the average unemployment spells of ethnic minorities and whites.

Thomson, James B.

TI Large Shareholders and Market Discipline in a Regulated Industry: A Clinical Study of Mellon Bank. AU Haubrich, Joseph G.; Thomson, James B.

Tirole, Jean

PD February 1999. **TI** Corporate Governance. AA Institut D'Economie Industrielle. **SR** Centre for Economic Policy Research Discussion Paper: 2086; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 56. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE D23, G32. KW Governance. Shareholder Value. Stakeholder Society. Control Rights. Managerial Incentives.

AB The paper first develops an economic analysis of the concept of shareholder value, describes its approach and discusses some open questions. It emphasizes the relationship between pledgeable income, monitoring and control rights using a unifying and simple framework. The paper then provides a first and preliminary analysis of the concept of the stakeholder society. It investigates whether the managerial incentives and the control structure described in the first part can be modified so as to promote the stakeholder society. It is shown that the implementation of the stakeholder society strikes three rocks: dearth of pledgeable income, deadlocks in decision-making, and lack of clear mission for management. While it fares better on those three grounds, shareholder value generates biased decision-making; the paper analyzes the costs and benefits of various methods of protecting non-controlling stakeholders: covenants, exit options, flat claims, enlarged fiduciary duty.

PD February 1999. **TI** Transmission Rights and Market Power on Electric Power Networks. II: Physical Rights. AU Tirole, Jean; Joskow, Paul. AA Tirole: Institut D'Economie Industrielle. Joskow: Massachusetts Institute of Technology. **SR** Centre for Economic Policy Research Discussion Paper: 2087; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 44. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE L13, L94. KW Power Markets. Restructuring. Transmission. Congestion. Physical Rights.

AB We examine whether and how the allocation of physical rights to utilize congested transmission links affects the behavior of electricity generators and electricity consumers

with market power in the electricity market. The analysis recognizes that the ultimate allocation of transmission rights is endogenous, depending both on whether transmission rights can enhance market power and the microstructure of the rights market. Three alternative rights market microstructures are examined. The analysis initially focuses on a two-node network where there are cheap supplies available in an exporting region, expensive supplies in an importing region, and a congested transmission link between the two regions. Several other market power configurations are examined in less detail. The allocation of physical rights can cause production inefficiency due to withholding of physical rights from the market, an effect that is not observed for financial rights. Extension to a three-node network to allow for loop flows does not change the basic results, but does reveal complications associated with the creation of and accounting for physical transmission rights when there is loop flow. The paper concludes with a comparison of the welfare properties of financial and physical rights from a market power enhancement perspective.

TI Transmission Rights and Market Power on Electric Power Networks I: Financial Rights. AU Joskow, Paul; Tirole, Jean.

TI Cooperation Among Competitors: The Economics of Credit Card Associations. AU Rochet, Jean-Charles; Tirole, Jean.

Tobin, James

PD September 1999. **TI** On Minsky's Agenda for Reform. AA Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1234; Yale University, Cowles Foundation Library, P.O. Box 208281, New Haven, CT 06520. Website: www.cowles.econ.yale.edu/. PG 5. PR no charge up to 3 papers; \$3.00 U.S.; 4.00 International. JE B22, B31, E12, P17. KW Built-In Stability. Full Employment. Capitalism. Minsky.

AB In economics, theory and policy are intimately related. Policy recommendations are derived from theory, and in turn theory is revealed by dicta regarding policy. Chapter 13 of Minsky's book--Stabilizing an Unstable Economy--is an unusually complete design. This paper comments on Chapter 13, which presents Hy Minsky's conception of a stable, prosperous, efficient, equitable, capitalist system. His self-regulating capitalist economy depends for its stability on Big Government, the source of macroeconomic built-in counter-cyclical variations of aggregate demand and thus of profits. Economists and economic historians will for a long time debate the interpretation of the contrast between the high first 25 postwar years of growth and high-employment, and the succeeding and the disappointing quarter century that followed. Minsky attributes the reversals of the early postwar prosperity to the inevitable evolution of capitalism, particularly capitalist finance. His chapter 13 is designed to mitigate the vulnerabilities that produced these reversals. He ends his book predicting that capitalists' destructive financial innovations could spoil even a Minsky-designed capitalist system.

Toint, Philippe

TI Transfer to Sustain Core-Theoretic Cooperation in International Stock Pollutant Control. AU Germain, Marc; Toint, Philippe; Tulkens, Henry; de Zeeuw, Aart.

Tokarick, Stephen

TI Why Has Inflation in the United States Remained So Low? Reassessing the Importance of Labor Costs and the Price of Imports. **AU** Chan-Lau, Jorge A.; Tokarick, Stephen.

Toniolo, Gianni

TI Is the Kuznets Curve Still Alive? Evidence from Italy's Household Budgets, 1881-1961. **AU** Rossi, Nicola; Toniolo, Gianni.; Vecchi, Giovanni.

Tryon, Ralph

TI Monetary Policy and Price Stability. **AU** Johnson, Karen; Small, David; Tryon, Ralph.

Tsiddon, Daniel

PD May 1999. **TI** Coping with Technological Progress: The Role of Ability in Making Inequality so Persistent. **AU** Tsiddon, Daniel; Rubinstein, Yona. **AA** Tsiddon: Tel-Aviv University. Rubinstein: University of Chicago. **SR** Centre for Economic Policy Research Discussion Paper: 2153; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 64. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** D31, I21, J31, J62, O40. **KW** Ability. Economic Growth. Inequality. Mobility. Technological Progress.

AB This study explains the evolution of wage inequality over the last 30 years. At each level of schooling, a faster rate of technological progress weakens the link between schooling and work. By accentuating the role of ability, technological progress increases wage inequality within each group of education as well as between education groups. Guided by this theory we turn to the PSID for evidence. Using parents' education to approximate child's ability we show the following set of results: (a) Controlling for education of the child, parents' education contributes a lot more in the 1980s to his wage growth than in the 1970s. (b) The correlation between the parents' and the child's education increases from the 1970s to the 1980s. (c) The return to college education to the individual who has no ability rents has not changed -- it remains steady at the reasonable number of 23 percent. (d) The uncertainty of post-college wage increases relative to the uncertainty of post-high school wages over the same period. (e) It is parents' education and not parents' income that explains the wage growth of their children.

Tulkens, Henry

TI Transfer to Sustain Core-Theoretic Cooperation in International Stock Pollutant Control. **AU** Germain, Marc; Toint, Philippe; Tulkens, Henry; de Zeeuw, Aart.

Tybout, James

TI Does Promoting High Tech Products Spur Development? **AU** Hunt, Julie; Tybout, James.

Uhlig, Harald

PD May 1999. **TI** What are the Effects of Monetary Policy on Output? Results from an Agnostic Identification Procedure. **AA** Tilburg University. **SR** Centre for Economic Policy Research Discussion Paper: 2137; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website:

www.cepr.demon.co.uk. **PG** 44. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** C51, E52. **KW** Vector Autoregression. Monetary Policy Shocks. Identification. Monetary Neutrality.

AB This paper proposes to estimate the effects of monetary policy shocks by a new "agnostic" method, imposing sign restrictions on the impulse responses of prices, non-borrowed reserves and the federal funds rate in response to a monetary policy shock. No restrictions are imposed on the response of real GDP to answer the key question in the title. We find that "contractionary" monetary policy shocks have an ambiguous effect on real GDP. Otherwise, the results found in the empirical VAR literature so far are largely confirmed. The results could be paraphrased as a new Keynesian-new classical synthesis: even though the general price level is sticky for a period of about a year, money may well be close to neutral. We provide a counterfactual analysis of the early 80's, setting the monetary policy shocks to zero after December 1979, and recalculating the data. We found that the differences between observed real GDP and counterfactually calculated real GDP was not very large. Thus, the label "Volcker-recession" for the two recessions in the early 80's appears to be misplaced.

Ul-Haque, Nadeem

PD September 1999. **TI** Neglected Heterogeneity and Dynamics in Cross-Country Savings Regressions. **AU** Ul-Haque, Nadeem; Pesaran, M. Hashem; Sharma, Sunil. **AA** Ul-Haque and Sharma: International Monetary Fund. Pesaran: University of Cambridge. **SR** International Monetary Fund Working Paper: WP/99/128; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 31. **PR** not available. **JE** C23, E21, E62. **KW** Saving. Cross-Country Studies. Panel Data. Slope Heterogeneity. Ricardian Effect.

AB This paper examines the extent to which conclusions of cross-country studies of private savings are robust to allowing for the possible heterogeneity of savings behavior across countries and the inclusion of dynamics. It shows that neglecting heterogeneity and dynamics 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 -- are important determinants of private savings rates in the industrial countries in the post-World War II period.

Ulph, Alistair

TI Tying Government's Hands: Why Harmonisation of Environmental Policies May Be Desirable. **AU** Johal, Surjinder; Ulph, Alistair.

Valimaki, Juuso

TI Dynamic Common Agency. **AU** Bergemann, Dirk; Valimaki, Juuso.

TI Entry and Innovation in Vertically Differentiated Markets. **AU** Bergemann, Dirk; Valimaki, Juuso.

TI A Robust Folk Theorem for the Prisoner's Dilemma. **AU** Ely, Jeffrey C.; Valimaki, Juuso.

TI Entry and Innovation in Vertically Differentiated Markets. **AU** Bergemann, Dirk; Valimaki, Juuso.

TI Strategic Buyers and Privately Observed Prices.

AU Bergemann, Dirk; Valimaki, Juuso.

TI Imitation and Experimentation in Contests.
AU Squintani, Francesco; Valimaki, Juuso.

TI Stationary Multi-Choice Bandit Problems.
AU Bergemann, Dirk; Valimaki, Juuso.

Valletti, Tommaso M.

PD May 1998. **TI** Price Discrimination and Price Dispersion in a Duopoly. **AA** London School of Economics. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 33/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 41. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D43, L13. **KW** Price Discrimination. Price Dispersion.

AB This paper analyses the problem of price discrimination in a market where consumers have heterogeneous preferences both over a horizontal parameter (brand) and a vertical one (quality). Discriminatory contracts are characterized for different market structures. It is shown that price dispersion, i.e. the observed range of prices for each class of customers, increases almost everywhere as competition is introduced in the market. The findings are discussed with reference to the UK mobile telecommunications market.

PD May 1998. **TI** Two-Part Access Pricing and Imperfect Competition. **AA** London School of Economics. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 34/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 25. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D43, L51, L96. **KW** Access Pricing. Price Discrimination.

AB This paper considers a vertically separated industry with an upstream monopolist who supplies an essential input to two downstream Cournot firms. This situation is relevant to a number of sectors, including the telecommunications industry where trunk operators must have access to the local network of an incumbent firm to provide their long-distance service. The paper analyses two-part access pricing and input price discrimination under different regulatory settings, and it finds that discrimination may produce adverse welfare effects when it is practiced by the unregulated upstream firm.

TI The Theory of Access Pricing: An Overview for Infrastructure Regulators. **AU** Estache, Antonio; Valletti, Tommaso M.

Vamvakidis, Athanasios

TI Trade and Industrialization in Developing Agricultural Economies. **AU** Dodzin, Sergei; Vamvakidis, Athanasios.

van den Bergh, Jeroen C. J. M.

PD November 1998. **TI** Models of Individual Behaviour and Implications for Environmental Policy. **AU** van den Bergh, Jeroen C. J. M.; Ferrer-i-Carbonell, Ada; Munda, Giuseppe. **AA** van den Bergh: Free University. Ferrer-i-Carbonell: Politechnic Institute. Munda: Universitat Autònoma de Barcelona. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 77/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 28. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** D01, D02. **KW** Behavior.

Maximization Hypothesis. Bounded Rationality. Uncertainty. Environmental Regulation.

AB Most insights of environmental economics are in line with the standard neo-classical economic model of rational behavior, formulated in terms of maximization of utility in general, or profits in particular. The standard theory of environmental policy is a case in point. However, the maximization hypothesis and its methodological foundation have been criticized on many grounds, related to a lack of either logical or empirical content. Moreover, over the years great many alternative models of behavior have been proposed. Both criticism and alternatives are surveyed here. In the context of environmental economics behavioral assumptions have been most significant for the development of economic valuation theory and environmental policy theory. The focus here will be on environmental policy theory.

Van Dender, Kurt

TI Effectiveness and Welfare Impacts of Alternative Policies to Address Atmospheric Pollution in Urban Road Transport. **AU** Proost, Stef; Van Dender, Kurt.

Van Reenen, John

TI Export Market Performance of OECD Countries: An Empirical Examination of the Role of Cost Competitiveness. **AU** Carlin, Wendy; Glyn, Andrew; Van Reenen, John.

TI Do R&D Tax Credits Work? Evidence From an International Panel of Countries 1979-94. **AU** Bloom, Nick; Griffith, Rachel; Van Reenen, John.

TI Getting the Unemployed Back to Work: The Role of Targeted Wage Subsidies. **AU** Bell, Brian; Blundell, Richard; Van Reenen, John.

Van Rijckeghem, Caroline

PD October 1999. **TI** Sources of Contagion: Finance or Trade? **AU** Van Rijckeghem, Caroline; Weder, Beatrice. **AA** Van Rijckeghem: International Monetary Fund. Weder: University of Basel. **SR** International Monetary Fund Working Paper: WP/99/146; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 15. **PR** not available. **JE** F32, F34, G21. **KW** Contagion. Currency Crises. Financial Spillovers. International Trade. Banking.

AB This paper presents evidence that spillovers through bank lending, as opposed to trade linkages and country characteristics, can help explain contagion. We construct a measure of competition for bank funds and find evidence in favor of a common lender effect in the Mexican, Thai, and Russian crises, after controlling for macroeconomic fundamentals. The results are quite robust to the definition of the finance indicator. In the case of the Asian crisis, results are not always robust to the inclusion of trade competition, reflecting the high correlation between competition for funds and trade.

Vassalou, Maria

PD June 1999. **TI** Can Book-to-Market, Size and Momentum Be Risk Factors That Predict Economic Growth. **AU** Vassalou, Maria; Liew, Jimmy. **AA** Vassalou: Columbia University. Liew: Morgan Stanley Dean Witter. **SR** Centre for Economic Policy Research Discussion Paper: 2180; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website:

www.cepr.demon.co.uk. PG 36. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE G11, G12, G15. KW Book-to-Market. Momentum. Trading Strategies. GDP Growth.

AB We examine the extent to which the profitability of the HML, SMB, and WML trading strategies can be linked to future GDP growth. Using a large cross-section of securities from ten developed markets, we find that the HML and SMB portfolios contain significant information about future GDP growth. The predictive ability of these strategies is to a large degree independent of any information contained in the domestic market factor, which is known to be a leading indicator of economic growth. Even in the presence of popular business cycle variables, HML and SMB retain their ability to predict future economic growth in some of the countries examined. Our results support a risk-based explanation for the performance of the HML and SMB trading strategies. Little evidence was found to support such an explanation in the case of the WML trading strategy.

Vecchi, Giovanni

TI Is the Kuznets Curve Still Alive? Evidence from Italy's Household Budgets, 1881-1961. AU Rossi, Nicola; Toniolo, Gianni.; Vecchi, Giovanni.

Vergote, Stef

TI Marginal External Costs of Peak and Non Peak Urban Transport in Belgium. AU De Nocker, Leo; Vergote, Stef; Vinckx, Luc; Wouters, Guido.

Verhagen, Willem

TI A Theory of Interest Rate Stepping: Inflation Targeting in a Dynamic Menu Cost Model. AU Eijffinger, Sylvester; Schaling, Eric; Verhagen, Willem.

Verry, Donald

PD August 1998. **TI** Some Economic Aspects of Early Childhood Education and Care. AA University College London. SR University College London Discussion Papers in Economics: 98/06; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. PG 49. PR 4 pounds or \$8.00. JE H23, J21, J13, J22, J24. KW Pre-School Education. Human Capital. Child Care. Program Evaluation. Welfare.

AB This paper provides an economic framework for the evaluation of the costs and benefits of early childhood care and education (ECEC) and discusses how these relate to policy issues. The paper first surveys some cross-country indicators of ECEC effort, in relation to per capita incomes and to total public spending. Further statistical background is provided about the different arrangements for providing ECEC in selected countries and about the social changes which constitute the setting for debating and formulating ECEC policy. The benefits of ECEC to three groups, children who participate, their mothers and society at large, are discussed and some evidence on the magnitudes of such benefits is reviewed. This suggests the existence of positive net benefit to all three groups. The evidence about specific program characteristics that generate successful outcomes is not definitive. Efficiency and equity arguments supporting a degree of government subsidization of ECEC are reviewed. It is argued that while there is some evidence supporting subsidization to enable

society at large to reap the external benefits, equity arguments are likely to provide a stronger rationale for intervention.

Vettas, Nikolaos

TI On Intra-brand and Inter-brand Competition: The Strategic Role of Fees and Royalties. AU Saggi, Kamal; Vettas, Nikolaos.

PD June 1999. **TI** Location as a Signal of Quality. AA Duke University. SR Centre for Economic Policy Research Discussion Paper: 2165; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 60. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE D04, D08, L01. KW Location. Quality. Horizontal Differentiation. Vertical Differentiation. Spatial Agglomeration. Signaling.

AB We examine a horizontal product differentiation duopoly model where firms are also differentiated with respect to the quality of their products. Firms first choose their locations (or product characteristics) and then compete in prices. Under full information, it is shown that, whereas the low-quality firm prefers to locate as far as possible from its competitor, the same is not true for the high-quality firm, unless the quality difference is small enough. The paper then suggests an explanation for spatial agglomeration based on incomplete information considerations. Because it is less costly for a high-quality firm than for a low-quality firm to locate close to a rival firm, choosing a location closer to a rival signals high quality.

Vieille, Nicolas

TI Stopping Games with Randomized Strategies. AU Rosenberg, Dinah; Solan, Eilon; Vieille, Nicolas.

Vinckx, Luc

TI Marginal External Costs of Peak and Non Peak Urban Transport in Belgium. AU De Nocker, Leo; Vergote, Stef; Vinckx, Luc; Wouters, Guido.

Vines, David

TI A Krugman-Dooley-Sachs Third Generation Model of the Asian Financial Crisis. AU Irwin, Gregor; Vines, David.

Vohra, Rajiv

TI A Theory of Endogenous Coalition Structures. AU Ray, Debraj; Vohra, Rajiv.

Vohra, Rakesh V.

TI Calibration, Expected Utility and Local Optimality. AU Foster, Dean P.; Vohra, Rakesh V.

TI Correlated Equilibrium, Public Signalling and Absorbing Games. AU Solan, Eilon; Vohra, Rakesh V.

von Kleist, Karsten

TI The Evolution and Determinants of Emerging Market Credit Spreads in the 1990s. AU Kamin, Steven B.; von Kleist, Karsten.

von Thadden, Ernst-Ludwig

TI Dominant Investors and Strategic Transparency. AU Perotti, Enrico C.; von Thadden, Ernst-Ludwig.

Vulkan, Nir

PD June 1997. **TI** Co-operation and the Observability of Information Gathering. **AA** University College London. **SR** University College London Discussion Papers in Economics: 97/05; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. Website: netec.mcc.ac.uk/WoPEc.html. **PG** 9. **PR** 4 pounds or \$8.00. **JE** C70, D82, D83, L10. **KW** Information Gathering. Cooperation. Noisy Signaling. Nash Equilibria.

AB Recent studies had shown that the predictions of signaling models depend on the observability of signals and may change significantly if those are observed with a certain degree of noise. Models where agents publicly gather information are a particularly interesting special case because, in addition to its informative value, the information gathered can be used as a signal and may have strategic value. In this short paper, I focus on the strategic value of information gathering. I present a highly stylized model of competition under uncertainty which demonstrates (a) how strong are the strategic effects of public information gathering; by showing the existence of equilibria where firms play dominated strategies in a non-empty subset of the states of the world, and (b) that these effects highly depend on the observability of information gathering; by showing that only the outcomes of a secret information gathering survive arbitrarily small noise.

Waldman, Michael

TI The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries. **AU** Carlton, Dennis W.; Waldman, Michael.

Wallace-Jones, Jane

TI The Effectiveness of Provisions and Quality of Practices Concerning Public Participation in the EIA Procedures in Italy and the UK. **AU** Del Furia, Luca; Wallace-Jones, Jane.

Waller, Christopher J.

PD January 1998. **TI** Appointing the Median Voter of a Policy Board. **AA** University of Kentucky. **SR** Federal Reserve Bank of Cleveland Working Papers: 9802; Research Department, Federal Reserve Bank of Cleveland, P.O. Box 6387, Cleveland, Ohio 44101-1387. Website: www.clev.frb.org. **PG** 41. **PR** no charge. **JE** C73, D72, D78, E50, E61. **KW** Dynamic Bargaining. Political Economy. Appointments. Policy. Uncertainty.

AB Partisan politics and elector uncertainty generate policy uncertainty and partisan business cycles. To reduce policy uncertainty, society must design the policy-making environment to overcome electoral uncertainty and partisanship without ignoring the electorate's wishes. I show that delegating policy to an independent policy board with discretionary powers substantially reduces policy uncertainty while maintaining political accountability. Board members are chosen in a partisan, non-cooperative environment yet, in the benchmark model, policy uncertainty is eliminated and the policy rule is replicated. Thus, a political "invisible hand" is at work -- by setting up the policy institution properly and having the participants pursue their own self-interest, the social "optimum" prevails.

Walliser, Jan

PD November 1999. **TI** Regulation of Withdrawals in

Individual Account Systems. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/99/153; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 21. **PR** not available. **JE** G22, G23, G28, H55. **KW** Annuity. Pension Reform. Individual Accounts. Pension Funds. Regulation.

AB Funded mandatory pension systems based on individual accounts are spreading around the world. With the maturation of these systems, regulating the withdrawal of retirement savings will become increasingly important. Government regulation of withdrawals should mandate the purchase of inflation-indexed life annuities exceeding income available from government welfare programs for the retiree and potential survivors. Proper functioning of insurance markets does not, however, require annuitizing the entire account balance. Instead, more flexibility for the choice of withdrawals could be permitted for any remaining funds, helping to tailor income streams to individual needs and living arrangements.

Warner, Andrew

TI Macroeconomic and Sectoral Effects of Terms-of-Trade Shocks: The Experience of the Oil-Exporting Developing Countries. **AU** Spatafora, Nikola; Warner, Andrew.

Warnock, Francis E.

PD April 2000. **TI** Exchange Rate Dynamics and the Welfare Effects of Monetary Policy in a Two-Country Model with Home-Product Bias. **AA** University of North Carolina. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 667; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm.

PG 32. **PR** no charge. **JE** E43, E52, F31, F32, F41. **KW** Home Product Bias. Monetary Policy. Dynamic Optimizing Model. Purchasing Power Parity. Exchange Rates. **AB** International spillovers and exchange rate dynamics are examined in a two-country dynamic optimizing model that allows for home-product bias in consumption patterns: at given relative prices the ratio of home goods consumed to foreign goods consumed is higher in the home country. The setup nests Obstfeld and Rogoff (1995), who assume identical tastes. With home bias, results are different in three ways. When preferences are biased, the wealth transfers associated with current account imbalances induce movements in the real exchange rate and produce large short-run and small long-run deviations from consumption-based purchasing power parity. With home bias, interest rates, both real and nominal, can differ across countries; relatedly, home bias is a necessary but not sufficient condition for Dornbusch (1976) type exchange rate overshooting. Finally, in this model the welfare effects of expansionary monetary policy depend not only on world demand but also on the expenditure-switching effect of an exchange rate depreciation; monetary policy is 'beggar-thy-neighbor' if individuals have strong preferences for domestic products, but can be 'beggar-thyself' if, instead, imported goods are preferred.

PD December 1998. **TI** Idiosyncratic Tastes in a Two-Country Optimizing Model: Implications of a Standard Presumption. **AA** Board of Governors of the Federal Reserve System and University of North Carolina. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 631; Board of Governors of the Federal Reserve System, Division of International Finance,

Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 21.

PR no charge. JE F12, F31, F33, F41. KW Home Bias. Monetary Policy. Fiscal Policy. Purchasing Power.

AB International spillovers and exchange rate dynamics are examined in a two-country dynamic optimizing model that allows for idiosyncratic tastes across countries. Specifically, there is a home-good bias in consumption patterns: at given relative prices the ratio of home goods consumed to foreign goods consumed is higher in the home country. The setup nests Obstfeld and Rogoff (1995), who assume identical tastes. Allowing for idiosyncratic tastes produces results that differ from Obstfeld and Rogoff's: expansionary monetary policy increases home utility by more, the positive spillovers of a fiscal expansion are reduced, and both short-run and long-run deviations from consumption-based purchasing power parity (PPP) are possible. The model's predictions are broadly consistent with those from the Frenkel, Razin and Yuen (1996) version of the two-country Mundell-Fleming model and with observed behavior of real and nominal exchange rates.

Wasmer, Etienne

TI Does Space Affect Search? A Theory of Local Unemployment. AU Zenou, Yves; Wasmer, Etienne.

Watson, Joel

TI Conditioning Institutions and Renegotiation. AU Ramey, Garey; Watson, Joel.

TI Contractual Intermediaries. AU Ramey, Garey; Watson, Joel.

Weber, Rene

PD November 1999. TI On the Fast Track to EU Accession: Macroeconomic Effects and Policy Challenges for Estonia. AU Weber, Rene; Taube, Gunther. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/99/156; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 36. PR not available. JE E61, F15, F36, F41, F47. KW Transition. Economic Integration. European Union. Estonia. Policy.

AB This paper assesses the macroeconomic impact and policy challenges related to Estonia's prospective accession to the EU and its potential adoption of the euro. Our analysis of the trade, financial, and fiscal channels includes a model-based illustrative scenario using MULTIMOD. We conclude that the welfare enhancing effects for Estonia of further EU integration are likely to outweigh the drawbacks of more pronounced macroeconomic imbalances that could accompany this process. To smooth Estonia's accession-related adjustment, its fiscal and structural policies should be geared toward mitigating domestic demand pressures, promoting saving, and ensuring efficient public investment.

Weder, Beatrice

TI Sources of Contagion: Finance or Trade? AU Van Rijckeghem, Caroline; Weder, Beatrice.

Weil, David N.

TI Comparison Utility in a Growth Model. AU Carroll, Christopher D.; Overland, Jody; Weil, David N.

TI From Malthusian Stagnation to Modern Growth.

AU Galor, Oded; Weil, David N.

Weiss, Yoram

PD August 1997. TI Social Status and Economic Performance: A Survey. AU Weiss, Yoram; Fershtman, Chaim. AA Tel-Aviv University. SR University of Chicago Center for the Study of the Economy and the State Working Paper: 139; Center for the Study of the Economy and the State, University of Chicago, 1101 East 58th Street, Chicago, IL 60637. PG 26. PR \$3.00; make check payable to "The University of Chicago.". JE A12, D63, E21, E24, O40. KW Social Status. Saving. Wages. Evolutionary Models. Sociology.

AB This survey combines ideas and results from sociology and economics, recognizing that economic decisions are often shaped by social concerns and influences. Based on the sociological literature, we define social status and describe its measurement. We then describe the role of social status in economic analysis of saving and consumption, wages, and economic growth. We review recent work on status determination in equilibrium, including evolutionary models. We conclude with some remarks on the need for further interaction between sociology and economics.

Weisse, Bruce A.

TI Emerging Stock Markets, Portfolio Capital Flows and Long-Term Economic Growth: Micro and Macroeconomic Perspectives. AU Singh, Ajit; Weisse, Bruce A.

Welsch, Heinz

TI Energy-Capital-Labor Substitution and the Economic Effects of CO2 Abatement: Evidence for Germany. AU Kemfert, Claudia; Welsch, Heinz.

Werning, Ivan

TI Status, Lotteries and Inequality. AU Becker, Gary S.; Murphy, Kevin M.; Werning, Ivan.

Whitehouse, Edward

TI Individual Choice of Pension Arrangement as a Pension Reform Strategy. AU Disney, Richard; Palacios, Robert; Whitehouse, Edward.

Whitting, Geoffrey

PD December 1996. TI The Effects of Hyper-Inflation on Accounting Ratios: Financing of Corporate Growth in Industrialising Countries. AU Whitting, Geoffrey; Saporta, Victoria; Singh, Ajit. AA University of Cambridge. SR University of Cambridge Discussion Papers in Accounting and Finance: AF32; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. Website: www.econ.cam.ac.uk/dae. PG 23. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE E31, G32, O14, O16. KW Hyper-Inflation. Accounting. Retentions. Pecking Order. Corporate Finance.

AB Hyper-inflation can have a severe distortionary effect on the pattern of corporate finance which is apparent from company accounts. A simple algorithm, based upon the method of inflation accounting applied in Brazil, is developed and applied to the accounts of Turkish listed companies for the period 1982-90. The adjusted figures give a more plausible picture of corporate profitability and growth, and this suggests

that the adjustment is substantially successful. The financing patterns emerging from the adjusted data support the propositions of Singh and Hamid (1992) and Singh (1995) that (a) the corporate sector in developing countries tends to rely more on external finance for growth and (b) among the external sources of funds, it uses new shares to a surprisingly high degree. Further adjustments to the measurement of the external finance variable for Turkey and other countries also support this proposition. This contradicts the "pecking order" hypothesis, which suggests that retained profits are the preferred source of finance, and also runs contrary to the belief that capital markets of developing countries are inadequate to support substantial corporate growth by external financing, including equity financing.

Wihlborg, Clas

TI Corporate Insolvency Procedures and Bank Behavior: A Study of Selected Asian Economies. AU Hussain, Qaizar; Wihlborg, Clas.

Wilhelm, Mark

TI Taxation and the Labor Supply Decisions of the Affluent. AU Moffitt, Robert A.; Wilhelm, Mark.

Williams, Steven R.

TI The Optimality of a Simple Market Mechanism. AU Satterthwaite, Mark A.; Williams, Steven R.

Williamson, Stephen D.

TI Money and Dynamic Credit Arrangements with Private Information. AU Aiyagari, S. Rao; Williamson, Stephen D.

Windmeijer, Frank

TI Identifying Demand for Health Resources Using Waiting Times Information. AU Blundell, Richard; Windmeijer, Frank.

TI Wages and the Demand for Health -- A Life Cycle Analysis. AU Dustmann, Christian; Windmeijer, Frank.

Winter-Ebmer, Rudolf

PD April 1999. TI Identifying the Effect of Unemployment on Crime. AU Winter-Ebmer, Rudolf; Raphael, Steven. AA Winter-Ebmer: Johannes Kepler Universitat Linz. Raphael: University of California, San Diego. SR Centre for Economic Policy Research Discussion Paper: 2129; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 44. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE J06, K42. KW Unemployment. Crime.

AB Previous estimates of the effect of unemployment on crime commonly omit determinants of criminal behavior that vary with the business cycle, creating correlation between unemployment rates and the residuals in aggregate crime regressions. In this paper, we employ several strategies that attempt to minimize or break this correlation and eliminate the accompanying omitted variables bias to estimates of the effect of unemployment on crime. Using a state-level panel for the period from 1970 to 1993, we explore the sensitivity of crime-unemployment elasticity estimates to explicit controls for per-capita alcohol consumption, a factor that has been shown in the past to be pro-cyclical and a partial determinant of criminal

behavior. In addition, we use prime defense contracts per-capita at the state level as an instrument for state unemployment rates. Both controlling for alcohol consumption and using instrumental variables to correct for omitted variables bias yields large effects of unemployment on the seven felony offenses recorded by the Department of Justice. Moreover, in contrast to previous research, we find significant and sizable positive effects of unemployment on the rates of specific violent, as well as property crimes.

Winters, L. Alan

PD June 1999. TI How Regional Blocs Affect Excluded Countries: The Price Effects of MERCOSUR. AU Winters, L. Alan; Chang, Won. AA Winters: University of Sussex. Chang: Columbia University. SR Centre for Economic Policy Research Discussion Paper: 2179; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 64. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE C33, F13, F15. KW Regional Integration. Terms of Trade. Imperfect Competition. MERCOSUR.

AB The welfare effects of PTAs are most directly linked to changes in trade prices, i.e., the terms of trade. This paper employs a simple strategic pricing game in segmented markets to measure the effects of MERCOSUR on the pricing of "non-member" exports to the region. Working with detailed data on unit values and tariffs we find that the creation of MERCOSUR is associated with significant declines in the prices of non-members' exports to the region and that these can be largely explained by tariff preferences offered to its partners. We focus on the Brazilian market (by far the largest in MERCOSUR) and show that non-members' export prices to Brazil respond to both m.f.n. and preferential tariffs, the latter inducing reductions in non-member export prices.

Wolinsky, Asher

TI Game Theory and Industrial Organization. AU Bagwell, Kyle; Wolinsky, Asher.

PD September 1999. TI Eliciting Information From Multiple Experts. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1277; Center for Mathematical Studies in Economics and Management Science, Northwestern University, 2001 Sheridan Road, Leverone Hall, Room 371, Evanston, IL 60208-2014. Website: www.kellogg.nwu.edu/research/math. PG 16. PR \$3.00 domestic; \$5.00 airmail; \$2.00 Northwestern faculty/students; make check out to Northwestern University. JE D72, D73, D82, D83. KW Decision Maker. Multiple Experts. Mechanism Commitment. Expert Communication.

AB A decision maker must elicit information regarding the desirability of an action from experts with similar preferences which differ significantly from those of the decision maker. How much information can the decision maker elicit, despite the difference in interests? The paper focuses on how the decision maker can take advantage of the multiplicity of experts. If the decision maker cannot commit to a mechanism and the experts do not communicate, then no useful information is elicited in equilibrium. If the experts can be partitioned into groups such that the members of each group can communicate with each other before reporting to the decision maker, then more information can be elicited. If all experts can

communicate, they reveal the relevant information when their aggregate information makes it desirable for them to undertake the project. Interestingly, if communication among the experts can be restricted to certain subsets, then even more information can be elicited. If the decision maker can commit to a mechanism, the information elicited in some cases is sufficient to implement the decision maker's best outcome in all but one state. In all cases, experts choose their report with the understanding that it matters only when they are pivotal.

Woo, Wing T.

TI The U.S.-China Bilateral Trade Balance: It's Size and Determinants. AU Feenstra, Robert C.; Hai, Wen; Woo, Wing T.; Yao, Shunli.

Woodruff, Christopher

TI Contract Enforcement in Transition. AU McMillan, John; Woodruff, Christopher; Johnson, Simon.

TI Why do Firms Hide? Bribes and Unofficial Activity After Communism. AU Johnson, Simon; McMillan, John; Woodruff, Christopher.

Woodward, Peter A.

TI Market Power and the Cross-Industry Behavior of Prices Around a Business Cycle Trough. AU Baker, Jonathan B.; Woodward, Peter A.

Wooton, Ian

TI Comparative Advantage and the Location of Production. AU Forslid, Rikard; Wooton, Ian.

Wouters, Guido

TI Marginal External Costs of Peak and Non Peak Urban Transport in Belgium. AU De Nocker, Leo; Vergote, Stef; Vinckx, Luc; Wouters, Guido.

Wright, Jonathan H.

PD January 2000. TI A Simple Approach to Robust Inference in a Cointegrating System. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 654; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 23. PR no charge. JE C22. KW Cointegration. Unit Roots. Robustness. Instrumental Variables. Time Series.

AB Cointegration requires all the variables in the system to have exact unit roots; accordingly it is conventional for researchers to test for a unit root in each variable prior to a cointegration analysis. Unfortunately, these unit root tests are not powerful. Meanwhile, conventional cointegration methods are not at all robust to slight violations of the requirement that each variable has a unit root. In this paper I show how this difficulty may be circumvented by instrumenting the regressors in the cointegrating regression by deterministic polynomial time trends, or by artificially generated random walks.

TI High Frequency Data, Frequency Domain Inference and Volatility Forecasting. AU Bollerslev, Tim; Wright, Jonathan H.

PD October 1999. TI Long Memory in Emerging Market

Stock Returns. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 650; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. PG 18. PR no charge. JE C22, G12, G15, O16. KW Long Memory. Stock Returns. Frequency Domain. Emerging Markets. Time Series.

AB Many authors have investigated the possibility of long memory in asset returns. Generally, very little evidence has been found for long memory in either stock returns or exchange rate returns. This paper applies the log-periodogram regression to a wide range of emerging market stock returns and finds some evidence for positive long memory in 7 of the 17 series considered.

Wu, Stephen

TI Forecasting Successful Economics Graduate Students. AU Krueger, Alan B.; Wu, Stephen.

Xepapadeas, Anastasios

TI Optimal Management in Tilmania: A Competitive Species Assembly Constrained by a Limiting Factor. AU Brock, William; Xepapadeas, Anastasios.

TI Does Government Precommitment Promote Environmental Innovation? AU Petrakis, Emmanuel; Xepapadeas, Anastasios.

TI Environmental Advertisement: An Alternative Policy to Control Consumption Pollution. AU Sartzetakis, Eftichios Sophocles; Xepapadeas, Anastasios.

Yao, Shunli

TI The U.S.-China Bilateral Trade Balance: It's Size and Determinants. AU Feenstra, Robert C.; Hai, Wen; Woo, Wing T.; Yao, Shunli.

Yariv, Leeat

TI Games with Espionage. AU Solan, Eilon; Yariv, Leeat.

Yi, Sang-Seung

PD July 1998. TI Free-Trade Areas and Welfare: An Equilibrium Analysis. AA Dartmouth College. SR Fondazione Eni Enrico Mattei Note di Lavoro: 48/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 21. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE F13, F15. KW Endogenous Formation. Research Coalitions. Symmetric Firms.

AB This paper examines the welfare effects of the formation of a free-trade area (a set of countries that abolish tariffs among member countries but let individual member countries set external tariffs). If a representative consumer has love-of-variety preferences the welfare function exhibits supermodularity in external tariffs: when a country is constrained to charge lower tariffs on imports of some countries (because of a free-trade agreement) it is in the self-interest of that country to reduce external tariffs as well, because the reduction in external tariffs helps restore a balanced consumption portfolio. The reduction in external tariffs induced by free-trade agreements is shown to be sufficiently large to make non-member countries better off. Since only privately

beneficial free-trade agreements are voluntarily signed, the formation a free-trade area is a Pareto improvement. Due to free-riding problems, however, the global free-trade area may not be an equilibrium outcome under either the Open Regionalism rule or the Unanimous Regionalism rule.

PD July 1998. **TI** Endogenous Formation of Research Coalitions with Spillovers. **AU** Yi, Sang-Seung; Shin, Hyukseung. **AA** Yi: Dartmouth College. Shin: Sookmyung University, Seoul, Korea. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 49/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 37. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** F13, F15. **KW** Free-Trade Area. Welfare. Equilibrium Analysis.

AB We examine the endogenous formation of research coalitions with high spillovers among symmetric firms. Members of a research coalition set their R&D investments in order to maximize the aggregate profits of members of their coalition. The Exclusive membership rule supports a more "concentrated" coalition structure and thus leads to higher industry R&D investments for high spillovers than the Open Membership rule does. However, due to free-riding problems, the grand research coalition, which is the socially efficient outcome, is rarely an equilibrium outcome under either rule. Our results suggest that government subsidies to research consortia for basic research with high spillovers can improve social welfare by encouraging wider participation to a research consortium, that is, by alleviating free-rider problems in coalition formation. From a more theoretical viewpoint, our results on stable coalition structures are applicable to a wide variety of economic coalitions with positive externalities.

PD July 1998. **TI** Endogenous Formation of Joint Ventures with Efficiency Gains. **AA** Dartmouth College. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 50/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 41. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** C07, D23, L22. **KW** Endogenous Formation. Joint Ventures. Symmetric Firms.

AB This paper studies stable structures of efficiency-enhancing joint ventures among symmetric firms. Efficiency gains that accrue to a joint venture are assumed to increase with its size. The socially efficient industry-wide joint venture is the stable outcome when membership of a joint venture is open to outside firms, but typically not when membership can be restricted. Members of a large joint venture want to restrict membership for strategic reasons -- e.g., in order to keep rival firms' costs high. Side payments among firms do not eliminate the strategic incentives of members of a large joint venture to limit membership.

Yousef, Tarik

TI Skill Acquisition and Firm Creation in Transition Economies. **AU** Brixiova, Zuzana; Li, Wenli; Yousef, Tarik.

Yu, Dahai

PD September 1998. **TI** Rational Bubbles Under Diverse Information. **AA** Tufts University. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 621; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website:

www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 21.

PR no charge. **JE** D81, D82, D90, G12. **KW** Bubbles. Asset Pricing. Information Diversity. State Price.

AB This paper uses a set of post-extraction information trees to generally model diverse information and agent specific state price processes to define present and fundamental values. It shows that there can be no negative or finite bubbles and that, if agents are impatient and the aggregate endowment has a finite present value under some state price process of some agent, then there can be no bubble under this state price process for any asset with positive supply.

PD September 1998. **TI** Two Equivalence Theorems For Government Finance. **AA** Tufts University. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Paper: 622; Board of Governors of the Federal Reserve System, Division of International Finance, Mail Stop 24, Washington, DC 20551. Website: www.bog.frb.fed.us/pubs/workingpapers.htm. **PG** 20.

PR no charge. **JE** D59, D91, E62, H63. **KW** Debt Composition. Ricardian Equivalence. General Equilibrium. Government Finance.

AB This paper studies the effects of a path change in government debt composition and aggregate transfers on allocations and prices. It is shown that the effects are zero under some agent-specific transfer scheme even when markets are incomplete. If markets are complete, then the effects are zero under any transfer scheme that leaves each agent's lifetime resource unchanged if and only if agents are always collectively compensated for next period's return change. The infinite-horizon framework used has an arbitrary number of assets with arbitrary returns and an arbitrary mixture of finitely and infinitely lived agents.

Zalewska-Mitura, A.

PD April 1999. **TI** Does Market Organization Speed Up Market Stabilization? First Lessons From the Budapest and Warsaw Stock Exchanges. **AA** University of Bristol. **SR** Centre for Economic Policy Research Discussion Paper: 2134; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. **PG** 48. **PR** 5 pounds, \$8.00, or 8 euros plus shipping and handling. **JE** C22, G14, G15. **KW** Stock Markets. Learning. Efficiency. Transition Economics.

AB This paper investigates whether different systems of financial market organization influence the way in which newly created stock markets become more (weak-form) efficient. The author conducts a detailed comparative analysis of stocks listed on the Budapest and Warsaw Stock Exchanges, 1991-98, and demonstrates that an auction market (with call trading) becomes efficient more quickly than a dealer market (with continuous trading). As an econometric tool for comparative analysis, she uses a Test for Evolving Efficiency which is a GARCH-M model with time-varying constraints.

Zanforlin, Luisa

TI Technology and Epidemics. **AU** Chong, Alberto; Zanforlin, Luisa.

Zebregs, Harm

PD September 1999. **TI** Long-Term International Capital Movements and Technology: A Review. **AA** International Monetary Fund. **SR** International Monetary Fund Working

Paper: WP/99/126; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 23. PR not available. JE F21, F43, O30. KW Capital Movements. Technology. Open Economy. Economic Growth. International Investment. AB This paper reviews the theoretical literature on the question of how long-term international capital movements depend on the international distribution of technology. It focuses on long-term investment flows, as these are more affected by international differences in technologies than short-term financial flows. International capital movements are investigated in the context of various technology specifications, ranging from models with only one common technology to those with multiple and endogenous technologies. The paper demonstrates that the theoretical specification of technology is crucial to the prediction of the size and direction of international capital movements.

Zeitouni, Naomi

PD December 1998. TI Options, Quasi Options, and the Opportunity to Develop a Resource of Environmental Value. AU Zeitouni, Naomi; Freeman, Shirra. AA University of Haifa, Israel. SR Fondazione Eni Enrico Mattei Note di Lavoro: 91/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. PG 17. PR 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. JE Q32. KW Decision Making. Uncertainty. Environmental Externalities.

AB Faced with the choice between preserving and developing a natural resource in the presence of uncertain environmental externalities, the social return to undertaking development is stochastic. When development is irreversible and the decision-maker can defer commencement, there is value to new information that is revealed over time, which reduces the uncertainty about the externalities. The assessment is therefore one of how much to develop and when to begin development. This approach to the problem differs from conventional cost-benefit analysis and optimal extraction models. The former asks the question of whether to invest a given amount and the latter asks how much is optimal to invest. In this paper a model is developed which identifies both the level and timing of investment that are socially optimal.

Zeldes, Stephen P.

TI Would a Privatized Social Security System Really Pay a Higher Rate of Return? AU Geanakoplos, John; Mitchell, Olivia S.; Zeldes, Stephen P.

TI Social Security Money's Worth. AU Geanakoplos, John; Mitchell, Olivia S.; Zeldes, Stephen P.

Zenou, Yves

TI Wage Competition with Heterogeneous Workers and Firms. AU Hamilton, Jonathan; Thisse, Jacques-Francois; Zenou, Yves.

PD May 1999. TI Does Space Affect Search? A Theory of Local Unemployment. AU Zenou, Yves; Wasmer, Etienne. AA Zenou: CERAS. Wasmer: ECARE. SR Centre for Economic Policy Research Discussion Paper: 2157; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 44. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE E24, J41, R14. KW Local Labor Markets. Urban Land Use. Matching.

Equilibrium Unemployment.

AB The spatial dispersion of economic agents is an immediate determinant of informational imperfections. We investigate how this dispersion creates search frictions and thus rationing. For that, we develop a model of local labor markets in which workers' search efficiency is negatively affected by distance to jobs. Workers' location in a city is endogenous and reflects a trade-off between commuting costs and the surplus associated with search. Different configurations emerge in equilibrium: notably, the unemployed workers may reside far away or close to the jobs. The labor market equilibrium itself depends crucially on these urban equilibria since the aggregate information about economic opportunities depends on the shape of the city. We show that there exists a unique and stable market equilibrium in which both land and labor markets are solved for simultaneously. We then decompose unemployment in two parts: the level reached if all agents were residing in the same location and an additional term due to the spatial dispersion.

Zhao, Xiaoliang

TI Arbitrage-Free Discretization of Lognormal Forward Libor and Swap Rate Models. AU Glasserman, Paul; Zhao, Xiaoliang.

Zilcha, Itzhak

TI Saving Behavior in Stationary Equilibrium with Random Discounting. AU Karni, Edi; Zilcha, Itzhak.

Zilibotti, Fabrizio

PD April 1999. TI Equilibrium Unemployment Insurance. AU Zilibotti, Fabrizio; Hassler, John; Mora, Jose V. Rodriguez; Storesletten, Kjetil. AA Zilibotti, Hassler and Storesletten: Stockholm University. Mora: Universitat Pompeu Fabra. SR Centre for Economic Policy Research Discussion Paper: 2126; Centre for Economic Policy Research, 90-98 Goswell Road, London EC1V-7RR, United Kingdom. Website: www.cepr.demon.co.uk. PG 48. PR 5 pounds, \$8.00, or 8 euros plus shipping and handling. JE D72, E24, J24, J64, J65. KW Comparative Advantage. Employment. Political Equilibrium. Search. Specialization. Unemployment Insurance. AB In this paper, we incorporate a positive theory of unemployment insurance into a dynamic overlapping generations model with search-matching frictions and on-the-job learning-by-doing. The model shows that societies populated by identical rational agents, but differing in the initial distribution of human capital across agents, may choose very different unemployment insurance levels in a politico-economic equilibrium. The interaction between the political decision about the level of the unemployment insurance and the optimal search behavior of the unemployed gives rise to a self-reinforcing mechanism, which may generate multiple steady-state equilibria. In particular, a European-type steady-state with high unemployment, low employment turnover and high insurance can co-exist with an American-type steady-state with low unemployment, high employment turnover and low unemployment insurance. A calibrated version of the model features two distinct steady-state equilibria with unemployment levels and duration rates resembling those of the U.S. and Europe, respectively.

TI Employment and Distributional Effects of Restricting Working Time. AU Marimon, Ramon; Zilibotti, Fabrizio.

Zivin, Joshua

TI How To Compensate Physicians When Both Patient and Physician Effort are Unobservable. **AU** Leonard, Kenneth L.; Zivin, Joshua.

Zumer, Frederic

TI Interregional and International Risk Sharing and Lessons for EMU. **AU** Melitz, Jacques; Zumer, Frederic.

Zylicz, Tomasz

PD November 1998. **TI** Debt-for-Environment Swap as a Game: The Case of the Polish EcoFund. **AA** University of Warsaw. **SR** Fondazione Eni Enrico Mattei Note di Lavoro: 69/98; Fondazione Eni Enrico Mattei, Corso Magenta 63, 20123 Milano, Italy. Website: www.feem.it. **PG** 23. **PR** 10 papers minimum order at \$4.00 each; annual subscription at \$250.00. **JE** G11, G18, H06, H63. **KW** Debt Swaps. Environmental Policy. Polish EcoFund.

AB Debt swaps as an instrument of international co-operation in the environmental field were conceived of and first applied in the 1980s. They were once thought of as "win-win" arrangements, solving environmental and economic problems at the same time. In the 1990s it became clear, however, that (1) debt-for-environment swaps attracted as little as 1-2 percent of debt swap schemes (with debt-for-equity swaps taking almost all the rest), and (2) the effectiveness and efficiency of those carried out was sometimes problematic. The paper addresses the question of why -- despite high expectations -- debt-for-environment swaps have not emerged as a major international environmental policy tool.