

ABSTRACTS OF WORKING PAPERS IN ECONOMICS

This section contains abstracts and complete bibliographic information for current working papers, listed alphabetically by primary author. Brief entries appear for secondary authors, cross-referenced to the primary author. For more recent as well as historical information, consult the AWPE DATABASE, available on magnetic media from Cambridge University Press. (Call 212-924-3900)

Abell, Peter

PD September 1992. TI Comparing Case Studies: An Introduction to Comparative Narratives. AA London School of Economics. SR London School of Economics Centre for Economic Performance Discussion Paper: 103; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. PG 20. PR no charge. JE C81. KW Case Study. Cooperation. AB The paper provides a systematic method for comparing case-studies which take the form of a sequence of events. The idea of abstracting and/or generalizing the structure of a case-study using a mapping rule which creates either a tolerance (a symmetric reflexive relationship) or an equivalence on the domain set is explored. An example is given of comparing the evolution of cooperation in a number of cooperative organizations.

Abreu, Dilip

PD October 1992. TI Folk Theorems for Repeated Games: A NEU Condition. AU Abreu, Dilip; Dutta, Prajit K.; Smith, Lones. AA Abreu: Princeton University. Dutta: Columbia University. Smith: Massachusetts Institute of Technology. SR Massachusetts Institute of Technology Department of Economics Working Paper: 92-15; Department of Economics, Massachusetts Institute of Technology, Cambridge, MA 02139. PG 22. PR \$8.00 Domestic; \$10.00 Overseas; \$5.00 Student. JE C72, C73. KW Folk Theorem. Repeated Game. Full-Dimensionality. AB The Fudenberg and Maskin folk theorem for discounted repeated games assumes that the set of feasible payoffs is full dimensional. We obtain the same conclusion using a weaker condition. This condition is that no pair of players has equivalent von Neumann-Morgenstern utilities over outcomes. We term this condition NEU ("non-equivalent utilities"). The condition is weak, easily interpreted, and also almost necessary for the result. We also extend our analysis to finitely repeated games and overlapping generations games.

Agenor, Pierre-Richard

PD October 1992. TI Credibility Effects of Price Controls in Disinflation Programs. AA International Monetary Fund. SR International Monetary Fund Working Paper: 92/83; International Monetary Fund, Washington, DC 20431. PG 17. PR not available. JE C72, E31, E64. KW Price Controls. Credibility. Disinflation. Inflation. AB This paper examines whether price controls may enhance the credibility of a disinflation program, using a framework in which agents behave strategically. The analysis indicates that a partial price freeze is not fully credible, and may result in inflation inertia. The authorities may be able to determine

optimally the intensity of price controls so as to minimize the policy loss associated with a discretionary monetary strategy. But the optimal intensity of controls is shown to be significantly different from zero only if the cost of enforcing price ceilings is not too high, or if the weight attached to price distortions in the policymaker's loss function is small.

Aghion, Philippe

PD February 1991. TI Government Domestic Debt and the Risk of Default: A Political-Economic Model of the Strategic Role of Debt. AU Aghion, Philippe; Bolton, Patrick. AA Aghion: Massachusetts Institute of Technology and DELTA, Paris. Bolton: Harvard University and Laboratoire d'Econometrie de l'Ecole Polytechnique, Paris. SR University of Western Ontario Papers in Political Economy: 9; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. PG 33. PR no charge. JE E62, D70, D72. KW Fiscal Policy. Political Institutions. AB Until recently, most of the research and controversy on macroeconomic fiscal policies was about when and whether debt-financed government deficits have real effects on aggregate output and employment. This problem has typically been studied in a model of a representative agent interacting with a benevolent government maximizing a Social Welfare Function. Naturally, only a limited set of issues can be addressed within this framework. Thus, a particularly important aspect of fiscal policy suppressed in this model is the (intra generational) redistributive effect of fiscal policy and the consequent political conflicts arising from these distributional concerns. Behind the representative agent lurks a lot of heterogeneity whether in terms of income and asset holdings of preferences. This paper focuses on the question of how differences in income and asset-holdings give rise to differences in preferences concerning fiscal policy and investigates how democratic political institutions solve the social choice problem of what fiscal policy to implement, when agents have conflicting preferences.

Ahmad, S. Ehtisham

PD August 1991. TI Jordan: Restructuring Public Expenditures and Protecting the Poor. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/91/82; International Monetary Fund, Washington, DC 20431. PG 16. PR not available. JE H20, H50, E62, E64. KW Subsidies. Food Subsidies. Public Works. AB In Jordan, a system of general food subsidies became untenable in budgetary terms, with a sharp devaluation of the dinar in the late 1980's. A shift from a general subsidy system to limited rations would greatly reduce budgetary costs and

minimize adverse effects on the poor. To reduce subsidies, the authorities had taken measures, during the course of 1990, consistent with the measures suggested. To complete the safety net, a system of self-targeting public works is suggested; a reform of the social security system might also be needed in view of the increased unemployment resulting from the recent Middle East crisis.

al-Nowaihi, Ali

PD August 1992. **TI** Monetary Policy and Reputational Equilibria: A Resolution of the Non-Uniqueness Problem. **AU** al-Nowaihi, Ali; Levine, Paul. **AA** al-Nowaihi and Levine: University of Leicester. **SR** CEPR Discussion Paper: 702; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 20. **PR** Pounds 3.00 or \$5.00. **JE** E52. **KW** Monetary Policy. Reputational Equilibria. Multiple Equilibria. Credibility.

AB This paper provides a resolution of the non-uniqueness of reputational equilibria in the Barro-Gordon monetary policy game. We introduce a "chisel-proof" credibility condition which ensures that in response to a small deviation from the low inflation rate by the central bank, it never pays for the private sector to acquiesce. This condition, which amounts to a refinement of the subgame perfect equilibrium, endogenizes the punishment length of the private sector's trigger strategy. The result is that a unique low-inflation outcome can be enforced as a subgame perfect and credible non-cooperative equilibrium.

Alesina, Alberto

PD September 1992. **TI** Political Instability and Economic Growth. **AU** Alesina, Alberto; Roubini, Nouriel; Ozler, Sule; Swagel, Phillip. **AA** Alesina: Harvard University and National Bureau of Economic Research. Roubini: Yale University and National Bureau of Economic Research. Ozler: Stanford University and National Bureau of Economic Research. Swagel: Federal Reserve Board. **SR** National Bureau of Economic Research Working Paper: 4173; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** \$3.00. **JE** O47, H11. **KW** Government Collapse.

AB This paper investigates the relationship between political instability and per capita GDP growth in a sample of 113 countries for the period 1950-1982. We define "political instability" as the propensity of a government collapse, and we estimate a model in which political instability and economic growth are jointly determined. The main result of this paper is that in countries and time periods with a high propensity of government collapse, growth is significantly lower than otherwise. This effect remains strong when we restrict our definition of "government change" to cases of substantial changes of the government.

PD September 1992. **TI** Income Distribution, Political Instability, and Investment. **AU** Alesina, Alberto; Perotti, Roberto. **AA** Alesina: Harvard University, National Bureau of Economic Research, and CEPR. Perotti: Columbia University. **SR** Columbia University Department of Economics Discussion Paper: 625; Department of Economics, Columbia University, 420 W 118th St., Room 1022 IAB, New York, New York 10027. **PG** 21. **PR** \$5.00. **JE** A12, O40. **KW** Income Inequality. Economic Growth. Political Unrest.

AB This paper successfully tests on a sample of 72 countries

for the periods 1960-85 and 1970-85 the following hypotheses. Income inequality, by fueling social discontent, increases socio-political instability. The latter, by creating uncertainty in the politico-economic environment, reduces investment and therefore economic growth. As a consequence, income inequality and economic growth are inversely related. We measure socio-political instability with a composite index which captures the occurrence of more or less violent phenomena of political unrest. Our hypotheses are tested by estimating a two-equation model in which the endogenous variables are investment and our variable of socio-political instability. Ours results are robust to sensitivity analysis on the specification of the model and are essentially unchanged when the model is estimated using robust regression techniques.

PD September 1992. **TI** The Political Economy of Growth: A Critical Survey of the Recent Literature and Some New Results. **AU** Alesina, Alberto; Perotti, Roberto. **AA** Alesina: Harvard University, National Bureau of Economic Research, and CEPR. Perotti: Columbia University. **SR** Columbia University Department of Economics Discussion Paper: 626; Department of Economics, Columbia University, 420 W 118th St., Room 1022 IAB, New York, New York 10027. **PG** 31. **PR** \$5.00. **JE** A12, O40. **KW** Growth Theory. Political Economy.

AB Two of the most active fields in economics in the last few years have been growth theory and macro-political economy. The first one was inspired by new "endogenous growth theories" to reconsider which economic factors influence economic development. Recent research in "macro political economy" has explored the connections between politics, institutions and macroeconomic policies and outcomes. This paper reviews the recent literature which has grown at the intersection of these two very active areas of research. Specifically, we analyze what we have learned and what puzzles are left unsolved in the area of the socio-political determinants of growth. We focus on the relation between four key variables: economic growth and capital accumulation; political instability; political freedom and democratic institutions; and income inequality.

Alogoskoufis, George

PD March 1992. **TI** Wage Inflation, Electoral Uncertainty and the Exchange Rate Regime: Theory and UK Evidence. **AU** Alogoskoufis, George; Lockwood, Ben; Philippopoulos, Apostolis. **AA** Alogoskoufis and Lockwood: Birkbeck College. Philippopoulos: University of Essex. **SR** CEPR Discussion Paper: 657; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 29. **PR** Pounds 3.00 or \$5.00. **JE** E31, F33. **KW** Politics. Elections. Unemployment.

AB We extend the "rational-partisan" model of inflation to allow for the effects of unemployment persistence on the dynamics of inflation. We combine this model with the "exchange-rate-regime" model of inflation and examine the experience of the United Kingdom. Outside the fixed exchange rate regime of Bretton Woods, persistently high inflation can be attributed to the failure of political parties to precommit to price stability, in the light of unemployment persistence. Elections are associated with higher inflation, with the exception of the Thatcher period. There is no evidence that the Labour party is more inflationary in general than the Conservatives.

Altman, Edward I.

PD December 1992. TI Mark-to Market Disclosure: An Opportunity Dressed in Annoying Clothing. AA New York University. SR New York University Salomon Brothers Working Paper: S-92-52; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. PG 8. PR \$5.00. JE G10, G12, G18. KW Non-Publicly Traded Assets. Illiquid Markets. Asset Valuation.

AB The procedure set forth in this paper provides a rigorous approach for the valuation of non-publicly traded assets. Our approach is potentially useful for assets in liquid and illiquid markets but the payoff would seem to be especially great in the latter. Implicit in our valuation analysis are expected loss rates. As such, the procedure is a valid tool for setting aside capital reserves for expected losses. Mortality loss estimates, based on loss experience in the public bond market, are already being used by high yield fixed income investors, particularly insurance companies, who are comfortable with such a methodology. It would seem that private placement valuation of insurance companies, commercial banks and other lending/investing institutions are natural extension. The push for more current mark-to-market valuations and fair-value estimates of investments should be embraced as a stimulus to attempts to improve upon extant valuation techniques. This paper suggest one method to achieve that result.

Altschuler, Rosanne

PD May 1992. TI Dynamic Effects of Foreign Tax Credits on Multinational Corporations. AU Altschuler, Rosanne; Fulghieri, Paolo. AA Columbia University. SR Columbia University Department of Economics Discussion Paper: 611; Department of Economics, Columbia University, 420 W 118th St., Room 1022 IAB, New York, New York 10027. PG 25. PR \$5.00. JE F23, H23, H25, H26. KW Multinational Corporations. Tax Obligations. Investment Incentives.

AB The U.S. tax code allows multinational corporations to credit tax payments made to foreign treasuries against domestic tax obligations, up to their U.S. tax liability on foreign source income. If foreign tax payments exceed the U.S. tax liability on foreign source income the corporation is said to be in "excess credits." In this paper, we consider how investment incentives change as multinational corporations switch into and out of "excess credits." We derive an explicit expression for the cost of capital for a marginal investment of an all equity financed foreign subsidiary. We find that if the foreign tax credit position and/or the dividend policy of a parent corporation changes over time the cost of capital will be a function of domestic and foreign country tax rates and the dividend repatriation policy of the subsidiary. This contrasts with the Hartman result that the U.S. tax system provides capital import neutrality to corporations investing abroad.

Ammer, John

PD November 1992. TI Measuring International Economic Linkages with Stock Market Data. AU Ammer, John; Mei, Jianping. AA Ammer: Board of Governors, Federal Reserve. Mei: New York University. SR New York University Salomon Brothers Working Paper: S-92-46; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New

York University, 90 Trinity Place, New York, NY 10006. PG 21. PR \$5.00. JE F30, G10. KW International Stock Markets. Variance Decomposition. Time-Varying. Risk Premia.

AB This paper develops a new framework for measuring financial and real economic linkages between countries. We employ a variant of the Campbell and Schiller (1988) log-linearization method to decompose domestic and foreign equity return innovations into components associated with news about dividend growth, interest rates, exchange rates, and future equity risk to which common real and financial shocks contribute to covariation between the returns on different national stock markets. An application to U.S. and U.K. data from 1957 to 1989 reveals substantial degrees of both real and financial integration between the two economies.

Andersen, Torben M.

PD August 1992. TI Cyclical Properties of Wages and Prices in Open Economies. AU Andersen, Torben M.; Hansen, Niels Lynggard. AA University of Aarhus. SR Aarhus Institute of Economics Memo: 1992-10; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. PG 22. PR no charge. JE E32, J31, F41. KW Business Cycles. Labor Markets.

AB Cyclical properties of variables relating to the interaction between product and labor markets are found to show much less regularity than the properties of output components. The strongest comovements are found between nominal variables while the interrelationship between nominal and real variables as well as between different real variables is more blurred. Specifically, we find that prices-domestic and foreign-move tightly together while the link between prices and wages is less strong. Wages are more closely related to consumer than producer prices, and product wages tend to move countercyclically. The evidence also points to the importance of both demand and supply shocks, foreign and domestic components of the shocks and the presence of nominal rigidities.

Anderson, James E.

PD June 1992. TI A New Approach to Evaluating Trade Policy. AU Anderson, James E.; Neary, J. Peter. AA Anderson: Boston College. Neary: University College Dublin. SR CEPR Discussion Paper: 683; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 24. PR Pounds 3.00 or \$5.00. JE F13. KW Tariffs. Protection. Quotas.

AB This paper introduces a new measure, the Trade Restrictiveness Index, which measures the restrictiveness of a system of trade protection. The index is a general equilibrium application of the distance function and answers the question: "What uniform set of trade restrictions is equivalent (in welfare terms) to the initial protective structure?" The index is applicable to both tariffs and quotas and allows international and intertemporal comparisons. The index is operational and we provide an empirical example to illustrate its applicability and to show its superiority to commonly used measures.

Anderson, Neil

TI Innovation, Cultural Values and the Management of Change in British Hospital Management. AU West, Michael;

Anderson, Neil.

Anderson, Ronald W.

PD November 1992. TI Market Stabilization and the Reform of the Common Agricultural Policy. AA Universite Catholique de Louvain. SR CEPR Discussion Paper: 740; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 38. PR Pounds 3.00 or \$5.00. JE F13, Q17, Q18. KW Storage. Commodities.

AB I solve numerically for stationary rational-expectations equilibria of a two-country, non-linear model of a storable commodity. With constant tariffs, price volatilities in both countries increase with an increase in the tariff rate of one country or with an increase in the storage cost in one country. When one country ("the EC") uses a variable import levy and export subsidy to defend a fixed price floor, increases in the floor (a) increase mean price and decrease price volatility in the EC and (b) decrease mean price, increase volatility and increase private stockholding in the rest of the world. The volatility of farm incomes in the EC are relatively insensitive to increases in the floor.

Anderson, Simon P.

PD November 1992. TI Who Benefits from Antidumping Legislation? AU Anderson, Simon P.; Schmitt, Nicolas; Thisse, Jacques-Francois. AA Anderson: University of Virginia. Schmitt: Simon Fraser University. Thisse: Universite de Paris I-Sorbonne. SR CEPR Discussion Paper: 731; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 23. PR Pounds 3.00 or \$5.00. JE F12, F13, L13. KW Antidumping Laws. International Trade. Price Policy.

AB Antidumping laws alter the pricing policies of foreign firms to the benefit of domestic ones. Unilaterally, domestic firms want to lobby for antidumping restrictions and consumers want to lobby against them. This paper shows that in the absence of cost considerations, if firms succeed in both countries, their profits fall and the consumer surplus rises, so that firms end up working for consumers everywhere by lobbying. It also shows that governments, maximizing total domestic surplus, prefer no legislation irrespective of the actions of other governments. World surplus may, however, be greater with antidumping rules.

Andrews, Donald W. K.

PD November 1992. TI The Large Sample Correspondence Between Classical Hypothesis Tests and Bayesian Posterior Odds Tests AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1035; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse, Box 2125, Yale Station, New Haven, CT 06520. PG 23. PR no charge. JE C11, C12. KW Asymptotics. Bayesian. Classical. Hypothesis Test. Likelihood Ratio.

AB This paper establishes a correspondence in large samples between classical hypothesis tests and Bayesian posterior odds tests for models without trends. More specifically, tests of point null hypotheses and one- or two-sided alternatives are considered (where nuisance parameters may be present under both hypotheses). It is shown that for certain priors the Bayesian posterior odds test is equivalent in large samples to classical Wald, Lagrange multiplier, and likelihood ratio tests

for some significance level and vice versa.

Angehrn, Albert

PD September 1990. TI "Triple C": A Visual Interactive MCDSS. AA INSEAD. SR INSEAD Working Papers: 90/70/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 18. PR not available. JE C88, D81. KW Decision Making. Multicriteria Decisions.

AB "Triple C" is a new visual interactive system which supports the exploration of multicriteria decisions. The novelty of this system consists in an overall utilization of visual interaction for supporting all the information processing activities related to the task of incrementally defining and analyzing a multicriteria decision situation. Rather than providing objective "solutions", this system aims at supporting end-users to progressively gain insights into a decision situation, providing different tools to enable them (1) to better understand the decision situation at hand by expressing and analyzing their own preference structures, testing different alternatives and comparing them interactively, (2) to support and verify their individual judgement by performing different types of sensitivity analysis, and (3) to justify their subjective choices and communicate them easily.

PD 1992. TI Integrating Case-Based Reasoning in Multi-Criteria Decision Support Systems. AU Angehrn, Albert; Dutta, Soumitra. AA INSEAD. SR INSEAD Working Papers: 92/54/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 16. PR not available. JE D81, D70. KW Decision Support Systems. Learning. Problem Solving.

AB An important focus in current research on decision support systems (DSS) is the design of flexible environments to facilitate and support learning about the problem domain by the user. This research uses case-based reasoning to present a symbiotic DSS in which both the user and the DSS learn from each other. The user learns from the DSS (from stored prior problem solutions) and the system learns from the user (by observing current problem solving behaviors). The specific context of our research is the class of DSS used for supporting multi-criteria decision making (MCDM).

Aoki, Masanao

PD September 1991. TI Two Complementary Representations of Multiple Time Series in State Space Innovation Forms. AA University of California, Los Angeles. SR University of California at Los Angeles Department of Economics Working Paper: 628; Department of Economics, University of California at Los Angeles, 2263 Bunche., Los Angeles, CA 90024. PG 29. PR \$5.00; checks payable to U.C. Regents. JE C32, C13. KW State Space Model. Innovation Representation. Multivariate Time Series.

AB This paper uses two alternative innovation representations (forward and backward) of a state space model of multivariate weakly stationary time series to suggest estimators of system models and innovation noise covariance which are alternative to the estimators based on stochastic realizations. A scheme for iterative improvements of the initial estimates is also suggested.

PD September 1992. TI Interactions of Real GNP Business Cycles in a Three Country Time Series Model.

AA University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 675; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. **PG** 20. **PR** \$2.50; checks payable to U.C. Regents. **JE** C32, F43, C51. **KW** Business Cycles. Interdependence. Common Shocks.

AB The paper describes a procedure for examining short-run dynamic interactions among macroeconomic models by constructing aggregate state space submodels for dynamic modes corresponding with short-run response patterns. Using the quarterly real GNP from the U.S., West Germany and Japan for 1974.III to 1991.I, we examine dynamic interactions in the frequency ranges roughly comparable with a range of business cycle frequencies. We find that there is no (world wide) shock common to the three countries, even though the West German and Japanese real GNP are hit by a common shock.

Armaos, John

PD September 1992. **TI** Bank Runs and Partial Suspension of Convertibility. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-92-34; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 12. **PR** \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). **JE** G21, G28. **KW** Banking. Bank Panic.

AB This paper attempts to justify theoretically the use of partial suspension of convertibility as an effective measure -- under certain circumstances-- against bank runs. Its use was frequent in the days of the National Banking System in the U.S. and before the advent of deposit insurance. The paper shows that partial suspensions can eliminate panics and be optimal (efficient) at the same time and then proceeds to show that their characteristics generally agree with those actually observed in the marketplace.

Armstrong, Mark

PD November 1992. **TI** Nonlinear Pricing and Price Cap Regulation. **AU** Armstrong, Mark; Cowan, Simon; Vickers, John. **AA** University of Oxford. **SR** Oxford Applied Economics Discussion Paper Series: 152; Institute of Economics and Statistics, St Cross Building, Manor Road, Oxford OX1 3UL. **PG** 23. **PR** 2 pounds. **JE** D40, L51. **KW** Non-Linear Pricing. Price Cap. Regulation.

AB The paper analyzes profit-maximizing nonlinear pricing by a firm that is subject to price cap regulation. Two forms of regulatory constraint are considered: (i) a cap on the firm's average revenue, and (ii) a constraint that the firm must continue to offer each consumer the option of buying at the uniform price. Optimal nonlinear price schedules in these regimes are shown to have near characterizations that are related to the nonlinear tariffs that an unregulated monopolist would charge. Of the regulatory regimes, the firm prefers the average revenue constraint to the option constraint and likes uniform pricing least. Consumers in aggregate prefer the option regime to uniform pricing and like the average revenue constraint least, but there are also distributional effects between consumers. Although the optional tariff regime Pareto dominates uniform pricing, it is ambiguous whether welfare is higher under uniform pricing or under the average revenue regime.

Artis, Michael J.

PD March 1992. **TI** Counter-Inflationary Policy in the Framework of the EMS. **AA** University of Manchester. **SR** CEPR Discussion Paper: 649; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 18. **PR** Pounds 3.00 or \$5.00. **JE** E52, F31, F41. **KW** Inflation. Real Interest Rates. European Monetary System.

AB The conditions of the "new EMS" - an absence of exchange rate realignments and corresponding added credibility - have given rise to concern about the stabilization properties of the System. Nominal interest rate divergence may have been narrowed ahead of inflation divergence. Cross-country real interest rankings would then assume a negative correlation with the corresponding inflation rankings. The paper argues that on theoretical grounds, a perverse correlation between real interest rates and inflation can be predicted for "old EMS" conditions. Empirical evidence supports this prediction while failing to confirm it for the "new EMS".

PD November 1992. **TI** Instability of the Velocity of Money: A New Approach Based on the Evolutionary Spectrum. **AU** Artis, Michael J.; Bladen-Hovell, Robin; Nachane, Dilip. **AA** Artis and Bladen-Hovell: Manchester University. Nachane: University of Bombay. **SR** CEPR Discussion Paper: 735; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 19. **PR** Pounds 3.00 or \$5.00. **JE** E41. **KW** Money Demand. Structural Breaks. Frequency Domain.

AB Money demand instability has been the subject of considerable attention in the recent literature. This paper examines the stability of velocity series for the United States and for five European countries (France, Germany, Italy, the Netherlands and the United Kingdom). A distribution-free test due to Subba Rao (1981) and based on the concept of the evolutionary spectrum is used. The technique reveals structural breaks of long-term significance for only broad money velocity in the United States and narrow money velocity in the United Kingdom.

Atanasio, Orazio P.

PD August 1992. **TI** Consumption Growth and Excess Sensitivity to Income: Evidence from U.S. Micro Data. **AU** Atanasio, Orazio P.; Weber, Guglielmo. **AA** Atanasio: Stanford University & CEPR. Weber: University College, London, IGER & Institute for Fiscal Studies. **SR** Institute for Fiscal Studies (IFS) Working Paper: W92/15; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, ENGLAND. **PG** 41. **PR** 3 pounds. **JE** E21, D91. **KW** Euler Equation. Consumption. Excess Sensitivity.

AB This paper uses eleven years of Consumer Expenditure Survey data to estimate consumption growth equations for a number of year-of-birth cohorts. Our aim is to exploit the household-level detailed information on all components of nondurable expenditure to estimate the elasticity of intertemporal substitution and test for excess sensitivity to labor income. We find that a demographic-augmented specification of the equation provides an adequate description of the data for younger cohorts when we model nondurable expenditure other than food. However, overidentifying restriction tests reject the same specification for older cohorts, while food and total nondurable consumption equations typically display excess sensitivity to labor income.

Ayres, Robert U.

PD 1992. **TI** Industrial Metabolism of Nitrogen. **AU** Ayres, Robert U.; Norberg-Bohm, Vicki. **AA** Ayres: INSEAD. Norberg-Bohm: Harvard University. **SR** INSEAD Working Papers: 92/57/EP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 24. **PR** not available. **JE** L65, Q20. **KW** Chemicals. Environmental Sinks. Agricultural Inputs.

AB This paper reviews in quantitative terms the sources, production processes and economic uses of synthetic nitrogen-based chemicals with particular emphasis on agricultural uses. It discusses the environmental fate of nitrogenous chemicals, especially fertilizers. It also reviews the production of oxides of nitrogen (NO_x) via combustion processes. Data is provided mainly for the U.S. and, where available, for the world.

PD 1992. **TI** Industrial Metabolism of Sulfur. **AU** Ayres, Robert U.; Norberg-Bohm, Vicki. **AA** Ayres: INSEAD. Norberg-Bohm: Harvard University. **SR** INSEAD Working Papers: 92/58/EP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 22. **PR** not available. **JE** L65, Q20. **KW** Chemicals. Agricultural Inputs. Environmental Sinks.

AB This paper quantitatively reviews the sources, production processes.

Bacharach, Michael

PD November 1992. **TI** Sophisticated Bounded Agents Play the Repeated Dilemma. **AU** Bacharach, Michael; Shin, Hyun Song; Williams, Mark. **AA** University of Oxford. **SR** Oxford Applied Economics Discussion Paper Series: 143; Institute of Economics and Statistics, St Cross Building, Manor Road, Oxford OX1 3UL. **PG** 28. **PR** 2 pounds. **JE** C72, C73, C74. **KW** Prisoner's Dilemma. Common Knowledge. Backward Induction. Bounded Rationality.

AB This paper investigates the effect of bounds on the degree of players' iterated knowledge ("depth limits") on the amount of defection produced by backward induction in the finitely repeated Prisoner's Dilemma. Although players' reasoning abilities are bounded in this way, they are "sophisticated" in the sense that they can derive theorems about how bounded players play. The amount of endgame defection is characterized in terms of depth limits. It is then shown that, in a two-stage game in which players first choose depth limits and then play the repeated Dilemma, for typical payoff parameters they choose depth limits which resemble those observed empirically and are consistent with only a few rounds of endgame defection.

Backus, David K.

PD December 1992. **TI** Long-Memory Inflation Uncertainty: Evidence from the Term Structure of Interest Rates. **AU** Backus, David K.; Zin, Stanley E. **AA** Backus: New York University and National Bureau of Economic Research. Stanley: Carnegie Mellon University and National Bureau of Economic Research. **SR** New York University Salomon Brothers Working Paper:S-92-50; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 18. **PR** \$5.00. **JE** G12, E50. **KW** Government Bonds. Yields. Asset Pricing.

AB We use a fractional difference model to reconcile two features of yields on U.S. government bonds with modern asset pricing theory: the persistence of the short rate and the

variability of the long end of the yield curve. We suggest that this process might arise from the response of heterogeneous agents to changes in monetary policy.

Bagwell, Kyle

PD September 1992. **TI** Advertising as Information: Matching Products to Buyers. **AU** Bagwell, Kyle; Ramey, Garey. **AA** Bagwell: Northwestern University. Ramey: University of California, San Diego. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1005; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208. **PG** 32. **PR** Per copy: \$3.00 in the U.S.A. or Canada; \$5.00 via international mail. Make check payable to Northwestern University. **JE** L15. **KW** Advertising. Matching. Quality. Fixed Costs.

AB We consider communication of quality via cheap talk and dissipative advertising, when consumers have heterogeneous tastes for quality. For search goods, cheap talk communicates quality when fixed costs are roughly constant across quality levels, while if fixed costs vary greatly with quality, then firms having the higher-fixed-cost quality level use dissipative advertising. Further, product differentiation (generically) cannot occur in the absence of advertising. For experience goods, quality can be communicated by cheap talk in a range where low-quality firms have greater fixed costs, and low-quality firms use dissipative advertising if their fixed costs are greater still.

PD November 1992. **TI** The Diamond Paradox: A Dynamic Resolution. **AU** Bagwell, Kyle; Ramey, Garey. **AA** Bagwell: Northwestern University. Ramey: University of California, San Diego. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1013; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208. **PG** 26. **PR** Per copy: \$3.00 U.S.A. or Canada; \$5.00 via international mail. Make checks payable to Northwestern University. **JE** D83, D82, E30. **KW** Diamond Paradox. Dynamic Search. Procyclical Markups.

AB We consider the role of repeat business in resolving the paradox of Diamond (1971). In each period, consumers engage in sequential price search at a positive search cost. Consumers enforce pricing discipline via a simple loyalty-boycott search rule that directs future-period searches away from firms that raise prices in the current period. In consumer's best equilibria, the equilibrium price decreases continuously with the level of search costs, and the competitive outcome obtains as search costs approach zero. We show further that Rotemberg and Saloner's (1986) finding of countercyclical markups does not arise in the presence of positive search costs.

PD November 1992. **TI** Commitment and Observability in Games. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1014; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208. **PG** 10. **PR** Per copy: \$3.00 in the U.S.A. or Canada; \$5.00 via international mail. Make checks payable to Northwestern University. **JE** C72, D82. **KW** Commitment. First-Mover Advantage. Observability.

AB Models of commitment make two assumptions: there is a first mover, and his action is perfectly observed by the subsequent mover. The purpose of this paper is to disentangle these two assumptions, in order to see if a strategic benefit from commitment remains when the first-mover's choice is imperfectly observed. The basic finding is that the first-mover advantage is eliminated when there is even a slight amount of noise associated with the observation of the first-mover's selection.

Bai, Jushan

TI The Impact of 1989 California Major Anti-Smoking Legislation on Cigarette Consumption: Three Years Later. **AU** Hu, Teh-wei; Bai, Jushan; Keeler, Theodore E.; Barnett, Paul G.

Bailey, Roy E.

TI The Union Wage Effect in Late Nineteenth Century Britain. **AU** Hatton, Timothy J.; Boyer, George R.; Bailey, Roy E.

Baldwin, Richard

PD November 1992. **TI** An Eastern Enlargement of EFTA: Why the East Europeans Should Join and the Eftans Should Want Them. **AA** Centre for Economic Policy Research. **SR** Centre for Economic Policy Research Occasional Paper: 10;. **PG** 35. **PR** not available. **JE** F36, O52. **KW** Economic Integration. Eastern Europe.

AB Talk of EC enlargement has badly affected European governments' eyesight: those in the European Free Trade Association can't see anything after EC accession, those in the Central and East European countries can't see anything before accession, and as usual the EC can't see past its own nose. This "EC tunnel vision" has prevented the East and West from looking at an intermediate step: an eastern enlargement of EFTA. At first glance, the notion of East Europeans joining EFTA seems outlandish. Two factors make it less so: (i) An EFTA enlargement has become a "why not?" proposition, since all the major EFTans except Norway plan to leave EFTA for the EC in five to ten years anyway, and Norway is likely to follow soon. (ii) The CEEC's will not achieve EC accession for at least two decades, so they must soon join something else to avoid being marginalized individually.

Ball, Laurence M.

PD September 1992. **TI** Relative-Price Changes as Aggregate Supply Shocks. **AU** Ball, Laurence M.; Mankiw, N. Gregory. **AA** Ball: Princeton University and National Bureau of Economic Research. Mankiw: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4168; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 31. **PR** \$5.00. **JE** E31, E50. **KW** Supply Shocks. Price Adjustment. Inflation.

AB This paper proposes a theory of supply shocks, or shifts in the short-run Phillips curve, based on relative-price changes and frictions in nominal price adjustment. When price adjustment is costly, firms adjust to large shocks but not to small shocks, and so large shocks have disproportionate effects on the price level. Therefore, aggregate inflation depends on the distribution of relative-price changes: inflation rises when the distribution is skewed to the right, and falls when the distribution is skewed to the left. We show that this theoretical

result explains a large fraction of movements in postwar U.S. inflation. Moreover, our model suggests measures of supply shocks that perform better than traditional measures, such as the relative prices of food and energy.

Banerjee, Anindya

PD November 1992. **TI** Simultaneous Versus Sequential Move Structures in Principal-Agent Models. **AU** Banerjee, Anindya; Beggs, Alan. **AA** University of Oxford. **SR** Oxford Applied Economics Discussion Paper Series: 148; Institute of Economics and Statistics, St Cross Building, Manor Road, Oxford OX1 3UL. **PG** 24. **PR** 2 pounds. **JE** D82, D80. **KW** Principal-Agent Model. Move Structures.

AB We consider a model with a single principal and two agents and compare the payoff to the principal when agents choose their actions simultaneously with his payoff when they choose them sequentially. We show that when the actions are strategic complements, and output has two possible levels, the principal is typically better off when moves are sequential. In particular examples, however, the principal may be worse off. We give sufficient conditions for sequential moves to be optimal, which, in a setting with continuous actions, are equivalent to conditions sufficient for the validity of the first-order approach. We also give sufficient conditions for the principal to be better off when output has more than two possible levels.

Banks, James

PD August 1992. **TI** Quadratic Engel Curves, Welfare Measurement and Consumer Demand. **AU** Banks, James; Blundell, Richard; Lewbel, Arthur. **AA** Banks: Institute for Fiscal Studies. Blundell: Institute for Fiscal Studies and University College, London. Lewbel: Brandeis University. **SR** Institute for Fiscal Studies (IFS) Working Paper: W92/14; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, ENGLAND. **PG** 22. **PR** 3 pounds. **JE** D11. **KW** Consumer Demand. Engel Curves. Welfare Measurement.

AB Popular models of demand like the Translog Demand or Almost Ideal Demand (AID) systems have expenditure share Engel curves that are rank two and are linear in the logarithm of total expenditure. A nonparametric analysis of consumers' expenditure patterns suggests that Engel curves are actually rank three and require quadratic terms in log expenditure. We derive the complete class of integrable, rank three, quadratic logarithmic expenditure share systems. Within this class of systems we propose a Quadratic Almost Ideal Demand System (QUAIDS) functional form that comes as close as possible to the near linearity of Deaton and Muellbauer's AID model. QUAIDS is estimated on a large pooled data set of UK households. The distribution of welfare gains and losses from a series of indirect tax reforms is analyzed. In addition to being empirically significant, the quadratic term is shown to have important welfare implications, since it permits goods to be necessities at some expenditure levels and luxuries at others.

Barnett, Paul G.

PD September 1992. **TI** Oligopoly Structure and the Incidence of Cigarette Excise Taxes. **AU** Barnett, Paul G.; Keeler, Theodore E.; Hu, Teh-wei. **AA** University of California, Berkeley. **SR** University of California at Berkeley Working Paper in Economics: 92-202; **IBER** 156

Barrows Hall, University of California at Berkeley, Berkeley, CA 94720. PG 12. PR \$3.50 plus applicable sales tax. JE H20, L13. KW Cigarettes. Taxation. Oligopoly.

AB The economic incidence of cigarette excise taxes in the United States is estimated for 1955-1989. The analysis simultaneously considers consumer demand and the reactions of manufacturers and the distribution industry, and contrasts the incidence of federal with state and local taxes. A cost function was estimated, and found that cigarette manufacture is subject to increasing returns to scale. The model of the market found a mean price elasticity bias may explain why this estimate is higher than that of other studies. The industry was found to be less competitive than a Cournot industry. Competition among manufacturers has decreased substantially since 1980. A simulation shows that an increase in the federal excise tax causes a greater increase in price, and a greater decrease in consumption, than does the same increase in the average of state and local tax rates.

TI The Impact of 1989 California Major Anti-Smoking Legislation on Cigarette Consumption: Three Years Later. AU Hu, Teh-wei; Bai, Jushan; Keeler, Theodore E.; Barnett, Paul G.

Barro, Robert J.

PD March 1992. TI Public Finance in Models of Economic Growth. AU Barro, Robert J.; Sala-i-Martin, Xavier. AA Barro: Harvard University. Sala-i-Martin: Yale University. SR CEPR Discussion Paper: 630; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 29. PR Pounds 3.00 or \$5.00. JE E62, H21, O40. KW Economic Growth. Fiscal Policies. Public Finance.

AB In growth models that incorporate public services, the optimal tax policy hinges on the characteristics of the services. If the public services are publicly-provided private goods, that are rival and excludable, or publicly-provided public goods, that are non-rival and non-excludable, lump-sum taxation is superior to income taxation. Many types of public goods are subject to congestion, however, and are therefore rival but to some extent non-excludable. In these cases, income taxation works approximately as a user fee and can therefore be superior to lump-sum taxation. We argue that the congestion model applies to a wide array of public expenditures.

Basevi, Giorgio

PD July 1992. TI Bargaining with a Composite Player: An Application to the Uruguay Round of GATT Negotiations. AU Basevi, Giorgio; Delbono, Flavio; Mariotti, Marco. AA Basevi and Delbono: Universita degli Studi di Bologna. Mariotti: University of East Anglia. SR CEPR Discussion Paper: 685; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 14. PR Pounds 3.00 or \$5.00. JE C78, F13. KW Bargaining. GATT Negotiations.

AB The paper analyzes a situation in which negotiations take place between a party consisting of a single decision-maker and a party consisting of a group of two decision-makers. The latter, in setting its proposal to the opponent party, may act cooperatively or non-cooperatively within itself. In the paper, however, the model is directly applied to the case of the Uruguay Round of GATT negotiations. In this case the authors' conjecture is that much of the difficulty currently experienced in reaching an agreement stems from the often non-cooperative

nature of the preliminary agreement within the European Community required before it can arrive at a definite proposal for negotiation with other countries.

Batten, Dennis S.

TI Selecting An Intermediate Target Variable for Monetary Policy When the Goal is Price Stability. AU Belongia, Michael T.; Batten, Dennis S.

Bayoumi, Tamim A.

PD September 1991. TI The Effect of the ERM on Participating Economies. AA International Monetary Fund. SR International Monetary Fund Working Paper: 91/86; International Monetary Fund, Washington, DC 20431. PG 22. PR not available. JE E63, F33, F36. KW Macroeconomic Performance. Vector Autoregression. International Policy Coordination.

AB The effect of membership in the ERM on macroeconomic performance is analyzed using vector autoregression techniques. The results indicate that while the ERM has had little effect on the nature of the shocks hitting the economies, it has had a significant effect on the response of member countries to these shocks. In addition, long-time members of the ERM have significantly more correlated shocks than other countries. These results conform to the thesis that the ERM represents a move by countries with relatively similar underlying shocks to coordinate macroeconomic policy.

PD May 1992. TI Shocking Aspects of European Monetary Unification. AU Bayoumi, Tamim A.; Eichengreen, Barry. AA Bayoumi: Bank of England. Eichengreen: University of California at Berkeley. SR CEPR Discussion Paper: 643; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 36. PR Pounds 3.00 or \$5.00. JE F33, F36. KW EMU. Exchange Rates.

AB Data on output and prices for eleven EC member nations are analyzed using a VAR decomposition to extract information on underlying aggregate supply and demand disturbances. The coherence of the underlying shocks across countries and the speed of adjustment to these shocks are compared with the results from U.S. regional data. We find that the underlying shocks are significantly more idiosyncratic across EC countries than across US regions, which may indicate that the EC will find it more difficult to operate a monetary union. A core of EC countries - Germany and her immediate neighbors - experience shocks of similar magnitude and cohesion as the U.S. regions, however. EC countries also exhibit a slower response to aggregate shocks than U.S. regions, presumably reflecting lower factor mobility.

PD May 1992. TI Is There a Conflict Between EC Enlargement and European Monetary Unification? AU Bayoumi, Tamim A.; Eichengreen, Barry. AA Bayoumi: Bank of England. Eichengreen: University of California at Berkeley. SR CEPR Discussion Paper: 646; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 18. PR Pounds 3.00 or \$5.00. JE F33, F36. KW EMU. European Community.

AB Recent proposals for enlarging the European Community to include the EFTA countries raise the question of whether the new members should participate in a European Monetary

Union. In part, the issue hinges on the incidence of aggregate supply and demand disturbances. We use data on prices and output and a VAR decomposition to analyze this issue empirically, grouping economies according to the magnitude of the disturbances, their cross-country correlation, and speeds of response.

PD August 1992. TI Macroeconomic Adjustment Under Bretton Woods and the Post-Bretton Woods Float: An Impulse-Response Analysis. AU Bayoumi, Tamim A.; Eichengreen, Barry. AA Bayoumi: International Monetary Fund. Eichengreen: University of California Berkeley. SR University of California at Berkeley Working Paper in Economics: 92-201; IBER 156 Barrows Hall, University of California at Berkeley, Berkeley, CA 94720. PG 28. PR \$3.50 plus applicable sales tax. JE F00, F40. KW Bretton Woods. Exchange Rates. International Adjustment.

AB More than two decades since the transition from fixed to flexible to exchange rates, there is no consensus as to the consequences of the shift. In a sense this is not surprising, since there exists little agreement among economists about how exchange rate variations affect macroeconomic variables like output and inflation. In the theoretical world of open-economy macroeconomics, anything goes. This inability to converge on a common model has been particularly debilitating for empirical economists. One response has been to fit historical time series to a specific theoretical model but without testing it against alternatives. The alternative is to avoid positing a model and to focus atheoretically on correlations in the data. In this paper we stake out a middle ground between these extremes. We show that the closest thing the economics profession possesses to a consensus model -- the aggregate supply-aggregate demand framework -- can be fit to historical time series in ways that shed light on the effects of the exchange rate regime.

PD September 1992. TI Macroeconomic Shocks, the ERM, and Tri-Polarity. AU Bayoumi, Tamim A.; Taylor, Mark P. AA International Monetary Fund. SR CEPR Discussion Paper: 711; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 12. PR Pounds 3.00 or \$5.00. JE F33, F31. KW Macroeconomic Performance. Tri-polarity.

AB We analyze the importance of ERM membership for macroeconomic performance by comparing the behavior of real output growth and inflation of members and non-members of the ERM. Taking the traditional aggregate supply and demand model as the basis for the analysis, we propose and implement an econometric procedure for identifying aggregate demand and supply shocks. The results confirm that the ERM has acted as a vehicle for macroeconomic policy coordination among its members. We also investigate several issues relating to the notion of a "tri-polar" global economic system comprising Germany, Japan and the US.

PD September 1992. TI Macroeconomic Adjustment Under Bretton Woods and the Post-Bretton-Woods Float: An Impulse-Response Analysis. AU Bayoumi, Tamim A.; Eichengreen, Barry. AA Bayoumi: International Monetary Fund. Eichengreen: University of California, Berkeley and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4169; National

Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 24. PR \$5.00. JE E42, E58, E63, E65. KW Exchange Rate Regimes. Policy Comparison.

AB We use time-series methods to estimate a simple aggregate-supply-aggregate-demand model in order to analyze the comparative performance of fixed- and flexible-exchange-rate systems and test competing hypotheses designed to explain shifts between exchange-rate regimes. The paper provides a coherent explanation of the causes and consequences of the shift from the Bretton Woods System of pegged exchange rates to the post-Bretton-Woods float. The shift from fixed to floating was associated with a modest increase in the cross-country dispersion of supply shocks but not with an increase in their average magnitude. In contrast, there was little change in either the cross-country dispersion or the average magnitude of demand shocks. More important in explaining the collapse of Bretton Woods were factors that heightened the impact of shocks on the external accounts, forcing governments to respond to supply shocks with changes in demand that stabilized prices and the exchange rate at the expense of increased output volatility.

PD November 1992. TI Macroeconomic Adjustment Under Bretton Woods and the Post-Bretton-Woods Float: An Impulse-Response Analysis. AU Bayoumi, Tamim A.; Eichengreen, Barry. AA Bayoumi: International Monetary Fund. Eichengreen: University of California, Berkeley. SR CEPR Discussion Paper: 729; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 28. PR Pounds 3.00 or \$5.00. JE F31, F33. KW Regime changes. Floating Rates. Exchange Rates.

AB We use time-series methods to estimate a simple aggregate supply and demand model in order to analyze the comparative performance of fixed and flexible exchange rate systems and test competing hypotheses designed to explain shifts between exchange rate regimes. The paper provides a coherent explanation of the causes and consequences of the shift from the Bretton Woods System of pegged exchange rates to the post-Bretton-Woods float.

Bean, Charles R.

PD September 1992. TI Unemployment, Consumption and Growth. AU Bean, Charles R.; Pissarides, Christopher A. AA London School of Economics. SR London School of Economics Centre for Economic Performance Discussion Paper: 100; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. PG 23. PR no charge. JE E24, O41, D91. KW Overlapping Generations Model. Endogenous Growth.

AB Using a standard overlapping generations framework modified to incorporate matching frictions in the labor market and a technology capable of yielding unbounded endogenous growth, we show that the cross-country bivariate correlation between unemployment and growth can be either positive or negative depending on the source of the differences in economic structures across countries. We also present a two-sector variant of the model in which there is imperfect competition in consumption goods production. A reduction in the propensity to save leads to an expansion in the market size for consumption goods, and an increase in employment. If entry costs into consumption goods production are sufficiently large this expansion in employment can be big enough to produce an

increase in the total volume of saving - and therefore growth - even though the propensity to save has decreased.

PD October 1992. **TI** Economic and Monetary Union in Europe. **AA** London School of Economics. **SR** CEPR Discussion Paper: 722; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 36. **PR** Pounds 3.00 or \$5.00. **JE** E58, F33, H77, E62. **KW** EMU. Fiscal Federalism.

AB This paper assesses the costs and benefits of monetary union in Europe. It is argued that neither the costs nor the benefits are in principle likely to be as great as critics and proponents respectively have suggested. Fiscal issues are likely to be far more significant. Fiscal federalism is by no means a necessary corollary of monetary union and the "Maastricht rules" on public debt and deficits will place harmful constraints on national fiscal policies.

PD October 1992. **TI** Unemployment, Consumption and Growth. **AU** Bean, Charles R.; Pissarides, Christopher A. **AA** London School of Economics. **SR** CEPR Discussion Paper: 723; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 23. **PR** Pounds 3.00 or \$5.00. **JE** E1, J64, O41. **KW** Endogenous Growth. Savings. Matching Models.

AB In this paper we highlight certain links between unemployment, savings and growth. Using a standard overlapping generations framework, modified to incorporate matching frictions in the labor market and a technology capable of yielding unbounded endogenous growth, we show that the cross-country bivariate correlation between unemployment and growth can be either positive or negative depending on the source of the differences in economic structures across countries.

Beetsma, Roel

PD October 1992. **TI** Exchange Rate Bands and Optimal Monetary Accommodation Under a Dirty Float. **AU** Beetsma, Roel; van der Ploeg, Frederick. **AA** Beetsma: Tilburg University. van der Ploeg: University of Amsterdam. **SR** CEPR Discussion Paper: 725; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 24. **PR** Pounds 3.00 or \$5.00. **JE** F31, F41, E52. **KW** Exchange Rate Regimes. Stochastic Simulation. Supply Shocks.

AB This paper studies regimes of managed exchange rates for a small open economy with an integrated capital market, rational expectations in financial markets, sluggish nominal wages and prices, and supply shocks that follow a Brownian motion. Each regime can be characterized by the degree to which price shocks are accommodated and the width of the exchange rate band. Special cases of monetary accommodation are a peg, a clean float and a PPP exchange rate rule. First, the optimal degree of monetary accommodation of price shocks is analyzed when there is no exchange rate band. Second, the effects of exchange rate bands and the accompanying inframarginal interventions are examined when allowance is made for intramarginal interventions as well.

Begg, David

PD June 1992. **TI** Enterprise Debt and Economic Transformation: Financial Restructuring of the State Sector in Central and Eastern Europe. **AU** Begg, David; Portes, Richard D. **AA** Birkbeck College, University of London.

SR CEPR Discussion Paper: 695; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 40. **PR** Pounds 3.00 or \$5.00. **JE** E44, G33, O16. **KW** Bankruptcy. Recapitalization.

AB Throughout Central and Eastern Europe (CEE), there is a widespread failure of enterprise debtors to make scheduled payments of principal and interest to creditors, who in turn have strong incentives not to declare bankruptcy. In such circumstances, the price mechanism does not properly guide the reallocation of resources. The normal process of exit in a market economy is suspended, and the disproportionate share of bank credit effectively going to refinancing of incumbents impedes entry. We argue that this may be the single most important obstacle to economic restructuring in CEE. We discuss the scope of and reasons for this problem; the inefficiencies it creates; and how to deal with it.

PD September 1992. **TI** Eastern Germany Since Unification: Wage Subsidies Remain a Better Way. **AU** Begg, David; Portes, Richard D. **AA** Birkbeck College, University of London. **SR** CEPR Discussion Paper: 730; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 31. **PR** Pounds 3.00 or \$5.00. **JE** J38, J61, O52. **KW** Germany. Migration. Labor Mobility.

AB In Spring 1991, we argued that the centerpiece of German policy towards unification should be a universal, temporary wage subsidy in Eastern Germany and the elimination of all other subsidies. Subsequent events have strengthened the analytical case for and practical importance of this policy. This paper describes the performance of the Eastern German economy since unification, the reasons behind it, and the principal policy responses. It then identifies the specific market failures attributable to unification and shows that the various current policy interventions are poorly targeted. Finally, the paper sets out our proposal, explains why it minimizes distortions, and deals with common objections to a wage subsidy.

Beggs, Alan

TI Simultaneous Versus Sequential Move Structures in Principal-Agent Models. **AU** Banerjee, Anindya; Beggs, Alan.

Beim, David O.

PD December 1992. **TI** Term Structure and the Non-Cash Values in Bonds. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-92-40; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 22. **PR** \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). **JE** E43, G14. **KW** Bond Prices. Market Frictions.

AB Market frictions enable bond prices to impound values other than the present value of their cash flows. When the term structure of interest rates is estimated with particular care, one can uncover and quantify such non-cash values. This provides answers to questions about tax clienteles, the representative bond investor, the value of bond liquidity, apparently negative call option values and other market anomalies.

Bellmann, Lutz

PD September 1992. **TI** The Eastern German Labour

Market in Transition: Gross Flow Estimates from Panel Data. AU Bellmann, Lutz; Estrin, Saul; Lehmann, Hartmut; Wadsworth, Jonathan. AA Bellmann: Institut für Arbeitsmarkt und Berufsforschung der Bundesanstalt für Arbeit. Estrin, Lehmann, and Wadsworth: London School of Economics. SR London School of Economics Centre for Economic Performance Discussion Paper: 102; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. PG 20. PR no charge. JE J40, P27, P17, E24. KW German Unification. Employment.

AB Following the unification of the two Germanies in October 1990, the former German Democratic Republic was subject to a series of economic shocks, resulting in large declines in output and employment. This paper investigates the behavior of the East German labor market during the initial stages of the transition to a market economy, using information contained in a unique longitudinal survey of GDR residents taken between November 1990 and November 1991. The study utilizes Markovian flow analysis of worker transitions between labor market states. The results demonstrate that the sharp increase in the stock of unemployment is mainly due to large inflows from employment into the state. Flows out of unemployment, however, have risen steadily throughout the sample period. Inter-industry flows have also increased, primarily into the emerging finance and service sectors. The results suggest that standard methodologies can have a useful role in the analysis of economies in transition.

Belongia, Michael T.

PD October 1992. TI Selecting An Intermediate Target Variable for Monetary Policy When the Goal is Price Stability. AU Belongia, Michael T.; Batten, Dennis S. AA Belongia: Federal Reserve Bank of St. Louis. Batten: Citibank, New York. SR Federal Reserve Bank of St. Louis Working Paper: 92-008A; Research and Public Information Division, Federal Reserve Bank of St. Louis, P.O. Box 442, St. Louis, MO 63166. PG 18. PR no charge. JE E51, E52. KW Monetary Policy. Monetary Controls. Price Stability.

AB Conventional investigations of the "best" intermediate target variable for monetary policy have used a single criterion: the best fit between the behavior of an aggregate and that of some goal variable such as nominal spending or the aggregate price level. Ignored in this type of study, however, is the ability of the central bank to control the behavior of the aggregate which has the best fit relative to the goal variable. This paper treats the issue of monetary control explicitly and selects an intermediate target variable on the basis of a joint criterion of monetary control and relationship with the aggregate price level. The results indicate that all of the traditional simple sum aggregates perform poorly relative to Divisia aggregates or the currency-equivalent (CE) measure recently proposed by Rotemberg, et al.

Beltratti, Andrea

PD September 1992. TI Option and Non-Use Values of Environmental Assets. AU Beltratti, Andrea; Chichilnisky, Graciela; Heal, Geoffrey M. AA Beltratti: University of Turin. Chichilnisky and Heal: Columbia University. SR Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-92-33; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. PG 9. PR \$5.00 academics and non-profit

institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). JE Q20, D46. KW Conservation. Shadow Prices.

AB See other entry.

PD September 1992. TI Option and Non-Use Values of Environment Assets. AU Beltratti, Andrea; Chichilnisky, Graciela; Heal, Geoffrey M. AA Beltratti: Università di Torino. Chichilnisky and Heal: Columbia University. SR Columbia University Department of Economics Discussion Paper: 620; Department of Economics, Columbia University, 420 W 118th St., Room 1022 IAB, New York, New York 10027. PG 10. PR \$5.00. JE Q20, D80. KW Option Value. Irreversibility. Non-Use Value.

AB It is widely recognized that the value of environmental assets such as biodiversity, unique locations and the atmosphere may be hard to quantify. In particular, option values, quasi-option values and non-use values have been the subject of extensive discussion. We propose here an evaluation of environmental assets based on the option value or shadow price associated with intertemporal welfare maximization under conditions of uncertainty about the future preferences. We show that these values can provide powerful motives for conservation of the goods, and are under certain conditions equivalent to a reduction in the discount rate to be applied to future benefits. We also show that the option value can be bounded below by a function of the degree of risk aversion and parameters of the probability distribution governing the uncertainty about future preferences.

Ben-Porath, Elchanan

PD December 1992. TI Rationality, Nash Equilibrium and Backward Induction in Perfect Information Games. AA Tel-Aviv University. SR Tel-Aviv Sackler Institute of Economic Studies Working Paper: 14-92; Department of Economics, Tel-Aviv University, Ramat Aviv 69978, Tel-Aviv, ISRAEL. PG 33. PR no charge. JE C72. KW Investment. Technological Change. Growth Accounting.

AB It is shown that in a generic perfect information game the set of outcomes that are consistent with common certainty of rationality (CCR) at the beginning of the game coincides with the set of outcomes that survive one deletion of weakly dominated strategies and then iterative deletion of strongly dominated strategies. Thus, the backward induction outcome is not the only outcome that is consistent with CCR. Next, it is shown that if, in addition to CCR, there is common certainty (CC) each player gives a positive probability to the true strategies and beliefs of the other players, and if there is CC of the support of the beliefs of each player, then the outcome of the game is a Nash equilibrium outcome. The paper concludes with an extension of the model which allows for the possibility of mistakes in the implementation of the strategies. It is shown that if, in addition to CCR, there is CC that there is a small probability of a mistake at every vertex, then the players choose the backward induction strategies.

Bennett, Elaine

PD July 1992. TI Odd Man Out: Bargaining Among Three Players. AU Bennett, Elaine; Houba, Harold. AA Bennett: Johns Hopkins University, Virginia Polytechnic Institute and University of California, Los Angeles. Houba: Free University, Amsterdam. SR Johns Hopkins Department of Economics Working Paper: 284; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218.

PG 55. PR no charge. JE C78. KW Bargaining. Cooperative Game Theory.

AB This paper considers three-player bargaining problems in which only the two-player coalitions can achieve any gains. The paper presents a cooperative model (the multilateral Nash solution of Bennett (1991a)) and a noncooperative model (the proposal-making model with discounting), and characterizes the cooperative and noncooperative solutions. These solutions are mutually reinforcing: For certain parameter values, the cooperative and noncooperative solutions coincide. For the remaining parameter values, the cooperative solutions form an interval; the noncooperative solution is one endpoint of this interval, and Binmore's (1985) market demand solution is the other endpoint of this interval.

Benoit, Jean-Pierre

PD June 1991. **TI** Voting Simply in the Election of Assemblies. **AU** Benoit, Jean-Pierre; Kornhauser, Lewis A. **AA** New York University. **SR** New York University Economic Research Report: 91-32; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG 28. PR no charge. JE D72, D71. KW Candidates. Social Choice.**

AB In many elections, citizens choose among candidates that then constitute assemblies rather than choose among assemblies directly. To understand these candidate-based procedures, we begin with the observation that the voter's preferences over assemblies, not candidates, are fundamental. Moreover, given her preferences over assemblies, a voter might derive a ranking of candidates in many different ways. We justify the common assumption of separable preferences over assemblies by making explicit the relation between separability and sincere voting. To do this, we introduce the notion of simple voting which extends the idea of sincere voting to candidate-based procedures. Intuitively, an individual votes simply when she does not regret the electoral success of candidates for whom she voted. We identify top-separability and separability of assembly preferences as necessary and sufficient conditions for simple voting over candidates and simple ranking of candidates, respectively, to be possible.

PD June 1991. **TI** Social Choice in a Representative Democracy. **AU** Benoit, Jean-Pierre; Kornhauser, Lewis A. **AA** New York University. **SR** New York University Economic Research Report: 91-33; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG 30. PR no charge. JE D71, D72, C70. KW Voting. Candidates. Assembly.**

AB In a representative democracy, citizens stand at two removes from legislation. First, they do not deliberate and vote directly on legislation. Rather they elect assemblies that enact such legislation in their stead. Second, and less commonly remarked, citizens do not vote directly for assemblies. Rather they vote for individual candidates, with the candidates receiving the most votes elected. This paper examines the efficiency properties of these voting systems. We show, first, that in general these procedures are inefficient. Second, we identify a condition on assembly preferences (called *k*-blockness) that insures the election of a Pareto-optimal assembly. We then prove two negative results. The first theorem shows that inefficiency may recur if all but two of the voters have *k*-block preferences. The second theorem shows that

whatever neutral restriction is imposed on preferences, an "almost inefficient" assembly may be elected.

Bentolila, Samuel

PD August 1992. **TI** A Model of Labour Demand with Linear Adjustment Costs. **AU** Bentolila, Samuel; Saint-Paul, Gilles. **AA** Bentolila: CEMFI. Saint-Paul: DELTA. **SR** CEPR Discussion Paper: 690; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG 35. PR Pounds 3.00 or \$5.00. JE J23. KW Unemployment. Labor Demand. Firing Costs.**

AB This paper formulates a discrete-time model to study the effects of firing costs on labor demand by a firm facing linear adjustment costs under serially independent productivity shocks. We show that a rise in firing costs reduces the firm's marginal propensities to hire and fire, and may increase or decrease its average steady-state labor demand.

Berechman, Joseph

PD June 1991. **TI** Airline Deregulation and the Choice of Networks. **AU** Berechman, Joseph; Shy, Oz. **AA** Tel-Aviv University. **SR** Tel-Aviv Sackler Institute of Economic Studies Working Paper: 2-91; Department of Economics, Tel-Aviv University, Ramat Aviv 69978, Tel-Aviv, ISRAEL. **PG 20. PR no charge. JE L93. KW Airline Deregulation. Hub and Spoke. Networks.**

AB In this paper we explore how incumbent airline firms restructure their route network in order to deter entry caused by deregulation. We demonstrate that under the threat of entry, following market deregulation, incumbent airline firms are more likely to operate hub-and-spoke type networks. In doing so, the firms will increase the frequency of service compared with a fully-connected type network case. Consequently, consumers' welfare will rise with deregulation.

Bergemann, Dirk

PD December 1992. **TI** Multiple Tasks in the Principal-Agent Model: A Generalized Portfolio Model. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences (CARESS) Working Paper: 92-33; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG 31. PR no charge. JE G10, G11, D82. KW Optimal Contract. Moral Hazard. Multiple Tasks. Incentive Compatibility.**

AB The design of an optimal contract between a risk-neutral principal and a risk-averse agent is examined. The agent's choice space is multi-dimensional and subject to moral hazard. The fine structure of the optimal contract reveals that underlying the multiple task model is a classic portfolio model augmented by incentive compatibility requirements. The exact conditions under which a solution to the (unrelaxed) continuous action, continuous outcome contract model exists are spelled out. They relax the conditions given by Holmstrom (1978). The basic first order approach is extended to multiple and not necessarily independent tasks. We include the case of correlated outcomes and derive the appropriate conditions. Finally some applications are considered.

Berglas, Eitan

PD August 1991. **TI** Transaction Costs in a Tiebout Setup. **AU** Berglas, Eitan; Pines, David. **AA** Tel-Aviv University. **SR** Tel-Aviv Sackler Institute of Economic Studies Working Paper: 9-91; Department of Economics, Tel-Aviv University, Ramat Aviv 69978, Tel-Aviv, ISRAEL. **PG** 24. **PR** no charge. **JE** D70, H41, H71. **KW** Clubs. Local Public Goods. Transaction Costs. Local Taxes.

AB The paper investigates the efficiency of Tiebout-type equilibria with profit maximizing suppliers of LPG's (local public goods) when consumption monitoring is expensive. The paper discusses two distinct issues. The first is whether the policy instruments available to a developer are as effective as those available to a local government in handling second-best situations. The second is the efficiency of allocations resulting from using the profit-maximizing criterion by the supplier of the LPG. Regarding the first issue, the comparison is not conclusive; the instrument package available to each of these agents has its advantages and disadvantages. Regarding the second issue, it is asserted that with heterogeneous population, the use of inefficient monitoring may sometimes be motivated by the profit-maximizing criterion, whether applied by developers or local governments. The analysis suggested in this paper provides a useful framework for studying optimal taxation in the local governments framework.

PD September 1992. **TI** Transaction Costs in a Tiebout Setup. **AU** Berglas, Eitan; Pines, David. **AA** Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 19/92; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, ISRAEL. **PG** 26. **PR** no charge. **JE** D71, H41, H71. **KW** Efficiency. Tiebout-Type Allocation.

AB The paper addresses three issues associated with Tiebout-type equilibrium with profit maximizing suppliers of LPG (Local Public Goods) when monitoring the use of public facilities and collecting the appropriate user charge is too expensive: (a) Is, indeed, the property tax a second-best instrument? (b) Given the set of feasible instruments menu (provision of the LPG and taxes), is a Tiebout-type allocation with profit maximizing suppliers of the LPG constrained efficient? (c) Given the ranking of instruments, are profit maximizing developers better equipped with instruments conducive to (constrained) efficiency than land rent maximizing local jurisdiction or vice-versa? The concept of second and lower bests are discussed in the context of optimal taxation and the role of property tax in this framework is then spelled out. It is shown that the property tax is not necessarily a second-best instrument, that Tiebout-type equilibrium is constrained efficient, and that developers in the strict sense lack the second-best instruments which are available to local governments.

Bernstein, Jeffrey I.

PD August 1991. **TI** Price Margins and Capital Adjustment: Canadian Mill Products and Pulp and Paper Industries. **AA** Carleton University and National Bureau of Economic Research. **SR** New York University Economic Research Report: 91-42; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 21. **PR** no charge. **JE** D21, L73. **KW** Competition. Non-Competitive Behavior.

AB The purpose of this paper is to estimate a model incorporating non-competitive behavior in product and factor markets. In addition, capital accumulation is subject to adjustment costs so that firms are not constrained to be in long-run equilibrium. The model is applied to two major Canadian manufacturing industries: pulp and paper and mill products. The results show for both industries in each of the three product markets and the wood input market that there is competitive behavior. In addition, the industries are not in long-run equilibrium as marginal adjustment costs cause marginal profit to exceed the rental rate on capital. With the industries exhibiting short-run competitive behavior in product and factor markets, new estimates are derived for scale economies and rates of technological change.

Bertola, Giuseppe

PD March 1992. **TI** Models of Economic Integration and Localized Growth. **AA** Princeton University. **SR** CEPR Discussion Paper: 651; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 29. **PR** Pounds 3.00 or \$5.00. **JE** O11, O19. **KW** Externalities. Factor Mobility. European Community.

AB Economic integration and free factor mobility may be expected to enhance the growth performance of a united Europe. Simple models of integration among independent, endogenously-growing economic entities suggest that factor mobility may deepen rather than reduce regional differences in economic performance, however. This paper studies interactions between static geographical externalities and dynamic investment decisions, and it finds that economic integration need not result in more efficient factor allocations or faster growth.

Betancourt, Roger

PD September 1990. **TI** The Outputs of Retail Activities: Concepts, Measurement and Evidence. **AU** Betancourt, Roger; Gautschi, David. **AA** Betancourt: University of Maryland and INSEAD. Gautschi: Yale University and INSEAD. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 90/75/MKT; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 25. **PR** not available. **JE** L11, D40. **KW** Retail Activities. Retail Margins. Profits.

AB In this paper we develop a new economic framework for the empirical analysis of retail margins. This framework departs from the definition of profits and incorporates recent theoretical developments formalizing the role of distribution services as outputs of retail activities. Since the theory implies a nonlinear functional form, nonlinear least squares is the main estimation method. Our main results are: the measures of outputs of retail activities identified in the data perform as important and robust determinants of retail margins; variables that capture oligopolistic features of market structure play a limited or no role in determining retail margins; the hypothesis of quantity setting behavior is categorically rejected by the data; retail firms will evolve to provide lower accessibility of location for the typical consumer in terms of distance but they will provide his or her with broader assortments and more information.

Bhasker, V.

PD November 1992. **TI** Investment and Profitability: The Evidence from the Advanced Capitalist Countries.

AU Bhasker, V.; Glyn, Andrew. AA Bhasker: Delhi School of Economics. Glyn: University of Oxford. SR Oxford Applied Economics Discussion Paper Series: 144; Institute of Economics and Statistics, St Cross Building, Manor Road, Oxford OX1 3UL. PG 15. PR 2 pounds. JE D92, L10. KW Profitability. Investment. Profit Margin. AB The purpose of the paper is to investigate the relationship between profitability and investment in the biggest seven advanced capitalist countries over the period 1952-88. A simple model is constructed where the achieved profit margin affects investment, along with demand and relative cost variables. When such a model is estimated profitability appears to be of similar significance to the other two variables. It seems that in Germany, Japan and to a lesser extent the USA, lower profitability in the 1980's than the 1960's explains a substantial part of the decline in investment levels.

Bhattacharya, Utpal

PD November 1992. TI The Advantage to Hiding One's Hand: Speculation and Central Bank Intervention in the Foreign Exchange Market. AU Bhattacharya, Utpal; Weller, Paul. AA University of Iowa. SR CEPR Discussion Paper: 737; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 26. PR Pounds 3.00 or \$5.00. JE D82, D84, E58, F31, G15. KW Speculation. Exchange Rates. Target Zones. AB Using a portfolio balance model of exchange rate determination, this paper develops a theoretical explanation of why central banks do not make precise announcements of their exchange rate targets. In foreign exchange markets, where it is common knowledge that the central bank intervenes to stabilize the spot exchange rate around some target level, foreign exchange traders can exploit this fact to earn speculative profits from the central bank: this may cause the bank's reserves to fall to dangerous levels. We show that if the central bank is imprecise about its exchange rate targeting, it can use this informational advantage not only to reduce its reserve losses, but also to extract all relevant "fundamental" information from the traders.

Bhatti, Muhammad Ishaq

PD December 1992. TI Efficient Estimation of Random Coefficients Model Based on Survey Data. AA Monash University and Griffith University. SR Monash Department of Econometrics Paper: 13/92; Department of Econometrics and Operation Research, Faculty of Economics and Politics, Monash University, Clayton, Victoria 3168, Australia. PG 14. PR no charge. JE C13, C42, Q10. KW Bangladesh. Agricultural Survey. Block Effects. Survey Data. AB Much applied work in econometrics and other social sciences involves regression analysis using survey data. Recently, King and Evans (1986) and Bhatti (1991) considered an equicorrelated error term model with fixed coefficients and proposed some diagnostic tests for detecting the equicorrelated parameter (ρ). This paper considers an efficient estimation procedure for the linear regression model with stochastic coefficients and equicorrelated disturbances across blocks. An algorithm for the maximum likelihood estimator is presented, after King (1986), for an error components model. Its application to a model based on Bangladesh data is discussed.

Bisat, Amer

PD October 1992. TI Issues in Managing and Sequencing Financial Sector Reforms Lessons from Experiences in Five Developing Countries. AU Bisat, Amer; Johnston, R. Barry; Sundararajan, V. AA International Monetary Fund. SR International Monetary Fund Working Paper: 92/82; International Monetary Fund, Washington, DC 20431. PG 83. PR not available. JE G21, G52, E44, O16, P52. KW Financial Systems. Financial Sector Reforms. Developing Countries. AB A review of the experience of five developing countries in reforming their financial systems illustrates the benefits and risks, and provides lessons on the factors which contribute to successful financial sector reforms. Financial sector reforms need to be supported by active monetary policy, and the adoption of new monetary control procedures early in the reform program; reforms should be sequenced consistently with the broader program of macroeconomic adjustment. The pace of liberalization of interest rates and credit should also take account of the solvency of financial and nonfinancial firms. A minimal system of prudential regulation is an essential element of successful financial sector reform.

Biskup, Jozef

TI Creation of Free Trade Area. Czechoslovakia - Hungary - Poland: Consequences for the Polish Economy. AU Guzek, Marian; Biskup, Jozef; Kawecka-Wyrzykowska, Elzbieta.

Bladen-Hovell, Robin

TI Instability of the Velocity of Money: A New Approach Based on the Evolutionary Spectrum. AU Artis, Michael J.; Bladen-Hovell, Robin; Nachane, Dilip.

Block, Michael K.

PD May 1992. TI Some Experimental Evidence on Differences Between Student and Prisoner Reactions to Monetary Penalties and Risk. AU Block, Michael K.; Gerety, Vernon E. AA Block: University of Arizona. Gerety: AT&T. SR University of Arizona Economics Working Paper: 92-30; Department of Economics, McClelland Hall - Rm. 401, University of Arizona, Tucson AZ 85721. PG 17. PR \$2.00 U.S. and Canada; \$3.00 Overseas by air. JE K42, D80, L49. KW Crime. Experimental Economics. Punishment. Deterrence.

AB In this paper we report on a series of laboratory experiments that investigate whether there are differences between criminals and the general population in their relative responsiveness to changes in the certainty and severity of punishment. The results of these experiments show that, while criminals are no less able than the general population to determine their financial self interest, there are significant differences between these two groups in the effectiveness of increases in the certainty and severity of punishment in deterring anti-social behavior. Criminals appear much more responsive to the certainty of punishment than to its severity. Non-criminal students on the other hand, consistent with a general aversion to risk, are more easily deterred by increases in severity than increases in the certainty of punishment.

Bloom, David E.

PD August 1992. TI Projecting the Number of New AIDS Cases in the U.S. AU Bloom, David E.; Glied, Sherry. AA Columbia University. SR Columbia University

Department of Economics Discussion Paper: 615; Department of Economics, Columbia University, 420 W 118th St., Room 1022 IAB, New York, New York 10027. PG 21. PR \$5.00. JE I10. KW AIDS. Back Calculation. Extrapolation. Health.

AB This paper reviews the two leading methods used to project the number of AIDS cases: back calculation and extrapolation. These methods are assessed in light of key features of the HIV/AIDS epidemic and of data on the epidemic; they are also assessed in terms of the quality of the projections they yield. Our analysis shows that both methods have tended to overproject, often by sizable amounts, the number of AIDS cases in the U.S., especially among homosexual/bisexual males and users of blood and blood products. The overprojections appear to be mainly the result of a considerable reduction in the rate of new HIV infection among the gay community starting in 1983-85. A new method for projecting AIDS cases is proposed that exploits knowledge about the process generating AIDS cases and that incorporates readily available information about rates of new HIV infection. This method is far less sensitive to estimates of the incubation distribution than the method of back calculation and is shown, for the two transmission categories studied, to generate far more accurate AIDS case projections through 1990 than those based on the method of extrapolation.

Blundell, Richard

TI Quadratic Engel Curves, Welfare Measurement and Consumer Demand. AU Banks, James; Blundell, Richard; Lewbel, Arthur.

Boadway, Robin

PD October 1992. TI Investment in Education and the Time Inconsistency of Redistributive Tax Policy. AU Boadway, Robin; Marceau, Nicolas; Marchand, Maurice. AA Boadway: Queen's University. Marceau: Universite Laval. Marchand: Universite Catholique de Louvain. SR Queen's Institute for Economic Research Discussion Paper: 860; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. PG 22. PR \$3.00 Canada; \$3.50 U.S. and elsewhere. JE H23, H24, I28. KW Taxation.

AB Time inconsistency of tax policy is shown to arise in a setting in which households differ in their ability to accumulate wealth and the government has redistributive objectives. The government can levy non-distorting taxes but is precluded from redistributing optimally by a self-selection constraint. The analysis is done for the case in which all wealth is human capital, and education is a private good. An argument can be made for public intervention in the provision of education.

Bofinger, Peter

PD May 1992. TI A Multilateral Payments Union for the Commonwealth of Independent States: Why and How? AU Bofinger, Peter; Gros, Daniel. AA Bofinger: Universitat Wurzburg. Gros: Centre for European Policy Studies. SR CEPR Discussion Paper: 654; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 25. PR Pounds 3.00 or \$5.00. JE E42, E58, F15, F33, F36. KW Payments Union. Economic Transition. Soviet Union. Commonwealth of Independent Nations.

AB The paper discusses the institutional arrangements of a

multilateral payments union for the Commonwealth of Independent States. It starts with an analysis of the risks of a non-cooperative solution, which would lead to serious liquidity and solvency problems and thus curtail inter-republican trade by a widespread system of bilateralism. A possible solution to these problems is an internal fixed exchange rate system along the lines of the EMS. The feasibility of this arrangement depends above all on Russia's ability to pursue non-inflationary monetary and fiscal policies. If this approach is not adopted and if most republics peg their currencies to the ECU, the transactions and precautionary demand for reserves can be considerably reduced by a multilateral payments union, which acts as a common clearing house and provides a common credit facility to its members.

PD June 1992. TI Some Lessons from Economic Transformation in East Germany. AU Bofinger, Peter; Cernohorsky, Ivan. AA Universitat Wurzburg. SR CEPR Discussion Paper: 686; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 21. PR Pounds 3.00 or \$5.00. JE P21, O52, O57. KW German Unification. Stabilization. Transition Economies.

AB The paper compares the experience with shock therapies in East Germany, Poland and the CSFR. After an analysis of the individual starting conditions and economic performance since the inception of comprehensive reform programs it focuses on the specific elements of the East German reform strategy. It shows that the short-term impact of huge transfers from West to East Germany was not necessarily positive for East German firms. It identifies the lack of incomes policies as a major flaw in the East German transformation concept. On the positive side the rapid restructuring of the East German financial sector allowed it to overcome the inefficiencies that characterize the banking systems and enterprise finance in Poland and the CSFR.

Bogart, William T.

PD June 1991. TI Property Taxes, Homeownership Capitalization Rates, and Housing Consumption. AU Bogart, William T.; Voith, Richard P. AA Bogart: Case Western Reserve University. Voith: Federal Reserve Bank of Philadelphia. SR Federal Reserve Bank of Philadelphia Research Working Paper: 91-13; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. PG 16. PR no charge except for overseas airmail, \$2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. JE H20, R20. KW Ownership Capitalization. Property Tax.

AB This paper extends a technique for estimating ownership capitalization rates to examine property tax capitalization and incidence. Using a cross section of owners and renters from the 1982 Annual Housing Survey for the Philadelphia SMSA, we estimate capitalization rates that vary by age, income, preference for home ownership, and property tax rate. We find that property taxes increase capitalization rates more for low income and very high income people. The evidence is consistent with a model of local governments targeting property tax and service levels to the median voter. We present estimates of the consumption tax rate on housing services, and find the property tax to be progressive in the low and moderate income ranges, but regressive at high income levels.

PD October 1992. **TI** Incidence and Allocation Effects of a State Fiscal Policy Shift: The Florio Initiatives in New Jersey. **AU** Bogart, William T.; Williams, Michael G.; Bradford, David F. **AA** Bogart: Case Western Reserve University. Williams: Securities and Exchange Commission. Bradford: Council of Economic Advisors. **SR** National Bureau of Economic Research Working Paper: 4177; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 26. **PR** \$3.00. **JE** H23, H24, R23, H22. **KW** Tax Reform. Migration. Wealth Redistribution.

AB We calculate the incidence of recent changes to the New Jersey state tax system on a sample of homeowners. Our analysis distinguishes between business-as-usual responses to an evolving fiscal situation and tax changes that constitute a surprise. The latter have incidence effects; the former do not. We conclude that, if the changes carried out by NJ Governor Jim Florio are regarded as permanent, they effected a one-time wealth redistribution from, on average, higher-income homeowners toward lower-income homeowners and from owners of suburban residential property toward owners of urban residential property. Although effects on the averages for identifiable groups are clear and significant there is very considerable variation in the effects on individual homeowners within groups. We also estimate the allocation effects of the tax changes using a general equilibrium model that incorporates the option of in-and out-migration. The results suggest that the changes will induce a sizable migration of wealthy and high-income people out of the state.

Boldrin, Michele

PD November 1992. **TI** Public Education and Capital Accumulation. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1017; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208. **PG** 27. **PR** Per copy: \$3.00 in the U.S.A. or Canada; \$5.00 via international mail. Make checks payable to Northwestern University. **JE** D91, H30, H40, I22, O11. **KW** Human Capital. Development. Vouchers. Political Equilibrium.

AB I study an overlapping generations model where physical and human capitals are used in production and can be accumulated by withholding resources from current consumption. Human capital is accumulated through a schooling system which can be financed either by private expenditures or by taxes on current income or by a combination of both. In a political equilibrium with majority voting, the median voter may approve of public school financing as an instrument to solve a "free rider problem". The model is shown to display a poverty trap as well as persistent growth. I am able to fully characterize the global dynamics of the model, which delivers a number of interesting and potentially testable hypotheses on the relation between income growth, capital accumulation and the development of public education.

Bolton, Patrick

TI Government Domestic Debt and the Risk of Default: A Political-Economic Model of the Strategic Role of Debt. **AU** Aghion, Philippe; Bolton, Patrick.

Bonanno, Giacomo

PD December 1992. **TI** Nash Versus Subgame-Perfect

Equilibrium: The Role of Information. **AA** University of California, Davis. **SR** University of California at Davis Economics Department Working Paper: 417; Department of Economics, University of California at Davis, Davis, CA 95616. **PG** 19. **PR** \$3.00 U.S. and Canada. \$4.00 international. **JE** C72. **KW** Information. Beliefs. Nash Equilibrium. Subgame-Perfect Equilibrium.

AB We consider an extensive game in this paper. In this game four properties define the notion of a well-behaved profile of beliefs. To every profile of beliefs there corresponds a strategy profile. We consider how two different information functions affect the equilibrium properties of the profiles of beliefs.

Bonissone, Piero

TI Computer Support for Strategic and Tactical Planning in Mergers and Acquisitions. **AU** Dutta, Soumitra; Bonissone, Piero.

Borensztein, Eduardo R.

PD October 1992. **TI** Structural and Macroeconomic Determinants of the Output Decline in Poland: 1990-91. **AU** Borensztein, Eduardo R.; Ostry, Jonathan D. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 92/86; International Monetary Fund, Washington, DC 20431. **PG** 26. **PR** not available. **JE** E20, O50, P50. **KW** Poland. Market Reform.

AB This paper addresses two questions relating to the output decline in Poland since the initiation of market-oriented reforms at the beginning of 1990. First, to what extent is the decline in output a generalized phenomenon, rather than reflecting the short-term effects of resource reallocation in response to the new relative price structure? Second, what have been the main macroeconomic determinants of the output decline? In response to the first question, the paper finds relatively little evidence to favor a "structural change" view of the output decline. As far as the second question is concerned, the paper finds that both supply-side and demand-side factors have played a role, depending on the specific time period being considered.

Bossert, Walter

PD October 1992. **TI** An Alternative Characterization of Paretian Generalized Median Social Welfare Functions. **AU** Bossert, Walter; Weymark, John A. **AA** Bossert: University of Waterloo. Weymark: University of British Columbia and Johns Hopkins University. **SR** Johns Hopkins Department of Economics Working Paper: 293; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 9. **PR** no charge. **JE** D71. **KW** Arrovian Social Choice. Median Voter.

AB This article considers social welfare functions for which the set of alternatives is the two-dimensional nonnegative orthant and for which individuals can have any strictly monotonic, linear preference ordering. A Paretian generalized median social welfare function is defined by augmenting the n individuals in society with $n-1$ phantom individuals each of whom has a fixed weakly monotonic, linear ordering and, for each profile of preferences, choosing the social preference to be the linear preference with slope equal to the median of all $2n-1$ individual slopes. The main theorem in this article provides an axiomatization of this class of social welfare functions.

Boyer, George R.

TI The Union Wage Effect in Late Nineteenth Century Britain. **AU** Hatton, Timothy J.; Boyer, George R.; Bailey, Roy E.

Bradford, David F.

TI Incidence and Allocation Effects of a State Fiscal Policy Shift: The Florio Initiatives in New Jersey. **AU** Bogart, William T.; Williams, Michael G.; Bradford, David F.

Brams, Steven J.

PD May 1991. **TI** When is it Rational to be Magnanimous in Victory? **AU** Brams, Steven J.; Mor, Ben D. **AA** New York University. **SR** New York University Economic Research Report: 91-27; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 29. **PR** no charge. **JE** C71, C72, H56. **KW** War. Magnanimity.

AB There are two contending schools of thought on how a victor should treat a defeated party after a war or other major dispute. While magnanimity may quell the desire of the defeated party for revenge, it may also be instrumental in the defeated party's resurrection. Similarly, the defeated party may face the conflicting choices of whether to cooperate or not cooperate with the victor. These interdependent choices are modeled by a generic "magnanimity game" (MG), which subsumes different strategic situations that may arise in the aftermath of victory. Two types of victor and six types of the defeated party define twelve specific games. General conditions under which each of the different outcomes in MG is rational are derived. A defeated party may benefit from "moving power," but its effects may take considerable time to realize if information is incomplete. Historical examples from 19th and 20th-century wars and crises illustrate other outcomes in MG.

PD June 1991. **TI** Games Theory and Literature. **AA** New York University. **SR** New York University Economic Research Report: 91-29; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 31. **PR** no charge. **JE** C70, A12. **KW** Game Theory. Fiction.

AB Applications of noncooperative game theory to novels, short stories, plays, a narrative poem, and an opera are surveyed from both an historical and a critical perspective, based in part on responses to a questionnaire. While some analyses shed light on literary issues, such as the role of emotions or the rationality of character choices that culminate in tragedy, others highlight game-theoretic issues, such as problems of coordinating choices or building reputations when information is incomplete. Several models indicate a sophisticated understanding of plots and character motives and make use of advanced game-theoretic tools, whereas other applications are quite trivial and offers little insight into a literary work.

PD June 1991. **TI** A Generic Negotiation Game. **AA** New York University. **SR** New York University Economic Research Report: 91-31; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 18. **PR** no charge. **JE** C71, C72. **KW** Incomplete Information. Cooperation.

AB A generic Negotiation Game (NG) is used to model a

conflict between two parties seeking to resolve their differences and reach a settlement. NG is a 2 x 2 nonconstant-sum symmetric game that is "generic" in the sense that its payoffs, which are assumed to be cardinal, are only incompletely specified. Consequently, conclusions drawn about it are applicable to all games with which it is consistent, including such well-known games as Prisoners' Dilemma, Chicken, Deadlock, and Stag Hunt. NG may be in exactly one of four mutually exclusive "states," with different pure-strategy Nash equilibria associated with each state: (1) conflict alone; (2) cooperation alone; (3) a combination of conflict and cooperation; and (4) two win-lose outcomes, each of which favors a different player. The most potent force driving NG toward state (2) is reducing the difference between winning and losing; increasing the rewards of cooperation and the penalties of conflict are not as helpful unless they occur in tandem. Normative implications of these results for encouraging negotiated settlements are discussed.

PD July 1991. **TI** Arbitration Procedures. **AU** Brams, Steven J.; Kilgour, D. Marc; Merrill, Samuel. **AA** Brams: New York University. Kilgour: Wilfrid Laurier University. Merrill: Wilkes University. **SR** New York University Economic Research Report: 91-38; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 26. **PR** no charge. **JE** D74, C78. **KW** Bargaining. Conflict Resolution.

AB Conventional arbitration in which an arbitrator is free to choose any settlement in a two-party dispute, is compared with several alternative arbitration procedures: 1. Final-Offer Arbitration (FOA) permits each party to submit a so-called final offer; the arbitrator is restricted to choosing one or the other final offer and cannot split the difference. 2. Combined Arbitration uses FOA if the arbitrator's preferred position is between the two final offers; if the arbitrator's position is outside these offers, Conventional Arbitration is used. 3. Two-Stage FOA. Two-Stage FOA allows the initial loser under FOA to respond with a counteroffer; if the arbitrator prefers the counteroffer, the settlement is the average of this counteroffer and the initial winner's offer; otherwise, the initial winner's offer is chosen. A game-theoretic analysis of optimal strategies shows that Combined Arbitration and Two-Stage FOA lead to the greatest convergence but not the same settlement.

PD August 1991. **TI** Three Solutions to Divide the Dollar. **AU** Brams, Steven J.; Taylor, Alan D. **AA** Brams: New York University. Taylor: Union College. **SR** New York University Economic Research Report: 91-43; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 22. **PR** no charge. **JE** C72. **KW** Egalitarian Equilibrium. Multiple Equilibria.

AB Divide the Dollar (DD) is a game in which two players independently propose a division of a dollar into cents, with each demanding a certain amount. If the sum of their demands does not exceed 100, then each receives what it bids; otherwise, both receive nothing. This game has multiple Nash equilibria, including the egalitarian division of (50,50), but this division is not compelling except for its symmetry and presumed fairness. Alterations in the rules of DD are proposed that give the players noncooperative reasons for choosing the egalitarian equilibrium. Three procedures are compared on the basis of the rectifiability of their strategies and the computability of their solutions. Each illustrates how changing either the information

structure or the payoff function of DD can facilitate rational calculations by the players. In particular, the revisions of DD enable the players to avoid DD's indeterminacy render the selection of the egalitarian equilibrium not only rational but also implementable by only one player.

PD August 1991. **TI** Game Theory and Multilateral Negotiations: The Single European Act and the Uruguay Round. **AU** Brams, Steven J.; Doherty, Ann E.; Weidner, Matthew L. **AA** Brams: New York University. Doherty and Weidner: Unknown. **SR** New York University Economic Research Report: 91-45; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 27. **PR** no charge. **JE** D72, F13, F14, C70. **KW** Trade Negotiations. European Community.

AB The Single European Act (SEA) institutionalized qualified-majority voting for most decisions of the European Community (EC) Council of Ministers that pertain to the "internal market." The de jure Banzhaf voting power of members of the Council is compared with their power under the assumption that France and Germany have de facto vetoes in a new weighted voting body. The power of plausible groupings of members is also analyzed and related to the negotiations leading to the SEA. A 3-person game is used to analyze the negotiations among the U.S., the EC, and Japan on two major issues related to the liberalization of trade, agricultural price supports and access to markets. A dynamic negotiation model illustrates both the conditions that led to the conflict and what compromises will be needed to overcome it.

Brenner, Robin J.

PD May 1992. **TI** Arbitrage and Cointegration. **AU** Brenner, Robin J.; Kroner, Kenneth F. **AA** University of Arizona. **SR** University of Arizona Economics Working Paper: 92-25; Department of Economics, McClelland Hall - Rm. 401, University of Arizona, Tucson AZ 85721. **PG** 23. **PR** \$2.00 U.S. and Canada; \$3.00 Overseas by air. **JE** G14, G13, C32. **KW** Arbitrage. Cointegration. Simple Efficiency.

AB There exists a large literature on cointegration in financial markets which finds that spot and forward (futures) rates in some markets (e.g. currency markets) are cointegrated with cointegrating vector (1,-1), while in other markets (e.g. commodity markets) they are not cointegrated, though very little work has been done to examine the reasons for these results. In this paper we present the relationship between arbitrage pricing and cointegration, and show that the existence of cointegration depends on the time series properties of the cost-of-carry. We argue that the conditions for cointegration are more likely to hold in currency markets than in commodity markets, which explains the empirical results mentioned above. Several implications of our model are also discussed. For example, we show that even in efficient markets, spot and futures prices need not be cointegrated. We also show why the simple efficiency hypothesis is often rejected, and provide an explanation for why the risk premium is time varying.

Brenton, Paul A.

PD September 1992. **TI** Estimates of Bilateral Trade Elasticities and Their Implications for the Modelling of '1992'. **AU** Brenton, Paul A.; Winters, L. Alan. **AA** University of Birmingham. **SR** CEPR Discussion Paper: 717; Centre for Economic Policy Research, 25-28 Old Burlington Street,

London W1X 1LB, UNITED KINGDOM. **PG** 32. **PR** Pounds 3.00 or \$5.00. **JE** F13, F14, F15, F17. **KW** Elasticities. Estimation.

AB In this paper we use detailed trade and production data and a theoretically consistent model of demand - the Almost Ideal Demand System - to estimate bilateral trade elasticities, the key parameters required for quantification of the effects of the "1992" program. Initial results for 70 West German manufacturing industries suggest that price elasticities are relatively low. If the responsiveness to price changes is really as low as these results suggest the effects of "1992" may be quite different from that normally discussed. The impact of the program will be felt most strongly in those industries currently subject to quantitative constraints.

Broadberry, Stephen N.

PD July 1992. **TI** Manufacturing and the Convergence Hypothesis: What the Long-Run Data Show. **AA** University of Warwick. **SR** CEPR Discussion Paper: 708; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 22. **PR** Pounds 3.00 or \$5.00. **JE** O47, O52, O57. **KW** Labor Productivity. Manufacturing.

AB The commonly accepted chronology for comparative productivity levels based on GDP data does not apply to the manufacturing sector, where there is evidence of a much greater degree of stationarity of comparative labor productivity performance among the major industrialized countries of Germany, the United Kingdom and the United States. These results for manufacturing suggest that convergence of GDP per worker must have occurred through trends in other sectors and through compositional effects of structural change. The persistent large labor productivity gap between the US and Europe cannot be explained simply by differences in capital per worker, but is related to technological choice.

Brociner, Andrew

PD May 1992. **TI** Fiscal Policy Coordination and EMU: A Dynamic Game Approach. **AU** Brociner, Andrew; Levine, Paul. **AA** University of Leicester. **SR** CEPR Discussion Paper: 639; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 31. **PR** Pounds 3.00 or \$5.00. **JE** F15, F36, F42. **KW** Reputation. Barro-Ricardian Neutrality. Externality.

AB This paper considers fiscal policy coordination in a European Economic and Monetary Union (EMU). We use an overlapping generations model which leads to departures from Barro-Ricardian neutrality. In our calibrated model, however, we find these departures to be rather small. Two models are considered: EMU with one good; and a two-good EMU. We find that in the two-good EMU model, as relative prices can change, countries have an incentive to improve their terms of trade. This externality together with increased real interest rates leads to an inefficient outcome in the non-cooperative case. Thus fiscal policy coordination can lead to significant welfare gains. With government spending externalities, however, the negative externalities can offset positive ones arising from government spending. Furthermore, in the one-good EMU model, cooperation can be counterproductive. We conclude that the case for fiscal policy coordination depends upon the nature of both the economic integration in Europe and the externalities from government spending.

Buiter, Willem H.

PD June 1992. TI Should We Worry About the Fiscal Numerology of Maastricht? AA Yale University. SR CEPR Discussion Paper: 668; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 22. PR Pounds 3.00 or \$5.00. JE E61, F15, F33, H63, H87. KW EMU. Convergence. Public Debt.

AB The paper reviews and evaluates in a non-technical manner the economic and political arguments for and against the two fiscal convergence criteria written into the Treaty of Maastricht and its Protocols. In order to qualify for full membership in Economic and Monetary Union (EMU), net general government borrowing may not exceed 3% of GDP and general government gross debt may not exceed 60% of GDP. The paper concludes that the adoption of these two universal fiscal reference values is without theoretical or practical foundation. Attempts to meet these fiscal norms would result in unnecessary hardship for a number of countries and a deflationary fiscal stance for the EC as a whole.

PD August 1992. TI Government Solvency, Ponzi Finance and the Redundancy and Usefulness of Public Debt. AU Buiter, Willem H.; Kletzer, Kenneth M. AA Yale University. SR CEPR Discussion Paper: 680; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 38. PR Pounds 3.00 or \$5.00. JE E61, E62, H20. KW Tax Capacity.

AB We investigate how the ability of the government to depart from budget balance and issue debt expands the set of equilibria that can be supported using lump-sum tax-transfer instruments. We show how this depends on the restrictions that exist on the capacity to tax and make transfer payments, and what these restrictions imply for the government's ability to issue debt.

Burda, Michael C.

PD June 1990. TI Gross Labour Market Flows in Europe: Some Stylized Facts. AU Burda, Michael C.; Wyplosz, Charles. AA Burda; INSEAD, OFCE, and Centre for Economic Policy Research. Wyplosz; INSEAD and Centre for Economic Policy Research. SR INSEAD Working Papers: 90/51/EP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 24. PR not available. JE E24, E32. KW Labor Market. Unemployment. Business Cycles.

AB The purpose of this paper is to establish some stylized facts on gross labor market flows - using mostly new data from France, Germany, the U.K. and the U.S. - which any theory of unemployment ought to explain. The regularities on gross labor market flows that we isolate are inconsistent with a large class of theories of labor markets and business cycles. Key results are: flows into and out of unemployment are countercyclical; these flows move tightly together, over both the cycle and the long run; the bulk of exits from unemployment actually represent job findings rather than exits from the labor force; employment inflows and outflows are procyclical.

PD June 1990. TI The Consequences of German Economic and Monetary Union. AA INSEAD, OFCE, and Centre for Economic Policy Research. SR INSEAD Working Papers: 90/53/EP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 27. PR not

available. JE F15, O52. KW Germany. German Unification.

AB This paper analyzes some of the consequences of the pending economic and monetary union of the two Germanies. Particular emphasis is given to the real implications for the supply side of the German Democratic Republic and for resource flows between the two economic regions.

PD July 1990. TI Intertemporal Prices and the U.S. Trade Balance. AU Burda, Michael C.; Gerlach, Stefan. AA Burda; INSEAD and Centre for Economic Policy Research. Gerlach; Brandeis University. SR INSEAD Working Papers: 90/55; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 24. PR not available. JE F14. KW Durable Goods. Trade Deficit.

AB The deterioration of the U.S. merchandise trade deficit since 1982 has fallen mostly on durable goods. Using a representative agent model, we show that the key distinction between the trade balance in nondurables and durables is the role of intertemporal prices in the latter. A decrease in intertemporal prices associated, for example, with an exchange rate overvaluation should therefore be expected to worsen the trade balance in durables more than in nondurables. This interpretation of the compositional changes of the U.S. trade balance is supported by our econometric findings.

PD October 1990. TI Exchange Rate Dynamics and Currency Unification: The Ostmark-DM Rate. AU Burda, Michael C.; Gerlach, Stefan. AA Burda; INSEAD, Gerlach; Brandeis University. SR Unite de Recherche Document de Travail ENSAE/INSEE: 90/78/EP; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. PG 17. PR not available. JE F31, F33. KW Exchange Rates. Monetary Union.

AB This paper studies the exchange rate between the East and West German mark in the period before the German monetary union. We show that standard exchange rate theory contains strong predictions about the dynamics of the exchange rate under these circumstances, and use state space methods to estimate key parameters of the model. A random walk model fits the first half of the data well, during which it was unclear that monetary union would occur. In the second half, when union was expected, the Ostmark rate behaves as a weighted average of fundamentals and the expected terminal exchange rate.

PD June 1992. TI Trade Unions, Wages and Structural Adjustment in the New German States. AU Burda, Michael C.; Funke, Michael. AA Burda; WZB Berlin. Funke; Free University of Berlin. SR CEPR Discussion Paper: 652; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 36. PR Pounds 3.00 or \$5.00. JE E24, J38, J51, J58. KW Germany. Trade Unions. High Wage Policy.

AB The rapid wage increases observed in Eastern Germany over the past two years have important implications for the direction taken by structural change in this region. These implications are not solely negative, and remain controversial in the public debate. This paper discusses four aspects of a "high wage policy" on the economic assumptions necessary to generate them.

Burdett, Kenneth

PD November 1992. TI Search, Matching, and Unions. AU Burdett, Kenneth; Wright, Randall. AA Burdett:

University of Essex. Wright: University of Pennsylvania. SR University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences (CARESS) Working Paper: 92-30; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. PG 21. PR no charge. JE D83, J51. KW Search. Matching. Labor Economics. Market Frictions.

AB The model in this paper involves frictions in the labor market, a union-negotiated wage, nonwage match-specific considerations, and nontransferable utility. We begin by describing a representative worker's and a representative firm's decision problems in this environment. Next, we define an equilibrium for the model, show that an equilibrium always exists, and provide conditions that guarantee that such an equilibrium is unique. Finally, we discuss the consequences of changes in the union-negotiated wage.

Cadot, Olivier

PD November 1990. TI Prudence and Success in Politics. AU Cadot, Olivier; Sinclair-Desgagne, Bernard. AA INSEAD. SR Unite de Recherche Document de Travail ENSAE/INSEE: 90/86/EP/TM; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. PG 27. PR not available. JE C70, C73, D72. KW Political Inertia. Repeated Games. Electorate.

AB The paper proposes a theory of political inertia. The setup is a repeated game between an infinitely-lived electorate and finitely-lived politicians. The latter are endowed with a given reputation for competence. In one equilibrium, politicians seeking reelection exhibit an extreme form of caution, avoiding any risky involvement. Other equilibria exist, however, in which moderately cautious politicians take up those challenges that are not too informative about their competence.

Calomiris, Charles W.

PD September 1992. TI Greenback Resumption and Silver Risk: The Economics and Politics of Monetary Regime Change in the United States, 1862-1900. AA University of Illinois and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4166; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 36. PR \$5.00. JE E58, E42, N21. KW National Banking. Interest Rate Determination. Controvertibility.

AB This paper begins by developing a framework for price and interest rate determination under suspension of convertibility during the national banking period. The model is applied to interpret unanticipated price level shocks and expected deflation during the period of greenback inconvertibility (1862-1879), and to explain forward discounts on the dollar during the 1890's, which saw substantial risk of a return to suspension of convertibility.

Calvo, Guillermo A.

PD October 1992. TI Capital Inflows to Latin America: The 1970's and the 1990's. AU Calvo, Guillermo A.; Leiderman, Leonardo; Reinhart, Carmen M. AA Calvo and Reinhart: International Monetary Fund; Leiderman: International Monetary Fund and Tel Aviv University. SR International Monetary Fund Working Paper: 92/85; International Monetary Fund, Washington, DC 20431.

PG 22. PR not available. JE G10, F41. KW Capital Inflows. Latin America.

AB During the past two years Latin America has received sizable international capital inflows. This paper compares the recent experience with that of the late 1970's. The analysis examines differences and similarities between the two episodes in three broad areas: domestic macroeconomic conditions in the recipient countries at the outset of both episodes, the behavior of the external factors that influence the international allocation of capital, and the response of key macroeconomic variables, such as the real exchange rate, reserves, and stock prices. The paper aims at assessing how vulnerable these economies are to an unexpected and swift reversal in capital inflows, and whether there are signs that the vulnerability has changed appreciably over time.

Cameron, Trudy Ann

PD September 1991. TI Cost-Benefit Analysis for Non-Market Resources: A Utility Theoretic Empirical Model Incorporating Demand Uncertainty. AU Cameron, Trudy Ann; Englin, Jeffrey. AA Cameron: University of California, Los Angeles. Englin: Pacific Northwest Laboratory. SR University of California at Los Angeles Department of Economics Working Paper: 627; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. PG 46. PR \$5.00; checks payable to U.C. Regents. JE Q30, Q26, Q00. KW Nonmarket Resource Valuation. Recreation Participation. Acid Rain. Bivariate Probit Model.

AB There exists a well-developed theoretical literature concerning the nonmarket value of public goods under uncertainty, but little research effort has been devoted to utility-theoretic empirical specifications. This paper develops an empirical model that employs the state preference model of consumer decision making. We use this model to assess willingness to pay for prevention of acid rain damage to lakes in the Northeast U.S. Our sample includes both resource users and non-users and we specifically model individual participation decisions, thereby allowing for individual risk (demand uncertainty) in the form of endogenous recreational participation probabilities. Controlling for user/non-user sample selection we use responses to a referendum contingent valuation survey question to calibrate an indirect utility difference function. We then derive the corresponding cost-benefit quantities (individual expected consumer surplus, option price, option value, and individual willingness-to-pay loci) relevant to this application.

Caminal, Ramon

PD October 1992. TI Why Do Market Shares Matter?: An Information-Based Theory. AU Caminal, Ramon; Vives, Xavier. AA Universitat Autònoma de Barcelona. SR CEPR Discussion Paper: 713; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 32. PR Pounds 3.00 or \$5.00. JE D11, D43, D82. KW Oligopoly. Herd Behavior. Quality Signals.

AB We analyze the informational content of market shares and prices in a dynamic duopoly model in which consumers have heterogeneous information on the quality differential (q) of two goods. It is shown that when firms are poorly informed about q , and therefore the ability of prices to reveal information is limited, consumers rationally believe that a firm with a high

market share is likely to produce a high-quality good. As a result, firms try to signal-jam the inferences of consumers and compete for market shares beyond the level explained by short-run profit maximization.

Canova, Fabio

PD March 1991. **TI** Are Seasonal Patterns Constant Over Time? A Test for Seasonal Stability. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 91-25; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 15. **PR** no charge. **JE** C32. **KW** Seasonal Patterns. Seasonal Stability.

AB This paper describes a test which is able to distinguish deterministic forms of seasonality from a non-stationary seasonal fluctuations. The asymptotic distribution of the test is derived under weak assumptions which allow for a wide variety of weakly dependent non-explosive processes. The test is applied to three data sets with different seasonal characteristics.

PD August 1991. **TI** Detrending and Business Cycle Facts. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 91-23; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 39. **PR** no charge. **JE** C32, E32. **KW** Detrending. Business Cycles. Seasonality. Filters.

AB This paper examines the business cycle properties of a small set of real U.S. macroeconomic time series using a variety of detrending methods. It is shown that (1) important linear summary statistics of U.S. business cycles vary widely across detrending methods. (2) the qualitative response of consumption, investment, hours and productivity to a typical shock in GNP have, depending on the method used, two types of patterns: one consistent with a Real Business Cycle model and one consistent with a Neo-Keynesian labor-hoarding story, (3) the gain function of various detrending filters extract different amounts of information at business cycle frequencies, (4) alternative detrending methods provide different characterizations of business cycle turning point dates and (5) regardless of the detrending method used, the seasonal and the cyclical properties of U.S. business cycles differ both qualitatively and quantitatively.

PD August 1991. **TI** Sensitivity Analysis and Model Evaluation in Simulated Dynamic General Equilibrium Economics. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 91-24; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 32. **PR** no charge. **JE** C15, C13. **KW** Calibration. Estimation by Simulation. Monte Carlo. Simulation.

AB This paper describes a Monte Carlo procedure to simulate dynamic nonlinear general equilibrium macro models. The procedure makes the choice of parameters and the evaluation of the model less subjective than standard calibration techniques, it provides more general restrictions than estimation by simulation approaches and provides a way to conduct a global sensitivity analysis for reasonable perturbations of the parameters. As an illustration I apply the technique to five examples involving different models and statistics.

Caplin, Andrew

PD July 1992. **TI** Competition Among Institutions.

AU Caplin, Andrew; Nalebuff, Barry. **AA** Caplin: Columbia University. Nalebuff: Yale University. **SR** Columbia University Department of Economics Discussion Paper: 621; Department of Economics, Columbia University, 420 W 118th St., Room 1022 IAB, New York, New York 10027. **PG** 25. **PR** \$5.00. **JE** D70. **KW** Group Formation. Institutions.

AB Economic theory offers two different approaches to the analysis of group formation and the role of institutions. The general equilibrium approach explores the influence of the economic environment on the formation of groups. The game theoretic approach runs in the opposite direction; it explores the influence of institutions on economic outcomes. To integrate these approaches we consider situations in which institutions must compete for members. Our focus is on the fundamental interaction between memberships and policies. The policy that an institution adopts depends on its membership, while its membership depends on the policies of all the institutions. We provide the basic elements for a theory of competition among institutions: an abstract definition of an institution and the corresponding equilibrium concepts. We demonstrate by example, the possibility that an equilibrium may not exist.

Carlin, Wendy

PD July 1992. **TI** Restructuring Enterprises in Eastern Europe. **AU** Carlin, Wendy; Mayer, Colin. **AA** Carlin: University College London. Mayer: City University Business School. **SR** CEPR Discussion Paper: 700; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 57. **PR** Pounds 3.00 or \$5.00. **JE** G32, P11, P12. **KW** Privatization.

AB The enterprise sectors of Eastern Europe are undergoing fundamental reform. This article evaluates alternative forms of corporate restructuring. In some countries, restructuring is being undertaken by the state before privatization; in some, restructuring is delegated to private-sector institutions before shares are offered to the public at large; and in others, public offers of shares are preceding restructuring. The article suggests that the recent theoretical literature on corporate ownership and vertical integration provides a useful framework for evaluating alternative sequences of reform.

Carrington, William J.

PD November 1992. **TI** Gender Segregation in Small Firms. **AU** Carrington, William J.; Troske, Kenneth R. **AA** Carrington: The John Hopkins University. Troske: Bureau of the Census. **SR** Bureau of the Census Center for Economic Studies Discussion Paper: CES 92-13; Center for Economic Studies, Bureau of the Census, Washington, DC 20233. **PG** 37. **PR** no charge. **JE** C82, J12, J16, J30. **KW** Gender. Segregation. Wage Gap.

AB This paper studies interfirm gender segregation in a unique sample of small employers. We focus on small firms because previous research on interfirm segregation has studied only large firms and because it is easier to link the demographic characteristics of employers and employees in small firms. This latter feature of small firms permits an assessment of the role of employer discrimination in creating gender segregation. Our first finding is that interfirm segregation is prevalent among small employers. Indeed, men and women rarely work in the same firm. Our second finding is that the education and gender of the business owner strongly influence the gender

composition of a firm's workforce. This suggests that employer discrimination may be an important cause of workplace gender segregation. Finally, we estimate that interfirm segregation can account for up to 50% of the gender gap in annual earnings.

Casella, Alessandra

PD September 1992. TI Arbitration in International Trade. AA University of California at Berkeley. SR CEPR Discussion Paper: 721; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 34. PR Pounds 3.00 or \$5.00. JE F15, K12. KW International Integration. Institutions. International Contracts.

AB The great majority of international contracts provide for arbitration in the event of dispute. This paper studies international arbitration as a prime example of private trade shaping international institutions. The provisions and the practice of international arbitration are reviewed, and a general equilibrium model of the relationship between the expansion of international trade and the adoption of arbitration is presented. The model focuses on the heterogeneity of economic agents in terms of their legal needs. It shows how arbitration alters the size and composition of markets, while at the same time responding to exogenous changes in trade.

Cats-Baril, William L.

TI The French Videotex System Minitel: An Example of the Critical Success Factors to Establish a National Information Technology Infrastructure. AU Jelassi, Tawfik; Cats-Baril, William L.

Celentani, Marco

PD October 1992. TI Reputation in Dynamic Games. AU Celentani, Marco; Pesendorfer, Wolfgang. AA Celentani: Universida Carlos III de Madrid. Pesendorfer: Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1009; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208. PG 26. PR Per copy: \$3.00 in the U.S.A. or Canada. \$5.00 via international mail. Make checks payable to Northwestern University. JE C73, E60. KW Reputation. Time Inconsistency. Dynamic Games.

AB We consider an infinite dynamic game played by one large player and a large number of small players. State variables are allowed, and public histories included only the play of the large player, the aggregate play of the small players and the aggregate state variable. We use a reputational argument that restricts the set of equilibria to profiles that give the large player almost what he could get by committing to an optimal strategy as his discount factor approaches 1. Furthermore, we identify a class of dynamic games where this result holds even if the small players' discount factor also approaches 1.

Cernohorsky, Ivan

TI Some Lessons from Economic Transformation in East Germany. AU Bofinger, Peter; Cernohorsky, Ivan.

Chadha, Bankim

PD October 1992. TI Are Prices Countercyclical? AU Chadha, Bankim; Prasad, Eswar. AA International

Monetary Fund. SR International Monetary Fund Working Paper: 92/88; International Monetary Fund, Washington, DC 20431. PG 24. PR not available. JE E31, E32. KW Business Cycle. Price Movements.

AB This paper examines the comovement of prices with the cyclical component of output. It argues that determining the cyclical behavior of prices by applying the same stationarity-inducing transformation to the levels of both output and prices, and examining the correlations of the resulting series, can be misleading. A more appropriate procedure is to examine the correlations between the rate of inflation and the level of cyclical component of output. In post-war U.S. data the correlations between similarly transformed price and output data are consistently and often strongly negative, as reported recently by a number of authors as evidence of countercyclical price behavior. The rate of inflation, however, is consistently and usually strongly positively correlated with various measures of the cyclical component of output.

Chakrabarti, Subir K.

PD July 1992. TI Stochastic Games of Perfect Information with Continuous Payoff Dependence. AA Indiana University, Purdue University, and Johns Hopkins University. SR Johns Hopkins Department of Economics Working Paper: 291; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. PG 16. PR no charge. JE C70, C73. KW Stochastic Games. Transition Probabilities. Subgame Perfect Equilibrium. AB We analyze stochastic games of perfect information which satisfy what we have called the continuous payoff dependence condition. The condition states that the payoff of a player playing at time t changes continuously with the payoff of the player playing in the following period. We show that under this condition when transition probabilities are continuous in the topology of weak convergence of probability measures, finite horizon games will have a subgame perfect equilibrium point. This is true even if the payoff functions of the players are not of the separable variety. If in addition, an infinite horizon game satisfies a transversality condition which amounts to saying that the payoff of a player playing at time t does not change by much more than the change in the payoff of the player playing in the next period, then the infinite horizon game too will have a subgame perfect equilibrium point.

PD September 1992. TI Equilibria in Discounted Stochastic Games with Weak Continuous Transition Probabilities. AA Indiana University, Purdue University, and Johns Hopkins University. SR Johns Hopkins Department of Economics Working Paper: 292; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. PG 16. PR no charge. JE C70, C73. KW Stochastic Games. Transition Probabilities. Subgame Perfect Equilibrium. AB We show that a finite horizon stochastic game which satisfies the assumption that the transition probabilities are continuous in the weak topology on measures, where the dual of the space of measures is the set of bounded measurable functions, has a subgame perfect equilibrium point. We then show that if these transition probabilities are absolutely continuous with respect to a given measure every period and the transition probabilities depend only on the immediate past, then the infinite horizon stochastic game will have a subgame perfect equilibrium point. We do this by showing that the pointwise limit of the equilibrium strategy profiles of the finite terminations of the infinite horizon game is a subgame perfect

equilibrium of the infinite horizon game.

Chamley, Christophe

PD August 1992. TI Information Revelation and Strategic Delay in a Model of Investment. AU Chamley, Christophe; Gale, Douglas. AA Boston University. SR Boston University Ruth Pollak Working Paper in Economics: 10; Department of Economics, Boston University, 270 Bay State Rd., Boston, MA 02215. PG 30. PR no charge. JE C73, D83, E22. KW Informational Externality. Bayesian Equilibrium.

AB We study a strategic game with a pure informational externality. Players care about the actions of other players only because of the information they reveal. In equilibrium, players may delay making decisions so that they can observe the decisions of other players. We show there is a unique symmetric Perfect Bayesian Equilibrium and, under the maintained assumptions, it always exhibits delay. As long as the game continues, there is a positive probability that investment will collapse and never be resumed. When the period length becomes vanishingly small, there is no delay but there is informational inefficiency: the true state is not necessarily revealed. We characterize equilibrium in the limit as the number of players becomes unboundedly large. When the period length is small and the number of agents is large, there is underinvestment. We examine the welfare properties of equilibrium and show the first best can be attained by a simple "countercyclical" policy.

Chandra, Pankaj

PD August 1990. TI Models for the Evaluation of Manufacturing Flexibility. AU Chandra, Pankaj; Tombak, Mihkel. AA Chandra: McGill University. Tombak: INSEAD. SR INSEAD Working Papers: 90/61/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 15. PR not available. JE L23, M11. KW Machine Flexibility. Technology.

AB We present models by which flexibility for a manufacturing system can be assessed. These models enable a manager to compare different systems with respect to certain flexibility types. These models reflect the view that the flexibility of a system is a function of the technology as well as how well the system is managed. Two of the most fundamental types of flexibility, routing and machine flexibility, are examined. The efficacy of the methods are shown through numerical examples.

Chang, Roberto

PD September 1991. TI Private Investment and Sovereign Debt Negotiations. AA New York University. SR New York University Economic Research Report: 91-47; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. PG 25. PR no charge. JE F34, D78. KW Bargaining. Sunspots.

AB I study a model of sovereign debt bargaining of the kind proposed by Bulow and Rogoff. I assume that all agents act rationally with perfect foresight and perfect information. The main departure from previous studies is that the government of the debtor country acts on behalf of but is not identical to its representative citizen. This seemingly minor change implies that (i) there is an indeterminacy of bargaining outcomes, including some of the sunspots type; (ii) agreement may be

delayed for many periods; and (iii) marginal debt may not be worthless.

Chari, V.

PD July 1991. TI A Reconsideration of the Problem of Social Cost: Free Riders and Monopolists. AU Chari, V.; Jones, L. AA Chari: Federal Reserve Bank of Minneapolis. Jones: Northwestern University. SR Federal Reserve Bank of Minneapolis Staff Report; 142; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. PG 59. PR no charge. JE D61, D62, H41. KW Coase Theorem. Public Goods. Externalities.

AB We examine the validity of one version of the Coase Theorem: In any economy in which property rights are fully allocated, competition will lead to efficient allocations. This version of the theorem implies that the public goods problem can be solved by allocating property rights fully and letting markets do their work. We show that this mechanism is not likely to work well in economies with either pure public goods or global externalities. The reason is that the privatized economy turns out to be highly susceptible to strategic behavior in that the free-rider problem in public goods economies manifests itself as a complementary monopoly problem in the private goods economy. If the public goods or externalities are local in nature, however, market mechanisms are likely to work well.

Chen, Yongmin

PD December 1992. TI Dynamic Duopoly with Slowly Changing Customer Loyalties. AU Chen, Yongmin; Rosenthal, Robert W. AA Chen: Washington University. Rosenthal: Boston University. SR Boston University Industry Studies Program Discussion Paper: 37; Department of Economics, Boston University, 270 Bay State Rd., Boston, MA 02215. PG 18. PR no charge. JE C73, D43, L13. KW Duopoly. Customer Loyalties. Market Share. Stochastic Game.

AB A dynamic model of duopoly is considered in which a fixed fraction of the customer population changes loyalties in each period from the current high-price seller to the current low-price seller. The model is a stochastic game, and it is shown to have a Markov perfect equilibrium with distinctive economic features. Effects of changes in the duopolists' discount factors and in the stickiness of the customer loyalties on the equilibrium strategies and on long-run market structure are studied.

Chichilnisky, Graciela

PD May 1992. TI Robustly Efficient Equilibria in Non-Convex Economies. AU Chichilnisky, Graciela; Heal, Geoffrey M. AA Columbia University. SR Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-92-28; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. PG 13. PR \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). JE D51, D61. KW Non-Convexity. Marginal Cost Pricing. Pareto Efficiency.

AB An economy has a robustly efficient marginal cost pricing equilibrium (mcpe) if it has an mcpe that is Pareto efficient and if this property is preserved under small variations in preferences, endowments and technologies. We consider

economies in which there is a finite number of equilibria, each of which varies continuously with preferences and endowments. We prove that there exist no robustly efficient marginal cost pricing equilibria.

PD July 1992. **TI** Arbitrage and Equilibrium in Economies with Infinitely Many Securities and Commodities. **AU** Chichilnisky, Graciela; Heal, Geoffrey M. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-92-29; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 14. **PR** \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). **JE** D50, G14. **KW** Limited Arbitrage. Competitive Equilibrium.

AB Welfare economics and finance have each evolved their own equilibrium concepts. In welfare economics this is the concept of a competitive general equilibrium: in finance, it is the absence of arbitrage opportunities. These concepts emerged independently and were initially seen as quite distinct. In the 1980's researchers in both fields began to investigate the connections between the two concepts. Our paper extends this literature. We work with a weaker condition than no arbitrage, the concept of limited arbitrage. This concept was introduced in the context of social choice theory by Chichilnisky. Limited arbitrage, as its name implies, admits arbitrage opportunities that generate bounded increases in utility: it does not rule out all arbitrage opportunities. We show that this concept, limited arbitrage, is fully equivalent to the concept of a competitive general equilibrium. Formally, we show that a competitive general equilibrium exists if and only if arbitrage opportunities are limited.

PD July 1992. **TI** Arbitrage and Equilibrium in Economies with Infinitely Many Securities and Commodities. **AU** Chichilnisky, Graciela; Heal, Geoffrey M. **AA** Columbia University. **SR** Columbia University Department of Economics Discussion Paper: 618; Department of Economics, Columbia University, 420 W 118th St., Room 1022 IAB, New York, New York 10027. **PG** 25. **PR** \$5.00. **JE** D50, G14. **KW** Arbitrage. Limited Arbitrage. Competitive Equilibrium.

AB See other entry.

PD August 1992. **TI** Financial Innovation and Endogenous Uncertainty in Incomplete Asset Markets. **AU** Chichilnisky, Graciela; Wu, Ho-Mou. **AA** Chichilnisky: Columbia University. Wu: Stanford University and Tulane University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-92-30; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 41. **PR** \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). **JE** G14, D52. **KW** Default. General Equilibrium.

AB We study endogenous uncertainty stemming from the introduction of new financial assets, so as to evaluate the risks as well as the welfare gains of financial innovation. The introduction of financial assets to hedge individual risk can lead to the risk of default, which is a collective risk. The possibility of default represents endogenous uncertainty, since it depends on economic variables. A proper allocation of risk in the face of new states of endogenous uncertainty requires the introduction of a large number of additional new securities, without which

the market is incomplete. We prove the existence of a general equilibrium with default, in which the agents recontract trading positions and prices in the states of default. We establish the existence of an open set of general equilibrium economies, in which the pattern of trade is highly interconnected so that default by one agent leads to default by an overwhelming majority of all other individuals.

PD August 1992. **TI** Financial Markets for Unknown Risks. **AU** Chichilnisky, Graciela; Heal, Geoffrey M. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-92-31; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 19. **PR** \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). **JE** D52, D81, G10, G22. **KW** Incomplete Markets. Insurance.

AB An economy faces an unknown individual risk, such as the health effects of a recently discovered environmental hazard. Opinions may be widely different about the distribution of risks across the population. We study financial markets that suffice to reach efficient allocations in this situation. The problem is formalized in a general equilibrium economy with incomplete markets for individual and collective uncertainty. We show that ignorance of the probabilities describing individual risk leads to collective risk. Introducing an array of mutual insurance policies and of Arrow securities is shown to lead to Arrow - Debreu competitive allocations. By combining insurance contracts for individual risks and securities markets for collective risks, the proposed institutional framework economizes significantly on the number of markets required for efficiency.

PD August 1992. **TI** Believing in Multiple Equilibria. **AU** Chichilnisky, Graciela; Heal, Geoffrey M.; Streufert, Peter A.; Swinkels, Jeroen M. **AA** Chichilnisky and Heal: Columbia University. Streufert: University of Wisconsin. Swinkels: Stanford University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-92-32; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 10. **PR** \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). **JE** D81, D51. **KW** Common Priors. Individual Rationality.

AB If agents have common priors concerning the probability with which an equilibrium is selected, they have an incentive to trade beforehand. If their trading process satisfies a certain notion of individual rationality, these trades will reduce and ultimately remove all uncertainty concerning equilibrium selection. In this sense, multiple equilibria engender institutions which can uniquely determine an equilibrium.

PD August 1992. **TI** Financial Markets for Unknown Risks. **AU** Chichilnisky, Graciela; Heal, Geoffrey M. **AA** Columbia University. **SR** Columbia University Department of Economics Discussion Paper: 616; Department of Economics, Columbia University, 420 W 118th St., Room 1022 IAB, New York, New York 10027. **PG** 20. **PR** \$5.00. **JE** G14, D50, G33. **KW** Collective Risk. Individual Risk. Insurance. Financial Markets.

AB An economy faces an unknown individual risks, such as the health effects of a recently discovered environmental hazard. Opinions may be widely different about the distribution of risks across the population. We study financial markets that

suffice to reach efficient allocations in this situation. The problem is formalized in a general equilibrium economy with incomplete markets for individual and collective uncertainty. We show that ignorance of the probabilities describing individual risk leads to collective risk. Introducing an array of mutual insurance policies and of Arrow securities is shown to lead to Arrow - Debreu competitive allocations. By combining insurance contracts for individual risks and securities markets for collective risks, the proposed institutional framework economizes significantly on the number of markets required for efficiency.

PD August 1992. **TI** Financial Innovation and Endogenous Uncertainty in Incomplete Asset Markets. **AU** Chichilnisky, Graciela; Wu, Ho-Mou. **AA** Chichilnisky: Columbia University. **WU**: Stanford University and Tulane University. **SR** Columbia University Department of Economics Discussion Paper: 617; Department of Economics, Columbia University, 420 W 118th St., Room 1022 IAB, New York, New York 10027. **PG** 50. **PR** \$5.00. **JE** G14, D50, G33. **KW** Collective Risk. Default. Endogenous Uncertainty. **AB** See other entry.

PD August 1992. **TI** Market Innovation and the Global Environment. **AA** Columbia University. **SR** Columbia University Department of Economics Discussion Paper: 619; Department of Economics, Columbia University, 420 W 118th St., Room 1022 IAB, New York, New York 10027. **PG** 11. **PR** \$5.00. **JE** Q28. **KW** Market Innovation. Environmental Policy. Sustainable Development.

AB Markets are often considered enemies of the environment. A traditional view is that environmental issues are grounded on market externalities because, in cases such as smoking, one individual's consumption is irrevocably linked to those of others. This leads to ill defined private choices and to the failure of market efficiency. Markets can therefore induce overconsumption of environmental resources, such as clean air. Reciprocally, environmental concerns are often blamed for undermining market performance. Environmental regulation can lead to undue costs and prevent the unfettered behavior needed for achieving market efficiency. Yet recent evidence points in the opposite direction. Markets have evolved some of the most innovative and useful solutions for global environment problems. This paper examines the role of market innovation in explaining the apparent contradiction between markets and the environment. It argues that market innovation can serve as a powerful tool of environmental policy operating together with a competitive market environment.

TI Option and Non-Use Values of Environmental Assets. **AU** Beltratti, Andrea; Chichilnisky, Graciela; Heal, Geoffrey M.

TI Option and Non-Use Values of Environment Assets. **AU** Beltratti, Andrea; Chichilnisky, Graciela; Heal, Geoffrey M.

Chirinko, Robert S.

PD August 1991. **TI** Delivery Lags, Adjustment Costs, and Econometric Investment Models. **AU** Chirinko, Robert S.; Schiantarelli, Fabio. **AA** Chirinko: University of Chicago. Schiantarelli: Boston University. **SR** New York University Economic Research Report: 91-41; New York University, Faculty of Arts and Science, Department of Economics,

Washington Square, New York, N.Y. 10003. **PG** 20. **PR** no charge. **JE** E22, D21, D92. **KW** Technological Constraints. Ordering Costs.

AB This paper explores the impact of a delivery lag technology on the specification of econometric investment equations within an explicit optimizing framework. The formal model contains a general delivery lag distributed over many periods and adjustment costs for both new orders and delivered capital. The impact of these technological constraints on the Euler Equation and Q specifications are examined in a general model. We then consider the special case when the delivery lag follows a geometric pattern, and show that the econometric specifications depend critically on the interaction between delivery lags and the ordering costs. With ordering costs, none of the specifications are similar to those derived on an ad hoc basis in the literature.

Choi, Jay Pil

PD May 1992. **TI** Irreversible Choice of Uncertain Technologies with Network Externalities. **AA** Columbia University. **SR** Columbia University Department of Economics Discussion Paper: 612; Department of Economics, Columbia University, 420 W 118th St., Room 1022 IAB, New York, New York 10027. **PG** 25. **PR** \$5.00. **JE** D80, D62, D24. **KW** Technology Choice. Network Externalities. Uncertainty.

AB This paper explores the problem of sequential and irreversible technology choice in the presence of network externalities when the technologies stochastically evolve over time. Early potential users are shown to adopt an irreversible technology too early compared to the social optimum. The effect of increasing the uncertainty of the technologies on early potential user's decision is analyzed. We find that the sponsor of new emerging technology might choose too safe a research strategy. We also study the consequences of allowing side payments between generations of consumers, and demonstrate that ex post optimal policy can impair ex ante social welfare.

Clarida, Richard H.

PD March 1992. **TI** Cointegration, Aggregate Consumption, and the Demand for Imports: A Structural Econometric Investigation. **AA** Columbia University. **SR** Columbia University Department of Economics Discussion Paper: 614; Department of Economics, Columbia University, 420 W 118th St., Room 1022 IAB, New York, New York 10027. **PG** 18. **PR** \$5.00. **JE** C32, F10, E21. **KW** Import Demand. Cointegration. Permanent Income.

AB This paper uses a two-good version of the rational expectations permanent income model to derive a structural import demand equation for non-durable consumer goods. Under the identification restriction that taste shocks are stationary, the model is shown to imply that log imports, log domestic goods, and the log relative price of imports are cointegrated. The rational expectations permanent income hypothesis in conjunction with assumption of addilog (Houthakker (1960)) preferences implies that the log of the demand for domestic goods is the correct "activity" variable on the right-hand-side of the import demand equation. Using the econometric approach suggested by Phillips-Loretan (1990), we estimate the cointegrating vector and use these estimates to recover estimates of the utility parameters of the representative household. Given these utility parameters, we calculate expressions for the price and expenditure elasticities of import

demand.

PD June 1992. **TI** The Real Exchange Rate and U.S. Manufacturing Profits: A Theoretical Framework with Some Empirical Support. **AA** Columbia University. **SR** Columbia University Department of Economics Discussion Paper: 613; Department of Economics, Columbia University, 420 W 118th St., Room 1022 IAB, New York, New York 10027. **PG** 17. **PR** \$5.00. **JE** F31, D21. **KW** Exchange Rates. Manufacturing Profits. Pricing-to-Market. Error Correction.

AB This paper investigates the relationship between manufacturing profits and the real exchange rate. Using Marston's (1990) model of pricing-to-market, we identify two channels, a valuation channel and volume channel, through which changes in the real exchange rate can shift the profits of a price-setting exporter. Employing the econometric approach developed by Johansen (1990;1991), we estimate a dynamic vector error correction model on quarterly data for real U.S. manufacturing profits and five variables that theory suggests should be useful in accounting for the behavior of real profits in an open economy: domestically sold output, the real exchange rate, real unit costs, the relative price of domestically sold output, and real foreign income.

Clifton, Eric

PD July 1992. **TI** Inter-Enterprise Arrears in Transforming Economies: The Case of Romania. **AU** Clifton, Eric; Khan, Mohsin S. **AA** International Monetary Fund. **SR** International Monetary Fund Papers on Policy Analysis and Assessment: 92/1; International Monetary Fund, Washington, DC 20431. **PG** 20. **PR** not available. **JE** E51, E65. **KW** Eastern Europe.

AB This paper reviews the experience with inter-enterprise arrears in Romania during 1991 with the purpose of extracting lessons that might prove useful for other economies in transition to market-based systems. While the rapid growth of inter-enterprise arrears poses a serious policy problem in all the transforming economies of Eastern Europe, the case of Romania is perhaps most striking: gross inter-enterprise arrears grew almost eighteen-fold (to about 50 percent of GDP) in only 12 months. This paper discusses the development of these arrears and the policies implemented by the authorities to resolve the problem.

Cohen, Daniel

PD April 1990. **TI** Price and Trade Effects of Exchange Rates Fluctuations and the Design of Policy Coordination. **AU** Cohen, Daniel; Wyplosz, Charles. **AA** Cohen: CEPREMAP, Centre for Economic Policy Research and Universite de Nancy II. Wyplosz: INSEAD and Centre for Economic Policy Research. **SR** INSEAD Working Papers: 90/50/EP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 23. **PR** not available. **JE** F42, F31, F41. **KW** Monetary Policy. Fiscal Policy.

AB We analyze a two-country zone facing a joint inflationary shock and responding with coordinated and uncoordinated monetary and fiscal policies. We show that the standard presumption that the absence of coordination results in an excessive exchange rate appreciation of the zone with respect to the rest of the world hinges on a specific assumption: within the two countries considered, the price effect of exchange rate fluctuations dominates the trade effects relative to the corresponding effects vis a vis the rest of the world. If the

relative hierarchy goes the other way around (as we argue is likely for EC countries), the standard conclusion is reversed. The paper also considers asymmetric shocks as well as monetary policy coordination.

PD August 1992. **TI** Tests of the "Convergence Hypothesis": A Critical Note. **AA** CEPREMAP. **SR** CEPR Discussion Paper: 691; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 15. **PR** Pounds 3.00 or \$5.00. **JE** E22, O41. **KW** Growth. Human Capital.

AB I argue in this paper that the "speed of convergence" estimated in recent works on "convergence" does not capture "actual" convergence towards a steady state, but rather conditional dynamics towards a moving target. Although this conditional convergence can be taken to imply that there are decreasing returns to such storable assets as physical and human capital, they cannot be taken to rule out unbounded growth (since human capital could well be indefinitely growing). I offer a test of the "convergence hypothesis" based on the analysis of a two-dimensional system and find that it cannot be accepted.

PD August 1992. **TI** The Debt Crisis: A Post Mortem. **AA** CEPREMAP. **SR** CEPR Discussion Paper: 692; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 44. **PR** Pounds 3.00 or \$5.00. **JE** F21. **KW** LDC Debt. Brady Plan. Capital Accumulation.

AB I calculate the returns on developing countries' debt obtained by their (private and public) creditors and show that they are satisfactory. I then evaluate the conflict of interest between private and public creditors and assess the role of the Brady Plan as a vehicle to achieving a "grand settlement" of the debt crisis. I argue that they are not as satisfactory. I show that the group of reschedulers did suffer from lower growth in the 1980's, but I also show that their rate of capital accumulation did not accelerate in the years before the debt crisis. I evaluate the extent to which sovereign risk, rather than low returns, explains the failure of foreign finance to accelerate capital accumulation in the large debtor countries.

Cooper, Russel J.

PD September 1992. **TI** A System of Demand Equations Satisfying Effectively Global Regularity Conditions. **AU** Cooper, Russel J.; McLaren, Keith R. **AA** Cooper: University of Western Sydney, Nepean. McLaren: Monash University. **SR** Monash Department of Econometrics Working Paper: 11/92; Department of Econometrics, Faculty of Economics and Politics, Monash University, Clayton, Victoria 3168, Australia. **PG** 26. **PR** no charge. **JE** D11, D12. **KW** Demand Systems. Duality. Indirect Utility Function. Global Regularity.

AB A parametric specification of an indirect utility function in terms of expenditure and two unit cost functions is proposed. Specification of these unit cost functions in terms of regular functions leads to the notion of an "effectively globally regular" system of demand equations: that is, a system of demand equations that is regular over a cone in expenditure-price space, and for which the regular regions includes all points in any given sample, and all values of nominal expenditure and prices generating higher values of real expenditure than the sample minimum. This general model nests a number of popular demand systems, such as the Linear Expenditure System, as

special cases. An empirical application demonstrates the value of the generalization.

Cooper, Russell

PD August 1992. **TI** Cooperation Without Reputation: Experimental Evidence From Prisoner's Dilemma Games. **AU** Cooper, Russell; DeJong, Douglas V.; Ross, Thomas W. **AA** Cooper: Boston University. DeJong: University of Iowa. Ross: University of British Columbia. **SR** Boston University Industry Study Program Discussion Paper: 36; Department of Economics, Boston University, 270 Bay State Rd., Boston, MA 02215. **PG** 29. **PR** no charge. **JE** C72, C92. **KW** Cooperation. Reputation. Altruism.

AB This paper investigates cooperative play in prisoner's dilemma games by designing an experiment to evaluate the ability of two leading theories to explain observed cooperation: reputation and altruism. The paper makes three contributions: (1) we analyze both one-shot and finitely repeated games to gauge the relative importance of reputation effects, (2) we evaluate alternative theories of altruism and estimate the proportion of altruists in one-shot games and (3) we elicit the beliefs of players about their opponents' play to understand the evolution of beliefs and play. We conclude that neither altruism nor reputation building alone can explain our observations. A mixed model of altruists and egoists in a finitely repeated setting does better but still fails to match the data.

PD October 1992. **TI** The Aggregate Implications of Machine Replacement: Theory and Evidence. **AU** Cooper, Russell; Haltiwanger, John. **AA** Cooper: Boston University. Haltiwanger: University of Maryland and Bureau of the Census. **SR** Bureau of the Census Center for Economic Studies Discussion Paper: 92-12; Center for Economic Studies, Bureau of the Census, Washington, DC 20233. **PG** 29. **PR** no charge. **JE** C81, L60. **KW** Retooling. Productivity. Seasonal Cycles.

AB This paper studies an economy in which producers incur resource costs to replace depreciated machines. The process of costly replacement and depreciation creates endogenous fluctuations in productivity, employment and output of a single producer. We also explore the spillover effects of machine replacement on other sectors of the economy and provide conditions for synchronized machine replacement by multiple, independent producers. The implications of our model are generally consistent with observed monthly output, employment and productivity fluctuations in automobile plants. Synchronization of retooling across plants within the auto industry is widespread so that the fluctuations observed at the plant level have aggregate implications.

Corsetti, Giancarlo

PD August 1992. **TI** Tax Smoothing Discretion Versus Balanced Budget Rules in the Presence of Politically Motivated Fiscal Deficits: The Design of Optimal Fiscal Rules for Europe after 1992. **AU** Corsetti, Giancarlo; Roubini, Nouriel. **AA** Corsetti: Universita di Roma. Roubini: Stanford University. **SR** CEPR Discussion Paper: 682; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 41. **PR** Pounds 3.00 or \$5.00. **JE** E62, E63, F41, H62. **KW** Fiscal Deficits. Fiscal Rules. EMU.

AB We analyze the arguments in favor and against binding fiscal rules such as those recently agreed by European countries

as preconditions for participation in the third phase of the European Monetary Union. The evidence in the paper suggests that a number of EC countries are following unsustainable fiscal policies and that this "deficits bias" may be partly due to political distortions. Binding balanced budget rules would eliminate the deficits bias that appears in the presence of such distortions, but would also prevent the use of potentially beneficial tax-smoothing budget deficits in response to transitory shocks.

Cowan, Simon

TI Nonlinear Pricing and Price Cap Regulation. **AU** Armstrong, Mark; Cowan, Simon; Vickers, John.

Cox, James C.

PD May 1992. **TI** Using Laboratory Market Experiments to Evaluate Econometric Estimators of Structural Models. **AU** Cox, James C.; Oaxaca, Ronald L. **AA** University of Arizona. **SR** University of Arizona Economics Working Paper: 92-22; Department of Economics, McClelland Hall - Rm. 401, University of Arizona, Tucson AZ 85721. **PG** 27. **PR** \$2.00 U.S. and Canada; \$3.00 Overseas by air. **JE** C13, C52, C92. **KW** Econometric Estimators. Market Experiments. Disequilibrium Econometrics.

AB Selection of an estimator is often based on a priori reasoning. For example, in estimating simultaneous structural equations, accepted practice would be to appeal to basic econometric theory to support a decision to use a method such as 2SLS, 3SLS, or FIML rather than OLSQ. However, the importance of empirical evaluation of econometric methods is recognized by researchers who conduct Monte Carlo experiments. That approach is based on "hard-wiring" economic behavior in the statistical simulation ("experiment"). Generating data with market experiments with human subjects provides an alternative approach to empirical evaluation of estimators. Our use of this approach leads to some novel results such as: (1) OLSQ provides better estimates of supply functions than does 2SLS using average prices from experimental posted offer markets; (2) OLSQ provides better estimates of demand functions than does 2SLS using average prices from experimental double auction markets. More generally, the more accurate estimator from among GQ, SW, 2SLS, and OLSQ depends on the market institution that generates the data and the price measure (average or closing) that is used in estimation.

PD August 1992. **TI** The Preference Reversal Phenomenon: Response Mode, Markets and Incentives. **AU** Cox, James C.; Grether, David M. **AA** Cox: University of Arizona. Grether: California Institute of Technology. **SR** University of Arizona Economics Working Paper: 92-23; Department of Economics, McClelland Hall - Rm. 401, University of Arizona, Tucson AZ 85721. **PG** 23. **PR** \$2.00 U.S. and Canada; \$3.00 Overseas by air. **JE** C91, C92, C81. **KW** Preference Reversals. Response Mode. Markets.

AB We have replicated the preference reversal phenomenon in markets (second price and English clock auctions) and also with the traditional BDM pricing task. With financial incentives, immediate feedback, and repetition the phenomenon tended to go away for all three institutions. Without financial incentives the phenomenon persisted in the English clock auction. In the present paper we extend the study of preference reversals to market environments and begin to address the

apparent conflict between the experimental literature on individual choice and judgement and the literature focused on market experiments. We present the results of a series of experiments designed to analyze: 1. The effects of economic incentives, repetition, feedback, and information on decisions in market environments. 2. The effects of different response modes on decisions in paired nonmarket and market environments.

Crafts, Nicholas F. R.

PD August 1992. TI Was the Thatcher Experiment Worth it? British Economic Growth in a European Context. AA University of Warwick. SR CEPR Discussion Paper: 710; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 28. PR Pounds 3.00 or \$5.00. JE I31, O52. KW Inequality. UK.

AB The changes in economic policy introduced in the UK after 1979 had a substantial impact on income distribution, unemployment and productivity growth. This paper brings together available evidence in an attempt to evaluate the welfare effects of the Thatcher reforms. The estimated impact turns out to be sensitive to the degree of "inequality aversion" of the investigator and to the method chosen to estimate the counterfactual productivity path. The overall welfare effect may have been either negative or positive but is probably smaller than partisan assessments have claimed.

Crone, Theodore M.

PD November 1992. TI Estimating House Price Appreciation: A Comparison of Methods. AU Crone, Theodore M.; Voith, Richard P. AA Federal Reserve Bank of Philadelphia. SR Federal Reserve Bank of Philadelphia Research Working Paper: 92-21; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. PG 16. PR no charge except overseas airmail, \$2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. JE C52, R31. KW Forecasting. Housing Market.

AB Several parametric and nonparametric methods have been advanced over the years for estimating house price appreciation. This paper compares five of these methods in terms of predictive accuracy, using data from Montgomery County, Pennsylvania. The methods are evaluated on the basis of the mean squared prediction error and the mean absolute prediction error. A statistic developed by Diebold and Mariano is used to determine whether differences in prediction errors are statistically significant. We use the same statistic to determine the effect of sample size on the accuracy of the predictions. In general, parametric methods of estimation produce more accurate estimates of house price appreciation than nonparametric methods. And when the mean absolute prediction error is used as the criterion of accuracy, the repeat sales method produces the most accurate estimate among the parametric methods we tested.

Danthine, Jean Pierre

PD July 1992. TI Wage Bargaining Structure, Employment and Economic Integration. AU Danthine, Jean Pierre; Hunt, Jennifer. AA Danthine: University of Lausanne. Hunt: Yale University. SR CEPR Discussion Paper: 694; Centre for Economic Policy Research, 25-28 Old

Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 25. PR Pounds 3.00 or \$5.00. JE E24, F15, J51, J61. KW Unions. Labor Market. Corporatism.

AB It is widely believed that the integration of European economies will have little impact on labor mobility. This does not mean, however, that European labor markets will be unaffected by the process of economic integration. In this paper we show that with increased competition from closer economic integration, the hump-shaped pattern summarizing the relationship between economic performance and the degree of centralization in wage bargaining flattens out. As a consequence, the importance of the position of a particular economy on the wage-bargaining scale diminishes. We find, however, that the post-integration wage-price structure is closer to the configuration familiar to decentralized economies.

De Grauwe, Paul

PD June 1992. TI Inflation Convergence During the Transition to EMU. AA Katholieke Universiteit Leuven. SR CEPR Discussion Paper: 658; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 20. PR Pounds 3.00 or \$5.00. JE F15, F33, F36. KW Inflation. Monetary Union.

AB According to the Maastricht Treaty, EMS countries will be able to join EMU if their inflation rates are not more than 1.5% higher than the average of the three lowest inflation rates in the EMS. In this paper I analyze the likelihood of inflation rates converging to the levels set out in the Maastricht Treaty, and conclude that this is unlikely to be the case. I study whether the Maastricht convergence requirement for inflation rates is not needlessly tight.

De Kock, Gabriel

PD March 1992. TI Fiscal Policies and the Choice of Exchange Rate Regime. AU De Kock, Gabriel; Grilli, Vittorio. AA De Kock: Federal Reserve Bank of New York. Grilli: Department of Economics, Birkbeck College. SR CEPR Discussion Paper: 631; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 28. PR Pounds 3.00 or \$5.00. JE F33, F36. KW Exchange Rate. Seigniorage. Fiscal Policy.

AB A common argument against either a monetary union or a regime of fixed exchange rates is that they preclude flexible use of the inflation tax. We address this point of view by comparing three alternative exchange rate regimes: a pure float, an EMS regime in which the exchange rate is fixed but can be realigned, and a monetary union. We model the three regimes as alternative commitments on future seigniorage policies. The approach suggests that it is not possible to Pareto-rank the three regimes. On the other hand, we provide intuitive conditions under which each of the systems is superior to the others.

De Long, J. Bradford

PD May 1992. TI The Marshall Plan: History's Most Successful Structural Adjustment Program. AU De Long, J. Bradford; Eichengreen, Barry. AA De Long: National Bureau of Economic Research. Eichengreen: University of California at Berkeley. SR CEPR Discussion Paper: 634; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 44. PR Pounds 3.00 or \$5.00. JE F02, N14. KW Marshall Plan. Foreign Aid.

AB The post-World War II reconstruction of Western Europe was one of the greatest economic and foreign policy successes of this century. 'Folk wisdom' assigns much of the credit to the Marshall Plan, which transferred some \$13 billion of US aid to Europe between 1948 and 1951. We examine the economic effects of the Marshall Plan, and find that it was too small to have significantly accelerated recovery by financing private investment, speeding the repair of infrastructure or easing commodity bottlenecks. None the less, we conclude that the conditions attached to Marshall aid contributed significantly to Western Europe's rapid growth after World War II, by pushing Europe's 'mixed economies' in a direction that left them with a mixture of more 'market' and fewer controls.

de Melo, Jaime

PD September 1992. **TI** The New Regionalism: A Country Perspective. **AU** de Melo, Jaime; Panagariya, Arvind; Rodrik, Dani. **AA** de Melo: World Bank. Panagariya: World Bank. Rodrik: Harvard University. **SR** CEPR Discussion Paper: 715; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 37. **PR** Pounds 3.00 or \$5.00. **JE** F13, F15. **KW** Regional Integration. Free Trade Area. Customs Union.

AB The paper first surveys the ambiguous economics of customs unions. In a world with trade restrictions, regional integration presents certain advantages including enhanced bargaining power and market access. We then turn to institutional aspects of regional integration, and point out that integration enforces arbitrage in institutions as well as in markets for goods and factors. This kind of arbitrage can lead to improved economic outcomes by rendering decision-making less sensitive to economically harmful factional interests, especially when regional institutions are designed properly. Finally, we turn to an empirical evaluation of existing schemes.

TI A Primer on the MFA Maze. **AU** Faini, Riccardo; de Melo, Jaime; Takacs, Wendy E.

De Meyer, Arnoud

PD October 1990. **TI** Removing the Barriers in Manufacturing. **AU** De Meyer, Arnoud; Ferdows, Kasra. **AA** INSEAD. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 90/73/TM; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 12. **PR** not available. **JE** L60, O52. **KW** European Manufacturers. Production Capabilities. Performance.

AB The 1990 European Manufacturing Futures survey shows that the European manufacturers are doing well. The efforts in total quality management and improvement of deliveries are paying off; the factories have been cleaned up and reorganized. The creation of the post 1992 single market is not expected to change the total number of their factories, but is likely to demand a more customized output and service to more markets from each factory. The leading European manufacturers are focusing increasingly more on closer links between production and the other functions in the company as well as with suppliers, customers, and others outside the company. The excitement of the 1992 single market, and the opening of Eastern European markets, can hinder such risk-taking ventures in manufacturing. But, in fact because of the new opportunities, uncertainties, and potential turbulence in Europe in the next few years, there is even more reason for bringing the factory in

closer contact with its environment.

DeJong, Douglas V.

TI Cooperation Without Reputation: Experimental Evidence From Prisoner's Dilemma Games. **AU** Cooper, Russell; DeJong, Douglas V.; Ross, Thomas W.

Delbono, Flavio

TI Bargaining with a Composite Player: An Application to the Uruguay Round of GATT Negotiations. **AU** Basevi, Giorgio; Delbono, Flavio; Mariotti, Marco.

Demekas, Dimitri G.

PD August 1991. **TI** The Romanian Economic Reform Program. **AU** Demekas, Dimitri G.; Khan, Mohsin S. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/80; International Monetary Fund, Washington, DC 20431. **PG** 52. **PR** not available. **JE** P20, P30. **KW** Transition. Economic Reform.

AB With the start of the process of its transition to a market economy in early 1990, Romania joined the ranks of other reforming Eastern European countries. At the starting point of its reform program, however, Romania was in a deep economic and institutional crisis and had no experience in even modest attempts to reform its economy. This paper outlines the main characteristics of the Romanian economic system before the reform, and presents the evolution of the reform program, as well as its achievements in the first year or so since it was launched.

Dermine, Jean

PD August 1990. **TI** Economies of Scale and Scope in the French Mutual Funds (SICAV) Industry. **AU** Dermine, Jean; Roller, Lars-Hendrik. **AA** INSEAD. **SR** INSEAD Working Papers: 90/59/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 16. **PR** not available. **JE** G24, L22. **KW** Financial Sector.

AB The object of the paper is to contribute to the literature on economies of scale and scope in the financial sector. Concerned mostly with depository financial institutions offering deposits and loans services, previous American studies find little evidence of economies of scale, except for banks with assets under \$100 million. A case can be made that additional evidence on economies of scale and scope in the financial sector is needed because the deregulation of capital markets, securitization and the generalization, at least in Europe, of the universal banking model enlarge considerably the scope of banking activities. Since the mutual fund industry relies very much on information systems, one could anticipate that investments in computers and software create fixed costs and the potential for economies of scale. Turning the argument around, it could be argued that, if no economies of scale are found in the mutual funds industry, they are unlikely to be observed in other market-related activities.

PD May 1991. **TI** The BIS Proposal for the Measurement of Interest Rate Risk, Some Pitfalls. **AA** INSEAD. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 91/34/FIN; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 13. **PR** not available. **JE** G21, E40, G28. **KW** Risk Measurement. Interest Rate Risk. Banks.

AB The Basle Committee on Banking Supervision is working on a risk measurement system to evaluate the interest rate risk exposure of banks. It is shown that the current proposal does not avoid twelve pitfalls quite common in interest rate risk measurement systems, so that it could give a misleading evaluation of risks. Secondly, it is argued that there are few reasons to harmonize interest rate regulations at the international level and that decentralization and delegation to national regulators and supervisors remain appropriate.

PD June 1991. **TI** The Regulation of Financial Services in the EC, Centralization or National Autonomy? **AA** INSEAD. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 91/35/FIN; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 25. **PR** not available. **JE** G10, G18, F36. **KW** Financial markets, Regulation, International Coordination.

AB The paper evaluates the regulatory structure of the European financial services industry. It addresses the issue of hierarchy of regulations, that is the eventual need for centralized regulation at the level of a European Central Bank, harmonization of national regulations, competitive (de) regulation or "host country" regulation. An economic analysis of the sources of market failures concludes that competition between national regulators will benefit consumers of financial services and the efficiency of financial markets in most cases. The paper warns against an abusive interpretation of the "public interests" criterion which is used too often to restrict competition. Finally, the paper argues that more work remains to be done to achieve open and stable financial markets.

Dierkens, Nathalie

PD November 1990. **TI** Information Asymmetry and Corporate Communication: Results of a Pilot Study. **AU** Dierkens, Nathalie; Sinclair-Desgagne, Bernard. **AA** INSEAD. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 90/83/FIN/TM; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 18. **PR** not available. **JE** C82, D82. **KW** Signaling, Asymmetric Information, Corporate Communication.

AB In the last years, a very large number of theoretical studies have been analyzing signaling policies in numerous situations of asymmetric information. However, no empirical analysis along these lines has yet been done of the overall policy of corporate communication of the firm. The research aims at constructing a database on corporate communication and at testing several theories concerning information asymmetry. Specifically, we plan to study the link between the quantity of information provided by the firm and good and bad shocks hitting the firm. Also we want to test whether the policy of corporate communication has any measurable effects on stock prices. At this point, we have conducted a pilot study with promising results and are launching the construction and analysis of the full sample. The paper describes the procedure followed for the data collection, give some first results and ends with the projected steps for future research.

Dimsdale, N. H.

PD November 1992. **TI** A Model of the Interwar Economy. **AU** Dimsdale, N. H.; Horsewood, N. **AA** University of Oxford. **SR** Oxford Applied Economics Discussion Paper Series: 149; Institute of Economics and

Statistics, St Cross Building, Manor Road, Oxford OX1 3UL. **PG** 41. **PR** 2 pounds. **JE** E62, N14. **KW** Britain, Fiscal Policy, Exchange Rates, Interwar Period.

AB This paper presents a new model of the British economy in the interwar period. The model is used for counter-factual simulations which are designed to shed light on major controversies over economic policy. These include the consequences of expansionary fiscal policy, a reduction in the replacement ratio and a lower exchange rate for sterling in 1920's.

DiSalvo, James

TI Conduct in a Banking Duopoly. **AU** Shaffer, Sherrill; DiSalvo, James.

Dixon, Huw David

PD May 1992. **TI** Imperfect Competition and Macroeconomics: A Survey. **AU** Dixon, Huw David; Rankin, Neil. **AA** Dixon: University of York. Rankin: University of Warwick. **SR** CEPR Discussion Paper: 636; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 52. **PR** Pounds 3.00 or \$5.00. **JE** E32, E52, E62. **KW** Monetary Policy, Fiscal Policy.

AB This survey outlines the general lessons of the recent literature on imperfectly competitive macroeconomies for the theory of monetary and fiscal policy. A general framework is presented which encompasses most of the existing literature. Although money is of itself neutral in these models, the presence of menu costs, expectations which are not unit elastic, or sectoral nominal rigidities can result in a welfare-improving role for monetary policy. Imperfect competition also enhances the scope for the beneficial influence of fiscal policy. We explore the possibilities for multiple Pareto-ranked equilibria and the role of increasing returns to scale.

PD November 1992. **TI** Inefficient Diversification in Multimarket Oligopoly with Diseconomies of Scope. **AA** York University. **SR** CEPR Discussion Paper: 732; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 12. **PR** Pounds 3.00 or \$5.00. **JE** D24, D43, D61, O33. **KW** Technology Adoption, Production Inefficiencies.

AB This paper considers the incentives of oligopolistic firms to diversify into technologically related markets when there are diseconomies of scope. There is a rent-extraction incentive for firms to adopt flexible technologies, which enable them to enter technologically related markets, thereby increasing competition. This strategic motive leads to inefficiency in production, however, due to diseconomies of scope. This paper shows that the welfare gain from increased competition can be more than offset by the inefficiency in production, which may lead to lower welfare than in the case of pure monopoly.

Doherty, Ann E.

TI Game Theory and Multilateral Negotiations: The Single European Act and the Uruguay Round. **AU** Brams, Steven J.; Doherty, Ann E.; Weidner, Matthew L.

Domowitz, Ian

PD September 1992. **TI** A Taxonomy of Automated Trade Execution Systems. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/92/76;

International Monetary Fund, Washington, DC 20431. PG 34. PR not available. JE D44, G15. KW Automatic Trade Execution. Financial Markets.

AB A taxonomy of existing and planned automated trade execution systems in financial markets is provided. Over 50 automated market structures in 16 countries are analyzed. The classification scheme is organized around the principle that such markets consist of an algorithm that performs a trade matching function, together with information display and transmission mechanisms. Automated market structures are classified by ordered sets of trade execution priority rules, trade matching protocols and associated degree of automation of price discovery, and transparency, to include informational asymmetries between classes of market participants. Systematic differences in systems across types of financial instruments, geographical market centers, and over time are analyzed.

PD October 1992. TI Automating the Price Discovery Process: Some International Comparisons and Regulatory Implications. AA International Monetary Fund. SR International Monetary Fund Working Paper: 92/80; International Monetary Fund, Washington, DC 20431. PG 23. PR not available. JE O44, G15, K42. KW Automated Trade Execution. Price Discovery.

AB Automated trade execution systems are examined with respect to the degree to which they automate the price discovery process. Seven levels of automation of price discovery are identified, and 47 systems are classified according to these criteria. Systems operating at various levels of automation are compared with respect to age, geographical location, and type of securities traded. Information provided to market participants, and asymmetries of information between traders with direct access to the automated market and outside investors also are examined. It is found, for example, that the degree of asymmetric information increases with the level of automation of price discovery. The potential for trading abuses related to prearranged trading, noncompetitive execution, and trading ahead of customers is analyzed for each level of automation. Certain levels of automation widen the opportunities for trading abuses in some respects, but may narrow them in others.

Dooley, Michael

PD September 1992. TI Endogenous Creditor Seniority and External Debt Values. AU Dooley, Michael; Stone, Mark. AA Dooley: University of California, Santa Cruz. Stone: International Monetary Fund. SR National Bureau of Economic Research Working Paper: 4172; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 18. PR \$3.00. JE F34, C43, E43. KW Foreign Debt. Capital Flight.

AB A new aggregation scheme used to measure the sources of fiscal financing of indebted countries suggests that there was a fundamental improvement in the seniority of domestic debt at the expense of foreign bank debt during the late 1980's. We argue that this was the revenue maximizing response of governments to internal and external capital flight that drained the domestic financial "tax base" subject to indirect taxation. Empirical analysis indicates that the profile of the sources of fiscal financing influenced external debt values. The econometric analysis also implies that previous studies have neglected an important reason for the decline in loan values from 1985 to 1989; the increase in international interest rates.

Dumas, Bernard

PD May 1992. TI How Long Do Unilateral Target Zones Last? AU Dumas, Bernard; Svensson, Lars E. O. AA Dumas: University of Pennsylvania. Svensson: Stockholm University. SR CEPR Discussion Paper: 645; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 12. PR Pounds 3.00 or \$5.00. JE F31, F33. KW Exchange Rates. Interventions. Reserves.

AB We examine the expected survival time of a unilateral exchange rate target zone, when constraints on monetary policy prevent the central bank from exclusively focusing on defending the target zone. In general, the width of the target zone has a negligible effect on the expected survival time, and the dominant determinants are reserve levels and the degree of real and monetary divergence between the country in question and the rest of the world. For seemingly realistic parameters, the expected survival time is fairly long: a few decades rather than a few years.

Durlauf, Steven N.

PD September 1992. TI Measuring Noise in Inventory Models. AU Durlauf, Steven N.; Maccini, Louis J. AA Durlauf: Stanford University and National Bureau of Economic Research. Maccini: Johns Hopkins University. SR Johns Hopkins Department of Economics Working Paper: 294; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. PG 23. PR no charge. JE E22. KW Inventories. Buffer Stocks. Cost Shocks.

AB This paper assesses different models of inventory behavior in terms of their ability to well approximate the realized data on inventories. We do this initially for the pure production smoothing model and then for a sequence of generalizations of the model by treating the inventory data as the sum of two unobserved components. The first component is the part of inventories that can be explained by the specified null model; the second component model noise. We then perform a signal extraction exercise on the data which provides estimates of the variances of the unobserved components. These estimates have the desirable property, shown by Durlauf and Hall [1989] that the variance of the estimated noise component is a lower bound on the variance of the true noise component. Consequently, we can assess, through the ratio of the estimated noise variance to inventory variance, the importance of the noise component. This provides a metric for the significance of the model noise. We find that the basic production level smoothing model of inventories, augmented by buffer stock motives, observed cost shocks, and to a lesser extent stockout avoidance motives, appears to well approximate monthly inventory data.

Dutta, Prajit K.

TI Folk Theorems for Repeated Games: A NEU Condition. AU Abreu, Dilip; Dutta, Prajit K.; Smith, Lones.

Dutta, Soumitra

PD June 1990. TI Approximate Reasoning by Analogy to Answer Null Queries. AA INSEAD. SR INSEAD Working Papers: 90/49/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 17. PR not available. JE C88. KW Database. Fuzzy Logic. Artificial Intelligence.

AB Analogy refers to recognizing certain similarities

between a source situation/object and a target situation/object and deriving some properties of the target based on the observed similarities with the source. Analogy is an important inference method in human cognition and is a powerful computational tool for general inference. Null queries are queries which elicit a null answer from the database system, often due to the presence of incomplete information in the database, e.g., the absence of certain attribute values for some objects. Analogy is useful for obtaining an approximate answer to a null query. In this paper, we develop the theoretical basis for the application of analogical reasoning to obtain approximate answers for null queries in the context of a fuzzy relational data model. Incorporating analogical reasoning in data models enhances their user-friendliness. Our proposed model of analogy incorporates fuzzy logic and is a natural generalization of models of analogy researched in the domain of artificial intelligence.

PD September 1990. **TI** Computer Support for Strategic and Tactical Planning in Mergers and Acquisitions. **AU** Dutta, Soumitra; Bonissone, Piero. **AA** Dutta: INSEAD. Bonissone: General Electric Corporation Research and Development. **SR** INSEAD Working Papers: 90/66/TM/SE/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 6. **PR** not available. **JE** D92, D81, G34, C87. **KW** Long Term Planning.

AB This paper presents a new approach to planning in dynamic and uncertain environments. Planning is viewed as a process in which an agent's long term goals are transformed into short term tasks and objectives, given the context of planning. The developed model allows for a dynamic balance between long term strategic planning and short term tactical planning. A combination of rules and scripts is used. Rules are used for reasoning about long term strategic choices. Scripts are used for representing short term tasks and objectives. The uncertainty calculi of RUM/PRIMO are used for supporting reasoning under uncertainty. In the proposed model, it is also possible to achieve a seamless integration of case-based reasoning into the planning process. These ideas have been implemented in a system called MARS, which plans in the financial domain of mergers and acquisitions.

PD September 1990. **TI** A Framework and Methodology for Enhancing the Business Impact of Artificial Intelligence Applications. **AA** INSEAD. **SR** INSEAD Working Papers: 90/68/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 11. **PR** not available. **JE** O32, O33. **KW** Computer Technology. Strategic Applications.

AB Artificial intelligence (AI) technology is being increasingly used for commercial applications. The past decade has seen many advances in the development of AI theory and tools. However, there is a dearth of research into frameworks and methodologies for identifying strategic applications of AI. AI applications which enhance the competitive advantage of a company are of strategic value to the organization. This paper presents an approach based on "information and value profiling" for choosing strategically important AI applications. AI groups in companies can use this methodology profitably to better align their development efforts with the corporate strategy of the firm.

PD September 1990. **TI** A Model for Temporal Reasoning in Medical Expert Systems. **AA** INSEAD.

SR INSEAD Working Papers: 90/69/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 9. **PR** not available. **JE** C88, I12. **KW** Medical Software. Fuzzy Logic.

AB While the results obtained with medical expert systems have been very encouraging, they have some limitations which prevent them from fully simulating the behavior of a medical expert. Some of these deficiencies are external (i.e. peculiar to the domain of application) while others are internal (i.e. caused by the technology used). This paper explains these limitations of medical expert systems and addresses the issue of temporal reasoning in medical expert systems. Temporal reasoning is especially important for medical expert systems as the final diagnosis is often strongly affected by the sequence in which the symptoms develop. Current research on time structures in computer science is reviewed and a temporal model based on fuzzy set theory is developed. The proposed model allows a simple and natural representation of symptoms and provides for efficient computation of temporal relationships between symptoms. The applicability of the proposed temporal model to reasoning in expert systems is demonstrated.

TI Integrating Case-Based Reasoning in Multi-Criteria Decision Support Systems. **AU** Angehrn, Albert; Dutta, Soumitra.

Edmonds, Graham J.

PD September 1992. **TI** Unit Root Tests and Mean Shifts. **AU** Edmonds, Graham J.; O'Brien, R. J.; Podivinsky, Jan M. **AA** Edmonds and O'Brien: Southampton University. Podivinsky: Southampton University and Monash University. **SR** Monash Department of Econometrics Working Paper: 10/92; Department of Econometrics, Faculty of Economics and Politics, Monash University, Clayton, Victoria 3168, Australia. **PG** 12. **PR** no charge. **JE** C12. **KW** Testing. Unit Roots. Structural Break. Mean Shift. Simulation.

AB A mean shift can cause tests for a unit root to erroneously fail to reject the null hypothesis of the existence of a unit root. Perron (1990) and Hendry and Neale (1991) provide simulation evidence of this for (augmented) Dickey-Fuller tests in models without a time trend. This paper extends these analyses by considering a wider range of test statistics (including statistics proposed by Bhargava (1986)) applied to models (possibly including a time trend) subject to a shift in mean. Our simulation results show that, at least for alternatives close to the unit root, either an appropriate Bhargava test statistic or the suitably normalized OLS estimator of the unit root has higher power than the Dickey-Fuller t-tests.

Eichengreen, Barry

PD March 1992. **TI** The Marshall Plan: Economic Effects and Implications for Eastern Europe and the Former USSR. **AU** Eichengreen, Barry; Uzan, Marc. **AA** Eichengreen: University of California at Berkeley. Uzan: Harvard University. **SR** CEPR Discussion Paper: 638; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 85. **PR** Pounds 3.00 or \$5.00. **JE** F31, N14, O22, F35. **KW** Marshall Plan. Foreign Aid. Eastern Europe.

AB This paper is a first attempt to evaluate the economic effects of the Marshall Plan. We find that US aid had a significant impact on Europe's recovery from World War II. The recipients of large amounts of Marshall aid recovered significantly faster than other industrial countries. Strikingly,

however, we find that the obvious channels through which the Marshall Plan could have affected European recovery - stimulating investment, augmenting capacity to import and financing infrastructure repair - were relatively unimportant. Rather, the crucial role of the Marshall Plan was to facilitate the restoration of financial stability and the liberalization of production and prices.

TI The Marshall Plan: History's Most Successful Structural Adjustment Program. AU De Long, J. Bradford; Eichengreen, Barry.

TI Shocking Aspects of European Monetary Unification. AU Bayoumi, Tamim A.; Eichengreen, Barry.

TI Is There a Conflict Between EC Enlargement and European Monetary Unification? AU Bayoumi, Tamim A.; Eichengreen, Barry.

TI Macroeconomic Adjustment Under Bretton Woods and the Post-Bretton Woods Float: An Impulse-Response Analysis. AU Bayoumi, Tamim A.; Eichengreen, Barry.

TI Macroeconomic Adjustment Under Bretton Woods and the Post-Bretton-Woods Float: An Impulse-Response Analysis. AU Bayoumi, Tamim A.; Eichengreen, Barry.

TI Macroeconomic Adjustment Under Bretton Woods and the Post-Bretton-Woods Float: An Impulse-Response Analysis. AU Bayoumi, Tamim A.; Eichengreen, Barry.

El-Erian, Mohamed A.

PD August 1991. **TI** Mexico's External Debt and the Return to Voluntary Capital Market Financing. AA International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/83; International Monetary Fund, Washington, DC 20431. **PG** 33. **PR** not available. **JE** F34, G15, O54. **KW** Commercial Bank Debt. Debt Servicing. Capital Market Financing.

AB The paper analyzes the evolution of Mexico's approach to commercial bank debt restructuring since the outbreak of the 1982 debt servicing problems. It discusses the key elements of the approach, their implementation, and their interaction with developments in the "international debt strategy". It focuses, in particular, on factors contributing to the emergence of comprehensive market-based debt and debt service reduction operations. Together with the sustained implementation of appropriate economic policies these operations have contributed to Mexico's return to voluntary international capital market financing. The paper discusses the major aspects of this market re-entry process.

El-Gamal, Mahmoud A.

PD July 1992. **TI** Vertigo: Comparing Structural Models of Imperfect Behavior in Experimental Games. AU El-Gamal, Mahmoud A.; Palfrey, Thomas R. AA California Institute of Technology. **SR** Caltech Social Science Working Paper: 800; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 13. **PR** no charge. **JE** C70, C91. **KW** Experimental Game Theory. Learning in Games. Errors in Beliefs.

AB This paper investigates learning in games with one-sided incomplete information using laboratory data from a game which we call the game of Vertigo. The predicted Bayes-Nash equilibrium behavior of the agents in this type of game

generates overly strong restrictions on the data, including the zero likelihood problem: certain actions should never be observed. To circumvent statistical problems, and to allow for deviations from perfectly rational behavior, we introduce the possibility of players making errors when choosing their actions. We compare two competing models depending on whether players take the errors in actions into consideration when formulating their strategies. We also investigate possible deviations from Bayes' rule, producing too fast or too slow an updating rule. In total, we get six models of sophisticated and unsophisticated strategy formation on the first dimension, and fast, slow, or no updating on the second. We apply a fully Bayesian structural econometric approach to compare the statistical performance of these six models, and to obtain posterior estimates of several nuisance parameters governing the errors in actions.

Elgar, Jane

PD September 1992. **TI** The Impact of the Law on Industrial Disputes in the 1980s. AU Elgar, Jane; Simpson, Bob. AA London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 104; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 52. **PR** no charge. **JE** J52, J58. **KW** Trade Unions. Union Law.

AB This paper evaluates evidence from information provided by trade unions and employers' associations in 1990-91 on the influence of the law on industrial disputes in the 1980's. A detailed analysis of four sectors - education, other public services, printing and publishing, engineering and construction - leads to the conclusion that while the law was an important factor in some disputes, government claims concerning the beneficial impact of the labor legislation of 1980-1990 are too simplistic. In the 1980's the law in general became a more important factor in industrial relations, in particular in industrial disputes. The influence of the law varied considerably between different sectors. Of the legislative changes in the 1980's, only the requirement for unions to hold ballots before calling on their members to take industrial action had a significant overall impact and the effects of this change were diverse and complex.

Englin, Jeffrey

TI Cost-Benefit Analysis for Non-Market Resources: A Utility Theoretic Empirical Model Incorporating Demand Uncertainty. AU Cameron, Trudy Ann; Englin, Jeffrey.

Engsted, Tom

PD September 1992. **TI** Testing Quadratic Adjustment Cost Models within a Cointegrated VAR. AU Engsted, Tom; Haldrup, Niels. AA University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1992-9; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 17. **PR** no charge. **JE** C12, C32, J23. **KW** Rational Expectations. Cointegration.

AB This paper deals with estimation and testing of linear quadratic adjustment cost models under rational expectations. We illustrate how the restrictions arising from such models can be specified within an unrestricted VAR-model written in the Johansen (1988, 1991) error correction model form with cointegrating restrictions. The technique that we are going to

present is a straightforward generalization of the Campbell-Shiller (1987) method for testing rational expectations restrictions in present value models. In particular, we show how information about both the short-run and the long-run cointegration parameters of the Johansen VAR-model can be exploited in a unified way to test the restrictions. The paper is completed by an empirical application to sectoral labor demand for Danish manufacturing. Generally, the quadratic adjustment cost model under rational expectations is found to be rejected by the data.

Estache, Antonio

PD June 1992. TI Evaluating the Minimum Asset Tax on Corporations: An Option Pricing Approach. AU Estache, Antonio; van Wijnenbergen, Sweder. AA World Bank. SR CEPR Discussion Paper: 684; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 27. PR Pounds 3.00 or \$5.00. JE H21, H25. KW Minimum Asset Tax. Tax Incentives. Option Pricing.

AB King-Fullerton methodology cannot assess the minimum-asset tax (MAT) because it cannot handle uncertainty. We present an alternative based on option pricing, and show how carry-over rules, depreciation conventions and uncertainty affect the MAT burden. Using Brazilian data, we show that: (a) because of the high intersectoral variance of capital intensity, the MAT does not reduce sectoral distortions; and (b) while high variance raises the MAT burden, high risk firms are not hit harder by the MAT; high-risk firms also have a high rate of return, which reduces the impact of the MAT.

Estrin, Saul

TI The Eastern German Labour Market in Transition: Gross Flow Estimates from Panel Data. AU Bellmann, Lutz; Estrin, Saul; Lehmann, Hartmut; Wadsworth, Jonathan.

Evans, Martin

PD November 1992. TI Inflation Regimes and the Sources of Inflation Uncertainty. AU Evans, Martin; Wachtel, Paul. AA New York University. SR New York University Salomon Brothers Working Paper: S-92-51; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. PG 33. PR \$5.00. JE E30, E37. KW Inflation. Markov Switching Model. Inflation Regimes. Uncertainty.

AB This paper develops new time series measures of inflation in the United States in the post-War period that account for the prospect of changing inflation regimes. The measures are constructed from estimates of a Markov switching model for inflation. Importantly, we show that rational forecasts derived from the Markov model are consistent with survey measures of inflation expectations. This result serves to validate our model and suggests that agents rationally account for possible regime switching when forecasting. Our Markov model allows us to decompose uncertainty about future inflation into two components; a certainty equivalent component that ignores uncertainty about future inflation regimes, and a regime uncertainty component than the certainty equivalent component of inflation uncertainty.

Evans, Robert A.

PD March 1992. TI Value, Consistency and Random

Coalition Formation. AA University of Cambridge. SR University of Cambridge Economic Theory Discussion Paper: 169; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 12. PR \$5.00 (L2.50), checks payable to University of Cambridge. JE C71. KW Shapley Value. Cooperation Games. Consistency. Coalition Formation.

AB Given an n-player cooperative game and a feasible "wage" n-vector, suppose that the players in a cooperative game are randomly split into two coalitions, each with a randomly chosen leader, the two leaders bargain bilaterally and each pays, out of his share, a wage to each member of his coalition as specified by the wage vector. The wage vector is said to be consistent with the above procedure if it is equal to the ex ante expected payoff vector. We prove that if all two-coalition partitions are equally likely and if the bilateral bargain splits the surplus equally then the unique persistent payoff is the Shapley value. An equivalent consistency result holds for partitions with more than two elements. These results are related to Gul's (1989) result on non-cooperative implementation of the Shapley value.

Faini, Riccardo

PD July 1992. TI Finance and Development: The Case of Southern Italy. AU Faini, Riccardo; Galli, Giampaolo; Giannini, Curzio. AA Faini: Universita di Brescia. Galli and Giannini: Banca d'Italia. SR CEPR Discussion Paper: 674; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 56. PR Pounds 3.00 or \$5.00. JE G21, D82. KW Rationing. Information. Credit Markets.

AB We look at the role of the financial sector in the context of the relatively backward regions of Southern Italy. Commercial banks in the South typically have higher operating costs and charge higher interest rates than Northern banks. Borrowers in the South are considerably riskier than those elsewhere in Italy, but that risk accounts for only half of the 200 basis points average North-South interest differential. The rest is largely accounted for by differences in operating costs. We argue that these findings reflect a situation in which Southern banks have a monopoly of information concerning local firms, with outside banks forced to resort to rationing practices to avoid attracting the worse borrowers.

PD September 1992. TI A Primer on the MFA Maze. AU Faini, Riccardo; de Melo, Jaime; Takacs, Wendy E. AA Faini: Universita degli Studi di Brescia. de Melo: World Bank. Takacs: University of Maryland. SR CEPR Discussion Paper: 716; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 24. PR Pounds 3.00 or \$5.00. JE F13. KW Allocative Efficiency. Multi-Fiber Agreements. Quotas.

AB The paper identifies the potential sources of allocative inefficiency generated by the Multi-Fiber Agreements (MFA) and examines the evidence for such inefficiencies. Five sources of inefficiency are identified relating to inefficient allocations across countries, across consumers, and among firms within constrained countries. Evidence is first provided from trends in import shares for aggregate categories of textiles and clothing before and during the MFA. Second, evidence is provided from a detailed examination of quota utilization rates and price differentials among EC importing countries.

Farber, Henry S.

PD October 1992. **TI** The Analysis of Inter-Firm Worker Mobility. **AA** Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 308; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 39. **PR** \$2.00. **JE** J63. **KW** Turnover. Mobility. Job Change.

AB I use a sample of over fourteen thousand full-time jobs held by workers in the National Longitudinal Survey of Youth (NLSY) to examine mobility patterns and to evaluate theories of inter-firm worker mobility. The roles of both heterogeneity and state dependence in determining mobility rates for young workers are investigated, and both are found to be very important. There are three main findings. First, mobility is strongly positively related to the frequency of job change prior to the start of the job. Second, job change in the most recent year prior to the start of the job is more strongly related than earlier job change to mobility on the current job. Third, the monthly hazard of job ending is not monotonically decreasing in tenure as most earlier work using annual data has found, but it increases to a maximum at three months and declines thereafter.

Farmer, Roger E. A.

PD October 1992. **TI** Real Business Cycles and the Animal Spirits Hypothesis. **AU** Farmer, Roger E. A.; Guo, Jang Ting. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 680; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. **PG** 29. **PR** \$5.00. **JE** E32. **KW** Animal Spirits. Business Cycles.

AB In this paper, we investigate a quantitative equilibrium macroeconomic model with an aggregate technology that is subject to increasing returns. We show that this model may display fluctuations at business cycle frequencies even when there are no shocks whatsoever to the fundamentals of the economy. These fluctuations are due to the self-fulfilling beliefs of investors which we call "animal spirits." We calibrate our model economy using recent evidence on the magnitude of increasing returns from industry studies of the U.S. economy and we find that our calibrated model performs as well or better than the standard RBC model at capturing the contemporaneous properties of the fluctuations in U.S. data. We also compare the impulse response functions predicted by our model, and by two other more standard models, with a four variable vector autoregression on U.S. data. Our animal spirits economy is the most successful of the three at matching broad features of the dynamic responses in the actual data. In addition, the Solow residuals in the animal spirits economy, driven by i.i.d. sunspots, broadly resemble those in the U.S. time series.

Feenberg, Daniel R.

PD November 1992. **TI** Income Inequality and the Incomes of Very High Income Taxpayers: Evidence From Tax Returns. **AU** Feenberg, Daniel R.; Poterba, James M. **AA** Feenberg: National Bureau of Economic Research. Poterba: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** Massachusetts Institute of Technology Department of Economics Working Paper: 92-16; Department of Economics, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 27. **PR** \$8.00

Domestic; \$10.00 Overseas; \$5.00 Student. **JE** H20, E25. **KW** Tax Returns. Tax Reforms. Income Inequality.

AB This paper uses tax return data for the period 1951-1990 to investigate the rising share of adjusted gross income (AGI) that is reported on very high income tax returns. We find that most of the increase in the share of AGI reported by high-income taxpayers is due to an increase in reported income for the one quarter of one percent of taxpayers with the highest AGIs. The share of total AGI reported by these taxpayers rose slowly in the early 1980's, and increased sharply in 1987 and 1988. This pattern suggests that at least part of the increase in the income share of high-AGI taxpayers was due to the changing tax incentives that were enacted in the 1986 Tax Reform Act. By lowering marginal tax rates on top-income households from 50% to 28%, TRA86 reduced the incentive for these households to engage in tax avoidance activities. We also find substantial differences in the growth of the income share of the highest one quarter of one percent of taxpayers, and the share of other very high income taxpayers. This suggests that the increasing inequality of reported incomes at very high levels may not be driven by the same factors that have generated widening wage inequality throughout the income distribution and over a longer time period.

Ferdows, Kasra

TI Removing the Barriers in Manufacturing. **AU** De Meyer, Arnoud; Ferdows, Kasra.

Fershtman, Chaim

PD May 1992. **TI** Social Status, Culture and Economic Performance. **AU** Fershtman, Chaim; Weiss, Yoram. **AA** Fershtman: Northwestern University. Weiss: Tel-Aviv University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1007; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208. **PG** 18. **PR** Per copy: \$3.00 in the U.S.A. or Canada; \$5.00 via international mail. Make checks payable to Northwestern University. **JE** Z10, D50, J70. **KW** Social Status. Cultural Differences.

AB The purpose of this paper is to trace out the relationships between social status and economic performance in a general equilibrium framework. We show that changes in the demand for status, triggered by changes in preferences or in income distribution, influence the wage structure the level of aggregate output and economic welfare. The link between status and aggregate output is created by the fact that differences in occupational status imply occupational wage differences among workers of the same skill. The larger is the demand for status the larger is the wage gap and the lower is aggregate output. Our discussion of status is closely related to the economic analysis of discrimination against ethnic or racial groups (see Becker(1971) and Arrow(1973)). The main difference is that our discussion puts more emphasis on acquired characteristics, in particular schooling. Hence, status is determined endogenously within the equilibrium system.

Fiorito, Riccardo

PD July 1992. **TI** Stylized Facts of Business Cycles in the G7 from a Real Business Cycles Perspective. **AU** Fiorito, Riccardo; Kollintzas, Tryphon. **AA** Fiorito: University of Siena. Kollintzas: Athens University of Economics and Business. **SR** CEPR Discussion Paper: 681; Centre for

Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 55. PR Pounds 3.00 or \$5.00. JE E31, E32, E24. KW Labor Hoarding. Adjustment. Variable Employment.

AB This paper investigates the basic stylized facts of business cycles in the G7 countries. Evidence suggests that the real business cycles model can account for several important stylized facts for all seven countries. But real business cycle models cannot at present account for some basic stylized facts of labor dynamics, primarily because they cannot account for variations in total hours and hours per worker. This and other evidence suggests that labor hoarding might, especially in Europe and Japan, be the main force behind employment dynamics.

Fishback, Price V.

PD July 1992. TI Did Workers Gain From the Passage of Workers' Compensation Laws? AU Fishback, Price V.; Kantor, Shawn Everett. AA University of Arizona. SR University of Arizona Economics Working Paper: 92-28; Department of Economics, McClelland Hall - Rm. 401, University of Arizona, Tucson AZ 85721. PG 17. PR \$2.00 U.S. and Canada; \$3.00 Overseas by air. JE N32, J30. KW Worker's Compensation. Compensating Wage Differentials.

AB Legislative reforms often have indirect effects that offset the gains expected from legislation. Contemporaries hailed workers' compensation as a boon to workers because it raised the amount of post-accident compensation paid to injured workers. Analysis of several wage samples from the early 1900's shows that the rise in post-accident compensation was fully offset by a reduction in wages for semi-skilled and unskilled workers, but not for unionized and skilled workers. In essence, workers' compensation forced less skilled workers to forego a percentage of annual earnings up-front in return for an insurance package with greater benefits than under negligence liability.

Fishelson, Gideon

PD September 1992. TI Endowment Effect and Market Effect: Revisited. AA Tel Aviv University. SR Tel Aviv Foerder Institute for Economic Research Working Paper: 20/92; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, ISRAEL. PG 7. PR no charge. JE D30, J70. KW Market Effect. Endowment Effect. Income Differential.

AB The question regarding the determinants of the earning differential between two population groups at a given time period, and of its evolution over time has been given continuous attention over the past three decades. The difference of the market prices of various endowments has also been called "discrimination" and measures were suggested for its quantification. In this study we present alternative formulations for the evaluation of the endowments vs. the market factors. We recommend the one which is the most consistent and symmetric over groups and show its performance for U.S. data.

Fishman, Arthur

PD September 1991. TI Planned Obsolescence as an Engine of Technological Progress. AU Fishman, Arthur; Gandal, Neil; Shy, Oz. AA Tel-Aviv University. SR Tel-Aviv Sackler Institute of Economic Studies Working Paper: 10-91; Department of Economics, Tel-Aviv University, Ramat

Aviv 69978, Tel-Aviv, ISRAEL. PG 15. PR no charge. JE O31. KW Durability. Innovation. Technological Progress.

AB Critics of capitalism contend that many products are designed to have uneconomically short lives, with the intention of forcing consumers to repurchase too frequently. This phenomenon is commonly referred to as "planned obsolescence." In this paper, we show that planned obsolescence may be a necessary condition for the achievement of technological progress and that a pattern of rapidly deteriorating products and fast innovation may be preferred to long-lasting products and slow innovation.

Flinn, Christopher

PD July 1991. TI Cohort Size and Schooling Choice. AA New York University. SR New York University Economic Research Report: 91-40; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. PG 25. PR no charge. JE I21, J24. KW Education. Welfare Elasticity.

AB We develop a perfect-foresight overlapping generations model to investigate the effects of cohort size on schooling decisions and cohort-specific welfare measures. A set of sufficient conditions are presented which ensure the existence of a unique sequence of human capital rental rates and schooling choices for any sequence of cohort sizes. We perform a small simulation exercise in which we examine schooling and welfare elasticities defined with respect to own cohort size and the sizes of neighboring cohorts; the welfare elasticities are decomposed into a part attributable to the direct effect of cohort size change and an indirect effect attributable to changes in schooling choices. For the range of structural parameters utilized, the absolute size of the direct cohort size effect is typically an order of magnitude greater than that of the equilibrium effect.

Flood, Mark D.

PD July 1991. TI Market Structure and Inefficiency in the Foreign Exchange Market. AA Federal Reserve Bank of St. Louis. SR Federal Reserve Bank of St. Louis Working Paper: 91-001A; Research and Public Information Division, Federal Reserve Bank of St. Louis, P.O. Box 442, St. Louis, MO 63166. PG 30. PR no charge. JE C15, D40, F31. KW Foreign Exchange. Industrial Organization. Market Microstructure. Market Efficiency. Simulation.

AB This paper investigates the intraday operational efficiency of the U.S. foreign exchange market by conducting experiments with market composition (the numbers of market-makers, brokers and customers in the market) in a computer simulation model. The results suggest significant operational inefficiencies which can be explained by temporary inventory imbalances inherent in a decentralized market.

Franciosi, Robert J.

PD October 1992. TI United States vs. Brown University Et al.: Why do Nonprofits Fix Prices? AA University of Arizona. SR University of Arizona Economics Working Paper: 92-29; Department of Economics, McClelland Hall - Rm. 401, University of Arizona, Tucson AZ 85721. PG 15. PR \$2.00 U.S. and Canada; \$3.00 Overseas by air. JE L44. KW Antitrust. Nonprofit Organizations. AB On May 22, 1991 the Justice Department filed a

complaint against eight Ivy League schools and MIT claiming that they violated the Sherman Act by colluding on the amount of financial aid to offer students. The defendants argued that the effects of their agreements were redistributive, that is it helped finance poorer students. This paper develops a simple model of school behavior that tries to explain why schools act to redistribute financial resources among students. It presents an empirical test that lends some support to the model.

Fry, Vanessa

PD November 1992. TI An Almost Ideal Quadratic Logarithmic Demand System for the Analysis of Micro Data. AU Fry, Vanessa; Pashardes, Panos. AA Fry: University of Oxford and Institute for Fiscal Studies. Pashardes: City University, London and Institute for Fiscal Studies. SR Oxford Applied Economics Discussion Paper Series: 145; Institute of Economics and Statistics, St Cross Building, Manor Road, Oxford OX1 3UL. PG 18. PR 2 pounds. JE D10. KW Demand Systems. Preference Heterogeneity. Microeconomic Data.

AB We consider an integrable rank-3 demand system which combines the two functionally flexible and analytically convenient price indices of the Almost Ideal (AI) demand system with a third price index to allow for quadratic logarithmic effects in the budget shares. The proposed specification is particularly useful for the analysis of micro data where significant non-linearities and preference heterogeneity occur. The empirical analysis in the paper is based on data drawn from the U.K. Family Expenditure Survey, 1970-86.

Fulghieri, Paolo

TI Dynamic Effects of Foreign Tax Credits on Multinational Corporations. AU Altshuler, Rosanne; Fulghieri, Paolo.

Funke, Michael

TI Trade Unions, Wages and Structural Adjustment in the New German States. AU Burda, Michael C.; Funke, Michael.

Gaba, Anil

PD August 1990. TI Using Survey Data in Inferences About Purchase Behaviour. AU Gaba, Anil; Winkler, Robert. AA Gaba: INSEAD. Winkler: Duke University. SR Unite de Recherche Document de Travail ENSAE/INSEE: 90/80/TM; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. PG 15. PR not available. JE C42, C11, M31. KW Survey Data. Bayesian Inference. Purchase Behavior. Marketing Research.

AB Data from consumer surveys often include errors, and such errors can have a serious effect on inferences about purchase behavior or other activities. In this paper a model is developed for making inferences about purchase behavior based on survey data with possible errors. A likelihood analysis reveals an identification problems, which is avoided when a Bayesian approach is taken. The model is applied with purchase recall data from two previous studies, and the analysis shows that errors can have a significant impact on inferences about purchase behavior. Ignoring such errors leads to point estimates that are unrealistically narrow. The effective amount of information in the survey data is reduced dramatically by the presence of errors. These results have important implications for the use and value of survey data in studies of purchase behavior in many other areas.

PD September 1990. TI Inferences with an Unknown Noise Level in a Bernoulli Process. AA INSEAD. SR Unite de Recherche Document de Travail ENSAE/INSEE: 90/79/TM; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. PG 26. PR not available. JE C12, C11, C13, C42. KW Bernoulli Process. Likelihood Analysis. Bayesian Analysis. Noise Level.

AB Inferences about a proportion p are often based on data generated from dichotomous processes, which are generally modeled as processes that are Bernoulli in p . In reality, the assumption that a data generating process is Bernoulli in p , the proportion of interest, is often violated due to the presence of various sources of noise. The level of the noise is usually unknown and, furthermore, dependent on the unknown proportion in which one is interested. Two specific models which take into account the existence of noise in a Bernoulli process are developed. In a likelihood analysis, an identification problem arises. The incorporation of prior information via a Bayesian analysis avoids this noise level. Empirical data is used to illustrate the models and provide some flavor of the implications of our uncertainty about the noise for inferences about a proportion.

Gagnon, Joseph E.

PD September 1991. TI How Pervasive is the Product Cycle? The Empirical Dynamics of American and Japanese Trade Flows. AU Gagnon, Joseph E.; Rose, Andrew K. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System International Finance Discussion Paper: 410; Division of International Finance, Board of Governors of the Federal Reserve System, Washington DC 20551. PG 16. PR no charge. JE F11, F12, F14. KW International Trade. Product Cycle. Factor Proportions.

AB This paper looks for dynamic patterns in international trade flows using multilateral American and Japanese data disaggregated to the four-digit SITC level. Little evidence is found of product-cycle dynamics between 1962 and 1988: rather, goods that begin the sample in surplus (deficit) tend to remain in surplus (deficit) throughout the sample.

Gale, Douglas

TI Information Revelation and Strategic Delay in a Model of Investment. AU Chamley, Christophe; Gale, Douglas.

PD September 1992. TI Dynamic Coordination Games. AA Boston University. SR Boston University Ruth Pollak Working Paper in Economics: 13; Department of Economics, Boston University, 270 Bay State Rd., Boston, MA 02215. PG 27. PR no charge. JE C72, C73, E22. KW Delay. Complementarities.

AB Firms and households may delay investment decisions because of the need to coordinate their decisions with other agents. Delay is costly because agents discount the future. Equilibrium delay is studied using a dynamic N -person, coordination game. The following results are obtained. (i) Introducing time "solves" the coordination problem: for fixed N , all equilibrium outcomes converge to the Pareto efficient outcome, as the period length converges to zero. (ii) The number of players turns out to be a crucial parameter. There exist equilibria in which delay is proportional to N , for arbitrarily large values of N . (iii) The exact timing of strategic complementarities is important. When complementarities are

"leading", there is no delay. (iv) Unlike the static model, the behavior of games with finite N is very different from the continuum model, even if N is very large.

Galeotti, Marzio

PD August 1991. TI Variable Markups in a Model with Adjustment Costs: Econometric Evidence for U.S. Industry. AU Galeotti, Marzio; Schiantarelli, Fabio. AA Galeotti: Università degli Studi di Brescia. Schiantarelli: Boston University. SR New York University Economic Research Report: 91-44; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. PG 18. PR no charge. JE D21, D43, D92, L60. KW U. S. Manufacturing. Returns to Scale.

AB In this paper we investigate the degree of market power in U.S. manufacturing industries and whether that power is affected by fluctuations in demand. The key feature of our contribution is that it imposes on a model with adjustment costs the minimum structure necessary to recover a measure of the markup of output price over marginal cost. The markup is allowed to vary with fluctuations in demand, and its estimate is obtained using the Euler equation approach. The paper also presents evidence on the degree of returns to scale. We conduct the empirical investigation for U.S. two-digit manufacturing industries using annual data covering 1952 through 1985. Significant departures from perfect competition characterize a large number of U.S. industries. However, our estimates suggest that the markups are smaller than those found in studies that abstract from adjustment costs.

Galli, Giampaolo

TI Finance and Development: The Case of Southern Italy. AU Faini, Riccardo; Galli, Giampaolo; Giannini, Curzio.

Galy, Michel

TI Spain: Landmarks in Economic Development, 1939-92. AU Spittaller, Erich; Galy, Michel.

PD October 1992. TI Implementation of Monetary Policy in EMS Countries Participating in the Exchange Rate Mechanism. AA International Monetary Fund.. SR International Monetary Fund Working Paper: 92/87; International Monetary Fund, Washington, DC 20431. PG 11. PR not available. JE F42. KW Monetary Independence. European Monetary System.

AB This paper investigates the issue of monetary interdependence among members of the European Monetary System over the period 1979-91 and the leadership role attributed to the German central bank in the process of monetary integration, and looks for possible changes in central banks' behaviors. Econometric evidence supports somewhat the German leadership role but suggests also the development of an increased interdependence between French and German monetary policies after 1981-82; meanwhile, the Italian and more the Spanish central banks appear to have preserved a more significant measure of monetary autonomy.

Gandal, Neil

TI Planned Obsolescence as an Engine of Technological Progress. AU Fishman, Arthur; Gandal, Neil; Shy, Oz.

Garbaccio, Richard F.

PD December 1992. TI Nonparametric Methods to

Measure Efficiency: A Comparison of Methods. AU Garbaccio, Richard F.; Hermalin, Benjamin E.; Wallace, Nancy E. AA Garbaccio and Wallace: University of California, Berkeley. Hermalin: University of California, Berkeley and Yale University. SR University of California at Berkeley Working Paper in Economics: 92-206; IBER, 156 Barrows Hall, University of California at Berkeley, Berkeley CA 94720. PG 18. PR \$3.50 U.S.A. and Canada. \$7.00 foreign. JE C14, C81, G21. KW Data Envelopment Analysis. Savings and Loans.

AB Using data on 951 savings and loans, we compare two nonparametric methods for measuring efficiency: Data Envelopment Analysis (DEA) and algebraic methods based on Varian (1984). We show that both methods are vulnerable to measurement error, although both theoretically and empirically we find the Varian-style measures to be less vulnerable. We also suggest simple methods to identify problematic observations and to reduce their influence on the results. Because we have data on the future insolvency of our savings and loans, we can directly compare the two methods by seeing which does a better job of predicting insolvency (working under the hypothesis that efficiency and insolvency should be negatively correlated). We find that the Varian-style methods do better; moreover, we find that some of DEA measures yield the implausible result that efficiency and insolvency are positively correlated.

Gasiorek, Michael

PD March 1992. TI 1992: Trade and Welfare; A General Equilibrium Model. AU Gasiorek, Michael; Smith, Alasdair; Venables, Anthony J. AA Gasiorek and Smith: University of Sussex. Venables: University of Southampton. SR CEPR Discussion Paper: 672; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 31. PR Pounds 3.00 or \$5.00. JE F12, F15, F14, F17, D58. KW Integration. Imperfect Competition. EC.

AB This paper investigates the consequences of the completion of the internal market in the EC using a computable general equilibrium model of trade under imperfect competition. The focus of the paper is the welfare consequences of reducing trade barriers and the changes in production and trade flows with the rest of the world. Welfare changes by country are reported and these are decomposed by source of gain. We find large welfare effects arising from imperfect competition. Intra-EC trade liberalization has pro-competitive effects which make a substantial contribution to the welfare change.

Gatignon, Hubert

TI Competitive Effects in Diffusion Models: An Empirical Analysis. AU Parker, Philip M.; Gatignon, Hubert.

Gatsios, Konstantine

PD March 1992. TI Privatization in Hungary: Past, Present and Future. AA Fitzwilliam College, University of Cambridge. SR CEPR Discussion Paper: 642; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 44. PR Pounds 3.00 or \$5.00. JE O52, P27, P31. KW Spontaneous Privatization. Privatization Programs. Self-Privatization.

AB The paper examines privatization in Hungary over the

last decade. It investigates the "spontaneous privatization" of the late 1980's and its relation to today's privatization efforts. It studies the changes in the economic structure of Hungary since 1988, and provides detailed information relating to the privatization efforts through the State Property Agency. It concludes by arguing for an "organized decentralization" of the privatization process as a necessary ingredient for achieving the privatization goals set by the government, and for moving Hungary away from a centrally planned to a market-oriented economy.

Gautschi, David

TI The Outputs of Retail Activities: Concepts, Measurement and Evidence. AU Betancourt, Roger; Gautschi, David.

Gehrig, Anette

PD October 1992. TI Mass Migration, Unions, and Fiscal Migration Policy. AU Gehrig, Anette; Schmidt, Christoph M.; Zimmermann, Klaus F. AA Universitat Munchen. SR CEPR Discussion Paper: 727; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 18. PR Pounds 3.00 or \$5.00. JE H30, J51, J61. KW Heterogeneous Labor. Integration.

AB Standard economic reasoning based on competitive labor markets suggests that migrant inflow will unambiguously lead to allocative gains for the native population of a host country. Even abstracting from the costs of integration, however, this result is not robust when important labor market imperfections are considered. This paper concentrates on the mechanism of wage determination in the receiving country. The model depicts a situation where one large monopoly union acts on behalf of the whole workforce. Depending on the arguments of the union objective function and on whether labor is heterogeneous, an optimal size of immigration may exist.

Gerety, Vernon E.

TI Some Experimental Evidence on Differences Between Student and Prisoner Reactions to Monetary Penalties and Risk. AU Block, Michael K.; Gerety, Vernon E.

Gerlach, Stefan

TI Intertemporal Prices and the U.S. Trade Balance. AU Burda, Michael C.; Gerlach, Stefan.

TI Exchange Rate Dynamics and Currency Unification: The Ostmark-DM Rate. AU Burda, Michael C.; Gerlach, Stefan.

Ghatak, Subrata

PD May 1992. TI The Adjustment Towards National Solvency in Developing Countries: An Application to India. AU Ghatak, Subrata; Levine, Paul. AA University of Leicester. SR CEPR Discussion Paper: 647; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 19. PR Pounds 3.00 or \$5.00. JE F34, O53. KW Debt.

AB We use a small macro model of the Indian economy to examine the cost of the adjustment required to secure national solvency. This is compared with the corresponding cost if India were to repudiate its debts and experience financial autarky as a consequence. Our empirical results suggest that a small drop in the trend growth rate, resulting from a loss of foreign investment and lending to the domestic sector, is sufficient to

deter renegeing, but only if the government is sufficiently far-sighted and chooses a discount rate of 5% (or less) a year. Debt relief generally improves the relative attractiveness of debt repayment.

Ghose, Devajyoti

PD September 1992. TI The Relationship Between GARCH and Stable Processes: Finding the Source of Fat Tails in Financial Data. AU Ghose, Devajyoti; Kroner, Kenneth F. AA University of Arizona. SR University of Arizona Economics Working Paper: 92-24; Department of Economics, McClelland Hall - Rm. 401, University of Arizona, Tucson AZ 85721. PG 16. PR \$2.00 U.S. and Canada; \$3.00 Overseas by air. JE C32, G10. KW GARCH. Temporal Aggregation. Financial Modelling.

AB The stable Paretian distribution and GARCH models are both popular in financial modeling because they both have characteristics which are prevalent in financial data. In this paper we first establish that in situations common in finance, the GARCH model converges to a stable model when temporally aggregated. Second, we show that in these same situations, many of the properties of stable models are shared by GARCH models. The conclusion, then, is that many of the findings of stable distributions in finance since Mandelbrot (1963) might actually be findings of temporal clustering of volatility. These results, which are demonstrated theoretically and with Monte Carlo experiments, are confirmed empirically with several financial data series.

PD October 1992. TI An Experimental Analysis of the Effects of Aggregation on Tests of the Permanent Income Hypothesis. AU Ghose, Devajyoti; Kim, Hansuk. AA Ghose: University of Arizona. Kim: Korea Telecom Research Center. SR University of Arizona Economics Working Paper: 92-31; Department of Economics, McClelland Hall - Rm. 401, University of Arizona, Tucson AZ 85721. PG 25. PR \$2.00 U.S. and Canada; \$3.00 Overseas by air. JE C91. KW Permanent Income Hypothesis. Experimental Analysis.

AB This paper uses experimental data collected from consumption experiments in a laboratory to test the time series implications of the hypotheses of rational expectations and the permanent income hypothesis, jointly and separately. This is usually not possible with conventional tests using aggregate time series data. Given the aggregation problems affecting conventional time series tests of the PIH, this is a complementary exercise which avoids some of the difficulties related to the existence of a representative agent.

Ghosh, Atish R.

PD September 1992. TI Macroeconomic Uncertainty, Precautionary Savings and the Current Account. AU Ghosh, Atish R.; Ostry, Jonathan D. AA Ghosh: Princeton University. Ostry: International Monetary Fund. SR International Monetary Fund Working Paper: WP/92/72; International Monetary Fund, Washington, DC 20431. PG 22. PR not available. JE C32, E21, F32. KW Current Account. Savings. Uncertainty.

AB The relationship between current account developments and changes in the macroeconomic environment remains a key issue in open economy macroeconomics. This paper extends the standard intertemporal optimizing model of the current account to incorporate the effects of macroeconomic uncertainty on private savings behavior. It is shown that the

greater the uncertainty in national cash flow, defined as output less investment less government expenditure, the greater is the precautionary demand for savings and, other things equal, the larger is the current account surplus. Empirical support for the model is found using quarterly data from four large industrial countries.

Ghoshal, Sumantra

PD August 1990. **TI** Organising Competitor Analysis Systems. **AU** Ghoshal, Sumantra; Westney, Eleanor. **AA** Ghoshal: INSEAD. Westney: Massachusetts Institute of Technology. **SR** INSEAD Working Papers: 90/63/SM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 23. **PR** not available. **JE** D23. **KW** Competitor Analysis.

AB Based on a detailed study of the competitor analysis (CA) systems in three large companies, this paper examines the assessments of the formal CA system by its members and its major users, the uses to which CA is put, and the organizational systems by which the function attempts to improve its contribution and strengthen its role.

PD August 1990. **TI** Internal Differentiation and Corporate Performance: Case of the Multinational Corporation. **AA** INSEAD. **SR** INSEAD Working Papers: 90/64/SM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 11. **PR** not available. **JE** F23, L22. **KW** Subsidiaries. Vertical Integration.

AB This note elaborates and provides empirical support for Ashby's Law of Requisite Variety in the context of the structure of headquarters-subsidiary relations in large multinational corporations (MNCs). We show that a "fit" between the contextual variety manifested by the different subsidiaries of an MNC and the variety in the structure of its headquarters-subsidiary relations leads to enhanced performance of the MNC as a whole. The paper also shows that a high level of normative integration constitutes an administrative mechanism that relaxes this constraint of differentiated fit.

PD September 1990. **TI** Requisite Complexity: Organizing Headquarters-Subsidiary Relations in MNCs. **AU** Ghoshal, Sumantra; Nohria, Nitin. **AA** Ghoshal: INSEAD. Nohria: Harvard University. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 90/74/SM; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 20. **PR** not available. **JE** F23, L20, D21, D20. **KW** Multinational Corporations. Local Environment. Firm Structure.

AB We examine the fit between the structure and environment of multi-unit organizations--such as multinational corporations--whose sub-units are located in different environments. In such firms, the structure by which each of the sub-units is governed must be responsive to contingencies presented by its local environment. At the same time, the firm must have structural mechanisms that allow it to respond to contingencies arising from linkages across its national environments. A fit between the structure and environment of such firms follows from the principle of requisite complexity. What this principle states is that the complexity of firm structure must match the complexity of its environment. Structural complexity increases with internal differentiation of structures as well as with the creation of integrative structures that respond to linkages across environments. Since, *ceteris paribus*, a uniform and simple structure is preferable to a

complex one, firms must only introduce structural complexity consistent with the complexity in their environments. Empirical evidence in support of these ideas is presented based on data on 41 multinational corporations.

Giannini, Curzio

TI Finance and Development: The Case of Southern Italy. **AU** Faini, Riccardo; Galli, Giampaolo; Giannini, Curzio.

Giovannini, Alberto

PD June 1992. **TI** Bretton Woods and its Precursors: Rules versus Discretion in the History of International Monetary Regimes. **AA** Columbia University. **SR** CEPR Discussion Paper: 661; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 40. **PR** Pounds 3.00 or \$5.00. **JE** E42, E43, E52, F31, F33, N21, N22, N23. **KW** Exchange Rate Regimes. Exchange Rate Bands. Credibility.

AB This paper asks whether the theory of rules and discretion in monetary policy can be applied to an understanding of the history of the world monetary system, by focusing on the establishment and the operation of the Bretton Woods regime, and comparing it with its predecessors. The paper first discusses the underpinnings of a theory of the evolution of the international monetary regime based on alternating rules and discretion. It then assesses the ability of such theories to explain the historical record. Finally, the paper analyzes the data on interest rates and exchange rates during the classical gold standard and the Bretton Woods period to assess the stabilizing properties of the two exchange rate regimes.

PD August 1992. **TI** Central Banking in a Monetary Union: Reflections on the Proposed Statute of the European Central Bank. **AA** Columbia University. **SR** Centre for Economic Policy Research Occasional Paper: 9. **PG** 31. **PR** not available. **JE** E50, F15, F33. **KW** Central Bank. European Central Bank. Monetary Policy.

AB This paper discusses the statutes of the European Central Bank as proposed in the amendments to the Treaty of Rome endorsed by the European Council in Maastricht in December 1991. For this purpose, the paper adopts a classification of central banking operations as those pertaining to monetary policy and those pertaining to banking policy. The statutes of the European Central Bank resemble to a significant extent the Bundesbank Act, but they assign more independence to the central bank than the law instituting the German central bank. Like the Bundesbank Act, the statutes of the European Central Bank envisage maximum independence of monetary policy in a regime where the single European currency floats against other currencies. Under fixed exchange rates, however, decisions about parities and their changes have to be shared with Finance Ministries. The paper argues that, as far as monetary policy is concerned, the independence granted to the central bank by the law is only a necessary, not a sufficient condition for effective monetary policy.

PD October 1992. **TI** Understanding the High Interest Rates on Italian Government Securities. **AU** Giovannini, Alberto; Piga, Gustavo. **AA** Giovannini: Ministero del Tesoro Italiano. Piga: Columbia University. **SR** CEPR Discussion Paper: 720; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 17. **PR** Pounds 3.00 or \$5.00.

JE E42, E43, F34, H63. **KW** Public Debt. Exchange Rate Expectations. Insolvency. Withholding Tax. Italian debt.

AB This paper discusses several determinants of the differential between yields on Italian government securities and yields on foreign government securities. We concentrate on expectations of (at least partial) insolvency, tax factors and exchange rate expectations. The evidence suggests that most of the differential between the cost of Italian debt and the cost of foreign (for example, German) debt is due to exchange rate expectations.

PD October 1992. **TI** A Simple Model of Money and Taxes and an Illustration with Brazilian Data. **AU** Giovannini, Alberto; Turtelboom, Bart. **AA** Giovannini: Ministero del Tesoro Italiano. Turtelboom: Columbia University. **SR** CEPR Discussion Paper: 726; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 10. **PR** Pounds 3.00 or \$5.00. **JE** E41, H30. **KW** Money Demand. Cash-in-advance Constraint. Inflation.

AB We explore the properties of velocity in a model where agents are required by law to use money to pay taxes, but not for any other private purchases. The model is applied to Brazil between 1975 and 1990. We show that the model mimics consumption velocity very closely during the high-inflation years.

Glied, Sherry

TI Projecting the Number of New AIDS Cases in the U.S. **AU** Bloom, David E.; Glied, Sherry.

Glosten, Lawrence

PD October 1992. **TI** Equilibrium in an Electronic Open Limit Order Book. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-92-39; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 61. **PR** \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). **JE** G10. **KW** Securities Exchange. Exchange Mechanism.

AB Under fairly general conditions, the paper derives the equilibrium price schedule determined by the bids and offers in an open limit order book. The analysis shows that 1) the order book will have a small trade spread, and small trades will be profitable while larger ones will not; 2) the electronic exchange provides as much liquidity as possible in extreme situations. An analysis of anonymous competing exchanges shows that 1) the limit order book does not invite competition, while other "exchanges" do; 2) If an entering exchange earns non-negative trading profits, the consolidated price schedule will equal limit order book price schedule.

Gluck, Heinz

TI Monetary and Exchange Rate Policy in Austria: An Early Example of Policy Coordination. **AU** Tatom, John A.; Gluck, Heinz; Proske, Dieter.

Glyn, Andrew

TI Investment and Profitability: The Evidence from the Advanced Capitalist Countries. **AU** Bhasker, V.; Glyn, Andrew.

PD November 1992. **TI** Real Wages and Reconstruction

in Eastern Europe. **AA** University of Oxford. **SR** Oxford Applied Economics Discussion Paper Series: 147; Institute of Economics and Statistics, St Cross Building, Manor Road, Oxford OX1 3UL. **PG** 26. **PR** 2 pounds. **JE** E66, P52. **KW** Economic Reconstruction. Eastern Europe.

AB Taking the cases of Poland and the Czech and Slovak Federal Republic, this paper argues that the fall in real wages has played a major role in precipitating slumps. While cuts in real wages could have provided the resources for economic reconstruction, the implementation of orthodox fiscal policies, cuts in government expenditure and budget surpluses, have meant that the sacrifices of living standards have been frittered away in falling output.

Gonzalo, Jesus

PD August 1992. **TI** Cointegration and Aggregation. **AA** Boston University. **SR** Boston University Ruth Pollak Working Paper in Economics: 11; Department of Economics, Boston University, 270 Bay State Rd., Boston, MA 02215. **PG** 10. **PR** no charge. **JE** C32, C43. **KW** Common Factors. Cointegration.

AB This paper explores the conditions under which cointegration at the micro level implies cointegration at the macro level and vice versa. The aggregation conditions considered in this paper are in terms of common factors assumptions rather than the representative agent assumption, thereby allowing for certain kinds of heterogeneity among agents.

Gordon, Robert J.

PD June 1992. **TI** Measuring the Aggregate Price Level: Implications for Economic Performance and Policy. **AA** Northwestern University. **SR** CEPR Discussion Paper: 663; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 45. **PR** Pounds 3.00 or \$5.00. **JE** C82, E31, O47. **KW** Prices. Growth.

AB Inaccurate measures of the aggregate price level may distort short-run policy decisions and may produce misleading comparisons of productivity growth across decades and among nations. This paper reviews compactly the vast U.S. literature on price and output measurement, and identifies special aspects of U.S. methods which affect international comparisons of inflation and output growth. Cross-country differences in measurement methods tend to overstate the recent productivity performance of U.S. relative to European manufacturing. Both European and U.S. manufacturing performance are probably understated relative to Japan.

Grawe, Oliver R.

TI Market-Share Quotas. **AU** Reitzes, James D.; Grawe, Oliver R.

Green, E.

PD August 1991. **TI** Contracts, Constraints, and Consumption. **AU** Green, E.; Oh, S. N. **AA** Green: University of Minnesota and Federal Reserve Bank of Minneapolis. Oh: Federal Reserve Bank of Minneapolis, University of Minnesota and University of Pittsburgh. **SR** Federal Reserve Bank of Minneapolis Staff Report: 143; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. **PG** 27. **PR** no charge. **JE** D11, D91. **KW** Permanent Income

Model. Liquidity Constraints.

AB The paper compares implications of three kinds of models of households' consumption behavior: the basic permanent-income model, several models of liquidity-constrained households, and a model of an informationally-constrained efficient contract. These models are distinguished in terms of implications regarding the present discounted values of net trades to households at various levels of temporary income, and the households' marginal rates of substitution. Martingale consumption is studied as an approximation to the predicted consumption process of the efficient-contract model.

PD August 1991. **TI** Eliciting Traders' Knowledge in "Frictionless" Asset Market. **AA** University of Minnesota and Federal Reserve Bank of Minneapolis. **SR** Federal Reserve Bank of Minneapolis Staff Report; 144; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. **PG** 19. **PR** no charge. **JE** D82, G10. **KW** Private Information. Sequential Bargaining.

AB Intuitively, a patient trader should be able to make his trading partners compete to reveal whatever information is relevant to their transactions with him. This possibility is examined in the context of a model resembling that of Gale (1986). The main result is that, under assumptions having to do with asset structure and spanning, incentive-compatible elicitation of trading partners' knowledge is feasible.

Grether, David M.

TI The Preference Reversal Phenomenon: Response Mode, Markets and Incentives. **AU** Cox, James C.; Grether, David M.

Gretsky, N.

PD September 1991. **TI** The Nonatomic Assignment Model. **AU** Gretsky, N.; Ostroy, Joseph M.; Zame, W. **AA** Gretsky: University of California, Riverside. Ostroy and Zame: University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 605; Department of Economics, University of California at Los Angeles, 2263 Bunche., Los Angeles, CA 90024. **PG** 27. **PR** \$5.00; checks payable to U.C. Regents. **JE** C70, D50, C61. **KW** Assignment Model. Infinite Dimensional Model. Nonatomic Game. Walrasian Equilibrium.

AB We formulate a model with a continuum of individuals to be assigned to a continuum of different positions which is an extension of the finite housing market version due to Shapley and Shubik. We show that optimal solutions to such a model exist and have properties similar to those established for finite models, namely, an equivalence among the following: (i) optimal solutions to the linear programming problem (and its dual) associated with the assignment model; (ii) the core of the associated market game; (iii) the Walrasian equilibria of the associated market economy.

Grilli, Vittorio

TI Fiscal Policies and the Choice of Exchange Rate Regime. **AU** De Kock, Gabriel; Grilli, Vittorio.

Gros, Daniel

TI A Multilateral Payments Union for the Commonwealth

of Independent States: Why and How? **AU** Bofinger, Peter; Gros, Daniel.

Grossman, Gene M.

PD April 1992. **TI** Environmental Impacts of a North American Free Trade Agreement. **AU** Grossman, Gene M.; Krueger, Alan B. **AA** Princeton University. **SR** CEPR Discussion Paper: 644; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 36. **PR** Pounds 3.00 or \$5.00. **JE** F13, Q2. **KW** Environment. Pollution. Trade Liberalization.

AB In general, a reduction in trade barriers will affect the environment by expanding the scale of economic activity, by altering the composition of economic activity and by initiating a change in the techniques of production. We present empirical evidence to assess the relative magnitudes of these three effects as they apply to further trade liberalization in Mexico. We first use comparable measures of three air pollutants in a cross-section of urban areas located in 42 countries to study the relationship between air quality and economic growth. We investigate whether the size of pollution abatement costs in US industry influences the pattern of international trade and investment. Finally, we use the results from a computable general equilibrium model to study the likely compositional effect of a North American Free Trade Agreement (NAFTA) on pollution in Mexico.

PD September 1992. **TI** Protection for Sale. **AU** Grossman, Gene M.; Helpman, Elhanan. **AA** Grossman: Princeton University. Helpman: Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 21/92; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, ISRAEL. **PG** 40. **PR** no charge. **JE** F13. **KW** Protection. Lobbying. Political Economy.

AB We develop a model in which special interest groups make political contributions in order to influence an incumbent government's choice of trade policy. In the political equilibrium, the interest groups bid for protection, and each group's offer is optimal given the offers of the others. The politicians maximize their own welfare, which depends on the total amount of contributions collected and on the aggregate welfare of voters. We study the structure of protection that emerges in political equilibrium and the equilibrium contributions that are made by the different industry lobby groups, and show why these groups may in some cases prefer to have the government use trade policy to transfer income rather than more efficient means. We also discuss how our framework might be extended to include endogenous formation of lobby groups, political competition between incumbents and challengers, and political outcomes in a multicountry trading system.

Gual, Jordi

PD August 1992. **TI** Deregulation of the European Banking Industry (1980-1991). **AU** Gual, Jordi; Neven, Damien. **AA** Gual: Universidad de Navarra. Neven: Universite de Lieg. **SR** CEPR Discussion Paper: 703; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 30. **PR** Pounds 3.00 or \$5.00. **JE** G21, G28, L11, L51. **KW** Banking Regulation. European Integration.

AB In this paper the experience of deregulation in the

banking sector of seven EC countries is analyzed. Lessons are drawn for assessment of how the EC directives affecting this sector could further affect the industry. Our findings broadly confirm intuition: there is some evidence that firms in protected markets earn large rents, which are partly dissipated in excessive costs and captured by workers. Conduct deregulation seems to be effective in triggering more intense price competition.

Guidotti, Pablo E.

PD September 1992. TI Losing Credibility: The Stabilization Blues. AU Guidotti, Pablo E.; Vegh, Carlos A. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/92/73; International Monetary Fund, Washington, DC 20431. PG 34. PR not available. JE F41. KW Exchange Rates. Stabilization. Credibility.

AB In exchange rate-based stabilization programs, credibility often follows a distinct time pattern. At first it rises as the highly visible nominal anchor provides a sense of stability and hopes run high for a permanent solution to the fiscal problems. Later, as the domestic currency appreciates in real terms and the fiscal problems are not fully resolved, the credibility of the program falls, sometimes precipitously. This paper develops a political-economy model that focuses on the evolution of credibility over time, and is consistent with the pattern just described. Inflation inertia and costly budget negotiations play a key role in the model.

Guiso, Luigi

PD June 1992. TI Earnings Uncertainty and Precautionary Saving. AU Guiso, Luigi; Jappelli, Tullio; Terlizzese, Daniele. AA Guiso and Terlizzese: Banca d'Italia. Jappelli: Istituto Universitario Navale. SR CEPR Discussion Paper: 699; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 27. PR Pounds 3.00 or \$5.00. JE D81, E21. KW Wealth Accumulation. Risk.

AB We test for the presence of precautionary saving using a self-reported measure of earnings uncertainty drawn from the 1989 Italian Survey of Household Income and Wealth. The effect of uncertainty on saving and wealth accumulations is consistent with the theory of precautionary saving and with decreasing prudence. Earnings uncertainty, however, explains only a small fraction of saving and asset accumulation. The results cast doubt on the empirical relevance of precautionary saving as a response to earnings uncertainty, but not on the importance of the precautionary motive per se. Besides earnings uncertainty, other major risks such as health and mortality risks may be important determinants of wealth accumulation.

Guo, Jang Ting

TI Real Business Cycles and the Animal Spirits Hypothesis. AU Farmer, Roger E. A.; Guo, Jang Ting.

Guzek, Marian

PD April 1992. TI Creation of Free Trade Area. Czechoslovakia - Hungary - Poland: Consequences for the Polish Economy. AU Guzek, Marian; Biskup, Jozef; Kawecka-Wyrzykowska, Elzbieta. AA Foreign Trade Research Institute, Warsaw. SR CEPR Discussion Paper: 659; Centre for Economic Policy Research, 25-28 Old

Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 17. PR Pounds 3.00 or \$5.00. JE F14, F15. KW Systemic Transformation. Liberalization. Eastern Europe. AB The aim of the paper is to assess the impact of the free trade area on the Polish national economy. The methodology of the research has been based on estimations of Polish exporters' gains, Polish state revenue reductions and potential savings in the entire national economy due to a reduction in production costs. The latter is analyzed using an input-output model. The findings indicate that participation in the free trade area will be beneficial for Poland.

Haaland, Jan I.

PD March 1992. TI Global Production Effects of European Integration. AU Haaland, Jan I.; Norman, Victor D. AA Norwegian School of Economics and Business Administration. SR CEPR Discussion Paper: 669; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 22. PR Pounds 3.00 or \$5.00. JE D58, F12, F15. KW Trade Theory. Trade Policy. Market Integration.

AB This paper presents a computable general equilibrium model of world trade, and applies the model to analyses of world trade and production effects of European integration. The main features of the model are: four world regions, twelve traded goods, one non-tradable aggregate in each region and three non-traded factors of production in each region. Eleven of the traded goods industries are imperfectly competitive, with differentiated products and increasing returns to scale. The model is calibrated to 1985 data, assuming that markets are segmented at the outset. Model experiments of reduced trade costs and fully integrated markets within the EC as well as between the EC and EFTA are presented.

Haldrup, Niels

TI Testing Quadratic Adjustment Cost Models within a Cointegrated VAR. AU Engsted, Tom; Haldrup, Niels.

Hall, Charles

PD September 1992. TI A Comparison of Relations Between Security Market Prices, Returns and Accounting Measures in Japan and the United States. AU Hall, Charles; Hamao, Yasushi; Harris, Trevor S. AA Columbia University. SR Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-92-36; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. PG 19. PR \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). JE G15. KW International Capital Markets. International Comparisons.

AB Extensive research and discussion has occurred over the last two decades relating to the relevance of accounting differences in the valuation of securities in international capital markets. Yet little empirical evidence exists which evaluates how the accounting measures in Japan are associated with stock prices or returns. For such evaluations to be made usefully we should expect fundamental associations between the accounting and stock market measures to be equivalent across the countries, subject to accounting differences. That is, if equivalent basic associations do not exist then it is not clear what is meant to make such international comparisons. This paper evaluates such associations in Japan and compares them to a sample of firms in the United States. The results suggest

that Japanese stock prices were largely unrelated to fundamental values based on accounting measures for most of the 1980's and that, currently, we are seeing a correction toward these fundamentals.

Haltiwanger, John

TI The Aggregate Implications of Machine Replacement: Theory and Evidence. AU Cooper, Russell; Haltiwanger, John.

Hamao, Yasushi

TI A Comparison of Relations Between Security Market Prices, Returns and Accounting Measures in Japan and the United States. AU Hall, Charles; Hamao, Yasushi; Harris, Trevor S.

PD October 1992. TI Securities Trading in the Absence of Dealers: Trades and Quotes on the Tokyo Stock Exchange. AU Hamao, Yasushi; Hasbrouck, Joel. AA Hamao: Columbia University. Hasbrouck: New York University. SR Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-92-35; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. PG 19. PR \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). JE G10. KW Price Limits. Stock Exchange.

AB This paper investigates the behavior of intraday trades and quotes for individual stocks on the Tokyo Stock Exchange (TSE). The TSE has two distinctive institutional features: (1) the absence of market makers who trade for their own accounts, and (2) use of price limits. Our findings suggest that the immediacy available in the market is high, despite the reliance on public limit orders to supply liquidity. The price limit mechanism causes some trades to execute more slowly, but allows many incoming market orders to transact at more favorable prices. We furthermore examine the impact of trades on quotes. The TSE's mechanism is similar in many respects to the electronic limit order book modeled by Glosten (1991). Consistent with Glosten's prediction, we find some evidence for quote reversals subsequent to trades.

Hansen, Bruce E.

PD September 1991. TI Inference When A Nuisance Parameter Is Not Identified Under the Null Hypothesis. AA University of Rochester. SR University of Rochester Center for Economic Research Working Paper: 296; Department of Economics, University of Rochester, Rochester, NY 14627. PG 35. PR no charge. JE C12, O40, C15. KW Nuisance Parameters. Identification. Growth. Threshold Effects.

AB It is not uncommon to find economists testing hypotheses in models where a nuisance parameter is not identified under the null hypotheses. This paper studies the asymptotic distribution theory for such problems. The asymptotic distributions of test statistics are found to be functionals of chi-square processes. In general, the distributions depend upon a large number of unknown parameters. A simulation method is proposed which can calculate the asymptotic distribution. The testing method is applied to the threshold autoregressive model for GNP growth rates proposed by Potter (1991). We present formal statistical tests which (marginally) support Potter's claim that there is a statistically significant threshold effect in a univariate autoregression for U.S. GNP growth rates.

Hansen, Niels Lynggard

TI Cyclical Properties of Wages and Prices in Open Economies. AU Andersen, Torben M.; Hansen, Niels Lynggard.

Hare, Paul

TI Industrial Policy and Restructuring in Eastern Europe. AU Hughes, Gordon A.; Hare, Paul.

TI The Competitiveness of Hungarian Industry. AU Michael, Thomas; Revesz, Tamas; Hare, Paul; Hughes, Gordon A.

Harrington, Joseph E., Jr.

PD June 1992. TI Experimentation and Learning in a Differentiated-Products Duopoly. AA Johns Hopkins University. SR Johns Hopkins Department of Economics Working Paper: 287; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. PG 36. PR no charge. JE L13, D43, D83. KW Learning. Product Differentiation. Oligopoly Theory.

AB This paper explores experimentation when several agents are simultaneously learning. The context is a duopoly in which firms are uncertain about the substitutability of their products. Firms set prices and learn from the realized demands. The informativeness of the market experiment is found to be increasing in the amount of price dispersion. The qualitative effect of learning on firms' prices depends on the type of market. In markets with highly substitutable products, price dispersion is greater under uncertainty as firms adjust their prices so as to create a more informative experiment. In markets with highly differentiated products, firms instead compress their prices because they prefer to know less about product substitutability. In contrast to the single-agent setting, an agent may act so as to discourage experimentation when the outcome of the experiment is public information and several agents are learning.

Harris, David

PD December 1992. TI A Test of the Null Hypothesis of Cointegration. AU Harris, David; Inder, Brett. AA Monash University. SR Monash Department of Econometrics Working Paper: 14/92; Department of Econometrics, Faculty of Economics and Politics, Monash University, Clayton, Victoria 3168, Australia. PG 32. PR no charge. JE Testing. Cointegration. Integrated Variables. KW

AB The cointegration tests of Engle and Granger (1987) test the null hypothesis of no cointegration. We extend the unit root testing framework of Kwiatkowski et al (1992) to testing the null hypothesis of cointegration. A test is developed which is asymptotically equivalent to the locally best invariant (LBI) test and is applicable to a wide range of non-stationary data generating processes. The asymptotic distribution of our test statistic is found to be free of nuisance parameters, and is dependent only on the number of regressors in the cointegrating regression. We tabulate asymptotic critical values for the test based on this distribution, and report on a small power comparison with the Dickey-Fuller test.

Harris, Trevor S.

TI A Comparison of Relations Between Security Market Prices, Returns and Accounting Measures in Japan and the

United States. AU Hall, Charles; Hamao, Yasushi; Harris, Trevor S.

Hasbrouck, Joel

TI Securities Trading in the Absence of Dealers: Trades and Quotes on the Tokyo Stock Exchange. AU Hamao, Yasushi; Hasbrouck, Joel.

Hatton, Timothy J.

PD September 1992. TI The Union Wage Effect in Late Nineteenth Century Britain. AU Hatton, Timothy J.; Boyer, George R.; Bailey, Roy E. AA Hatton and Bailey: University of Essex. Boyer: Cornell University. SR CEPR Discussion Paper: 712; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 18. PR Pounds 3.00 or \$5.00. JE N33, J51. KW Labor. History.

AB This paper gives a historical dimension to the impact of trade unions on earnings by estimating the union wage effect in Britain between 1889-90 using data from the US Commissioner of Labor survey conducted at that time. The determinants of union status are also investigated in terms of profit estimation using individual characteristics which may be correlated with union membership. The results of this first stage are used in the computation of selectivity-corrected estimates of the union wage effect. It is found that the effect of union membership on earnings at this time was in the order of 15-20% for a range of different skill levels.

TI International Migration and World Development: A Historical Perspective. AU Williamson, Jeffrey G.; Hatton, Timothy J.

Heal, Geoffrey M.

PD August 1991. TI Stable Disequilibrium Prices. AA Columbia University. SR Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-92-27; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. PG 7. PR \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). JE D51. KW Stability. Non-Convexity. Convexification.

AB In an economy with non-convex production possibility sets the Walrasian adjustment process is well-defined. Under appropriate conditions it is globally stable with a limit which is not a competitive equilibrium and is a non-market-clearing price. This limit is the competitive equilibrium price vector of the economy obtained by convexification of the production sets.

PD February 1992. TI Welfare Dynamics in Securities Markets with Increasing Numbers of Traders. AA Columbia University. SR Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-91-07R; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. PG 6. PR \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). JE G14, D61. KW Entry. Pareto Efficiency.

AB I show that the entry of new traders into a perfectly competitive securities market that is initially in competitive equilibrium leads to a series of equilibria each of which is Pareto superior to the previous one. Thus all participants in the market gain from the entry of additional traders: both existing

participants and new entrants gain. This provides an alternative formalization of the idea that "depth" or "liquidity" in a market is beneficial to all. The result occurs although the entry of a new participant may in principle alter market prices in a way that is unfavorable to existing participants. The proof is based on the classical welfare properties of competitive equilibria, and on the fact that competitive equilibria are contained in the core, and does not use assumptions about market imperfections or imperfect information.

TI Robustly Efficient Equilibria in Non-Convex Economies. AU Chichilnisky, Graciela; Heal, Geoffrey M.

TI Arbitrage and Equilibrium in Economies with Infinitely Many Securities and Commodities. AU Chichilnisky, Graciela; Heal, Geoffrey M.

TI Arbitrage and Equilibrium in Economies with Infinitely Many Securities and Commodities. AU Chichilnisky, Graciela; Heal, Geoffrey M.

TI Financial Markets for Unknown Risks. AU Chichilnisky, Graciela; Heal, Geoffrey M.

TI Believing in Multiple Equilibria. AU Chichilnisky, Graciela; Heal, Geoffrey M.; Streufert, Peter A.; Swinkels, Jeroen M.

TI Financial Markets for Unknown Risks. AU Chichilnisky, Graciela; Heal, Geoffrey M.

TI Option and Non-Use Values of Environmental Assets. AU Beltratti, Andrea; Chichilnisky, Graciela; Heal, Geoffrey M.

TI Option and Non-Use Values of Environment Assets. AU Beltratti, Andrea; Chichilnisky, Graciela; Heal, Geoffrey M.

Helpman, Elhanan

TI Protection for Sale. AU Grossman, Gene M.; Helpman, Elhanan.

Hercowitz, Zvi

PD November 1992. TI Macroeconomic Implications of Investment-Specific Technological Change. AA Tel Aviv University and University of Michigan. SR Tel Aviv Sackler Institute of Economic Studies: 13/92; Department of Economics, Tel Aviv University, Ramat Aviv, ISRAEL. PG 32. PR no charge. JE E22, O47. KW Technological Change. Growth Accounting. Business Cycle Accounting.

AB A quantitative investigation of investment-specific technological change for the U.S. postwar period is undertaken, analyzing both long-term growth and business cycles within the same framework. The premise is that the introduction of new, more efficient capital goods is an important source of productivity change, and an attempt is made to disentangle its effects from the more traditional Hicks-neutral form of technological progress. The balanced growth path for the model is characterized and calibrated to U.S. National Income and Product Account data. The long- and short-run U.S. data are then interpreted through the eyes of this framework. The analysis suggests that investment-specific change accounts for a large part of U.S. growth and is a significant factor in U.S. business cycle fluctuations.

Hermalin, Benjamin E.

TI Nonparametric Methods to Measure Efficiency: A Comparison of Methods. AU Garbaccio, Richard F.; Hermalin, Benjamin E.; Wallace, Nancy E.

Hibon, Michele

TI Exponential Smoothing: The Effect of Initial Values and Loss Functions on Post-Sample Forecasting Accuracy. AU Makridakis, Spyros; Hibon, Michele.

Hoekman, Bernard

PD June 1992. TI Conceptual and Political Economy Issues in Liberalizing International Transactions in Services. AA GATT. SR CEPR Discussion Paper: 666; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 29. PR Pounds 3.00 or \$5.00. JE F13. KW Trade in Services. Liberalization. Multilateral Negotiations.

AB This paper discusses a number of the problems confronting governments interested in liberalizing access to international service markets. The focus is on a "systemic" issue: the adequacy of available knowledge in terms of assisting policy-makers to define objectives, deal with vested interests and design practical procedures to liberalize international transactions in services. Two issues in particular are addressed: (i) the implications of the economic literature that has emerged since the mid-1980's on trade in services; and (ii) the impact of the almost complete lack of information on the costs and benefits of policies affecting services on the political economy of the liberalization of trade in services.

Horsewood, N.

TI A Model of the Interwar Economy. AU Dimsdale, N. H.; Horsewood, N.

Houba, Harold

TI Odd Man Out: Bargaining Among Three Players. AU Bennett, Elaine; Houba, Harold.

Hu, Teh-wei

TI Oligopoly Structure and the Incidence of Cigarette Excise Taxes. AU Barnett, Paul G.; Keeler, Theodore E.; Hu, Teh-wei.

PD September 1992. TI The Impact of 1989 California Major Anti-Smoking Legislation on Cigarette Consumption: Three Years Later. AU Hu, Teh-wei; Bai, Jushan; Keeler, Theodore E.; Barnett, Paul G. AA Hu, Keeler and Barnett: University of California, Berkeley. Bai: Massachusetts Institute of Technology. SR University of California at Berkeley Working Paper in Economics: 92-203; IBER 156 Barrows Hall, University of California at Berkeley, Berkeley, CA 94720. PG 10. PR \$3.50 plus applicable sales tax. JE H20. KW Cigarettes. Taxation.

AB In 1988, California voters enacted Proposition 99, increasing the tax on cigarettes by 25 cents per pack, effective January, 1989. Monthly sales data reported by the California State Board of Equalization between 1984 and 1991, adjusted for seasonal variation and time trend, show that consumption of cigarettes in January 1989 was about 25 percent less than would have been expected in the absence of the tax. By December, 1989 consumption was reduced to 9.5 percent below the pre-tax trend, an amount sustained throughout 1991.

TI A Dynamic Simultaneous-Equations Model for Cigarette Consumption in the Western States. AU Sung, Hai-Yen; Hu, Teh-wei; Keeler, Theodore E.

Hughes Hallett, Andrew

TI The Price of EMU Revisited. AU Minford, Patrick; Rastogi, Anupam; Hughes Hallett, Andrew.

Hughes, Gordon A.

PD March 1992. TI Industrial Policy and Restructuring in Eastern Europe. AU Hughes, Gordon A.; Hare, Paul. AA Hughes: The World Bank. Hare: Heriot-Watt University. SR CEPR Discussion Paper: 653; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 26. PR Pounds 3.00 or \$5.00. JE F14. L60. KW Competitiveness. Domestic Resource Costs.

AB Using input-output and world price data, this study computes domestic resource costs (DRCs) for branches of manufacturing industry in Bulgaria, Czechoslovakia, Hungary, Poland and the former Soviet Union. The results show a wide dispersion of DRCs in each country, including branches with negative value added at world market prices. Restructuring each economy towards the more competitive branches raises value added at world prices and usually raises employment as well. Since the countries studied are competitive in different sectors, there is little need for them to coordinate industrial policies, but there would be great benefit from schemes to facilitate intraregional trade (e.g. some form of union).

TI The Competitiveness of Hungarian Industry. AU Michael, Thomas; Revesz, Tamas; Hare, Paul; Hughes, Gordon A.

Hunt, Jennifer

TI Wage Bargaining Structure, Employment and Economic Integration. AU Danthine, Jean Pierre; Hunt, Jennifer.

Husain, Aasim M.

PD October 1992. TI Private Sector Development in State-Dominated Economies. AA International Monetary Fund. SR International Monetary Fund Working Paper: 92/79; International Monetary Fund, Washington, DC 20431. PG 16. PR not available. JE P42. L20, L32, D21. KW State Enterprises. Economic Development.

AB The development of a competitive private sector is widely viewed as a central element in the economic transformation of central and eastern Europe. Despite significant reforms in these economies, however, state enterprises continue to produce a substantial share of output. This paper considers how the profitability of private firms is affected by the size of the state-owned sector. Closures that result in a decrease in the number of state-owned firms reduce total industrial output in the short run, but encourage the entry of private firms into the industry in the longer run and lead to an increase in total output. Policies that result in a depreciation of the real exchange rate or an improvement in the short run, but their effect may be attenuated in the long run.

Iannaccone, Laurence R.

PD July 1991. TI The Consequences of Religious Market Structure: Adam Smith and the Economics of Religion. AA Santa Clara University. SR University of Western

Ontario Papers in Political Economy Report: 13; Political Economy Research Group, Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, CANADA N6A 5C2. PG 32. PR no charge. JE A13, B11, Z10. KW Religious Institutions. Religious Markets.

AB In a largely ignored chapter of *The Wealth of Nations*, Adam Smith laid the foundation for an economic theory of religious institutions. Smith emphasized the importance of market structure, describing in detail the differences between state-sponsored religious monopolies and competitive religious markets. This paper builds on Smith's discussion both theoretically and empirically. I formalize the concept of a religious market, defend its relevance, and derive predictions concerning the observable effects religious market structure. Data on the religious characteristics of 17 developed, Western nations confirm Smith's claim that monopoly and government regulation impede religious markets just as they do secular ones. Across Protestant nations, rates of church attendance and religious beliefs are substantially higher in highly competitive markets than in markets monopolized by established churches.

Ikeda, Yuichi

PD September 1992. **TI** Treatment of Intercompany Transfer Pricing for Tax Purposes - A Survey of Legislative and Administrative Issues. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/92/77; International Monetary Fund, Washington, DC 20431. **PG** 40. **PR** not available. **JE** H25. **KW** Intercompany Transfer Pricing. Taxation.

AB Tax authorities in several countries have intensified their surveillance of intercompany transfer pricing in recent years. This paper examines the legislative and administrative issues related to the treatment of intercompany transfer pricing for tax purposes. It reviews the existing international guidelines and national rules on methods for determining appropriate transfer prices, as well as the issues related to tax administration practices for the implementation of those rules. Various systems, proposed or introduced to improve the predictability of taxation, are also examined. This paper further reviews the recent discussions on the "commensurate-with-income" standard and the pricing methodologies proposed therein. It finally reviews some alternative approaches to international income allocation which are proposed or adopted in lieu of the transfer pricing approach.

Inder, Brett

TI A Test of the Null Hypothesis of Cointegration. **AU** Harris, David; Inder, Brett.

PD December 1992. **TI** A New Test for Structural Change in Dynamic Models. **AU** Inder, Brett; Kang, Hao. **AA** Monash University. **SR** Monash Department of Econometrics Working Paper: 15/92; Department of Econometrics, Faculty of Economics and Politics, Monash University, Clayton, Victoria 3168, Australia. **PG** 13. **PR** no charge. **JE** C22, C15, C12. **KW** CUSUM Test. Small Disturbance Asymptotics. Structural Breaks. Lagged Dependent Variable.

AB This paper considers the linear regression model with the lagged dependent variable as a regressor. It argues that the Dynamic CUSUM test may not be ideal in testing for a structural change at an unknown point in time. A new test is proposed, with critical values based on small disturbance

asymptotics. A Monte Carlo study shows some power improvement. The new test also provides far more reliable estimates of the location of the structural break.

Iz, Peri

PD September 1990. **TI** An Interactive Group Decision Aid for Multiobjective Problems: An Empirical Assessment. **AU** Iz, Peri; Jelassi, Tawfik. **AA** Iz: University of Baltimore. Jelassi: INSEAD. **SR** INSEAD Working Papers: 90/60/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 15. **PR** not available. **JE** D21, C61, C92. **KW** Multiple Decision Makers.

AB Organizations are frequently required to make decisions about multiobjective problems. The complexity of such decision processes increases drastically when the participation of multiple decision makers becomes necessary. This is primarily due to the unique preference structures of the participants whose individual judgements of the "best compromise solution" may not coincide. Nominal and/or interacting groups have been found to improve the decision making effectiveness and efficiency associated with such multiple objective, multiple decision maker problems. This study reports the results of a laboratory experiment involving the use of an interactive multiobjective group decision aid.

Jackson, Matthew O.

PD August 1992. **TI** A Proof of the Existence of Speculative Equilibria. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1003; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208. **PG** 7. **PR** Per copy: \$3.00 in the U.S.A. or Canada; \$5.00 via international mail. Make checks payable to Northwestern University. **JE** D82, D44, G12, G14. **KW** Speculation. Overlapping Generations.

AB The existence of speculative equilibria is proven in a simple overlapping generations, infinite horizon economy. In equilibrium, all agents bid for assets according to increasing functions of private information which are uncorrelated with the fundamental value (dividend stream) of the asset. This is a unique best response to the strategies of the other agents, which implies that speculative information is valuable.

PD September 1992. **TI** Characterizations of Game Theoretic Solutions Which Lead to Impossibility Theorems. **AU** Jackson, Matthew O.; Srivastava, Sanjay. **AA** Jackson: Northwestern University. Srivastava: Carnegie Mellon University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1004; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208. **PG** 22. **PR** Per copy: \$3.00 in the U.S.A. or Canada; \$5.00 via international mail. Make checks payable to Northwestern University. **JE** C72, D71. **KW** Implementation. Social Choice. Game Theory.

AB For some game theoretic solution concepts, such as dominant strategies, Nash equilibrium, and undominated strategies, only dictatorial social choice functions are implementable on a full domain of preferences with at least three alternatives. For other solution concepts, such as the iterative removal of weakly dominated strategies, undominated Nash equilibrium, and maximin, it is possible to implement

non-dictatorial social choice functions. Which characteristics of solution concepts account for these differences? We begin by proving a new impossibility theorem. This theorem shows that conditions which are significantly weaker than strategy-proofness, assure that a social choice function is dictatorial on a full domain of preferences. This helps us to identify the essential parts of the impossibility theorems and leads to two characterizations of solution concepts which lead to impossibility results.

Jappelli, Tullio

PD May 1992. TI Saving, Growth and Liquidity Constraints. AU Jappelli, Tullio; Pagano, Marco. AA Jappelli: Istituto Universitario Navale. Pagano: Università di Napoli. SR CEPR Discussion Paper: 662; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 26. PR Pounds 3.00 or \$5.00. JE E21, E44, O16. KW Endogenous Growth. Overlapping Generations.

AB In the context of an overlapping generations model, we show that liquidity constraints on households: (i) raise the saving rate; (ii) strengthen the effect of growth on saving; and (iii) increase the growth rate if productivity growth is endogenous. These propositions are supported by cross-country regressions of saving and growth rates on indicators of liquidity constraints on households. The results suggest that financial deregulation in the 1980's has contributed to the decline in national saving rates in the OECD countries and that the process of financial integration in the European Community may lead to a further reduction in saving and growth rates.

TI Earnings Uncertainty and Precautionary Saving. AU Guiso, Luigi; Jappelli, Tullio; Terlizzese, Daniele.

Jelassi, Tawfik

TI An Interactive Group Decision Aid for Multiobjective Problems: An Empirical Assessment. AU Iz, Peri; Jelassi, Tawfik.

PD October 1990. TI Du Present Au Future, Bilan et Orientations des Systemes Interactifs d'aide a la Decision. AA INSEAD. SR Unite de Recherche Document de Travail ENSAE/INSEE: 90/81/TM; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. PG 29. PR not available. JE C70, C78, D70. KW Decision. Negotiation. Interaction.

AB No abstract available. This paper is written in French.

PD September 1992. TI The French Videotex System Minitel: An Example of the Critical Success Factors to Establish a National Information Technology Infrastructure. AU Jelassi, Tawfik; Cats-Baril, William L. AA Jelassi: INSEAD. Cats-Baril: University of Vermont. SR INSEAD Working Papers: 92/60/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 20. PR not available. JE L63, L96. KW Information Technology. French Teletel System.

AB Establishing an advanced national information technology infrastructure has been argued as providing competitive advantage not only for the countries that develop it but for the companies that operate in those countries. This article describes the development of the most successful national videotex system-the French Teletel system known as Minitel-and explains why it was successful while most other national videotex systems have been commercial failures. The

article first gives a historical overview of the Minitel project and then analyzes its impact on French society and business. It then compares Minitel's features with those of other national videotex systems. The article concludes by suggesting a series of critical success factors in the development of a national information technology infrastructure.

Johnston, R. Barry

TI Issues in Managing and Sequencing Financial Sector Reforms Lessons from Experiences in Five Developing Countries. AU Bisat, Amer; Johnston, R. Barry; Sundararajan, V.

Jones, L.

TI A Reconsideration of the Problem of Social Cost: Free Riders and Monopolists. AU Chari, V.; Jones, L.

Kajii, Atsushi

PD November 1992. TI Constrained Suboptimality with Many Agents. AA University of Pennsylvania. SR University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences (CARESS) Working Paper: 92-29; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. PG 28. PR no charge. JE G10, D50, D52. KW Asset Reallocation. Constrained Suboptimality. Incomplete Markets.

AB It is well known that we should not expect competitive equilibria to be Pareto efficient when markets are incomplete. In sequential trade models in which market incompleteness results from insufficient asset markets, Stiglitz (1982) observed that with some non-generic exceptions, some reallocations of assets would Pareto improve a given equilibrium if spot commodity prices are left free to adjust to clear the markets. This is usually referred to the generic constrained optimality of competitive equilibria in incomplete markets. Geanakoplos-Polemarchakis (1986) proved Stiglitz' observation via transversality technique; generically in preferences and endowments, every rational expectation equilibrium can be Pareto improved upon by some asset reallocation, even asset reallocation is confined to those which respect the equilibrium asset prices. The contribution of this paper is to show that: (1) if asset reallocation is not confined to respect equilibrium asset prices, most of these restrictions can be dispensed with to establish the generic constrained suboptimality, hence the Stiglitz-Geanakoplos-Polemarchakis result can be strengthened considerably; (2) if asset reallocation is confined to respect equilibrium asset prices, then some of number restrictions are dispensable, but the restriction on the number of agents does not seem to be dispensable.

Kang, Hao

TI A New Test for Structural Change in Dynamic Models. AU Inder, Brett; Kang, Hao.

Kantor, Shawn Everett

TI Did Workers Gain From the Passage of Workers' Compensation Laws? AU Fishback, Price V.; Kantor, Shawn Everett.

PD September 1992. TI The Economic Consequences of Legislative Oversight: Theory and Evidence from the Medical Profession. AU Kantor, Shawn Everett; Legros, Patrick.

AA Kantor: University of Arizona. Legros: Cornell University. SR University of Arizona Economics Working Paper: 92-26; Department of Economics, McClelland Hall - Rm. 401, University of Arizona, Tucson AZ 85721. PG 31. PR \$2.00 U.S. and Canada; \$3.00 Overseas by air. JE L51, L84, L15. KW Legislative Oversight. Occupational Licensing. Politics. Regulation.

AB This paper provides a positive analysis of how formal, periodic legislative oversight of regulatory agencies can influence market outcomes and the welfare of regulated industries. Whereas previous research has focused on the political distinction between passive and active legislative oversight, this paper shows that there exists an important economic difference between the two mechanisms as well. We develop a principal-agent model that describes how a regulatory agent's incentives are influenced if its actions are publicly scrutinized. Our empirical analysis supports our claim that formal oversight leads to measurable economic effects.

PD October 1992. TI The Causes and Consequences of Livestock Enclosure in the Postbellum South. AA University of Arizona. SR University of Arizona Economics Working Paper: 92-27; Department of Economics, McClelland Hall - Rm. 401, University of Arizona, Tucson AZ 85721. PG 19. PR \$2.00 U.S. and Canada; \$3.00 Overseas by air. JE N51. KW Fence Laws. Agricultural Development. Postbellum South.

AB Prior to the Civil War farmers were permitted to run their animals on any land that was left unfenced. After the war "progressive" farmers sought legal reforms that would have forced livestock owners to fence in their animals, instead of forcing farmers to fence the animals out. The paper identifies the economic changes in the postbellum period that shifted the relative benefits in favor of a closed range policy. An empirical test supports the hypothesis that economic factors were important in the decision to enclose livestock. Finally, the paper measures the economic consequences of the new, closed range policy and shows that there were significant improvements in agricultural productivity as a result.

Kapur, Sandeep

PD May 1992. TI On Technological Expectations. AA University of Cambridge. SR University of Cambridge Economic Theory Discussion Paper: 170; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 19. PR \$5.00 (L2.50), checks payable to University of Cambridge. JE C12. KW Technological Improvement. Poisson Arrival Process.

AB A simple model is developed to examine the Schumpeterian conjecture regarding the "ex-ante conservation of capital in expectation of further technological improvement." The anticipation of further improvements may make it suboptimal to adopt the current best-practice technology when switching technologies repeatedly is costly. In this paper, improvements on the existing technology are expected to arrive as a Poisson arrival process, which results in a stationary decision rule. It is also suggested that the results might be quite different for a duopoly.

PD May 1992. TI Technological Diffusion with Endogenous Learning. AA University of Cambridge. SR University of Cambridge Economic Theory Discussion Paper: 171; Department of Applied Economics, University of

Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 25. PR \$5.00 (L2.50), checks payable to University of Cambridge. JE C70. KW Innovation Diffusion. Endogenous Learning. Waiting Games.

AB The diffusion of an innovation of uncertain profitability is modelled as an outcome of a sequence of waiting games. At each stage of this sequence, the firms that remain to adopt the innovation have an incentive to delay the adoption in order to learn more about its true profitability. Learning is assumed to be endogenous to the diffusion process - firms learn only from the experience of other firms that have adopted in the past. Given a finite number of firms, the mixed strategy Nash equilibria of these stage-games are such that simultaneous adoption is non-generic. Further, the expected duration of each stage is determined endogenously, and the resulting diffusion curve is not inconsistent with the commonly observed S-shaped pattern.

Karatzas, Ioannis

PD October 1992. TI Construction of Stationary Markov Equilibria in a Strategic Market Game. AU Karatzas, Ioannis; Shubik, Martin; Sudderth, William D. AA Karatzas: Columbia University. Shubik: Yale University. Sudderth: University of Minnesota. SR Yale Cowles Foundation Discussion Paper: 1033; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse, Box 2125, Yale Station, New Haven, CT 06520. PG 39. PR no charge. JE C70, D52. KW Strategic Market Games. Money. Incomplete Markets.

AB We study in this paper stationary competitive equilibria in an economy with fiat money, one non-durable commodity, infinitely many discrete-time periods, no credit or future markets, and a measure space of "non-homogeneous" agents who can differ in their preferences and in the distributions of their (random) endowments. These agents are immortal and hold money in order to offset the influence of random fluctuations in their income. Our two central issues here are time and uncertainty. We carry out an equilibrium analysis that focuses only on consumption, distribution of wealth, and price formation. The economy is modeled as an infinite horizon strategic market game with a continuum of agents. The resultant formulation permits the study of the model by dynamic programming methods and enables us to attach precise meaning to Keynes' concept of precautionary reserves in a monetary economy.

Katseli, Louka T.

PD June 1992. TI Foreign Direct Investment and Trade Interlinkages in the 1990s: Experience and Prospects of Developing Countries. AA University of Athens. SR CEPR Discussion Paper: 687; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 72. PR Pounds 3.00 or \$5.00. JE F21, F23. KW Developing Countries. Transnational Corporations.

AB The paper analyzes global trends in foreign direct investment (FDI) and the interlinkages between FDI, trade and competitiveness in host developing countries. The substitutability or complementarity of trade and FDI depend on the type of FDI activity undertaken, and more importantly, on whether FDI has resource-extracting, resource-exploiting or resource-expanding effects. It is argued that in the presence of mobile factors, the liberalization of trade and capital

movements and the maintenance of relatively low wages are necessary, but not sufficient, conditions for attracting FDI to LDCs. Finally, the effects of FDI on price competitiveness depends on the allocation of FDI between traded and non-traded sectors in the economy.

Kattuman, Paul

TI Market Concentration and Competition in Eastern Europe. AU Newbery, David M.; Kattuman, Paul.

Kawecka-Wyrzykowska, Elzbieta

TI Creation of Free Trade Area. Czechoslovakia - Hungary - Poland: Consequences for the Polish Economy. AU Guzek, Marian; Biskup, Jozef; Kawecka-Wyrzykowska, Elzbieta.

Keeler, Theodore E.

TI Oligopoly Structure and the Incidence of Cigarette Excise Taxes. AU Barnett, Paul G.; Keeler, Theodore E.; Hu, Teh-wei.

TI The Impact of 1989 California Major Anti-Smoking Legislation on Cigarette Consumption: Three Years Later. AU Hu, Teh-wei; Bai, Jushan; Keeler, Theodore E.; Barnett, Paul G.

TI A Dynamic Simultaneous-Equations Model for Cigarette Consumption in the Western States. AU Sung, Hai-Yen; Hu, Teh-wei; Keeler, Theodore E.

Kehoe, T.

PD May 1991. TI More on Money as a Medium of Exchange. AU Kehoe, T.; Kiyotaki, N.; Wright, Randall. AA Kehoe: University of Minnesota and Federal Reserve Bank of Minneapolis. Kiyotaki: University of Wisconsin and London School of Economics. Wright: University of Pennsylvania and Federal Reserve Bank of Minneapolis. SR Federal Reserve Bank of Minneapolis Staff Report; 140; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. PG 27. PR no charge. JE E42, E41, C62, C72. KW Commodity Money. General Equilibrium.

AB We extend the analysis of Kiyotaki and Wright, who study an economy in which the different commodities that serve as media of exchange are determined endogenously. Kiyotaki and Wright consider only symmetric, steady-state, pure-strategy equilibria, and find that for some parameter values no such equilibria exist. We consider mixed-strategy equilibria and dynamic equilibria. We prove that a steady-state equilibrium exists for all parameter values and that the number of steady-state equilibria is generically finite. We also show, however, that there may be a continuum of dynamic equilibria. Further, some dynamic equilibria display cycles.

Kende, Michael

PD November 1991. TI Gains from Standardization: The Case of Numerical Controls. AA Massachusetts Institute of Technology and INSEAD. SR INSEAD Working Papers: 92/51/EP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 55. PR not available. JE F14, D62. KW Network Externalities. Compatible Products.

AB This paper tests the effects on consumer surplus and profits of standardizing a product from which consumers derive network externalities. Theory suggests that standardization

would increase sales of the standardized product by enlarging the network of compatible products. If a country were to encourage standardization of its firms' products, domestic profits could increase even in foreign markets, making standardization a strategic trade policy. This paper studies the effects of the standardization of Japanese numerical controls on the U.S. market for machining centers. The results show that Japanese and U.S. profits are higher than they would have been had Japan not standardized, and U.S. and Japanese profits would have been higher if U.S. firms had also standardized.

Kets de Vries, Manfred F. R.

PD August 1990. TI The CEO Who Couldn't Talk Straight and Other Tales from the Board Room. AA INSEAD. SR Unite de Recherche Document de Travail ENSAE/INSEE: 90/89/OB; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. PG 36. PR not available. JE M10, M14. KW Executive Behavior. Chief Executives.

AB In this paper the case histories of three CEO's are presented, illustrating the suspicious, alexithymic and narcissistic modes. The ways in which the behavior of such top executives affects their organizations are described. Connections are drawn between early personality development of the self. Finally, the paper ends with a number of recommendations to board members on how to identify such troublesome executives.

Khan, Mohsin S.

TI The Romanian Economic Reform Program. AU Demekas, Dimitri G.; Khan, Mohsin S.

TI Inter-Enterprise Arrears in Transforming Economies: The Case of Romania. AU Clifton, Eric; Khan, Mohsin S.

Khor, Hoe Ee

PD September 1991. TI China-Macroeconomic Cycles in the 1980's. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/91/85; International Monetary Fund, Washington, DC 20431. PG 16. PR not available. JE C49, E32, O53, P29. KW Economic Reforms. Macroeconomic Instability.

AB This paper explores the links between reforms, macroeconomic management and the occurrence of macroeconomic instability in China during the last decade, drawing upon previous analytical work and also employing the "Granger causality" test. It is concluded that the cycles did not originate with the reforms; rather their characteristics were modified by structural changes in the economy. It is further argued that the incompleteness of reforms (which renders macroeconomic management difficult) had the effect of exacerbating the cycles by increasing their amplitude and frequency. Finally, results from the Granger tests suggest that broad money would be a good intermediate target for monetary policy.

Kilgour, D. Marc

TI Arbitration Procedures. AU Brams, Steven J.; Kilgour, D. Marc; Merrill, Samuel.

Kim, Hansuk

TI An Experimental Analysis of the Effects of Aggregation on Tests of the Permanent Income Hypothesis. AU Ghose,

Devajyoti; Kim, Hansuk.

Kim, In Joon

PD August 1992. TI The Valuation of Corporate Fixed Income Securities. AU Kim, In Joon; Ramaswamy, Krishna; Sundaresan, Suresh. AA Kim: Korea Advanced Institute of Science and Technology. Ramaswamy: University of Pennsylvania. Sundaresan: Columbia University. SR Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-92-38; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. PG 16. PR \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). JE G32, G33. KW Default Risk. Bankruptcy. Corporate Bonds.

AB We develop contingent claims valuation models for corporate bonds that are capable of generating yield spreads consistent with the levels observed in practice. We incorporate important features in the valuation related to the occurrence of and payoff upon bankruptcy and focus on the default risk of coupons in the presence of dividends and interest rate uncertainty. Numerical solutions are employed to show that the resulting yield spreads are sensitive to interest rate expectations but not to the volatility of the interest rates. Interaction between call provisions and default risk in determining yield spreads is explicitly analyzed to show that the call provision has a differential effect on Treasury issues relative to corporate issues.

Kiyotaki, N.

TI More on Money as a Medium of Exchange. AU Kehoe, T.; Kiyotaki, N.; Wright, Randall.

Klein, Michael W.

PD September 1992. TI The Accuracy of Reports of Foreign Exchange Intervention. AA Tufts University. SR National Bureau of Economic Research Working Paper: 4165; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 15. PR \$5.00. JE F31, E58. KW Foreign Exchange Intervention. Federal Reserve Policy.

AB Daily foreign exchange operations by the Federal Reserve are not revealed to the public contemporaneously or, up until recently, even years after the fact. With the recent release of daily intervention data it is now possible to gauge the accuracy of the market's perceptions of the Fed's foreign exchange intervention. In this paper we look at both qualitative and quantitative evidence on the accuracy of press reports of foreign exchange intervention by the Federal Reserve between the beginning of January 1985 and the end of December 1989. The evidence shows that the likelihood of intervention actually occurring given that it was reported was 88 percent. Interventions which were reported by the newspaper were larger on average than those which were not reported and this difference is statistically significant. Multinomial logit analysis also demonstrates that the likelihood of intervention being reported increased with the size of the intervention.

Kleit, Andrew N.

PD August 1992. TI Beyond the Rhetoric: An Inquiry into the Goals of the Sherman Act. AA Federal Trade Commission. SR Federal Trade Commission Bureau of Economics Working Paper: 195; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW,

Washington, D.C. 20580. PG 34. PR no charge. JE L40, K21. KW Sherman Act. Common Law. Legislative Choice.

AB The Sherman Antitrust Act is over a century old, yet debate continues about its original goal. Previous authors, focusing on the substance of the 1890 debate, have reached various conclusions about this goal. Instead of concentrating on the congressional debates, this paper examines the structural context of the Act. The paper argues that the Act is best viewed as a modest statutory extension of the common law. The goals of the common law are then discussed from the viewpoint of the "Law and Economics" school, and the congressional debates on the Sherman Act are also analyzed from this perspective. Using public choice theory, the paper also reviews the political support for the Act and the manner in which Congress chose to have the Act administered. The common law origins of antitrust, the support for, and implementation of the Act all support the conclusion that the Act's goal was economic efficiency.

Klemperer, Paul

PD July 1992. TI Competition When Consumers Have Switching Costs: An Overview. AA Oxford University. SR CEPR Discussion Paper: 704; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 22. PR Pounds 3.00 or \$5.00. JE D43, L16. KW Switching Costs. Lock-In. Brand Loyalty.

AB This paper surveys recent work on competition in markets in which consumers face costs to switching between competing firms' products, even when all firms' products are functionally identical. I address issues in macroeconomics, international trade and industrial organization: In a market with switching costs (or "brand loyalty"), a firm's current market share is an important determinant of its future profitability. I examine how the firm's choice between setting a low price to capture market share, and setting a high price to harvest profits by exploiting its current locked-in customers, is affected by the threat of new entry, interest rates, exchange rate expectations, the state of the business cycle, etc.

PD November 1992. TI Competition When Consumers Have Switching Costs: An Overview. AA University of Oxford. SR Oxford Applied Economics Discussion Paper Series: 142; Institute of Economics and Statistics, St Cross Building, Manor Road, Oxford OX1 3UL. PG 22. PR 2 pounds. JE D40, D41, F10, L10. KW Competition. Switching Costs. Firm Profitability.

AB We survey recent work on competition in markets in which consumers have costs of switching between competing firms' products, even when all firms' products are functionally identical. We address issues in macroeconomics and international trade, as well as industrial organization: In a market with switching costs (or "brand loyalty"), a firm's current market share is an important determinant of its future profitability. We examine how the firm's choice between setting a low price to capture market share, and setting a high price to harvest profits by exploiting its current locked-in customers, is affected by the threat of new entry, interest rates, exchange rate expectations, the state of the business cycle, etc. We also discuss the causes of switching costs, explain introductory offers and price wars, and examine industry profits, firms' product choices, and implications for multi-product competition.

Klepper, Gernot

PD March 1992. TI Pharmaceuticals - Who's Afraid of '1992'? AA Institut für Weltwirtschaft, Kiel. SR CEPR Discussion Paper: 675; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 29. PR Pounds 3.00 or \$5.00. JE F13, F15, D43. KW European Integration. Price Controls. Re-imports.

AB This paper analyzes the impact of the proposed initiatives of the European Commission for creating an internal market for pharmaceuticals. In a model of third-degree price discrimination, arbitrage between two markets and price controls through governments in one market are introduced. The effects of easier arbitrage opportunities on the prices in the two markets are analyzed. Also, the impact of a reduction in price controls in the low-priced markets is characterized. The welfare effects of the Internal Market in pharmaceuticals are ambiguous, since a movement from segmented and price-controlled markets towards integrated markets does not lead to a first- or second-best solution.

Kletzer, Kenneth M.

TI Government Solvency, Ponzi Finance and the Redundancy and Usefulness of Public Debt. AU Buitier, Willem H.; Kletzer, Kenneth M.

Knetter, Michael M.

PD September 1992. TI Is Price Adjustment Asymmetric?: Evaluating the Market Share and Marketing Bottlenecks Hypothesis. AA Dartmouth College and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4170; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 16. PR \$5.00. JE F31, E64, D40. KW Pricing-to-Market. Exchange Rates.

AB The theoretical literature on pricing-to-market has identified two possible reasons why the elasticity of prices to exchange rate changes may be asymmetric across appreciations and depreciations. If firms are attempting to increase market shares in foreign markets subject to the possibility of trade restrictions, then more pricing-to-market may occur during appreciations of the exporter's currency. If firms face capacity constraints in their distribution networks, then pricing-to-market may be exaggerated during periods of depreciation of the exporter's currency. This paper uses panel data on German and Japanese 7-digit industry exports to compare these competing explanations for asymmetries in pricing-to-market behavior. While the data seldom reject the null hypothesis of a symmetric response of prices to exchange rates, some industries, notably automobiles, provide empirical support for the market share model. Only a pooled regression with Japanese data supports the marketing bottlenecks model.

Knight, John

PD November 1992. TI Price Scissors and Intersectoral Resource Transfers: Who Paid for Industrialization in China? AA University of Oxford. SR Oxford Applied Economics Discussion Paper Series: 146; Institute of Economics and Statistics, St Cross Building, Manor Road, Oxford OX1 3UL. PG 17. PR 2 pounds. JE F10, F14, O53, O13. KW Price Scissors. Resource Transfer. International Trade.

AB The phenomena of "price scissors" and intersectoral resource transfers are shown to be very amenable to analysis

using international trade theory. It is possible to clarify the nature of the resource transfer involved and the distribution of the burden. The theoretical framework is applied to the Chinese economy and extended to incorporate such Chinese features as compulsory deliveries of food, consumer rationing, political constraints and the dynamic effects of industrialization. It is argued that the peasants, whose consumption and welfare were held down by the policy of price scissors and investment priority for industry, primarily paid for industrialization in China, the beneficiaries of the price scissors being future generations and probably also current industrial workers.

PD November 1992. TI Income Inequality in Rural China: Communities, Households and Resource Mobility. AU Knight, John; Song, Lina. AA University of Oxford. SR Oxford Applied Economics Discussion Paper Series: 150; Institute of Economics and Statistics, St Cross Building, Manor Road, Oxford OX1 3UL. PG 14. PR 2 pounds. JE O53, P24. KW Economic Inequality. China.

AB Reasons are adduced for expecting that economic inequality has been growing in rural China, both among communities, as a result of rural reforms that began in 1978. Case studies are used to examine this process and the mechanisms by which it occurred. Mobility of labor has been too restricted in extent and form to counter these disequalizing effects. Spatial characteristics appear to be more important than household characteristics in explaining the extent of inequality among households found in a 1988 national household survey. The relationship between income inequality and level of income per capita appears to be negative among counties and positive among provinces - suggesting that factor mobility and factor price equalization are greater, the smaller the community.

Koen, Vincent R.

PD August 1991. TI Testing the Credibility of the Belgian Hard Currency Policy. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/91/79; International Monetary Fund, Washington, DC 20431. PG 13. PR not available. JE E42, E43, E44, E52, F31. KW Exchange Rate Policy. Policy Credibility.

AB Interest rate differentials have been widely used to assess the degree of policy credibility. A problem with this measure, however is that the relationship between the differential and credibility varies not only across maturities but also with the actual level of the exchange rate. The alternative approach used in this paper, based on the construction of rate-of-return bands, overcomes this difficulty. It is applied to Belgium which in May 1990 hardened its exchange rate policy stance. Comparisons with other small, open European economies are carried out. Econometric evidence is provided supporting the claim that the announcement and active implementation of a tighter exchange rate link does make a difference.

Kollintzas, Tryphon

TI Stylized Facts of Business Cycles in the G7 from a Real Business Cycles Perspective. AU Fiorito, Riccardo; Kollintzas, Tryphon.

Kornhauser, Lewis A.

TI Voting Simply in the Election of Assemblies. AU Benoit, Jean-Pierre; Kornhauser, Lewis A.

TI Social Choice in a Representative Democracy.

AU Benoit, Jean-Pierre; Kornhauser, Lewis A.

Kremers, Jeroen J. M.

PD September 1992. TI The Implications of Cross-Border Monetary Aggregation. AU Kremers, Jeroen J. M.; Lane, Timothy D. AA Kremers: Ministry of Finance, the Netherlands and Erasmus University. Lane: International Monetary Fund. SR International Monetary Fund Working Paper: WP/92/71; International Monetary Fund, Washington, DC 20431. PG 18. PR not available. JE E41, F36, C43. KW Demand for Money. Currency Substitution. Monetary Aggregation.

AB Some recent studies suggest the possibility of estimating a stable aggregate demand-for-money relationship for the group of countries participating in the European Monetary System. These results are of particular relevance in connection with the task of setting policy targets for a European Central Bank. This paper uses a theoretical error-in-variables framework to identify what is gained and what may be lost through cross-border aggregation of money demand. It provides an analytical basis for such studies, paying particular attention to currency substitution and international portfolio diversification.

Kroner, Kenneth F.

TI Arbitrage and Cointegration. AU Brenner, Robin J.; Kroner, Kenneth F.

TI The Relationship Between GARCH and Stable Processes: Finding the Source of Fat Tails in Financial Data. AU Ghose, Devajyoti; Kroner, Kenneth F.

Krueger, Alan B.

TI Environmental Impacts of a North American Free Trade Agreement. AU Grossman, Gene M.; Krueger, Alan B.

PD September 1992. TI A Comparative Analysis of East and West German Labor Markets: Before and After Unification. AU Krueger, Alan B.; Pischke, Jorn-Steffen. AA Krueger: Princeton University and National Bureau of Economic Research. Pischke: Zentrum für Europäische Wirtschaftsforschung. SR Princeton Industrial Relations Section Working Paper: 307; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. PG 50. PR \$2.00. JE J31. KW Germany. Transition. Wages.

AB In 1988, the wage distribution in East Germany was much more compressed than in West Germany or the U.S.. Since the collapse of Communism and unification with West Germany, however, the wage structure in eastern Germany has changed considerably. In particular, wage variation has increased, the payoff to education has decreased somewhat, industry differentials have expanded, and the white collar premium has increased. Although average wage growth has been remarkably high in eastern Germany, individual variation in wage growth is similar to typical western levels. The wage structure of former East Germans who work in western Germany resembles the wage structure of native West Germans in some respects, but their experience-earnings profile is flat.

Krugman, Paul

PD October 1992. TI Why Have a Target Zone? AU Krugman, Paul; Miller, Marcus H. AA Krugman: Massachusetts Institute of Technology. Miller: University of Warwick. SR CEPR Discussion Paper: 718; Centre for

Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 38. PR Pounds 3.00 or \$5.00. JE F31, F32. KW Exchange Rates. Speculation. Stabilization.

AB The desire to avoid speculative runs on currencies appears to be one of the main reasons leading policy-makers to impose currency bands, but the standard analysis of target zones rules out any speculative inefficiencies by assumption. As an alternative we first present simple models of excess volatility due to stop-loss trading and then go on to consider what target zones might accomplish in this context. The principal result is that the speculation of informed traders shifts from being destabilizing to stabilizing, once the target zone assures them that stop-loss orders will not be triggered.

Kuhn, Kai-Uwe

PD July 1992. TI Competition Policy Research: Where Do We Stand? AU Kuhn, Kai-Uwe; Seabright, Paul; Smith, Alasdair. AA Kuhn: Oxford University. Seabright: Cambridge University. Smith: University of Sussex. SR Centre for Economic Policy Research Occasional Paper: 8;. PG 30. PR not available. JE L10, L11. KW Competition Policy. Market Structure. Industrial Organization.

AB This paper is intended to set out some views on current and possible future directions in research on competition policy, in order to elicit the reactions of both academics and policy-makers. The purpose of this exercise is to enable the CEPR's initiatives on "Market Structure, Industrial Organization and Competition Policy" to be sensitive to the perceived needs of those making policy today - to ensure that the questions we set out to answer are questions that matter not just abstractly but also for practical competition policy and summarizes its central dilemmas. Then we discuss a number of issues that arise when a firm has market power but do not necessarily involve strategic interaction with particular competitors.

Kyriacou, George

PD May 1991. TI Level and Growth Effects of Human Capital: A Cross-Country Study of the Convergence Hypothesis. AA New York University. SR New York University Economic Research Report: 91-26; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. PG 25. PR no charge. JE O15, J24, O57. KW Growth. Human Capital.

AB This paper examines the role of human capital in explaining the inability of some developing countries to "catch up" with more advanced countries. I construct a new proxy for human capital stock, namely the estimated years of schooling in the labor force, and reproduce the findings of several cross-country studies that the human capital levels are positively related to future output growth. Then, I estimate a cross-country Cobb-Douglas production function for the 1970-1985 period and find that the growth of human capital is not related to the growth of output. Two possible explanations are offered for why levels matter and not growth: First, that the output elasticity of human capital is positively related to the human capital level, and second that the level of average human capital is a proxy for the growth of technology.

Lambelet, Jean-Christian

PD September 1992. TI Monetary Policy in a Small Open Economy: How Independent Can it Be? The Swiss Experience. AA Universite de Lausanne. SR Universite de Lausanne, Cahiers de Recherches economiques: 9205; Departement d'econometrie et d'economie politique, Universite de Lausanne, BFSH - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 9. PR no charge. JE E42, E44, E52, E58. KW Monetary Policy. Interest Rates. Exchange Rates.

AB The initial question of this paper is: "How independent can monetary policy be in a small open economy?" The answer suggested by the Swiss experience is that such an economy does have some autonomy in the shaping of its monetary policy, but not much. Special circumstances can be exploited, as is the case right now, to gain some temporary leeway vis-a-vis the "big guy" or "big guys" which dominate the European or world stage. But special circumstances cannot last long. Consequently it is out of the question, or so it seems, for a small country to permanently follow a path fundamentally different from that of the major country or countries under whose shadow it must live. This article summarizes, in a predominantly non-technical fashion, a series of lectures given by the author in July, 1992, while he was a visiting professor at the University of Pretoria, Department of Economics.

Lane, Timothy D.

TI The Implications of Cross-Border Monetary Aggregation. AU Kremers, Jeroen J. M.; Lane, Timothy D.

PD October 1992. TI Currency Substitution and Cross-Border Monetary Aggregation: Evidence from the G-7. AU Lane, Timothy D.; Poloz, Stephen S. AA Lane: International Monetary Fund. Poloz: Bank of Canada. SR International Monetary Fund Working Paper: 92/81; International Monetary Fund, Washington, DC 20431. PG 31. PR not available. JE E41, F31. KW Currency Substitution, Money Demand.

AB Is there a stable aggregate money demand relationship for Europe. If so, why, and if not, why not? These questions are important for the implementation of policy by a European central bank, as well as for the appropriate speed of transition to EMU. This paper addresses them in a multi-country empirical study of money demand for the G-7 countries during the period since 1973. It looks for evidence of currency substitution and tests the restrictions implied by cross-border aggregation within Europe.

Lang, William W.

PD October 1992. TI "Flight to Quality" in Bank Lending and Economic Activity. AU Lang, William W.; Nakamura, Leonard I. AA Lang: Rutgers University. Nakamura: Federal Reserve Bank of Philadelphia. SR Federal Reserve Bank of Philadelphia Research Working Paper: 92-20; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. PG 12. PR no charge except overseas airmail, \$2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. JE E51. KW Money. Credit. Monetary Aggregates.

AB A major difficulty in econometric identification of the credit channel is that money and credit are closely related: they are the major components of the two sides of the banking system's balance sheet. Our approach depends on the view that

riskier, smaller borrowers are more dependent on bank lending than larger, less risky borrowers, so that relative shifts away from riskier borrowers, which we call a "flight to quality", ought to reduce economic activity. This paper develops a quarterly measure of the proportion of relatively "safe" new commercial and industrial loans made by commercial banks. Our measure of the proportion of relatively "safe" new loans Granger causes both real and nominal GDP when monetary aggregates and/or measures of a risk premium are included in the system. A positive innovation in the proportion of safe loans predicts future declines in both real and nominal GDP. Moreover, the magnitude of the effect on real GDP is considerably larger and more persistent than are those of shocks to the monetary aggregates.

Legros, Patrick

TI The Economic Consequences of Legislative Oversight: Theory and Evidence from the Medical Profession. AU Kantor, Shawn Everett; Legros, Patrick.

Lehmann, Hartmut

TI The Eastern German Labour Market in Transition: Gross Flow Estimates from Panel Data. AU Bellmann, Lutz; Estrin, Saul; Lehmann, Hartmut; Wadsworth, Jonathan.

Leiderman, Leonardo

TI Capital Inflows to Latin America: The 1970's and the 1990's. AU Calvo, Guillermo A.; Leiderman, Leonardo; Reinhart, Carmen M.

Leite, Sergio Pereira

PD October 1992. TI Coordinating Public Debt and Monetary Management During Financial Reforms. AA International Monetary Fund. SR International Monetary Fund Working Paper: 92/84; International Monetary Fund, Washington, DC 20431. PG 13. PR not available. JE G18. KW Public Debt. Monetary Management. Financial Reforms.

AB The paper analyzes the interplay between public debt and monetary management during financial reforms, and provides suggestions on collaboration between the central bank and the treasury to achieve common objectives. It discusses monetary policy and public debt at the onset and through different phases of a financial reform and emphasizes that many objectives of public debt and monetary management are mutually supportive. It recommends the setting up of units to deal with public debt issues both at the treasury and the central bank, as well as a committee to coordinate public debt and monetary management.

Levine, David K.

PD December 1992. TI When are Agents Negligible? AU Levine, David K.; Pesendorfer, Wolfgang. AA Levine: University of California, Los Angeles. Pesendorfer: Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1018; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208. PG 12. PR Per copy: \$3.00 in the U.S.A. or Canada; \$5.00 via international mail. Make checks payable to Northwestern University. JE C70, L10, E82. KW Dynamic Games.

AB We examine the following paradox: In a dynamic setting,

an arbitrarily large finite number of agents and a continuum of agents can lead to radically different equilibrium outcomes. We show that in a simple strategic setting this paradox is a general phenomenon. We also show that the paradox disappears when there is noisy observation of the players' actions. However, we argue that the aggregate level of noise must neither be too large, nor too small, and examine the question of how such noise might arise in practice and how large it is likely to be. We give several economic examples in which this paradox has recently received attention: the durable goods monopoly, corporate takeovers, and time consistency of optimal government policy.

Levine, Paul

TI Fiscal Policy Coordination and EMU: A Dynamic Game Approach. **AU** Brociner, Andrew; Levine, Paul.

TI The Adjustment Towards National Solvency in Developing Countries: An Application to India. **AU** Ghatak, Subrata; Levine, Paul.

PD August 1992. **TI** Fiscal and Monetary Policy Under EMU: Credible Inflation Targets or Unpleasant Monetary Arithmetic? **AU** Levine, Paul; Pearlman, Joseph. **AA** Levine: University of Leicester. Pearlman: University of the South Bank. **SR** CEPR Discussion Paper: 701; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 31. **PR** Pounds 3.00 or \$5.00. **JE** E52, E62, F15, F33. **KW** Fiscal Policy Coordination. Interdependence. Integration. **AB** The paper emphasizes the distinction between the purely fiscal reasons for fiscal policy coordination under EMU and the spillover effects of an uncoordinated fiscal policy on monetary policy.

TI Monetary Policy and Reputational Equilibria: A Resolution of the Non-Uniqueness Problem. **AU** al-Nowaihi, Ali; Levine, Paul.

Lewbel, Arthur

TI Quadratic Engel Curves, Welfare Measurement and Consumer Demand. **AU** Banks, James; Blundell, Richard; Lewbel, Arthur.

Li, Ya

PD October 1992. **TI** A Dynamic Game Theoretic Model of Firms' Training and Development Behavior Under Externality. **AA** Gettysburg College. **SR** University of Arizona Economics Working Paper: 92-20; Department of Economics, McClelland Hall - Rm. 401, University of Arizona, Tucson AZ 85721. **PG** 34. **PR** \$2.00 U.S. and Canada; \$3.00 Overseas by air. **JE** L10. **KW** Training Behavior. Training Externalities. Joint Training Programs.

AB The objective of this paper is to examine firms' strategic T&D investment behavior in the presence of T&D externalities. We first develop a dynamic duopoly game in which the duopolists invest in T&D strategically. Five propositions are derived, which show that one firm's T&D decision depends on the magnitude of T&D externalities, as well as on the level of training provided by the other firm. The more one firm invests in T&D, the less will the other firm invest in T&D. In the presence of T&D externalities, firms' steady state, open loop, Nash equilibrium level of training occurs at that point where their best reply mappings intersect. Under certain conditions, a firm may invest zero in T&D, pirating skilled workers from the

other firm. One firm's T&D investment is inversely related to its own discount rate, but positively related to its competitor's discount rate. To provide an analytical framework relating output market structure to the nature of firms' T&D activity, the dynamic duopoly game is extended to a multi-firm environment in which all firms are assumed to be identical.

PD October 1992. **TI** On the Existence of Training and Development Externalities in the Labor Market. **AA** Li: Gettysburg College. **SR** University of Arizona Economics Working Paper: 92-21; Department of Economics, McClelland Hall - Rm. 401, University of Arizona, Tucson AZ 85721. **PG** 35. **PR** \$2.00 U.S. and Canada; \$3.00 Overseas by air. **JE** J60. **KW** Training Externalities. Imperfectly Specific Training. Labor Turnover.

AB The objective of this paper is to identify the conditions under which T&D externalities are present in the labor market. Our departure from the conventional human capital theory lies mainly in the concept of imperfectly firm specific training. While T&D externalities are shown to be present under all categories of training, this paper focuses on how imperfectly firm specific training imparts T&D externalities. We argue that the existence and the magnitude of T&D externalities depend on whether or not training firms can accurately assess the value of their imperfectly firm specific training to poaching firms.

Liang, Kuo-yuan

TI The Relationship of Forecast Encompassing to Composite Forecasts with Simulations and an Application. **AU** Ryu, Keunkwan; Liang, Kuo-yuan.

Liuksila, Claire

PD August 1991. **TI** Colombia: Economic Adjustment and the Poor. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/81; International Monetary Fund, Washington, DC 20431. **PG** 33. **PR** not available. **JE** I32, I38, O15. **KW** Adjustment Programs. Poverty. Income Distribution.

AB This paper assesses the impact on the poor of the macroeconomic adjustment program undertaken in 1985-86. It finds that program-induced changes in production, employment, and real incomes have benefited the poor, while the adverse impact of program-induced price changes was modest and was largely cushioned by government policies. The paper describes the dimensions of poverty in Columbia, surveys government programs to alleviate poverty, and reviews the factors contributing to the improvement in the income distribution in recent years.

Lockwood, Ben

TI Wage Inflation, Electoral Uncertainty and the Exchange Rate Regime: Theory and UK Evidence. **AU** Alogoskoufis, George; Lockwood, Ben; Philippopoulos, Apostolis.

PD November 1992. **TI** Commodity Tax Competition Under Destination and Origin Principles. **AA** University of Exeter. **SR** CEPR Discussion Paper: 733; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 23. **PR** Pounds 3.00 or \$5.00. **JE** E62, F15. **KW** Customs Union. Border Controls.

AB This paper studies the effect of switching from the destination to the origin principle of taxation on non-cooperative commodity tax equilibrium. When taxes are

constrained to uniformity across commodities, the switch has no effect. When differentiated taxes are allowed, the effects of the switch depend on whether countries are small or large. In both cases the switch imposes the requirement that taxes must be uniform across commodities within each country. In the second case there are two further effects of the switch: (i) the introduction of negative spillover effects from tax policy; and (ii) a change in incentives to manipulate the terms of trade.

Maccini, Louis J.

TI Measuring Noise in Inventory Models. AU Durlauf, Steven N.; Maccini, Louis J.

MacKinnon, James G.

PD November 1992. TI Approximate Asymptotic Distribution Functions for Unit Root and Cointegration Tests. AA Queen's University. SR Queen's Institute for Economic Research Discussion Paper: 861; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. PG 20. PR \$3.00 Canada; \$3.50 U.S. and elsewhere. JE C15, C12. KW Monte Carlo Experiment. Critical Values.

AB This paper uses Monte Carlo experiments and regression methods to calculate approximate asymptotic distribution functions for a number of well-known unit root and cointegration test statistics. These allow empirical workers to calculate approximate P values for these tests. The results of the paper are based on a very extensive set of Monte Carlo experiments, which yield finite-sample critical values for a number of sample sizes. Response surface regressions are then used to obtain asymptotic critical values for a large number of different test sizes. Finally, regression methods are used to estimate approximate distribution functions with simple functional forms.

Makowski, Louis

PD September 1991. TI The Existence of Perfectly Competitive Equilibrium a la Wicksteed. AU Makowski, Louis; Ostroy, Joseph M. AA Makowski: University of California, Davis. Ostroy: University of California, Los Angeles. SR University of California at Los Angeles Department of Economics Working Paper: 606; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. PG 37. PR \$5.00; checks payable to U.C. Regents. JE C70, D50. KW Marginal Productivity. Value Theory. Competitive Equilibrium.

AB Historical documentation is provided to show that the no-surplus approach to perfectly competitive equilibrium is a descendant of ideas originating in the marginal productivity theory of distribution. We rely on connections with the work of J.B. Clark and especially P.H. Wicksteed. These connections are put to the test by showing how our reformulation of the marginal productivity principle can be used to give a self-contained proof of the existence of perfectly competitive equilibrium. Links are also established between the no-surplus approach to competitive equilibrium, the Shapley value, and the "productivity ethics" of Clark.

PD September 1991. TI Vickrey-Clarke-Groves Mechanisms in Continuum Economies: Characterization and Existence. AU Makowski, Louis; Ostroy, Joseph M. AA Makowski: University of California, Davis. Ostroy: University of California, Los Angeles. SR University of

California at Los Angeles Department of Economics Working Paper: 607; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. PG 35. PR \$5.00; checks payable to U.C. Regents. JE C70, D40, D42. KW Dominant Strategy. Mechanism Design. Full Appropriation.

AB The equivalence in the finite agent model between the families of efficient dominant strategy and Vickrey-Clarke-Groves mechanisms is extended to continuum economies. The concept of an individual's marginal product is used to link the two families of mechanisms when agents are non-atomic. Unlike the finite agent model, feasible and efficient dominant strategy mechanisms exist in the continuum, but these mechanisms do not guarantee individual rationality. For individual rationality to hold, the environment must also satisfy full-appropriation: each individual receives a payoff exactly equal to his/her marginal product. Full-appropriation is shown to be equivalent to the condition that each individual fully internalizes any external effects he/she creates. Environments and examples are given that exhibit or fail to exhibit full-appropriation.

PD September 1991. TI The Margin of Appropriation and an Extension of the First Theorem of Welfare Economics. AU Makowski, Louis; Ostroy, Joseph M. AA Makowski: University of California, Davis. Ostroy: University of California, Los Angeles. SR University of California at Los Angeles Department of Economics Working Paper: 629; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. PG 41. PR \$5.00; checks payable to U.C. Regents. JE D50, D60, D62. KW First Theorem of Welfare Economics. Pecuniary Externalities.

AB The standard First Theorem of Welfare Economics rests on two assumptions, price-taking behavior and complete markets. Thus, individuals have neither price-making nor market-making capacities. We offer an extension of the First Theorem in which individuals have such capacities. Two noteworthy features of the extension are its emphasis on aligning private rewards with social contributions at the "individual margin" as the key to market efficiency and, relatedly, its emphasis on pecuniary externalities as an important potential source of market failure.

Makridakis, Spyros

PD not available. TI Exponential Smoothing: The Effect of Initial Values and Loss Functions on Post-Sample Forecasting Accuracy. AU Makridakis, Spyros; Hibon, Michele. AA INSEAD. SR INSEAD Working Papers: 90/46/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 17. PR not available. JE C51, C52. KW Exponential Smoothing. Initial Values.

AB This paper describes an empirical investigation aimed at measuring the effect of different initial values and loss functions (both symmetric and asymmetric) on the post-sample forecasting accuracy. The 1001 series of the M-competition are used and three exponential smoothing methods are employed. The results are compared over various types of data and forecasting horizons and validated with additional data.

Mankiw, N. Gregory

TI Relative-Price Changes as Aggregate Supply Shocks. AU Ball, Laurence M.; Mankiw, N. Gregory.

Manning, Alan

PD September 1992. TI An Economic Analysis of the Effects of Pre-Strike Ballots. AA London School of Economics. SR London School of Economics Centre for Economic Performance Discussion Paper: 98; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. PG 18. PR no charge. JE J58, J51. KW Trade Unions. Union Regulation.

AB This paper uses a number of economic models to suggest ways in which the mandatory pre-strike ballots introduced in the U.K. Trade Union Act 1984 might be expected to affect union democracy, strike activity, wages and employment.

Marceau, Nicolas

TI Investment in Education and the Time Inconsistency of Redistributive Tax Policy. AU Boadway, Robin; Marceau, Nicolas; Marchand, Maurice.

Marchand, Maurice

TI Investment in Education and the Time Inconsistency of Redistributive Tax Policy. AU Boadway, Robin; Marceau, Nicolas; Marchand, Maurice.

Margo, Robert A.

PD August 1992. TI The Labor Force in the Nineteenth Century. AA Vanderbilt University. SR National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 40; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. PG 43. PR \$2.00. JE N31, J21, J51. KW Wages. Labor Supply. Unions.

AB This paper surveys recent research on the labor force in the nineteenth century. I examine trends in the aggregate size, demographic, occupational and industrial composition of the labor force; short-run and long-run movements in nominal and real wages; hours of work; the development of the factory system; the growth of unions; and government regulation of labor markets, specifically protectionist legislation. Although my survey is deliberately broad in scope, there is an underlying emphasis on those aspects of change that had a direct bearing on the evolution of the labor force in the twentieth century. In keeping with this theme, the paper concludes with a brief comparison of labor markets at the turn of the century with labor markets today.

PD September 1992. TI Employment and Unemployment in the 1930's. AA Vanderbilt University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4174; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 23. PR \$3.00. JE E24, N12, N32, C82. KW Great Depression. Disaggregated Data.

AB This paper surveys recent research on employment and unemployment in the 1930's. Unlike earlier studies that tended to rely heavily on aggregate time series, the research discussed in this paper focuses on disaggregated data. This shift in focus stems from two factors. First, disaggregated evidence provides many more degrees of freedom than the decade of annual observations associated with the depression and thus can prove helpful in discriminating between macroeconomic models. Second, and more importantly, disaggregation has revealed aspects of labor market behavior hidden in the time series that

are essential to their proper interpretation and which are, in any case, important in their own right. In particular, the findings dispute the view that representative-agent models are useful for interpreting shifts in employment and unemployment over the course of the Depression.

Marin, Dalia

PD June 1992. TI Tying, Risk-Sharing, and 'Lock-In': An Investigation of Countertrade Contracts. AA Harvard University. SR CEPR Discussion Paper: 673; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 34. PR Pounds 3.00 or \$5.00. JE F13, F14, O57. KW Contract Theory. Trade Policy. Eastern Europe.

AB The paper sees countertrade--the tying of trade flows--as an insurance contract that mitigates contractual hazards and reduces the incentive for ex post "hold-up" when parties are "locked" in a relationship after they have made specific investment. This way tying is seen as a commitment device against renegotiation during contract execution when investments are sunk. Moreover, tying is seen as an institutional setting that is effective in securing technology spillovers from developed countries to Eastern Europe and LDCs. This view of countertrade is found to be consistent with the data.

Mariotti, Marco

TI Bargaining with a Composite Player: An Application to the Uruguay Round of GATT Negotiations. AU Basevi, Giorgio; Delbono, Flavio; Mariotti, Marco.

Marquez, Jaime

PD December 1992. TI Life Expectancy of International Cartels: An Empirical Analysis. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System International Finance Discussion Paper: 439; Division of International Finance, Board of Governors of the Federal Reserve System, Washington DC 20551. PG 9. PR no charge. JE L10, L20, C40. KW Cartel Durability. Non-Nested Tests. Lerner Index. Herfindahl Index. Truncated Sample.

AB This paper examines the empirical relation between market structure and life expectancy for cartels that were active in international commodity markets throughout this century. I consider two alternative empirical formulations and estimate their parameters recognizing that durability cannot take negative values. Both formulations predict that increases in either market shares or intercartel concentration prolong life expectancy but disagree in the relative importance of these two factors. The application of tests to discriminate among the two formulations does not support constant elasticity models.

Marston, Richard C.

PD September 1992. TI Determinants of Short-Term Real Interest Differentials Between Japan and the United States. AA University of Pennsylvania and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4167; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 38. PR \$5.00. JE F21, E52, E58. KW Financing Costs. Interest Differentials.

AB Many past studies of relative financing costs in the United States and Japan have relied on interest rates from the

1970's and earlier when Japanese financial markets were subject to numerous regulations and controls and were shielded by capital controls from financial markets abroad. Interest rates on bank loans, the most important source of financing in Japan, in fact, systematically underestimated the true costs of borrowing. In the United States, capital controls were being dismantled by the early 1970's, but the prime loan rate used in past studies had by then become an unreliable measure of the true cost of borrowing in the United States. This study shows that most of the reported gap in short term financing costs between the two countries can be traced to past features of the national markets which have largely disappeared. Now that markets have been deregulated and international capital flows liberalized, national interest rates are closely related to those in the unregulated Eurocurrency markets.

Mayer, Colin

PD May 1990. **TI** European Financial Regulation: A Framework for Policy Analysis. **AU** Mayer, Colin; Neven, Damien. **AA** Mayer: City University Business School. Neven: INSEAD. **SR** INSEAD Working Papers: 90/54/BP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 26. **PR** not available. **JE** G28, G21. **KW** Banks. Market Failure. Entry Barriers.

AB This paper investigates the design and implementation of financial regulation. It notes that the rationale for the regulation of financial services is different from that of banks. Instead of systemic risks, market failures created by asymmetric information between investors and firms lie at the heart of concerns about financial services. Reputation provides some correction for imperfect information. But a distinctive feature of financial services is the large penalty that misconduct by investment businesses can impose on investors. That risk creates a significant barrier to the entry of new firms. Regulation of financial services is therefore in large part concerned with reducing barriers to entry. It does this by extending the set of penalties that can be imposed on firms. Two classes of incentives are considered: capital requirements and direct penalties. The former has an advantage over the latter where there is a relation between the capital available to a firm and its quality.

TI Restructuring Enterprises in Eastern Europe.
AU Carlin, Wendy; Mayer, Colin.

Mayhew, Ken

PD March 1992. **TI** Incentives and the Management of Enterprises in Economic Transition: Capital Markets Are Not Enough. **AU** Mayhew, Ken; Seabright, Paul. **AA** Mayhew: Pembroke College, Oxford. Seabright: Churchill College, Cambridge. **SR** CEPR Discussion Paper: 640; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 52. **PR** Pounds 3.00 or \$5.00. **JE** D23, G38, L22, L51, P52. **KW** Eastern Europe. Corporate Governance. Competition Policy.

AB This paper examines the changing incentives for the efficient management of firms in Eastern Europe. It contrasts the internal constitution of the firm with the various constraints imposed on the firm's activities by external conditions in capital, labor and product markets. Empirically, the paper examines progress towards enterprise restructuring in Eastern Germany and Poland, contrasting the direct intervention in the structure and constitution of firms with the hopes for capital

market reform. Finally, the paper examines the potentially perverse consequences of inefficient enterprise management for the progress of macroeconomic reform.

McDougall, John N.

PD July 1991. **TI** Regulation and the Contestability of Markets: Some Evidence from the History of Transportation and Communications in Canada. **AA** Queen's University and University of Western Ontario. **SR** University of Western Ontario Papers in Political Economy: 14; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 28. **PR** no charge. **JE** L50, L51, N41, N42. **KW** Regulation. **AB** The analysis of this paper, supports, more or less firmly, two main conclusions. First, delay in the introduction of new transportation and communications technologies into Canada is quite prevalent historically. The full utilization of canals, railways, steam and iron ships, inter-city trucking, long-distance telephone network broadcasting, satellite transmission and fiber optic transmission all occurred later in Canada than in the United States. Second, Canadian governments' use of chosen instruments to preempt American entry into undeveloped Canadian markets for transportation and communication services can create economic and political sunk costs that they later find it difficult to abandon to the free play of market forces. The answer to this political problem has been to prevent the redundancy of such systems by protecting them from competition for their markets through regulated delay in the introduction of systems incorporating new technologies.

McGuckin, Robert H.

PD November 1992. **TI** Manufacturing Establishments Reclassified into New Industries: The Effect of Survey Design Rules. **AU** McGuckin, Robert H.; Peck, SuZanne. **AA** Bureau of the Census. **SR** Bureau of the Census Center for Economic Studies Discussion Paper: CES 92-14; Center for Economic Studies, Bureau of the Census, Washington, DC 20233. **PG** 16. **PR** no charge. **JE** C81, L60. **KW** Survey Design Rules. Measurement Errors. Industry Output.

AB Establishment reclassification occurs when an establishment classified in one industry in one year is reclassified into another industry in another year. Because of survey design rules at the Census Bureau these reclassifications occur systematically over time, and affect the industry-level time series of output and employment. The evidence shows that reclassified establishments occur most often in two distinct years over the the life of a sample panel. Switches are not only numerous in these years, they also contribute significantly to measured industry change in industry output and employment. The problem is that reclassifications are not necessarily processed in the year that they occur. The survey rules restrict most change to certain years. The effect of these rules is evidenced by looking at the variance across industry growth rates which increases greatly in these two years. Whatever the reason for reclassifying an establishment, the way the switches are processed raises the possibility of measurement errors in the industry level statistics.

McLaren, John

PD May 1992. **TI** Why Did Big Coffee Seek Regulation? A Theory of Dynamic Monopsony Pricing without Commitment. **AA** Columbia University. **SR** Columbia

University Department of Economics Discussion Paper: 623; Department of Economics, Columbia University, 420 W 118th St., Room 1022 IAB, New York, New York 10027. PG 40. PR \$5.00. JE D43, C73. KW Monopsony. Time Inconsistency.

AB Coffee beans must be roasted before they can be used by consumers. The roasting industry is highly concentrated, so that the large firms in it have market power over the beans they buy. This creates a potential time inconsistency problem: at planting time, roasters would like to promise planters a remunerative price but that will not be credible given roasters' incentives to push the price down at harvest time. It is argued that this problem survives in an infinite horizon: a folk theorem exists but it is fragile. Finally, it is shown that an intervention akin to the International Coffee Agreement (ICA) can help solve the time inconsistency problem. This may help explain the agitation of roasting firms for the establishment of the ICA, which would otherwise appear to run counter to their interests.

PD September 1992. **TI** Speculation on Primary Commodities: The Effects of Restricted Entry. **AA** Columbia University. **SR** Columbia University Department of Economics Discussion Paper: 622; Department of Economics, Columbia University, 420 W 118th St., Room 1022 IAB, New York, New York 10027. PG 29. PR \$5.00. JE C73, C72, D43. **KW** Commodity Prices. Dynamic Oligopoly. Speculation. Strategic Tariffs.

AB There are doubts about the competitiveness of real-world commodity trade and storage. Thus, we present a model of oligopolistic commodity speculation, in which a limited number of speculators practice non-cooperative storage in an infinite horizon game. A significant technical difficulty due to the non-negative stock constraint is overcome, and a tractable sub-game perfect equilibrium is presented, in which it is shown that less is stored and prices are more volatile than under perfect competition. It turns out that a tax on consumption of the good would increase storage, stabilize prices, increase welfare and raise speculative profits; the oligopolists would thus lobby for a tariff raised against their own shipments.

PD September 1992. **TI** Speculative Equilibrium of "Managed" Primary Commodity Markets. **AA** Columbia University. **SR** Columbia University Department of Economics Discussion Paper: 624; Department of Economics, Columbia University, 420 W 118th St., Room 1022 IAB, New York, New York 10027. PG 31. PR \$5.00. JE G10, G14. **KW** Commodity Speculation. Buffer Stock. Price Bubble.

AB This paper sets up a model of commodity speculation in the presence of a public buffer stock intervention. Equilibrium is characterized, existence is proven and sufficient conditions for uniqueness are given. These take the form of the buffer stock having "marginal propensities to store" between zero and one. A limited policy neutrality result is proven, but where the buffer stock does have an effect, some strong contrasts with the *laissez-faire* case are established. For example, the equilibrium is not necessarily a constrained social optimum; a sufficient condition is given under which it is. Further, examples are given in which a putatively stabilizing buffer stock intervention actually creates a price bubble where otherwise none could exist.

McLaren, Keith R.

TI A System of Demand Equations Satisfying Effectively

Global Regularity Conditions. **AU** Cooper, Russel J.; McLaren, Keith R.

Mei, Jianping

TI Measuring International Economic Linkages with Stock Market Data. **AU** Ammer, John; Mei, Jianping.

Merrill, Samuel

TI Arbitration Procedures. **AU** Brams, Steven J.; Kilgour, D. Marc; Merrill, Samuel.

Meyer, Margaret A.

PD February 1992. **TI** Biased Contests and Moral Hazard: Implications for Career Profiles. **AA** Nuffield College, Oxford. **SR** CEPR Discussion Paper: 637; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 21. PR Pounds 3.00 or \$5.00. JE D23, D82, J41. **KW** Organizations. Bias. Asymmetric Information.

AB We study the design of a sequence of two contests between a pair of identical risk averse employees whose effort choices are private information. It is optimal for the organization to 'bias' the second contest in favor of the early winner - the reduction in second-period incentives is outweighed by the increase in first-period incentives. Thus, even though first-period success reflects only transitory shocks and not ability, it is efficient to structure the contests so these shocks have persistent effects on employees' careers.

PD June 1992. **TI** Organizational Prospects, Influence Costs, and Ownership Changes. **AU** Meyer, Margaret A.; Milgrom, Paul; Roberts, John. **AA** Meyer: Oxford University. Milgrom and Roberts: Stanford University. **SR** CEPR Discussion Paper: 665; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 25. PR Pounds 3.00 or \$5.00. JE D21, D23, G34, L22. **KW** Divestitures. Acquisitions and Mergers. Firm Boundaries.

AB We augment efficiency-based theories of ownership by including influence costs. Our principal conclusion is that the prospect of organizational decline and layoffs creates additional influence costs in multi-unit organizations that would be absent if there were no prospect of layoffs and would be lessened or eliminated in focused organizations. This helps explain the tendency of firms to divest poorly performing units, as well as the pattern of sales of such units to firms already in businesses related to that of the divested unit.

Michael, Thomas

PD October 1992. **TI** The Competitiveness of Hungarian Industry. **AU** Michael, Thomas; Revesz, Tamas; Hare, Paul; Hughes, Gordon A. **AA** Michael: London School of Economics. Revesz: Budapest University of Economic Sciences. Hare: Heriot-Watt University. Hughes: The World Bank. **SR** CEPR Discussion Paper: 736; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 29. PR Pounds 3.00 or \$5.00. JE F14, L60. **KW** Hungary. Industrial Competitiveness. Domestic Resource Cost.

AB Using an RAS update to 1990 of an 86-sector input-output table for Hungary in 1986, and corresponding data on world-to-domestic price ratios for 1990, this paper calculates domestic resource costs (DRCs) for Hungarian industries. The

disaggregated results are compared with corresponding estimates for a more aggregated model using a 21-sector input-output table. Finally, the paper analyzes the likely impact of the recently concluded Association Agreement between Hungary and the EC on Hungary's competitiveness.

Miles, David

PD May 1992. TI House Prices, Personal Sector Wealth and Consumption: Some Conceptual and Empirical Issues. AA Birkbeck College. SR Birkbeck Discussion Paper in Financial Economics: FE-4/92; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. PG 26. PR no charge. JE D11, D91, R21. KW Housing Prices.

AB This paper analyzes the impact of changes in the real price of houses upon the level of wealth and the rate of consumption of the personal sector. A theoretical framework is developed to assess under what conditions the real net worth of agents is increased by unanticipated house price inflation. Long term trends in the value of the UK housing stock, and in the excess returns to housing wealth, are measured. The implications of the results for policy and for economic modeling are discussed.

Milesi-Ferretti, Gian Maria

PD September 1992. TI Wage Claims, Incomes Policy, and the Path of Output and Inflation in a Formerly Centrally Planned Economy. AA International Monetary Fund and London School of Economics. SR International Monetary Fund Working Paper: WP/92/74; International Monetary Fund, Washington, DC 20431. PG 31. PR not available. JE E63, E64, P50. KW Socialist Economies. Wage Control.

AB The corporate governance problem of state enterprises in former socialist economies can give rise to excessive wage claims and/or capital decumulation. This paper focuses on these problems, highlighting the dynamic links between wage behavior, the fiscal deficit, inflation and the capital stock. Wage controls have been widely advocated as a response to the corporate governance problem. We show that in the presence of excessive wage claims a system of wage controls can help to limit capital decumulation and reduce inflation, since wage moderation implies higher government revenues from the profit tax and therefore lower money creation. More specifically, it is shown that when wage levels are initially excessive a reduction in the degree of wage indexation is effective in lowering inflation if nominal wages do not provide, on average, full protection against future inflation.

Milgrom, Paul

TI Organizational Prospects, Influence Costs, and Ownership Changes. AU Meyer, Margaret A.; Milgrom, Paul; Roberts, John.

Miller, John H.

PD November 1992. TI Some Dynamics of a Strategic Market Game with a Large Number of Agents. AU Miller, John H.; Shubik, Martin. AA Miller: Carnegie Mellon University. Shubik: Yale University. SR Yale Cowles Foundation Discussion Paper: 1037; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse, Box 2125, Yale Station, New Haven, CT 06520. PG 29. PR no charge. JE D50, C70. KW Simulation. Game

Theory. Strategic Market Games. Money.

AB This paper is designed to combine the game theoretic investigation of the static or equilibrium properties of large strategic market games together with the investigation of some very simple dynamics, which nevertheless are sufficient to show differences between two related games, one in which both borrowing and trade take place. The role of banking reserves emerges as relevant and sensitive to the transient state dynamics. Several 100,000 player games are simulated and the behavior is constructed with the analytical prediction for the games with a continuum of agents.

Miller, Marcus H.

TI Why Have a Target Zone? AU Krugman, Paul; Miller, Marcus H.

Minford, Patrick

PD March 1992. TI The Price of EMU Revisited. AU Minford, Patrick; Rastogi, Anupam; Hughes Hallett, Andrew. AA Minford and Rastogi: University of Liverpool. Hughes Hallett: University of Strathclyde. SR CEPR Discussion Paper: 656; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 44. PR Pounds 3.00 or \$5.00. JE F31, F33, F42. KW Optimal Currency Area. Instability. Monetary Regimes.

AB Using the recent EC Commission report "One Market, One Money" as a point of reference, we consider the merits of a single currency in Europe. The main benefit is the reduction in transaction costs. The principal potential cost, and the main concern of this paper, arises from macroeconomic instability. One would expect that under European Monetary Union (EMU) the loss of the exchange rate as a stabilizing mechanism would be damaging. This emerges from our stochastic simulations of both the world and the UK Liverpool models. Our simulations reveal that, floating is superior to EMU for all countries, and that even if the rest of the Community proceeds with EMU, the UK is better off outside it.

Montiel, Peter J.

PD September 1992. TI External Shocks and Inflation in Developing Countries Under a Real Exchange Rate Rule. AU Montiel, Peter J.; Ostry, Jonathan D. AA Montiel: Oberlin College. Ostry: International Monetary Fund. SR International Monetary Fund Working Paper: WP/92/75; International Monetary Fund, Washington, DC 20431. PG 28. PR not available. JE E52, E61, F31, F41. KW Exchange Rate Rules. Fixed Exchange Rate. Crawling Peg.

AB This paper shows that the response of inflation to external shocks is very different when the authorities target the real exchange rate than when they follow a fixed exchange rate or a preannounced crawling peg. Specifically, shocks that would have no effect on the steady-state inflation rate under a fixed exchange rate are either inflationary or deflationary under a real exchange rate rule. Moreover, irrespective of the degree of capital mobility, the authorities will find it difficult to mitigate the destabilizing effects of real shocks on the price level by using monetary policy, except possibly in the very short run.

Moore, Michael J.

PD April 1992. TI Covered Purchasing Power Parity, Ex Ante PPP and Risk Aversion. AA Queen's University.

SR CEPR Discussion Paper: 635; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 28. **PR** Pounds 3.00 or \$5.00. **JE** F31, G12, G15. **KW** Arbitrage. Asset Pricing.

AB The standard expectations augmented theory of ex-ante purchasing power parity (PPP), which was first developed by Roll, assumes that agents are risk neutral. A Covered Purchasing Power Condition is developed which holds for the general case of risk aversion. A risk-augmented form of ex-ante PPP is then derived using a Lucas-style asset pricing framework. From this I conclude that real exchange rates may not possess the martingale property though the analysis clarifies the circumstances under which this property does hold. A consumption-based orthogonality condition is tested for, using 1970's and 1980's data for the seven main industrial countries. An interesting by-product of the study is that it provides us with a useful example of unit root testing on seasonal data. Overall the results give rise to cautious optimism.

Mor, Ben D.

TI When is it Rational to be Magnanimous in Victory?
AU Brams, Steven J.; Mor, Ben D.

Morris, Stephen

PD November 1992. **TI** Revising Knowledge: A Decision Theoretic Approach. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences (CARESS) Working Paper: 92-27; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 36. **PR** \$5.00. **JE** D11, D80. **KW** Knowledge. Preferences. Uncertainty.

AB Knowledge is defined as a property of agent preferences under uncertainty. An agent has a preference ordering over "acts", which specify payoffs at each state of an uncertainty space. But he has a collection of such preference orderings, different ones for each state of the world, and each date. Preferences satisfy static coherence if, for every decision problem (a subset of acts), the composite act derived by agent optimization at each state is at least as good as every act in the original decision problem. If preferences satisfy static coherence, then knowledge satisfies two properties called knowing that you know and subjective non-delusion. Preferences satisfy dynamic coherence if, for every decision problem, the composite act derived by agent optimization at each state at some future date is at least as good in terms of today's preferences as every act in the original decision problem. If preferences satisfy dynamic coherence, then if something is known today, it is known, both today and at all future dates, that it was known; and knowledge satisfies a dynamic version of subjective non-delusion. Preferences satisfy valuable information if, for every decision problem, the composite act derived by agent optimization at any intermediate date. If preferences satisfy valuable information, knowledge has a representation almost equivalent to partition information.

Mueller, Dennis

PD February 1991. **TI** Constitutional Rights. **AA** University of Maryland. **SR** University of Western Ontario Papers in Political Economy: 10; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 43.

PR no charge. **JE** D70, D71. **KW** Rights. Public Choice. Constitution. Constitutional Rights.

AB The question of what rights would or should be protected by a constitution has not been examined in the public choice literature. Nor has the more general question been addressed of the criteria by which constitutional rights are determined. The closest the literature has come to these questions is in the debate over liberal rights initiated by Amartya Sen (1970a,b; 1976). But here the existence of a right and its nature was assumed from the start, and the debate hinged around the conflict between this right and the Pareto postulate. A systematic examination from a public choice perspective of the origin of constitutional rights and their inherent characteristics has yet to appear. This paper begins to fill this void. The paper proceeds by first defining rights, and then discussing why they would be included in the constitutional contract. The paper then analyzes the criteria by which rights would be chosen for inclusion in the constitution. The concept of constitutional rights as put forward in this paper is then compared with other notions of rights extant in the literature --natural rights, moral rights, and economic rights. The paper also takes up the issue raised by Sen, whether constitutional rights, as here defined, can conflict with the Pareto principle.

Nachane, Dilip

TI Instability of the Velocity of Money: A New Approach Based on the Evolutionary Spectrum. **AU** Artis, Michael J.; Bladen-Hovell, Robin; Nachane, Dilip.

Nakamura, Leonard I.

TI "Flight to Quality" in Bank Lending and Economic Activity. **AU** Lang, William W.; Nakamura, Leonard I.

Nakamura, Shinichiro

PD June 1991. **TI** An Adjustment Cost Model of Long-Term Employment. **AA** Waseda University. **SR** New York University Economic Research Report: 91-30; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 17. **PR** no charge. **JE** J23, D24. **KW** Factor Demand Model. Overtime.

AB This paper presents a dynamic factor demand model with adjustment costs, in which workers and capital stock are quasi-fixed in the short run, but material and overtime hours of work are variable. Workers are quasi-fixed because of long-term employment. Scheduled and overtime hours of work enter the model as distinct factors of production. Corresponding to this distinction, total labor cost is divided into scheduled payments, which represent fixed costs of employment, and variable overtime payments. The model is based on the restricted cost function with quadratic adjustment costs for workers and capital stock. I specify the restricted cost function by a truncated translog function, and apply it to annual time series data for 1960 - 85 on the Japanese electrical machinery industry using 3SLS.

PD June 1991. **TI** Adjustment Costs in Stagnant and Rapidly Growing Industries. **AA** Waseda University. **SR** New York University Economic Research Report: 91-37; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 18. **PR** no charge. **JE** L64, L67, D24. **KW** Textile Industry. Capital Stock.

AB We analyze the pattern of adjustment costs of two

Japanese industries with remarkably different growth performances: the stagnant textile industry and the dynamic electrical machinery industry. We use a translog dynamic factor demand model with adjustment costs. To explicitly take into account the prevalence of long-term employment in Japan, this model treats the number of workers as a quasi-fixed factor, and overtime hours of work per worker as a variable factor. The textile industry shows a significant fixity in capital stock and a very weak fixity in workers. In contrast to this, in the electrical machinery industry workers and capital stock have a similar significant degree of fixity. Overall, when adjusted for different growth rates, adjustment costs have a higher share of the variable cost in the stagnant textile industry (1.7 percent) than in the dynamic electrical machinery industry (0.7 percent), indicating that the adjustment cost is more serious in stagnant industries rather than growing industries.

Nalebuff, Barry

TI Competition Among Institutions. AU Caplin, Andrew; Nalebuff, Barry.

Neary, J. Peter

TI A New Approach to Evaluating Trade Policy. AU Anderson, James E.; Neary, J. Peter.

Nerlove, Marc

PD May 1991. TI Children: A Capital Good or a Base for Income Redistribution Policies. AU Nerlove, Marc; Razin, Assaf; Sadka, Efraim. AA Nerlove: University of Pennsylvania. Razin: Tel-Aviv University and National Bureau of Economic Research. Sada: Tel-Aviv University. SR Tel-Aviv Sackler Institute of Economic Studies Working Paper: 1-91; Department of Economics, Tel-Aviv University, Ramat Aviv 69978, Tel-Aviv, ISRAEL. PG 17. PR no charge. JE J13, D91. KW Capital Good. Endogenous Fertility. Redistribution Policies.

AB We have examined in this survey the economic implications of three different approaches to the value of children in society: (1) Children as a capital good; (2) Endogenous fertility; and (3) Exogenous fertility. Of particular relevance to modern societies are the last two approaches. The major difference in the economic implications for egalitarian societies between these two approaches are as follows. According to the endogenous fertility approach, there is no need for horizontal redistribution of income in order to account for family size differences among families of equal incomes. Only vertical redistribution among families of different incomes is called for. According to the exogenous fertility hypothesis, both horizontal and vertical redistributions are called for.

Neumann, Manfred J. M.

TI Real Exchange Rates within and between Currency Areas: How Far Away is EMU? AU von Hagen, Jürgen; Neumann, Manfred J. M.

Neven, Damien

TI European Financial Regulation: A Framework for Policy Analysis. AU Mayer, Colin; Neven, Damien.

PD June 1990. TI Public Policy Towards TV Broadcasting in the Netherlands. AU Neven, Damien; Van Dijk, Menno. AA INSEAD. SR INSEAD Working Papers: 90/62/EP; INSEAD, Boulevard de Constance,

Fontainebleau, 77305 Cedex, FRANCE. PG 16. PR not available. JE L82, L52. KW Television Programming. Television Broadcasting.

AB In the Netherlands, broadcasting has always been a public-service monopoly. Air time has been shared among eight broadcasting "associations" which were distinguished along political, social and religious lines. Some view this system as inefficient and alienated from viewer interests. After the entry of a network funded entirely by advertising, competition for audience share has forced the public channels to start rethinking their program strategies. The discussion of the financing of TV broadcasting provides the right time to think through the principles of TV programming. Therefore, in this report, the following TV programming aspects are looked at in some detail: program quality, program variety, the influence of number of channels on quality and variety, the influence of a country's size on the obtainable quality and variety level, special-interest programming, and positive externalities such as minority, innovative and locally produced programming. Based on this analysis, we make several recommendations about the financing of TV programming.

PD July 1990. TI The Structure and Determinants of East-West Trade: A Preliminary Analysis of the Manufacturing Sector. AU Neven, Damien; Roller, Lars-Hendrik. AA INSEAD. SR INSEAD Working Papers: 90/56/EP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 14. PR not available. JE F14, L60, O52. KW Eastern Europe. Trade Liberalization.

AB Since the fall of 1989, important political changes have taken place in Eastern European countries and the USSR. These changes are far from completed and much uncertainty remains with respect to the speed at which reforms will proceed as well as to the content of the reforms. However, it is rather uncontroversial at this point to presume that some form of a market system for goods and factors will be established and that trade between Eastern European countries and the rest of the world is likely to be liberalized. In this paper, we shall assume that this reform is indeed implemented and we shall focus on its consequences for Western European countries. We will try to assess how the liberalization of trade will affect the EEC countries and whether the "1992" program of integration could be jeopardized by such liberalization.

TI Deregulation of the European Banking Industry (1980-1991). AU Gual, Jordi; Neven, Damien.

Newbery, David M.

PD April 1992. TI Market Concentration and Competition in Eastern Europe. AU Newbery, David M.; Kattuman, Paul. AA University of Cambridge. SR CEPR Discussion Paper: 664; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 16. PR Pounds 3.00 or \$5.00. JE L11, O12, P23, P52. KW Competition Policy. Size Distribution.

AB A key feature of Soviet-type economies is the excessive concentration of production and the skewed size distribution of enterprises. This is the root cause of the "soft budget constraint" and a natural outcome of the political economy of these countries. Given entrenched political support for a system which favors producers relative to consumers, it will be hard to pursue an active competition policy, though it is essential for successful reform. We examine a hypothetical restructuring of

Polish state enterprises and argue that this should be undertaken before they are privatized. Hungary appears to have started such a process already.

Nielsen, Lars Tye

PD June 1990. TI The Utility of Infinite Menus. AA INSEAD. SR INSEAD Working Papers: 90/52/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 8. PR not available. JE D81, D11. KW Boundedness. Uncertainty.

AB It is often argued that the St. Petersburg paradox shows that von.

PD July 1990. TI Common Knowledge of a Multivariate Aggregate Statistic. AA INSEAD. SR INSEAD Working Papers: 90/57/FIN/EP/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 41. PR not available. JE D82, D84. KW Rational Expectations. Asymmetric Information.

AB If a stochastically monotone function of asymmetrically informed individuals' expectations of a random vector is common knowledge, then all the individuals must agree on their expectations. This result generalizes the theorem of Nielsen, Brandenburger, Geanakoplos, McKelvey and Page (1989) from random variables to random vectors. It holds for general information structures given by sigma-algebras. In the illustrative case of normal distributions and linear signals, it is a statement about linear algebra, and it can be interpreted geometrically. Applied to a version of Grossman's (1975,1976,1978) securities market model with asymmetric information, the result implies that the equilibrium price is common knowledge only if all investors agree on their conditional distributions of asset returns. Combined with a result about pooling of linear signals, this observation implies that the linear rational expectations equilibrium is unique.

PD August 1990. TI Common Knowledge of Price and Expected Cost in an Oligopolistic Market. AA INSEAD. SR INSEAD Working Papers: 90/58/FIN/EP/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 47. PR not available. JE D82, D84, D43, L13. KW Expectations. Asymmetric Information. Oligopoly.

AB If a stochastically monotone aggregate of asymmetrically informed agents' expectations of a random variable is common information, then the agents must agree on their expectations. This result is applied to a model of an oligopolistic market where the firms have a common random component of cost. It makes possible a characterization the naive Cournot-Nash and Bayes-Cournot equilibria where the price is common knowledge. On this basis, the existence of rational expectations equilibria is shown, the full communication equilibria are characterized, and the question of uniqueness is answered.

PD December 1990. TI Existence of Equilibrium in CAPM: Further Results. AA INSEAD. SR Unite de Recherche Document de Travail ENSAE/INSEE: 90/87/FIN/EP; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. PG 12. PR not available. JE D50, G12. KW Asset Pricing. CAPM. General Equilibrium.

AB In the mean-variance capital asset pricing model (CAPM), non-monotonicity of preferences may lead to satiation and non-existence of equilibrium if there is no riskless asset. This paper generalizes an earlier existence result for

general equilibrium and removes the restrictive assumption that utility be concave in mean and variance. In addition, it is observed that there virtually always exists an equality-constrained general equilibrium, where investors maximize subject to an equality budget constraint.

PD October 1992. TI Portfolio Choice and Equilibrium with Expected Utility Preferences. AA INSEAD. SR INSEAD Working Papers: 92/59/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 31. PR not available. JE G10, G11. KW Satiation Portfolios. Optimal Portfolios. Asset Markets.

AB This paper exhibits conditions for the existence of satiation portfolios, the existence of optimal portfolios, and the existence of equilibrium in a model of asset markets where preferences for portfolios of assets are derived from expected utility based on a von Neumann-Morgenstern utility function and a joint distribution of total returns to the assets. The conditions are based on an analysis of directions of improvement. In particular, the relation between absence of arbitrage and existence of optimal portfolios is investigated.

Nohria, Nitin

TI Requisite Complexity: Organizing Headquarters-Subsidiary Relations in MNCs. AU Ghoshal, Sumantra; Nohria, Nitin.

Norberg-Bohm, Vicki

TI Industrial Metabolism of Nitrogen. AU Ayres, Robert U.; Norberg-Bohm, Vicki.

TI Industrial Metabolism of Sulfur. AU Ayres, Robert U.; Norberg-Bohm, Vicki.

Norman, Victor D.

TI Global Production Effects of European Integration. AU Haaland, Jan I.; Norman, Victor D.

Nyarko, Yaw

PD July 1991. TI Most Games Violate the Harsanyi Doctrine. AA New York University. SR New York University Economic Research Report: 91-39; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. PG 10. PR no charge. JE C73. KW Bayesian Games. Common Priors.

AB The type of a player in a game describes the beliefs of that player about the types of others. We show that the subset vectors of such player-type beliefs which obey the Harsanyi Doctrine (or consistency condition) is of Lebesgue measure zero. Further, as the number of players becomes large the ratio of the dimension Harsanyi-consistent beliefs to the set of all beliefs tends to zero.

PD September 1991. TI The Convergence of Bayesian Belief Hierarchies. AA New York University. SR New York University Economic Research Report: 91-50; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. PG 33. PR no charge. JE C73. KW Bayesian Games. Common Priors.

AB Agents in an economy or game do not know the value of some parameter theta, the "fundamentals". Their beliefs about theta are their first order beliefs. Agents do not know the first

order beliefs of other agents; their beliefs about this are their second order beliefs. Third order belief are beliefs about beliefs, etc. An agent's hierarchy of beliefs specifies that agent's beliefs of all orders. At each date agents receive information. I show that under a mutual absolute continuity condition the belief hierarchies of agents converge over time. This condition is a generalization of the Harsanyi (1968) Common Prior Assumption. The convergence result is applied to a model of competitive firm behavior where convergence of optimal actions to the Nash or Rational Expectations equilibrium is obtained.

PD September 1991. **TI** Learning and Agreeing to Disagree without Common Priors. **AA** New York University. **SR** New York University Economic Research Report: 91-51; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 33. **PR** no charge. **JE** C73. **KW** Common Knowledge.

AB We study the question of Common Knowledge and Agreeing-to-Disagree first discussed in the seminal paper of Aumann (1976) in a dynamic framework which is a generalization of Geanakoplos and Polemarchakis (1982). We replace the Common Prior Assumption typically used in this literature with a generalization which merely requires that agents' priors satisfy an ex ante mutual absolute continuity condition. We obtain conditions for beliefs to converge. We show that beliefs and actions become common knowledge in the limit. We also discuss what happens to the Agreeing-to-Disagree results when priors are not common. In particular we show that limiting beliefs or actions or "announcements" equal those resulting from the (not necessarily common) prior conditional on common observations.

O'Brien, R. J.

TI Unit Root Tests and Mean Shifts. **AU** Edmonds, Graham J.; O'Brien, R. J.; Podivinsky, Jan M.

Oaxaca, Ronald L.

TI Using Laboratory Market Experiments to Evaluate Econometric Estimators of Structural Models. **AU** Cox, James C.; Oaxaca, Ronald L.

Obstfeld, Maurice

PD May 1992. **TI** The Adjustment Mechanism. **AA** University of California at Berkeley. **SR** CEPR Discussion Paper: 648; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 62. **PR** Pounds 3.00 or \$5.00. **JE** F33, F41. **KW** Bretton Woods. Fixed Exchange Rate.

AB This paper studies the mechanisms of international payments adjustment at work under the Bretton Woods system of fixed exchange rates between 1945 and 1971. I argue that two market failures - imperfect international capital mobility and imperfect wage-price flexibility - are central to understanding the adjustment problems of that period. Imperfect capital mobility implied that even intertemporally solvent governments could face international liquidity constraints. Wage-price inflexibility implied that countries suffering from simultaneous reserve loss and unemployment might need to undergo lengthy transitions before returning to balance. By the 1960's, when trade had been substantially liberalized and partial convertibility restored, the main remaining adjustment weapon was currency realignment. The

currency realignment option proved incompatible, however, with the growing efficiency of the international capital market. Under Bretton Woods, increasing capital mobility undermined the regime as governments proved unwilling to stand by key systemic commitments.

PD August 1992. **TI** Risk-Taking, Global Diversification, and Growth. **AA** University of California at Berkeley. **SR** CEPR Discussion Paper: 688; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 36. **PR** Pounds 3.00 or \$5.00. **JE** G15, O40. **KW** Economic Growth. International Financial Markets. Financial Integration.

AB This paper develops a dynamic continuous-time model in which international risk sharing can yield substantial welfare gains through its positive effect on expected consumption growth. The mechanism linking global diversification to growth is an attendant world portfolio shift from safe, but low-yield, capital into riskier, high-yield capital. The presence of these two types of capital is designed to capture the idea that growth depends on the availability of an ever-increasing array of specialized, and hence inherently risky, production inputs. A partial calibration exercise based on Penn World Table consumption data implies steady-state welfare gains from global financial integration, which for some regions amount to several times initial wealth.

Oh, S. N.

TI Contracts, Constraints, and Consumption. **AU** Green, E.; Oh, S. N.

Oliveira-Martins, Joaquim

PD July 1992. **TI** Macroeconomic Import Functions with Imperfect Competition. An Application to the EC Trade. **AU** Oliveira-Martins, Joaquim; Toujas-Bernate, Joel. **AA** Oliveira-Martins: OECD. Toujas-Bernate: INSEE. **SR** CEPR Discussion Paper: 707; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 31. **PR** Pounds 3.00 or \$5.00. **JE** C30, F12, F14, F15, F17. **KW** Import Equations. Product Differentiation. Market Integration.

AB This paper analyzes the consequences for the standard import allocation models of assuming monopolistic competition on the supply side. Together with relative prices, this requires additional variables to capture product differentiation effects. To this end, we derive a composite price index from a nested CES-translog demand system. Our empirical work is twofold: first, we try to assess the long-term relationship between market shares and relative prices by using a cointegration technique, and second, we estimate the demand system for domestic, European and foreign products in the main European markets.

Ostroy, Joseph M.

TI The Nonatomic Assignment Model. **AU** Gretsky, N.; Ostroy, Joseph M.; Zame, W.

TI The Existence of Perfectly Competitive Equilibrium a la Wicksteed. **AU** Makowski, Louis; Ostroy, Joseph M.

TI Vickrey-Clarke-Groves Mechanisms in Continuum Economies: Characterization and Existence. **AU** Makowski, Louis; Ostroy, Joseph M.

TI The Margin of Appropriation and an Extension of the First Theorem of Welfare Economics. **AU** Makowski, Louis;

Ostroy, Joseph M.

Ostry, Jonathan D.

TI Macroeconomic Uncertainty, Precautionary Savings and the Current Account. AU Ghosh, Atish R.; Ostry, Jonathan D.

TI External Shocks and Inflation in Developing Countries Under a Real Exchange Rate Rule. AU Montiel, Peter J.; Ostry, Jonathan D.

TI Structural and Macroeconomic Determinants of the Output Decline in Poland: 1990-91. AU Borensztein, Eduardo R.; Ostry, Jonathan D.

Ozler, Sule

TI Political Instability and Economic Growth. AU Alesina, Alberto; Roubini, Nouriel; Ozler, Sule; Swagel, Phillip.

Pagano, Marco

TI Saving, Growth and Liquidity Constraints. AU Jappelli, Tullio; Pagano, Marco.

Page, Scott E.

PD September 1992. TI Specialized Elections. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1006; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208. PG 21. PR Per copy: \$3.00 in the U.S.A. or Canada; \$5.00 via international mail. Make checks payable to Northwestern University. JE D70. KW Elections. Specialization.

AB This paper introduces specialized elections. A specialized election randomly assigns each voter to one election, freeing her of voting responsibilities, in other elections. By reducing voters' responsibilities, specialized elections encourage more information acquisition. Specialized elections also make campaigning less costly. A shortcoming of specialized elections is the increase in outcome variance resulting from the sampling effect. Whether or not specialized elections improve democratic outcomes hinges upon the tradeoff between more informed voters and greater outcome variance. Sufficient conditions are derived for the increase in information to generate an outcome nearer to that which would be chosen by a fully informed electorate.

Palda, Filip

PD July 1991. TI Can Repressive Regimes be Moderated Through Foreign Aid? AA University of Ottawa. SR University of Western Ontario Papers in Political Economy: 15; Political Economy Research Group, Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. PG 22. PR no charge. JE F02, F34, F35. KW Foreign Aid. Repression. Foreign Policy.

AB How should foreign aid be given to repressive, less developed countries? Repressive rulers are assumed to control the national income and to trade it against the probability of staying in office which is assumed to depend positively on popular wealth and repression. A foreign donor aware of this process of optimization will pursue his international objectives by attaching conditions to his aid that alter the relative price of

repression and popular wealth in the calculations of the tyrant. The effectiveness of aid and the desirability of a "carrot and stick" aid policy depend on the direct and on the interactive effects that popular wealth and repression exert on the regime's stability. The importance of gifts in kind such as food and arms is questioned and the value of data on repression used to formulate aid policy is assessed.

Palfrey, Thomas R.

TI Vertigo: Comparing Structural Models of Imperfect Behavior in Experimental Games. AU El-Gamal, Mahmoud A.; Palfrey, Thomas R.

Panagariya, Arvind

TI The New Regionalism: A Country Perspective. AU de Melo, Jaime; Panagariya, Arvind; Rodrik, Dani.

Parker, Philip M.

PD September 1990. TI Competitive Effects in Diffusion Models: An Empirical Analysis. AU Parker, Philip M.; Gatignon, Hubert. AA Parker: INSEAD. Gatignon: University of Pennsylvania. SR INSEAD Working Papers: 90/71/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 30. PR not available. JE O31, D41. KW Innovation. Competitive Markets.

AB Recent developments generalize monopolistic diffusion models to competitive markets. These models are typically designed to derive normative propositions as to the evolution of marketing mix variables over the product life cycle. Few empirical studies have been performed to analyze the role of competition in the diffusion of innovations where multiple brands are in competition. This research investigates the effects of competition on the adoption dynamics of a brand over the product life cycle. Using scanner data, brand-level competitive diffusion models are developed to test hypotheses relative to the effects of competition on the diffusion of innovations. Several model specifications are evaluated and compared to prevalent diffusion models.

PD December 1990. TI The Effect of Advertising on Price and Quality: The Optometric Industry Revisited. AA INSEAD. SR Unite de Recherche Document de Travail ENSAE/INSEE: 90/84/MKT; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. PG 30. PR not available. JE D82, L84, L15. KW Advertising and Quality. Quality and Price. Lemons. Optometry. Professional Services.

AB Theoretical research has long debated whether advertising increases market efficiencies (fostering high quality, low-priced products) or leads to perverse equilibria (fostering low-quality, higher-priced rip-offs). This debate, and subsequent empirical studies, have had an impact on policy making and the deregulation of advertising and marketing activities, especially professional service industries. Empirical studies have investigated the possible existence of perverse equilibria in optometric markets where advertisers offering low-quality eye examinations compete against nonadvertisers (offering higher quality). Unlike the lemons outcome foreseen by advocates of advertising restrictions, these cross-sectional studies, relying on data collected prior to the impact of the Supreme Court decision, find that prices fall without an erosion of optometric quality where advertising restrictions are not present. This research examines the optometric industry since 1977 and reevaluates data collected by the U.S. Federal Trade

Commission in 1977. Contrary to previous studies, our analysis reveals an apparent perversion of the optometric industry: an erosion of eye examination quality without a decline in prices.

PD December 1990. **TI** Price Elasticity Dynamics over the Adoption Lifecycle: An Empirical Study. **AA** INSEAD. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 90/90/MKT; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 25. **PR** not available. **JE** M31, D40, C70. **KW** Strategic Pricing. Product Lifecycle. Marketing.

AB The role of elasticities in strategic pricing over the product lifecycle has received much attention in the marketing literature. The focus on first purchase, trial, or new product adoption is based on the managerial importance of targeting marketing efforts toward nonadopters; previous adopters may have regular repeat purchase behavior or will be satisfied with having the innovation one time, as might be the case for durable products. This research tests competing hypotheses concerning the time path of price elasticities over the product adoption lifecycle. Unlike previous empirical research, our study explores price elasticity dynamics in the context of new product diffusion.

Pashardes, Panos

TI An Almost Ideal Quadratic Logarithmic Demand System for the Analysis of Micro Data. **AU** Fry, Vanessa; Pashardes, Panos.

Pauly, Louis

PD February 1991. **TI** The National Bases of Regime Formation: The Challenge of Supervising International Capital Markets. **AA** University of Toronto. **SR** University of Western Ontario Papers in Political Economy: 11; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 43. **PR** no charge. **JE** G10, G18, E60, O72. **KW** Financial Markets. Policy Coordination. Political Institutions. Macroeconomic Performance.

AB Modern financial markets rest on political foundations. The institutions and policies of governments create those foundations. As contemporary national economies have become increasingly integrated, structural linkages between national financial markets have deepened. Underlying political structures and public policies in the financial sector of the global economy have accordingly become intrinsically interdependent. With a focus on the supervision of financial intermediaries, especially commercial banks and securities companies operating in the markets of advanced industrialized countries, this note explores some of the consequences of that interdependence. After setting out a perspective on the relationship between financial systems and macroeconomic performance, it outlines key governmental attempts to control that relationship. In recent years, many of those attempts have had an intergovernmental character and coordination problems have arisen. The paper illustrates the types of structural hurdles policy coordination efforts must overcome by sketching the historical development of unique supervisory structures in the United States, Japan, Canada, and Germany. Given the persistence of those structural differences, and the attendant complications posed for resolving international coordination problems, the paper supports arguments for strengthening the role of multilateral political institutions in this sector.

Pearlman, Joseph

TI Fiscal and Monetary Policy Under EMU: Credible Inflation Targets or Unpleasant Monetary Arithmetic? **AU** Levine, Paul; Pearlman, Joseph.

Peck, SuZanne

TI Manufacturing Establishments Reclassified into New Industries: The Effect of Survey Design Rules. **AU** McGuckin, Robert H.; Peck, SuZanne.

Perotti, Roberto

TI Income Distribution, Political Instability, and Investment. **AU** Alesina, Alberto; Perotti, Roberto.

TI The Political Economy of Growth: A Critical Survey of the Recent Literature and Some New Results. **AU** Alesina, Alberto; Perotti, Roberto.

Persson, Torsten

PD August 1991. **TI** Growth, Distribution and Politics. **AU** Persson, Torsten; Tabellini, Guido. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/78; International Monetary Fund, Washington, DC 20431. **PG** 15. **PR** not available. **JE** D30, D70, O40. **KW** Growth. Capital Accumulation. Taxation. Public Policy.

AB We start by arguing that to understand growth differences across countries and time, one needs to understand differences in public policies that affect the incentives for productive accumulation of capital, human capital, or technically useful knowledge. And to understand policy differences one needs to understand how political institutions aggregate conflicting interests into public policies. We then survey some recent work along these lines, which argues that more inequality leads to slower growth. Next, we illustrate some of the basic ideas of this work, by help of a simple model of taxation. We also present some econometric cross-country evidence, which is largely supportive of the basic ideas.

PD October 1992. **TI** Federal Fiscal Constitutions. Part I: Risk Sharing and Moral Hazard. **AU** Persson, Torsten; Tabellini, Guido. **AA** Persson; Institute for International Economic Studies. Tabellini; Innocenzo Gasparini Institute for Economic Research. **SR** CEPR Discussion Paper: 728; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 35. **PR** Pounds 3.00 or \$5.00. **JE** H73, E61, H11, D70. **KW** Fiscal Federalism. Politics. Principal-Agent Models.

AB Inspired by current European developments, we study equilibrium fiscal policy under alternative constitutional arrangements in a 'federation' of countries. There are two levels of government: local and federal. Local policy redistributes across individuals and affects the probability of aggregate shocks, while federal policy shares international risk. Policies are chosen under majority rule. There is a moral-hazard problem: federal risk-sharing can induce local governments to enact policies that increase local risk. We investigate this incentive problem under alternative fiscal constitutions.

Pesendorfer, Wolfgang

TI Reputation in Dynamic Games. **AU** Celentani, Marco; Pesendorfer, Wolfgang.

PD November 1992. **TI** Sovereign Debt: Forgetting and Forgetting Reconsidered. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1016; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208. **PG** 9. **PR** Per copy: \$3.00 in the U.S.A. or Canada; \$5.00 via international mail. Make checks payable to Northwestern University. **JE** F34. **KW** Sovereign Debt. Default. Reputation.

AB In this note we show that even if after default a sovereign can make deposits on a Swiss bank account, the exclusion from future debt is sufficient to deter a patient country from default. In contrast to the work by Bulow and Rogoff (1989) we assume that there is a fixed set of standard assets on the world financial markets in which the country can trade. In this setting the exclusion from future borrowing may seriously limit a country's ability to smooth consumption. Therefore the traditional reputational logic can be applied.

TI When are Agents Negligible? **AU** Levine, David K.; Pesendorfer, Wolfgang.

Philippopoulos, Apostolis

TI Wage Inflation, Electoral Uncertainty and the Exchange Rate Regime: Theory and UK Evidence. **AU** Alogoskoufis, George; Lockwood, Ben; Philippopoulos, Apostolis.

Piga, Gustavo

TI Understanding the High Interest Rates on Italian Government Securities. **AU** Giovannini, Alberto; Piga, Gustavo.

Pindyck, Robert S.

PD September 1992. **TI** Investments of Uncertain Cost. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4175; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 21. **PR** \$3.00. **JE** E22, D81, D21. **KW** Technical Uncertainty. Input Cost Uncertainty.

AB I study irreversible investment decisions when projects take time to complete, and are subject to two types of uncertainty over the cost of completion. The first is technical uncertainty, i.e., uncertainty over the amount of time, effort, and materials that will ultimately be required to complete the project, and that is only resolved as the investment proceeds. The second is input cost uncertainty, i.e., uncertainty over the prices and quantities of labor and materials required, and which is external to the firm's investment activity. I derive a simple decision rule that maximizes the firm's value, and I use it to show how these two types of uncertainty have very different effects on investment decisions. As an example, I analyze the decision to start or continue building a nuclear power plant during the 1980's.

Pines, David

TI Transaction Costs in a Tiebout Setup. **AU** Berglas, Eitan; Pines, David.

TI Transaction Costs in a Tiebout Setup. **AU** Berglas, Eitan; Pines, David.

Pischke, Jorn-Steffen

TI A Comparative Analysis of East and West German Labor Markets: Before and After Unification. **AU** Krueger, Alan B.; Pischke, Jorn-Steffen.

Pissarides, Christopher A.

TI Unemployment, Consumption and Growth. **AU** Bean, Charles R.; Pissarides, Christopher A.

TI Unemployment, Consumption and Growth. **AU** Bean, Charles R.; Pissarides, Christopher A.

Podivinsky, Jan M.

TI Unit Root Tests and Mean Shifts. **AU** Edmonds, Graham J.; O'Brien, R. J.; Podivinsky, Jan M.

Polinsky, A. Mitchell

PD September 1992. **TI** Optimal Cleanup and Liability after Environmentally Harmful Discharges. **AU** Polinsky, A. Mitchell; Shavell, Steven. **AA** Polinsky: Stanford University and National Bureau of Economic Research. Shavell: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4176; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 10. **PR** \$3.00. **JE** K32, D61. **KW** Pollution. Environmental Law.

AB This article studies how liability for environmentally harmful discharges affects the incentives of firms to engage in cleanup and invest in precautions, as well as the incentives of consumers to purchase the goods whose production leads to discharges. Our main conclusion is that making firms responsible for cleanup and strictly liable for any remaining harm will lead to the socially optimal outcome. We also show that under the negligence approach - whereby a firm is liable for damages only if it fails to take appropriate precautions or to engage in proper cleanup - the outcome will not be optimal; too much of the good will be purchased.

Poloz, Stephen S.

TI Currency Substitution and Cross-Border Monetary Aggregation: Evidence from the G-7. **AU** Lane, Timothy D.; Poloz, Stephen S.

Porter, Robert H.

PD September 1992. **TI** The Role of Information in U.S. Offshore Oil and Gas Lease Auctions. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1008; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208. **PG** 39. **PR** Per copy: \$3.00 in the U.S.A. or Canada; \$5.00 via international mail. Make checks payable to Northwestern University. **JE** D44, L10, L71. **KW** Auctions. Bidding. Information.

AB This paper describes the U.S. offshore oil and gas lease sales, conducted by the Department of the Interior since 1954. Several decision variables are discussed, including bidding for leases, the government's decision whether to accept the highest bid, the incidence and timing of exploratory drilling, and the formation of bidding consortia. It is argued that equilibrium models that emphasize informational and strategic issues, and that account for institutional features of the leasing program,

provide accurate predictions of outcomes.

Portes, Richard D.

TI Enterprise Debt and Economic Transformation: Financial Restructuring of the State Sector in Central and Eastern Europe. **AU** Begg, David; Portes, Richard D.

TI Eastern Germany Since Unification: Wage Subsidies Remain a Better Way. **AU** Begg, David; Portes, Richard D.

PD November 1992. **TI** The Association Process Making it Work Central Europe and the European Community. **AA** Centre for Economic Policy Research. **SR** Centre for Economic Policy Research Occasional Paper: 11; **PG** 28. **PR** not available. **JE** F02, F15. **KW** European Integration. Integration.

AB This paper summarizes the proceedings of a seminar whose purpose was to provide an in-depth discussion of the Association Agreements between Czechoslovakia, Hungary, Poland and the European Community.

Poterba, James M.

PD August 1992. **TI** 401(k) Plans and Tax-Deferred Savings. **AU** Poterba, James M.; Venti, Steven F.; Wise, David A. **AA** Poterba: Massachusetts Institute of Technology and National Bureau of Economic Research. Venti: Dartmouth College and National Bureau of Economic Research. Wise: Harvard University and National Bureau of Economic Research. **SR** Massachusetts Institute of Technology Department of Economics Working Paper: 92-14; Department of Economics, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 31. **PR** \$6.00 Domestic; \$8.00 Overseas; \$2.00 Student. **JE** H24, J14. **KW** Retirement Savings. 401(k) Plans. IRAs.

AB This paper examines the role of 401(k) plans in retirement saving by U.S. households. It charts the rapid growth of these plans during the 1980's; more than 15 million workers now participate in 401(k)s. Data from the Survey of Income and Program Participation are used to calculate 401(k) eligibility and participation rates by detailed age and income categories. For virtually all groups, 401(k) participation rates conditional on eligibility are much higher than take-up rates for IRAs, suggesting some important differences between these saving vehicles. We consider the interaction between 401(k)s and IRAs, and show that since 1986, only one-fifth of 401(k) contributors have also made IRA contributions. Some 401(k) eligibles who make limit contributions to 401(k) plans represent "new saving."

TI Income Inequality and the Incomes of Very High Income Taxpayers: Evidence From Tax Returns. **AU** Feenberg, Daniel R.; Poterba, James M.

Potts, Christopher N.

TI The Two-Stage Assembly Scheduling Problem: Complexity and Approximation. **AU** Van Wassenhove, Luk; Potts, Christopher N.; Strusevich, V. A.; Zwaneveld, Carin; Sevastjanov, S.V.

Prasad, Eswar

TI Are Prices Countercyclical? **AU** Chadha, Bankim; Prasad, Eswar.

Price, Lydia

PD May 1990. **TI** Improper Sampling in Natural Experiments: Limitations on the Use of Meta-Analysis Results in Bayesian Updating. **AU** Price, Lydia; Vanhonacker, Wilfried. **AA** INSEAD. **SR** INSEAD Working Papers: 90-47-MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 16. **PR** not available. **JE** C11. **KW** Bayesian Estimation.

AB The natural experiment hypothesis underlying meta-analyses and their extensive designs give rise to many empty or scarcely populated cells. The implications of this improper sampling can be severe when the results are incorporated as prior knowledge in a Bayesian estimation framework. Using existing meta-analyses in marketing and a known recursive framework for updating estimates in linear regression models, the practical limitations of such priors are discussed and illustrated. Suggestions are provided to alleviate some of the problems.

PD September 1992. **TI** Data Transferability: Estimating the Response Effect of Future Events: Based on Historical Analogy. **AU** Price, Lydia; Vanhonacker, Wilfried. **AA** INSEAD. **SR** INSEAD Working Papers: 92/56/MKT; INSEAD, INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 33. **PR** not available. **JE** M10, C11. **KW** Marketing. Data Transferability. Forecasting. Econometric Models.

AB Many managerial decisions are made with considerable uncertainty about their possible impacts. In assessing such problems, we often rely on analogous situations in the hope that they will shed light on the possible outcomes. This historical analogy assessment is often done in a rather ad hoc fashion. This paper introduces a formal methodology for transferring information or data from one situation to another. A simple recursive least squares approach to the Bayesian data transferability problem is discussed. Focus is on the method's applicability to commonly encountered marketing problems. Empirical testing and estimation issues are discussed and illustrated in the framework of generic substitution of brand name drug sales following patent expiration.

Proske, Dieter

TI Monetary and Exchange Rate Policy in Austria: An Early Example of Policy Coordination. **AU** Tatom, John A.; Gluck, Heinz; Proske, Dieter.

Ramaswamy, Krishna

TI The Valuation of Corporate Fixed Income Securities. **AU** Kim, In Joon; Ramaswamy, Krishna; Sundaresan, Suresh.

Ramey, Garey

TI Advertising as Information: Matching Products to Buyers. **AU** Bagwell, Kyle; Ramey, Garey.

TI The Diamond Paradox: A Dynamic Resolution. **AU** Bagwell, Kyle; Ramey, Garey.

Rankin, Neil

TI Imperfect Competition and Macroeconomics: A Survey. **AU** Dixon, Huw David; Rankin, Neil.

Rastogi, Anupam

TI The Price of EMU Revisited. **AU** Minford, Patrick; Rastogi, Anupam; Hughes Hallett, Andrew.

Ravn, Morten Overgaard

PD August 1992. TI Labour Migration: A Strategic Approach. AA University of Aarhus. SR Aarhus Institute of Economics Memo: 1992-11; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. PG 22. PR no charge. JE J61, F22, D83. KW Job Search. Small Economies.

AB Europe is currently faced with a situation where there is a great potential for labor migration across countries. The paper analyzes the determinants and consequences of labor migration using a job market search model in which workers can move to other countries given that some cost is paid. This yields many important insights concerning the labor migration choice. One salient result is that with free mobility especially small economies may face serious problems. This is the case both for small and "unfortunate economies", in the sense of workers migrating from the country, which run the risk of being deserted, and for small and "fortunate economies", countries that workers emigrate to, which face the possibility of such a big inflow of people that the current state is unsustainable.

PD September 1992. TI Business Cycles in the U.K.: A Small Open Economy in an Interdependent World. AA University of Aarhus. SR Aarhus Institute of Economics Memo: 1992-12; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. PG 28. PR no charge. JE E32, F41, E37, F47. KW Real Business Cycles. Technology Shock.

AB This paper conducts a quantitative investigation into business cycles in the U.K. The analysis is based on a two country real business cycle model with a number of important features. Among these are (1) the existence of non-traded goods, (2) the modeling of the U.K. as a non-standard small open economy, and (3) the inclusion of both technology shocks and government spending shocks as impulses to the cycle. The performance of the model is surprisingly good in many respects; it is able to account for the relative variabilities and comovements of many variables. The main discrepancies between the model and the data are to be found in the persistence of the variables and variabilities of consumption and hours worked.

Razin, Assaf

TI Children: A Capital Good or a Base for Income Redistribution Policies. AU Nerlove, Marc; Razin, Assaf; Sadka, Efraim.

Rebelo, Sergio

PD June 1992. TI Growth in Open Economies. AA Universidade Catolica Portuguesa. SR CEPR Discussion Paper: 667; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 36. PR Pounds 3.00 or \$5.00. JE E21, F43, O49, F21. KW Savings Rate. Open Economy.

AB This paper provides a survey of recent growth models that attempt to explain the cross-country diversity in rates of economic growth. It shows that these models can only generate differences in growth rates in the absence of international capital markets. With free international capital mobility they imply that the growth rate of consumption and GNP would be quickly equalized all over the world. This paper describes a simple modification of standard preferences that eliminates this implausible growth-equalization result and is consistent with

the fact that the savings rate is lower in poor countries than in rich countries.

Reiffen, David A.

PD August 1992. TI Auctions Under Increasing Costs: Coordination Problems and the Existence of an Asymmetric Equilibrium. AA Federal Trade Commission. SR Federal Trade Commission Bureau of Economics Working Paper: 198; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Washington, D.C. 20580. PG 19. PR no charge. JE D44, L41. KW Auctions. Coordination.

AB This paper models procurement auctions when suppliers face increasing costs. It is shown that an asymmetric equilibrium exists whereby one bidder bids different prices on each project in a series of simultaneous auctions, while its competitor bids the same price on each project. This existence of such an equilibrium may provide an explanation for observed bidding behavior in industries plausibly characterized by increasing costs. Further, it is shown that the price paid in simultaneously-held auctions will be less than the prices paid in sequentially-held auctions. Hence, the existence of an asymmetric equilibria may explain the prominence of simultaneous auctions for certain products.

Reinhart, Carmen M.

TI Capital Inflows to Latin America: The 1970's and the 1990's. AU Calvo, Guillermo A.; Leiderman, Leonardo; Reinhart, Carmen M.

Reiter, Stanley

PD November 1992. TI Knowledge, Discovery and Growth. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1011; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208. PG 95. PR Per Copy: \$3.00 in the U.S.A. or Canada; \$5.00 via international mail. Make checks payable to Northwestern University. JE O30, O31, O33. KW Technological Change. Knowledge. Invention.

AB The aim of the work reported in this paper is to build a formal model of technology in which technological change can be studied. Technological change takes place by invention, or discovery. It proceeds by finding new ways of doing things, by finding new things to do, or new uses for things already known. These things typical involve a creative act. Something previously unknown or nonexistent becomes known or comes into existence. This paper presents a model of technology in which technology is, as is conventional, viewed as knowledge of how to produce things. However, in contrast to conventional models of technology in economic theory, knowledge of how to produce things is represented explicitly. Technology is therefore a special category of knowledge.

Reitzes, James D.

PD April 1992. TI Market-Share Quotas. AU Reitzes, James D.; Grawe, Oliver R. AA Federal Trade Commission. SR Federal Trade Commission Bureau of Economics Working Paper: 194; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Washington, D.C. 20580. PG 34. PR no charge. JE C72, D43, F13. KW Trade Policy. Quotas. Non-Tariff Trade Barriers.

AB Anecdotal evidence reveals that an import quota is not always filled when the quota is specified in terms of a market-share limit instead of a quantity limit. In a simple Cournot duopoly, we provide a theoretical rationale for this outcome. Imposing a market-share quota eliminates pure-strategy equilibria. Instead, a mixed-strategy equilibrium arises where only the domestic firm mixes choices. The quota constraint is binding under one of the two equilibrium domestic strategies, but it is not binding under the other. Compared to a tariff that restrains the foreign market share to an equivalent level, domestic profits are always higher and consumer surplus is always lower under the market-share quota. Social welfare is lower under the market-share quota when the domestic firm uses its "constrained" strategy, but this outcome may be reversed when the domestic firm uses its "unconstrained" strategy.

Revesz, Tamas

PD June 1992. **TI** Taxes and Subsidies in the Transforming Hungarian Economy. **AU** Revesz, Tamas; Zalai, Erno. **AA** Budapest University of Economic Sciences. **SR** CEPR Discussion Paper: 696; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 36. **PR** Pounds 3.00 or \$5.00. **JE** H20. **KW** Government Budget, Hungary. Fiscal Policy.

AB One of the important neglected issues in discussions of East European transition to the market is the structure of the government's budget. This paper reviews the Hungarian fiscal situation in 1990 and classifies the data in a manner which accords with economic principles. The authors discuss the main forms of taxation and the various forms of subsidy and social welfare provision. Despite the removal of many former subsidies, the paper finds that many implicit and unjustified subsidies remain, and they continue to distort resource allocation in undesirable ways.

TI The Competitiveness of Hungarian Industry. **AU** Michael, Thomas; Revesz, Tamas; Hare, Paul; Hughes, Gordon A.

Rietz, Thomas A.

PD June 1992. **TI** Continuous Time Research and Development Investment and Innovation: Effects on Price and Dividend Paths. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1012; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208. **PG** 14. **PR** Per copy: \$3.00 in the U.S.A. or Canada; \$5.00 via international mail. Make checks payable to Northwestern University. **JE** C60, E22, G12, O31. **KW** Investment. Research. Asset Pricing. Dynamic Control.

AB I solve a general equilibrium, stochastic, dynamic control problem. In it, an agent who owns a productive asset decides how much of a non-storable good to consume and how much to invest in research and development. Combined, two features distinguish this from previous work. First, the agent maximizes lifetime expected utility (instead of profits or income). Second, the investment level affects the probability of a research and development innovation which would make future dividends jump. Dividend evolution is represented by a continuous time Poisson process with the jump probability of depending on the

investment level. In equilibrium, the agent chooses the investment level to give an optimal expected innovation rate. This results in endogenously chosen, stationary growth rates in asset dividends and prices. These non-stationary price and dividend paths are a type that Marsh and Merton (1986) predict will violate variance bounds tests such as Shiller's (1981). However, they are not subject to Shiller's (1986) criticism of Marsh and Merton, because they result from a general equilibrium with all agents behaving optimally and rationally.

Roberts, John

TI Organizational Prospects, Influence Costs, and Ownership Changes. **AU** Meyer, Margaret A.; Milgrom, Paul; Roberts, John.

Rodrik, Dani

PD June 1992. **TI** Foreign Trade in Eastern Europe's Transition: Early Results. **AA** Stanford University. **SR** CEPR Discussion Paper: 676; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 37. **PR** Pounds 3.00 or \$5.00. **JE** F13, F14, P33. **KW** Trade Policy. Eastern Europe.

AB By the end of 1991, Czechoslovakia, Hungary and Poland had achieved a substantial degree of openness to foreign trade. Judging by partner statistics, export performance has been impressive in all three countries. There is no evidence, however, that exporters have had any success in finding Western markets for the exports they have lost in Eastern markets. Export performance is attributable to exchange-rate policy in part, but the collapse of domestic demand has possibly played an even more important role. Finally, trade liberalization so far appears to have had little effect on price discipline, in large part because of the substantial devaluations that have accompanied it.

PD July 1992. **TI** Making Sense of the Soviet Trade Shock in Eastern Europe: A Framework and Some Estimates. **AA** Stanford University. **SR** CEPR Discussion Paper: 705; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 32. **PR** Pounds 3.00 or \$5.00. **JE** F13, F14, P33. **KW** Export Markets. CMEA. Market Loss.

AB East European countries have experienced sharp declines in real GDP since 1990. One of the reasons for this decline is the Soviet trade shock caused by the collapse of the CMEA and of traditional export markets in the Soviet Union. This paper is an attempt to quantify the magnitude of this external shock. A conceptual framework is developed to show that the shock has three distinct elements: (a) a terms-of-trade deterioration; (b) a market-loss effect; and (c) a removal-of-import-subsidy effect. Combining these three effects and adding Keynesian multiplier effects, the conclusion is that the Soviet trade shock accounts for all of the decline in Hungarian GDP, about 60% of the decline in Czechoslovakia, and between one-quarter and one-third of the decline in Poland.

TI The New Regionalism: A Country Perspective. **AU** de Melo, Jaime; Panagariya, Arvind; Rodrik, Dani.

Rogers, Robert P.

PD August 1992. **TI** The Minimum Optimal Steel Plant and the Survivor Technique of Cost Estimation. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau

of Economics Working Paper: 197; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Washington, D.C. 20580. PG 10. PR no charge.

JE L11. KW Economies of Scale. Cost Estimation.

AB The survivor technique is used to examine economies of scale in the steel industry, and the results are compared to an earlier engineering approach study by Tarr. Specifically the paper focuses on the conventional integrated steel mill of over 1 million tons a year. The results are consistent with Tarr's estimate of a steel mill Minimum Optimal Scale of 6 million tons a year.

Roland, Gerard

PD May 1992. TI Market Socialism and the Managerial Labour Market. AU Roland, Gerard; Sekkat, Khalid. AA Universite Libre de Bruxelles. SR CEPR Discussion Paper: 655; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 14. PR Pounds 3.00 or \$5.00. JE J42, P23. KW Ratchet Effect. Managerial Labor Market. Monopsony.

AB This paper presents a simple ratchet model. The ratchet effect, and the inability of the government to precommit credibly to given incentive schemes, are related to the fact that the government has monopsony power over managers, as is the case under market socialism where means of production are state-owned. But the introduction of a private sector of significant size gives an outside option to managers. Creating competition with the private sector is then a way to create credible commitment to public sector incentive schemes. Efficiency can be enhanced because of managers' interests in building a reputation on the managerial labor market, giving them the possibility of this outside option.

Roller, Lars-Hendrik

TI The Structure and Determinants of East-West Trade: A Preliminary Analysis of the Manufacturing Sector. AU Neven, Damien; Roller, Lars-Hendrik.

TI Economies of Scale and Scope in the French Mutual Funds (SICAV) Industry. AU Dermine, Jean; Roller, Lars-Hendrik.

Rosati, Dariusz K.

PD April 1992. TI Problems of Post-CMEA Trade and Payments. AA United Nations Economic Commission for Europe. SR CEPR Discussion Paper: 650; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 42. PR Pounds 3.00 or \$5.00. JE F14, F36, O52. KW Eastern Europe. Payments Union. International Trade.

AB The demise of the CMEA trading system in 1991 and the shift to convertible currency settlements and world market prices was expected to bring about a severe contraction of intra-group trade, coupled with large imbalances in trade between Eastern Europe and the former Soviet Union. To alleviate the costs of transition and to preserve existing trade links in Eastern Europe, the idea of a Central European Payments Union has been put forward, modeled on the successful archetype of the European Payments Union. But the present situation in Eastern Europe is different in many important respects from that of Western Europe in the late 1940's. Moreover, the observed trade decline is to a large extent a "natural" outcome of the elimination of the preferential and highly distortionary trading system of the CMEA.

Therefore, the payments union does not seem to be the "first-best" solution. Instead, a comprehensive program of external financial and technical assistance is needed to allow for the smooth restructuring of production and trade in post-CMEA countries, and to minimize losses from the abrupt cuts in mutual trade.

Rose, Andrew K.

TI How Pervasive is the Product Cycle? The Empirical Dynamics of American and Japanese Trade Flows. AU Gagnon, Joseph E.; Rose, Andrew K.

Rosenthal, Robert W.

TI Dynamic Duopoly with Slowly Changing Customer Loyalties. AU Chen, Yongmin; Rosenthal, Robert W.

Ross, Thomas W.

TI Cooperation Without Reputation: Experimental Evidence From Prisoner's Dilemma Games. AU Cooper, Russell; DeJong, Douglas V.; Ross, Thomas W.

Roubini, Nouriel

TI Tax Smoothing Discretion Versus Balanced Budget Rules in the Presence of Politically Motivated Fiscal Deficits: The Design of Optimal Fiscal Rules for Europe after 1992. AU Corsetti, Giancarlo; Roubini, Nouriel.

TI Political Instability and Economic Growth. AU Alesina, Alberto; Roubini, Nouriel; Ozler, Sule; Swagel, Phillip.

Rustichini, Aldo

PD September 1992. TI Learning About Variable Demand in the Long Run. AU Rustichini, Aldo; Wolinsky, Asher. AA Rustichini: New York University. Wolinsky: Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1015; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208. PG 11. PR Per copy: \$3.00 in the U.S.A. or Canada; \$5.00 via international mail. Make checks payable to Northwestern University. JE D80. KW Learning. Variable Demand. Monopoly.

AB This paper studies the problem of a monopoly who is uncertain about the demand it faces and learns about it over time through its pricing experience. The demand curve facing the monopoly is not constant—it changes over time in a Markovian fashion. We characterize the monopoly's optimal policy and inquire how it differs from an informed monopoly's policy. It turns out that, even when the rate at which the demand varies is negligible, the stationary probability with which the monopoly's policy deviates from its informed counterpart is non-negligible, as long as the discount factor is below 1.

Ryan, Cillian

PD June 1992. TI The Integration of Financial Services and Economic Welfare after 1992. AA University of Birmingham. SR CEPR Discussion Paper: 677; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 45. PR Pounds 3.00 or \$5.00. JE F15, F36. KW Economic

Integration. European Community.

AB This paper uses a computable general-equilibrium model of intertemporal demand to investigate the impact of market integration after 1992 on financial services and economic welfare in the European Community (EC). In contrast to previous work, it assesses the impact of "1992" on the demand for and the allocation of resources in the economy and provides estimates of the effects on borrowers and lenders, sectoral employment and output, international trade in financial services, the balance of payments and economic welfare.

Ryoo, Jaewoo

PD July 1992. **TI** Adverse Selection, Reputation, and Firms in Professional Service Markets. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences (CARESS) Working Paper: 92-28; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 30. **PR** no charge. **JE** D82, D80, L84. **KW** Professional Services. Adverse Selection. Reputation.

AB Professional service markets are characterized by potential adverse selection since quality of service is not directly verifiable. But conventional models of adverse selection have only limited use, because they are neither compatible with elastic labor supply nor able to explain the existence of large firms in those markets. This paper presents a theory of the professional service firm as an informational entity. Reputation spreads by word-of-mouth, and firms are differentiated by quality in such a way that average worker quality is increasing in firm size. Large firms serve as intermediaries through which differentiated workers and consumers are matched, and consequently play an economic role of preventing adverse selection. These and other predictions of the model are consistent with the observations in the market for legal services.

Ryu, Keunkwan

PD July 1992. **TI** The Relationship of Forecast Encompassing to Composite Forecasts with Simulations and an Application. **AU** Ryu, Keunkwan; Liang, Kuo-yuan. **AA** Ryu: University of California, Los Angeles. Liang: National Tsing Hua University, Taiwan. **SR** University of California at Los Angeles Department of Economics Working Paper: 668; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. **PG** 33. **PR** \$2.50; checks payable to U.C. Regents. **JE** C12, C22. **KW** Forecast. Encompassing Test. Monte-Carlo Simulation.

AB This paper examines the role of forecast-encompassing principles in model-specification searches through the use of linear composite forecasts. Based on the results of the pairwise forecast-encompassing test, this paper outlines a conceptual framework to provide some useful insights on cross-model evaluations in econometrics and the selection of predictors in composite forecasts. The contribution of this paper is twofold. First, it clarifies the complementary role of forecast-encompassing principle and composite forecasts. Second, it offers three different ways of performing the encompassing test and compares their finite sample performance through a Monte Carlo simulation study.

PD September 1992. **TI** Group Duration Analysis of the

Proportional Hazard Model: Minimum Chi-Square Estimators and Specification Tests. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 669; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. **PG** 28. **PR** \$2.50; checks payable to U.C. Regents. **JE** C41. **KW** Minimum Chi-Square Estimation. Semi-Parametric Estimation. Hausman Test.

AB Due to a discrete observation scheme, many duration variables are available only up to an interval, and not up to an exact point. The proportional hazard model is the most widely used continuous time duration models. Interval observations cause several difficulties in applying Cox's partial maximum likelihood estimation method to the proportional hazard model. First, two different death times reported to fall into the same interval are observationally equivalent. In Cox's procedure, there is no natural way of handling ties. Second, the nuisance part of the baseline hazard rate cannot be conditioned out of the estimation process. This paper develops semi-parametric minimum Chi-square estimators of the proportional hazard model for the case when durations are grouped and covariates are categorical. This paper also suggests simple specification tests.

Sachs, Jeffrey

TI Fiscal Federalism and Optimum Currency Areas: Evidence for Europe from the United States. **AU** Sala-i-Martin, Xavier; Sachs, Jeffrey.

Sadka, Efraim

TI Children: A Capital Good or a Base for Income Redistribution Policies. **AU** Nerlove, Marc; Razin, Assaf; Sadka, Efraim.

Saint-Paul, Gilles

PD February 1992. **TI** Distributional Conflicts, Power and Multiple Growth Paths. **AU** Saint-Paul, Gilles; Verdier, Thierry. **AA** DELTA. **SR** CEPR Discussion Paper: 633; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 25. **PR** Pounds 3.00 or \$5.00. **JE** E21, E62, H21, H31. **KW** Political Equilibrium. Endogenous Growth. Capital Flight.

AB This paper shows that multiple growth paths may occur in a politico-economic model of endogenous growth. This multiplicity is characterized by the coexistence of a low-tax, low-capital-flight equilibrium and a high-tax, high-capital-flight equilibrium. The likelihood of multiplicity is crucially related to the structure of power in society. For multiplicity to arise, it is necessary that the group in power (or the group that is decisive in determining the political outcome) has greater access to international capital markets than the average in the economy. The model provides an example of an inefficient allocation resulting from majority voting among rational agents.

PD July 1992. **TI** The High Unemployment Trap. **AA** DELTA. **SR** CEPR Discussion Paper: 670; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 31. **PR** Pounds 3.00 or \$5.00. **JE** E24, J22, J23, J63, J64. **KW** Employment. Labor Mobility. Flexibility.

AB A model of the labor market under firing restrictions and

endogenous quits is constructed. It is shown that in the spirit of Blanchard and Summers (1988), the model can generate multiple equilibria, with a low-quits/high-unemployment equilibrium coexisting with a high-quits/low-unemployment equilibrium. Under weak conditions, low-unemployment equilibria Pareto dominate high-unemployment equilibria. Mobility premia improve aggregate welfare but may increase unemployment.

PD August 1992. **TI** Are the Unemployed Unemployable? **AA** DELTA. **SR** CEPR Discussion Paper: 689; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 29. **PR** Pounds 3.00 or \$5.00. **JE** E24, J21, J31, J63. **KW** Unemployment. Productivity. Matching.

AB This paper develops a matching model of the labor market under wage rigidity when hiring decisions are irreversible. There are two types of workers, the skilled and the unskilled. The model is used to analyze whether technological advances may have increased unemployment, and shows that this is likely to occur if technological change is associated with an increase in the productivity and/or the supply of skilled relative to unskilled workers. These effects are stronger when hiring decisions are more irreversible.

TI A Model of Labour Demand with Linear Adjustment Costs. **AU** Bentolila, Samuel; Saint-Paul, Gilles.

PD October 1992. **TI** Productivity Growth and the Structure of the Business Cycle. **AA** DELTA. **SR** CEPR Discussion Paper: 709; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 30. **PR** Pounds 3.00 or \$5.00. **JE** D24, D92, E23, E32. **KW** Business Cycles. Research and Development.

AB Over recent years "opportunity cost" (OC) models of growth have been constructed which suggest that firms take advantage of the possibility of intertemporal substitution in order to engage in productivity-improving activities during recessions. This paper tests whether this argument is correct. The results are mildly supportive of the OC theory. Demand shocks tend to have a negative impact on productivity, both in the short and long run, and the short-run impact is stronger in those countries where fluctuations are more transitory. There is no evidence, however, of a significant R&D response to demand shocks.

Sala-i-Martin, Xavier

TI Public Finance in Models of Economic Growth. **AU** Barro, Robert J.; Sala-i-Martin, Xavier.

PD March 1992. **TI** Fiscal Federalism and Optimum Currency Areas: Evidence for Europe from the United States. **AU** Sala-i-Martin, Xavier; Sachs, Jeffrey. **AA** Sala-i-Martin: Yale University. Sachs: Harvard University. **SR** CEPR Discussion Paper: 632; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 21. **PR** Pounds 3.00 or \$5.00. **JE** F31, F33, E62, H23. **KW** Exchange Rate Arrangements. Exchange Rate.

AB The main aim of this paper is to estimate the extent to which the Federal Government of the United States insures member states against regional income shocks. Between one-third and one-half of the initial shock to a region is absorbed by the Federal Government. Taxes respond more strongly to

regional imbalances than do transfers. The main mechanism at work is the federal income tax system, which implies that the stabilization process is automatic rather than specifically designed each time there is a cyclical movement in income. Some economists may argue that this regional insurance scheme, provided by the Federal Government, is an important reason why the US system of fixed exchange rates has survived without major difficulties. According to this view, Europeans who look to the United States as a model for Europe should seriously consider the creation (or expansion) of a federal fiscal system at the same time as they create a European Central Bank that issues a unified European currency.

Salmon, Pierre

PD July 1991. **TI** From Competitive to Democratic Equilibrium: Has the Analogy Been Fruitful? **AU** Salmon, Pierre; Wolfelsperger, Alain. **AA** Salmon: Univeriste de Bourgogne. Wolfelsperger: Univeriste d'Orleans d'Etudes Politiques de Paris. **SR** University of Western Ontario Papers in Political Economy: 16; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 26. **PR** no charge. **JE** D70. **KW** Voting Theory. Equilibrium. Democratic Equilibrium.

AB This paper argues that the defense of the concept of "democratic equilibrium" that is generally employed is basically flawed. The nature of "democratic equilibrium" and the role of the Blackian program gives this concept in the study of politics are different on essential points from the concept of competitive equilibrium and the function it plays in economics. We also argue that the two main directions that have been followed to amend "democratic equilibrium" within the Blackian program mitigate the disequilibrium results but do not address the flaws described in the paper. Finally, we plead for a different analogy between politics and economics, one that focusses on organizations, and note that this line of thought is consistent with other main trends in public choice.

Satchell, Steve

PD July 1992. **TI** Daily Returns in European Stock Markets: Predictability, Non-Linearity and Transaction Costs. **AU** Satchell, Steve; Timmerman, Allan. **AA** Birkbeck College. **SR** Birkbeck Discussion Paper in Financial Economics: FE-5/92; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 20. **PR** no charge. **JE** C14, G12. **KW** Daily Stock Returns.

AB The paper compares evidence of non-linear dynamics in daily returns across ten European stock market indexes over the period 1980-1992. We apply a non-linear nearest neighbor algorithm to identify stochastic and deterministic patterns in the daily returns. The identified patterns are used in a recursive forecasting procedure and exploited in a simple trading rule which explicitly accounts for transaction costs. We find that transaction costs can be significant for the stochastic properties of the daily returns series in the investigated markets and probably are sufficiently large to rule out economic profits based on the non-linear predictions.

PD September 1992. **TI** An Assessment of the Economic Value of Nonlinear Foreign Exchange Rate Forecasts. **AU** Satchell, Steve; Timmerman, Allan. **AA** Birkbeck College. **SR** Birkbeck Discussion Paper in Financial Economics: FE-6/92; Birkbeck College, Department of

Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. PG 29. PR no charge. JE F31, C12. KW Exchange Rates. Forecasting.

AB The paper challenges recent research which suggests that nonlinear predictions of changes in high frequency exchange rates are economically insignificant. It is shown that the criteria of smallest mean squared error and mean absolute error are not particularly suited for assessment of the economic value of predictions of nonlinear processes where the predicted value and the prediction error typically are not independent. We present recursively computed nonlinear predictions which predict a statistically significant proportion of sign changes in a majority of cases. Our predictions, when used in conjunction with a simple trading strategy, generate higher mean returns with lower standard deviations than the buy and hold strategy applied to 16 daily dollar exchange rates.

Schiantarelli, Fabio

TI Delivery Lags, Adjustment Costs, and Econometric Investment Models. AU Chirinko, Robert S.; Schiantarelli, Fabio.

TI Variable Markups in a Model with Adjustment Costs: Econometric Evidence for U.S. Industry. AU Galeotti, Marzio; Schiantarelli, Fabio.

Schmidt, Christoph M.

PD August 1992. TI Ageing and Unemployment. AA Universitat Munchen. SR CEPR Discussion Paper: 693; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 28. PR Pounds 3.00 or \$5.00. JE J14, J51, J64. KW Aging. Cohort Size. Unions.

AB While aging is accepted as a major problem for most industrialized societies, its labor market consequences are not yet fully understood. This paper analyzes the effects of changes in the age composition of the Federal Republic of Germany on the incidence of unemployment in different sex-age groups. The German population has aged substantially in recent decades because of declining fertility and a halt in guestworker recruitment. The German wage-setting process appears to be characterized by the presence of a strong union movement that hampers flexible wage adjustments. Thus, age structure variations can be expected to lead to fluctuations in age-specific unemployment rates. In general, this intuition is confirmed by the estimations presented here.

TI Mass Migration, Unions, and Fiscal Migration Policy. AU Gehrig, Anette; Schmidt, Christoph M.; Zimmermann, Klaus F.

Schmitt, Nicolas

TI Who Benefits from Antidumping Legislation? AU Anderson, Simon P.; Schmitt, Nicolas; Thisse, Jacques-Francois.

Scholes, Myron S.

PD September 1992. TI Firm's Responses to Anticipated Reductions in Tax Rates: The Tax Reform Act of 1986. AU Scholes, Myron S.; Wilson, G. Peter; Wolfson, Mark A. AA Scholes and Wolfson: Stanford University and National Bureau of Economic Research. Wilson: Harvard University. SR National Bureau of Economic Research Working Paper: 4171; National Bureau of Economic Research, 1050

Massachusetts Avenue, Cambridge, MA 02138. PG 27. PR \$5.00. JE D21, D92, H25. KW Corporate Taxes. Deferred Income.

AB The 1986 Tax Act in the U.S. gradually reduced corporate tax rates from 46 percent prior to the Act to 34 percent by the middle of 1988. This reduction gave firms an incentive, in 1986 and 1987, to shift taxable income to future years when tax rates would be lower. There are substantial impediments, however, to shifting taxable income across periods, and it becomes an empirical question as to whether the benefits of shifting taxable income are sufficient to overcome the impediments. This paper examines whether firms deferred income recognition and/or accelerated expense recognition in anticipation of these declining tax rates. We find statistically significant evidence that firms shifted gross margin from the quarter immediately preceding an anticipated decrease in tax rates to the next quarter. We estimate that, on average, the 812 firms in our sample saved approximately five hundred thousand dollars in taxes by deferring sales.

Scholnick, Barry

PD September 1991. TI Testing a Disequilibrium Model of Lending Rate Determination: The Case of Malaysia. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/91/84; International Monetary Fund, Washington, DC 20431. PG 23. PR not available. JE E10. KW Financial Liberalization. Cointegration.

AB This study examines whether lending rates cleared the market for loans in Malaysia after interest rate liberalization. It is based on a theoretical model in which adverse selection and marginal cost pricing are brought together by the use of a quadratic loss function in the error correction format. This allows for the use of the cointegration methodology. Long-run tests support the model proposed in the paper, while rejecting part of the financial liberalization model. From the short-run results it is concluded that there is a large lag before lending rates respond to exogenous shocks, thus confirming that they do not fully clear the market for loans.

Scotchmer, Suzanne

PD October 1992. TI The Implications of Space for Competition. AU Scotchmer, Suzanne; Thisse, Jacques-Francois. AA Scotchmer: University of California, Berkeley. Thisse: Universite de Paris I-Sorbonne. SR CEPR Discussion Paper: 724; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 20. PR Pounds 3.00 or \$5.00. JE D40, H41, L13, R10. KW Location. Local Public Goods. Spatial Competition.

AB Incorporating space in economic models has two important consequences. First, the hypothesis of perfect competition becomes untenable, and second, the distinction between private and public goods becomes blurred. We review arguments that lead to these conclusions and summarize recent work pointing to other incentive systems that might lead to efficient location decisions and pricing policies.

Seabright, Paul

TI Incentives and the Management of Enterprises in Economic Transition: Capital Markets Are Not Enough. AU Mayhew, Ken; Seabright, Paul.

TI Competition Policy Research: Where Do We Stand?

AU Kuhn, Kai-Uwe; Seabright, Paul; Smith, Alasdair.

Sekkat, Khalid

TI Market Socialism and the Managerial Labour Market.
 AU Roland, Gerard; Sekkat, Khalid.

Senbongi, Shuichi

PD September 1992. TI Optimal Taxation of an Oligopoly. AA Johns Hopkins University. SR Johns Hopkins Department of Economics Working Paper: 289; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. PG 14. PR no charge. JE H21, L13. KW Optimal Taxation. Imperfect Competition.

AB This paper investigates optimal profit taxation for imperfect competitive industries. Under a lump-sum tax or a flat tax, after-tax profit maximization of a firm is equivalent to pre-tax profit maximization. Hence, the deadweight loss of imperfect competition is not influenced. Increasing pre-tax profit raises tax rate so that it may reduce after-tax profit under a progressive tax. As a progressive tax alleviates the deadweight loss of imperfect competition, it is superior to a lump-sum tax or a flat tax.

Serrano, Roberto

PD October 1992. TI Non-Cooperative Implementation of the Core. AA Brown University. SR Brown University Department of Economics Working Paper: 92-25; Department of Economics, Brown University, Providence, Rhode Island 02912. PG 25. PR no charge. JE C71, C72. KW Core. Consistency. Implementation. Coalition Formation. Nash Program.

AB I present a mechanism whose subgame perfect equilibrium outcomes coincide (in the limit) with the core of the underlying TU game when it is balanced. Although the mechanism requires a referee, his presence is unnecessary when the underlying TU game is convex. The mechanism resembles an asset market and is inspired by the property of consistency of the core.

PD November 1992. TI Non-Cooperative Implementation of the Nucleolus: The 3-Player Case. AA Brown University. SR Brown University Department of Economics Working Paper: 92-26; Department of Economics, Brown University, Providence, Rhode Island 02912. PG 16. PR no charge. JE C71, C72. KW Nucleolus. Consistency. Implementation. Strategic Bargaining. Nash Program.

AB I present a non-cooperative bargaining game that allows responders to exit at any point in time and have endogenous outside options. When the order of proposers corresponds to the power that players have in the underlying coalitional function, the unique Markov perfect equilibrium outcome of the game is the nucleolus. The result holds for 3-player superadditive games. An example shows that it cannot hold to the same class for n players. The mechanism is inspired by the consistency property of the nucleolus.

Shaffer, Sherrill

PD June 1991. TI Conduct in a Banking Duopoly. AU Shaffer, Sherrill; DiSalvo, James. AA Federal Reserve Bank of Philadelphia. SR Federal Reserve Bank of Philadelphia Research Working Paper: 91-12; Working Papers,

Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. PG 18. PR no charge except for overseas airmail, \$2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. JE D40, G21. KW Duopoly. Banking. Collusion.

AB This paper studies the empirical conduct of two banks constituting a duopoly. The study is of interest for two reasons. First, recent findings of competitive conduct among Canadian banks cast doubt on the extent to which banks collude in concentrated markets (Nathan and Neave, 1989; Schaffer, 1990a); a banking duopoly provides a rare and stringent test of the limits of this pattern of conduct. Second, the neoclassical theory of duopoly has been more fully developed than that for a general n-firm oligopoly, yet previous empirical tests have focused exclusively on markets with more than two firms. Thus, the study contributes to our understanding of both the banking industry and duopoly conduct, even though in either respect the findings should of course not be extrapolated to all banking markets or all duopolies.

Shavell, Steven

TI Optimal Cleanup and Liability after Environmentally Harmful Discharges. AU Polinsky, A. Mitchell; Shavell, Steven.

Shin, Hyun Song

PD September 1992. TI The Burden of Proof in a Game of Persuasion. AA University of Pennsylvania and University College, Oxford. SR University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences (CARESS) Working Paper: 92-31; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. PG 23. PR no charge. JE D78, D82, L51. KW Regulation. Takeover. Imperfect Information.

AB This paper examines the problem faced by a regulator who has to decide whether to allow a takeover to proceed, or to block it. The regulator relies on the submissions of the two interested parties, the raider and the target firm. Both parties have access to some imperfect information concerning a space of uncertainty S, and seeks to persuade the regulator by revealing some or all of this information. The regulator does not have independent access to information concerning S. A class of equilibria of this game gives rise to a particularly simple decision rule for the regulator which appeals to a probability distribution over the payoff-relevant state spaces, S, alone. The uncertainty concerning the precision of the disputant's information enter as parameters in this distribution. This parameterization yields an answer to how the regulator's decision rule should be modified as the information of the disputants changes.

TI Sophisticated Bounded Agents Play the Repeated Dilemma. AU Bacharach, Michael; Shin, Hyun Song; Williams, Mark.

PD November 1992. TI How Much Common Belief is Necessary for a Convention? AU Shin, Hyun Song; Williamson, Timothy. AA Shin: University of Pennsylvania and University College, Oxford. Williamson: University College, Oxford. SR University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences

(CARESS) Working Paper: 92-32; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. PG 22. PR no charge. JE C72, D82. KW Coordination Games. Common Belief. Conventions.

AB We study Bayesian coordination games in which players choose actions conditional on the realization of their respective signals. Due to differential information, the players do not have common knowledge that a particular game is being played. However, they do have common beliefs with specified probabilities concerning their environment. We address the following question. Given a structure of common beliefs between the players, how complex can an equilibrium be? In our framework, any equilibrium set of rules must be simple enough that the actions of all players are common belief with probability 1 at every state. Common belief with probability close to 1 will not do.

Shubik, Martin

TI Construction of Stationary Markov Equilibria in a Strategic Market Game. AU Karatzas, Ioannis; Shubik, Martin; Sudderth, William D.

TI Some Dynamics of a Strategic Market Game with a Large Number of Agents. AU Miller, John H.; Shubik, Martin.

Shy, Oz

TI Airline Deregulation and the Choice of Networks. AU Berechman, Joseph; Shy, Oz.

TI Planned Obsolescence as an Engine of Technological Progress. AU Fishman, Arthur; Gandal, Neil; Shy, Oz.

Simpson, Bob

TI The Impact of the Law on Industrial Disputes in the 1980s. AU Elgar, Jane; Simpson, Bob.

Sims, Christopher A.

PD June 1992. TI A Nine Variable Probabilistic Macroeconomic Forecasting Model. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1034; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse, Box 2125, Yale Station, New Haven, CT 06520. PG 22. PR no charge. JE E17. KW Vector Autoregression. Forecasts. Multivariate Time Series.

AB A model for U.S. macroeconomic time series that has been used for forecasting for several years is described in some detail. The model is a multivariate Bayesian autoregression, with allowance for conditional heteroskedasticity, stochastic time-variation in parameters, and non-normality of disturbances. It specifies the prior distribution in ways that improve on previous Bayesian vector autoregression specifications in realism and forecasting performance. The model's record of forecasting in recent years is displayed and discussed.

Sinclair, Peter J. N.

PD November 1992. TI Is Inflation a Bad Tax? AA University of Oxford. SR Oxford Applied Economics Discussion Paper Series: 141; Institute of Economics and Statistics, St Cross Building, Manor Road, Oxford OX1 3UL. PG 28. PR 2 pounds. JE E31, E50, E51. KW Seignorage. Tax Revenue.

AB Agent's time can be devoted to leisure, work or trading. Currency helps to lower the third of these. The government has a revenue need, to be met by distortionary taxation, including seignorage. A condition for Ramsey-efficient currency taxation is derived. This is infeasible, and currency best untaxed, if inflation lowers the supply of labor. Otherwise currency should be taxed, but at a rate which could fall as the government's revenue need increases.

Sinclair-Desgagne, Bernard

TI Information Asymmetry and Corporate Communication: Results of a Pilot Study. AU Dierkens, Nathalie; Sinclair-Desgagne, Bernard.

TI Prudence and Success in Politics. AU Cadot, Olivier; Sinclair-Desgagne, Bernard.

Skiadas, Costis

PD October 1992. TI Conditioning and Aggregation of Preferences. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1010; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208. PG 53. PR Per copy: \$3.00 in the U.S.A. or Canada; \$5.00 via international mail. Make checks payable to Northwestern University. JE D81. KW Conditional Preferences. Conditional Utility. Aggregation. Recursive Utility.

AB This paper contains a formulation of conditional preferences and their aggregation across states of nature and time that is consistent with, but does not imply, an expected utility representation of preferences, state-independence, or consequentialism. Under weak consistency conditions, the conditional utility of an act given certain information is related to coarser information through a (not necessarily additive) map, called an "aggregator." Sufficient conditions for additive aggregation are developed, based on standard theory of additive conjoint measurement. In a temporal setting, a "time coherence" axiom links conditional utilities and aggregators across time, providing the foundation for various forms of recursive utility. The general theory of conditioning and aggregation of preferences is applied to derive additive and recursive utility representations of preferences for information. The associated concept of information affinity (or aversion) is defined and related to recursive utility.

Smeaton, Deborah

PD September 1992. TI Self Employment - Some Preliminary Findings. AA London School of Economics. SR London School of Economics Centre for Economic Performance Discussion Paper: 96; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. PG 41. PR no charge. JE M13, J21. KW Entrepreneurship. Small Business.

AB This paper is a preliminary exploration of self employment using data from the Social Change and Economic Life Initiative. A brief examination of transitions into and out of self employment is presented, indicating career paths conducive to self employment. Using bivariate and regression analysis a profile of the self employed is established, with reference to training, attitudes, background, earnings, age, gender and ethnicity. In addition, the impact on entrepreneurship of government policy, unemployment and

large organization subcontracting practices is explored.

Smith, Alasdair

TI 1992: Trade and Welfare; A General Equilibrium Model. AU Gasiorek, Michael; Smith, Alasdair; Venables, Anthony J.

TI Competition Policy Research: Where Do We Stand? AU Kuhn, Kai-Uwe; Seabright, Paul; Smith, Alasdair.

Smith, Lones

TI Folk Theorems for Repeated Games: A NEU Condition. AU Abreu, Dilip; Dutta, Prajit K.; Smith, Lones.

Smith, Roy C.

PD November 1992. TI Bank Industry Linkages: Models for Eastern European Economic Restructuring. AU Smith, Roy C.; Walter, Ingo. AA Smith: New York University. Walter: INSEAD and New York University. SR New York University Salomon Brothers Working Paper: S-92-48; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. PG 29. PR \$5.00. JE O19, O92, P52, G21, G28. KW Economic Restructuring. Eastern Europe. Economic Reform. Bank.

AB One of the critical issues facing the emerging economies of Eastern Europe involves the nature of linkages between financial institutions and industrial companies during the process of economic restructuring. Replacing state ownership of enterprise with private equity holders must be accompanied by appropriate sources of financing and a control structure that imposes discipline on managers to work consistently in the interests of the shareholders. Addressing this problem is essential in any economic reforms intended to generate high levels of economic performance under market-driven conditions. This paper considers three approaches to the issue of bank-industry linkages: the Japanese keiretsu approach, the Anglo-American capital markets approach, and the German universal banking approach. We examine the strengths and weaknesses of each approach, and assess its potential as an appropriate arrangement in the Eastern European context.

Song, Lina

TI Income Inequality in Rural China: Communities, Households and Resource Mobility. AU Knight, John; Song, Lina.

Spiegel, Mark

PD March 1991. TI Threshold Effects in International Lending. AA New York University. SR New York University Economic Research Report: 91-17; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. PG 31. PR no charge. JE F34, O41. KW International Borrowing. Credit Constraint.

AB A dynamic model of international borrowing subject to a credit constraint is developed for an economy with increasing returns to scale in the aggregate physical capital stock. While growth models which assumed constant returns to scale yielded a credit constraint which was a constant share of the aggregate capital stock, the introduction of non-convexities induces rich dynamics to the endogenous credit constraint. First, the credit

constraint is shown to be increasing in the aggregate capital stock within the increasing returns to scale range. Second, there are two discontinuities in the credit constraint, one downwards, so that the credit constraint is non-monotonic in the aggregate capital stock.

Spitaller, Erich

PD September 1992. TI Spain: Landmarks in Economic Development, 1939-92. AU Spitaller, Erich; Galy, Michel. AA International Monetary System. SR International Monetary Fund Working Paper: WP/92/78; International Monetary Fund, Washington, DC 20431. PG 14. PR not available. JE O52. KW Economic Integration. Spain. Economic Development.

AB Recent success of the Spanish economy is frequently attributed to the benefits from economic integration into the European Community, which Spain joined in 1986. By contrast, this paper takes the view that, to a large extent, the origins of success may be traced back to earlier years and that the benefits from EC membership are best seen as reinforcing favorable trends already in effect. Exploring Spain's economic development from a longer-run perspective, with emphasis on interaction of events at home and abroad, the paper assesses the financial and structural policy record for its contributions to success. The paper concludes that by mid-1980 Spain had largely accomplished the transition to a modern economy and prospects were favorable for sustainable expansion over the medium term. The mutually reinforcing effects of those circumstances and the subsequent process of integration into the EC spurred the further progress of Spain.

Srivastava, Sanjay

TI Characterizations of Game Theoretic Solutions Which Lead to Impossibility Theorems. AU Jackson, Matthew O.; Srivastava, Sanjay.

Stanczak, Kazimierz

PD December 1992. TI Competing Monies and the Big Polish Inflation of 1989. AA University of California, Los Angeles. SR University of California at Los Angeles Department of Economics Working Paper: 682; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. PG 26. PR \$5.00. JE E40, E41, E31, F30. KW Inflation. Currency Substitution. Poland. Fiscal Policies.

AB This paper seeks to explain the big Polish inflation of 1989. It begins with a description of the country's unique experience with currency substitution (CS). I develop a model in which an endogenously emerging CS is assigned a key role in the inflationary process. In the model, selling and buying for currencies other than some prescribed local money is illegal. Thus, CS involves dodging the currency laws, which is assumed to require labor effort. In contrast to the existing literature, I study a case in which not only buyers, but sellers as well, optimally choose the currency denomination of payment. The model stresses the dependence of CS and inflation on fiscal policies, in particular, on the size of the geographical distribution of government spending.

PD December 1992. TI A Devaluation with Labor-Intensive Trading and Inelastic Labor Supply: The Polish Experience 1990-1991. AA University of California, Los Angeles. SR University of California at Los Angeles Department of Economics Working Paper: 683; Department of

Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. PG 20. PR \$5.00. JE F30, F41, E24, F31. KW Stabilization. Devaluation. Poland. Arbitrage Costs.

AB I seek to explain Poland's adjustment in 1990-1991. As documented below, the Polish case displays several interesting features, including a protracted post-devaluation adjustment of nominal and relative prices in the presence of a fixed exchange rate. I develop a simple, general equilibrium model with money which provides a new explanation for most of the features of the Polish adjustment. I depart from the standard assumption of the costless instantaneous arbitrage and its implication, PPP. The quadratic labor costs involved in carrying out foreign transactions imply that a devaluation results in a temporary increase in the PPP real exchange rate. In fact, given the absence of capital mobility, such export-stimulating real depreciation must occur if the lack of "money illusion" is to hold in the long run. The mere act of selling abroad drags labor away from production what, under the assumption of inelastic labor supply, leads to a fall in output. Thus, the devaluation is contractionary in the short run. Over time, as the continuing inflation in the domestic tradeable sector reestablishes PPP, all the real effects are gradually reversed.

PD December 1992. **TI** Price Controls, Inflation, and Welfare in the Steady-State. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 684; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. **PG** 13. **PR** \$5.00. **JE** E40, E24, P20, H20, D60. **KW** Price Controls. Inflation. Welfare. Labor Supply.

AB I seek an answer to the following question: how different are the steady-state welfare implications of an accelerated money growth in the economies with price controls and black markets? I proceed by embedding Barzel's (1974) classical rationing-by-waiting arguments in two general equilibrium monetary models. In the first, money is introduced through a cash-in-advance constraint on the black market purchases (the CIA model), while in the other, real balances appear as an argument in the utility function (the MIUF model). In each of these two endowment economies, binding price controls lead to queuing and the black market. I show that, in the CIA model, an unanticipated permanent increase in a growth rate of the money supply is welfare-improving because it reduces the steady-state waiting line by inducing a substitution towards the inflation-tax-free leisure. In the MIUF model, however, the steady-state waiting line is independent of inflation. Given that the real money demand is interest-elastic, welfare necessarily falls in the rate of the money growth. The results derived in this paper strongly support the case for a price liberalization ahead of the inflation stabilization.

Stein, Jerome L.

PD September 1991. **TI** Fundamental Determinants of Exchange Rates. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 91-26; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 33. **PR** no charge. **JE** F31, E43, F21. **KW** Exchange Rates. Interest Rates. Capital Movements.

AB The object of this paper is to answer the following questions. Have real exchange rates during the floating rate period been as stable as are justified by the fundamentals? What

are the fundamentals? When the fundamentals are unchanged, what are the sources of variation in the exchange rates? Is there long period rationality? How far does the Natural Real Exchange (NATREX) model used here go as an explanation? We show that the fundamentals, productivity and time preference, explain 74-85 per cent of the long period, but only 35 per cent of the short period variations.

Stella, Peter

PD September 1992. **TI** Tax Farming--A Radical Solution for Developing Country Tax Problems? **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/92/70; International Monetary Fund, Washington, DC 20431. **PG** 21. **PR** not available. **JE** H86, K42, L33. **KW** Tax Administration. Tax Farming.

AB Systemic tax administration problems in many developing countries have led to a search for radical solutions. One such proposed solution is tax farming. Tax farming is a system wherein the right to collect taxes is auctioned off to the highest bidder. An analysis of the historical experience with tax farming shows that its purported administrative efficiency is largely illusory. While certain aspects of tax administration may be suitable for privatization, the classic form of tax farming would appear to have little attraction for a modern state concerned with justice and equity.

Stone, Mark

TI Endogenous Creditor Seniority and External Debt Values. **AU** Dooley, Michael; Stone, Mark.

Straubhaar, Thomas

PD March 1992. **TI** Towards a European Migration Policy. **AU** Straubhaar, Thomas; Zimmermann, Klaus F. **AA** Straubhaar, University of Basel. Zimmermann; Universitat Munchen. **SR** CEPR Discussion Paper: 641; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 28. **PR** Pounds 3.00 or \$5.00. **JE** F22, J11, J68. **KW** East-West Migration.

AB The stagnating West European population combined with the prosperous economic development of the European Community (EC) generate strong economic incentives for immigration. The drastic political changes in Eastern Europe generate emigration pressures. There are a variety of problems with economic and political integration of migrants. The paper argues that immigration can compensate for demographic losses due to the decline and aging of the European labor force. Economic theory further predicts welfare gains from free factor movements, which should be reaped as long as social costs and adjustment costs are not prohibitive. An active European migration policy is recommended to achieve this aim.

Streufert, Peter A.

TI Believing in Multiple Equilibria. **AU** Chichilnisky, Graciela; Heal, Geoffrey M.; Streufert, Peter A.; Swinkels, Jeroen M.

TI Believing in Multiple Equilibria. **AU** Chichilnisky, Graciela; Heal, Geoffrey M.; Streufert, Peter A.; Swinkels, Jeroen M.

Strusevich, V. A.

TI The Two-Stage Assembly Scheduling Problem: Complexity and Approximation. **AU** Van Wassenhove, Luk; Potts, Christopher N.; Strusevich, V. A.; Zwaneveld, Carin; Sevastjanov, S.V.

TI The Two-Stage Assembly Scheduling Problem: Complexity and Approximation. **AU** Van Wassenhove, Luk; Potts, Christopher N.; Strusevich, V. A.; Zwaneveld, Carin; Sevastjanov, S.V.

Sudderth, William D.

TI Construction of Stationary Markov Equilibria in a Strategic Market Game. **AU** Karatzas, Ioannis; Shubik, Martin; Sudderth, William D.

Sulganik, Eyal

PD November 1992. **TI** On the Structure of Blackwell's Equivalence Classes of Information Systems. **AA** Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 22/92; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, ISRAEL. **PG** 18. **PR** no charge. **JE** D81. **KW** Information Systems. Blackwell's Theorem.

AB In this paper we explore the structure of Blackwell's equivalence classes of information systems. Our main result is that two doubly-stochastic information systems are equally informative (with respect to Blackwell's ordering) if and only if one information system is equal to a permutation of the other information system. Additionally we prove that this result also holds for regular (square) stochastic information systems, whereas for singular stochastic information systems we provide a counter-example to that statement. We provide some partial characterizations of equivalent stochastic singular information systems. We also explore the concept of dynamic equivalence, wherein we present some initial results.

Sundararajan, V.

TI Issues in Managing and Sequencing Financial Sector Reforms Lessons from Experiences in Five Developing Countries. **AU** Bisat, Amer; Johnston, R. Barry; Sundararajan, V.

Sundaresan, Suresh

TI The Valuation of Corporate Fixed Income Securities. **AU** Kim, In Joon; Ramaswamy, Krishna; Sundaresan, Suresh.

PD November 1992. **TI** An Empirical Analysis of U.S. Treasury Auctions: Implications for Auction and Term Structure Theories. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-92-37; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 19. **PR** \$5.00 academics and non-profit institutions; \$6.00 corporations (add \$1.00 outside U.S., Canada and Puerto Rico). **JE** D44, E43, G18. **KW** Treasury Securities. Interest Rates.

AB Sweeping changes have been proposed for the Treasury auction mechanism and the distribution system. As the Treasury experiments with (uniform price) Dutch auction in certain sectors of the yield curve, it seems appropriate to examine the components of the Treasury securities market in detail and establish some basic empirical regularities. How has the sealed-bid multiple price, discriminating auction performed

over the last decade? Have there been squeezes in the Treasury market? Are such squeezes sporadic or part and parcel of the Treasury distribution system? This paper attempts to shed some light on these questions, using data on auction awards on over 1000 auctions, secondary market prices and collateral-specific repo rates. In so doing, we attempt to set an empirical benchmark for the debate on the auction mechanism design and squeezes in Treasury auctions. We present some "stylized facts" concerning the results of auctions conducted by the Treasury during the sample period 1980-1991.

Sung, Hai-Yen

PD November 1992. **TI** A Dynamic Simultaneous-Equations Model for Cigarette Consumption in the Western States. **AU** Sung, Hai-Yen; Hu, Teh-wei; Keeler, Theodore E. **AA** University of California, Berkeley. **SR** University of California at Berkeley Working Paper in Economics: 92-204; IBER, 156 Barrows Hall, University of California at Berkeley, Berkeley CA 94720. **PG** 25. **PR** \$3.50 U.S.A. and Canada. \$7.00 foreign. **JE** D11, L13, I18, Q11. **KW** Tobacco Industry. Rational Addiction. Smoking.

AB This paper presents a rational addiction model, which integrates the addictive behavior of smokers toward cigarette consumption and the dynamic, profit-maximizing behavior of an oligopoly of cigarette producers. This model is tested on a panel data for eleven western states over the period of 1967-1990, using simultaneous estimation techniques. The results suggest the following conclusions: first, cigarette consumption is price-sensitive, with a demand elasticity of about -.33 in the short run and -.44 in the long run. These elasticities are smaller than those reported in most previous studies. Second, our results at least partially confirm the theory of rational addiction. Third, our model of oligopoly behavior confirms the hypothesis that the tobacco companies often raise end-market prices by more than the amount of the tax. Fourth, our results indicate that antismoking ordinances matter in reducing cigarette consumption, though their estimated significance is marginal. Finally, our results indicate that a tax increase, can have a strong effect on reducing cigarette consumption.

Sutherland, Alan

PD August 1992. **TI** Target Zone Models with Price Inertia: Some Testable Implications. **AA** University of York. **SR** CEPR Discussion Paper: 698; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 29. **PR** Pounds 3.00 or \$5.00. **JE** F31, F33. **KW** Exchange Rates. Price Flexibility.

AB Many recent papers suggest that the basic flex-price target zone model does not perform well empirically. This paper derives some of the testable implications of a sticky-price target zone model in order to determine whether the assumption of perfect price flexibility explains the empirical failure of the basic model. I find that while price inertia does introduce mean reversion into the exchange rate, the behavior of nominal variables is otherwise not qualitatively different from the flex-price model. The paper therefore concludes that the flex-price assumption is not an adequate explanation for empirical failure of the target zone basic model.

Svensson, Lars E. O.

TI How Long Do Unilateral Target Zones Last? **AU** Dumas, Bernard; Svensson, Lars E. O.

Swagel, Phillip

TI Political Instability and Economic Growth. AU Alesina, Alberto; Roubini, Nouriel; Ozler, Sule; Swagel, Phillip.

Tabellini, Guido

TI Growth, Distribution and Politics. AU Persson, Torsten; Tabellini, Guido.

TI Federal Fiscal Constitutions. Part I: Risk Sharing and Moral Hazard. AU Persson, Torsten; Tabellini, Guido.

Takacs, Wendy E.

TI A Primer on the MFA Maze. AU Faini, Riccardo; de Melo, Jaime; Takacs, Wendy E.

Tatom, John A.

PD August 1992. TI Monetary and Exchange Rate Policy in Austria: An Early Example of Policy Coordination. AU Tatom, John A.; Gluck, Heinz; Proske, Dieter. AA Tatom: Federal Reserve Bank of St. Louis. Gluck and Proske: Austrian National Bank, Vienna, Austria. SR Federal Reserve Bank of St. Louis Working Paper: 92-005A; Research and Public Information Division, Federal Reserve Bank of St. Louis, P.O. Box 442, St. Louis, MO 63166. PG 29. PR no charge. JE E31, E52, E58, F15, F30. KW Policy Coordination. Monetary Policy. Exchange Rate Policy.

AB This paper describes the evolution of Austrian exchange rate and monetary policy as an example of the benefits of policy coordination and credibility. This policy improved the performance of the Central Bank in achieving its twin objective of stabilizing the internal and external value of the currency. In this process, policymakers have sought to exploit the advantages of credibility by building a reputation for sticking to their policy. The evidence presented exhibits the increased coordination between Austrian and German nominal aggregates in the course of time. These accomplishments have apparently not required tying the real performance of the Austrian economy to any adverse permanent real consequences of German monetary policy, in particular, to its inflation-unemployment trade off.

PD August 1992. TI Currency Appreciation and "Deindustrialization": A European Perspective. AA Federal Reserve Bank of St. Louis. SR Federal Reserve Bank of St. Louis Working Paper: 92-006A; Research and Public Information Division, Federal Reserve Bank of St. Louis, P.O. Box 442, St. Louis, MO 63166. PG 32. PR no charge. JE F21, F31, F41, F43. KW Exchange Rates. Currency Appreciation. Productivity.

AB During the 1980's policy advisers were successful in prompting the view that movements in the value of the dollar have an inverse relationship to U.S. international competitiveness. This article explains their hypothesis, as well as the counterargument that exchange rates positively reflect a country's competitiveness. Economic policies that boost competitiveness also raise the value of the domestic currency. The mirror image of these hypotheses apply to U.S. trading partners, including Europe. The evidence indicates that European countries were not "deindustrialized" from 1985 to 1990, when the ECU rose in value by more than the dollar had risen in 1980-1985. Instead, European competitiveness rebounded strongly in the late-1980's, reversing the stagnant

performance of the early-1980's.

Taylor, Alan D.

TI Three Solutions to Divide the Dollar. AU Brams, Steven J.; Taylor, Alan D.

Taylor, Mark P.

TI Macroeconomic Shocks, the ERM, and Tri-Polarity. AU Bayoumi, Tamim A.; Taylor, Mark P.

Terlizzese, Daniele

TI Earnings Uncertainty and Precautionary Saving. AU Guiso, Luigi; Jappelli, Tullio; Terlizzese, Daniele.

Thisse, Jacques-Francois

TI The Implications of Space for Competition. AU Scotchmer, Suzanne; Thisse, Jacques-Francois.

TI Who Benefits from Antidumping Legislation? AU Anderson, Simon P.; Schmitt, Nicolas; Thisse, Jacques-Francois.

Timmerman, Allan

PD January 1992. TI A Model of Information Aggregation with Simultaneous Determination of Stock Prices and Dividends. AA Birkbeck College. SR Birkbeck Discussion Paper in Financial Economics: FE-1/92; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. PG 23. PR no charge. JE G35, D82. KW Private Information. Dividend Policy.

AB The paper analyzes a model where companies, dividend policies follow the "stylized facts" identified in the classic study by Lintner (1956). The companies pay dividends which reflect the discounted value of their optimal forecasts of future earnings conditional on their private but imperfect information. Stock prices reflect the present value of expected future dividends based on the individual companies' dividend announcements. Dividends have a macroeconomic information function since the companies extract valuable information about their unobservable earnings from the stock price. The implied feedback from stock prices to dividends is investigated for the U.S. stock market and found to be important empirically.

PD January 1992. TI How Learning in Financial Markets Generates Excess Volatility and Predictability in Stock Prices. AA Birkbeck College. SR Birkbeck Discussion Paper in Financial Economics: FE-2/92; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. PG 29. PR no charge. JE G12, D83, C15. KW Excess Returns. Forecasting.

AB Two of the most discussed anomalies in the financial literature are the predictability of excess returns and the excess volatility of stock prices. This paper shows that investors' recursive learning behavior can explain these empirical phenomena for both a stationary and a non-stationary dividend process. The small sample dynamics of stock prices in models with two different learning rules are investigated. Our findings are most closely in line with the empirical data when dividends follow a geometric random walk and the investors use a "present value" learning algorithm to forecast future dividends and discount these values to obtain the stock price.

PD January 1992. TI Characterisations of Rational

Expectations Solutions to Present Value Models with Feedback. AA Birkbeck College. SR Birkbeck Discussion Paper in Financial Economics: FE-3/92; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. PG 17. PR no charge. JE C22, C62, G12. KW Stock Market. Multiple Solutions.

AB This paper considers present value models with a feedback from the endogenous variable to the forcing variable. We show that feedback can generate multiple solutions to present value models. It can also change the stability properties of the solution and introduce an arbitrary martingale in the solution. The results are applied to the U.S. stock market where there appears to be evidence of a feedback from lagged stock prices to dividends.

TI Daily Returns in European Stock Markets: Predictability, Non-Linearity and Transaction Costs. AU Satchell, Steve; Timmerman, Allan.

TI An Assessment of the Economic Value of Nonlinear Foreign Exchange Rate Forecasts. AU Satchell, Steve; Timmerman, Allan.

Tombak, Mihkel

TI Models for the Evaluation of Manufacturing Flexibility. AU Chandra, Pankaj; Tombak, Mihkel.

Tommasi, Mariano

PD December 1992. TI Intertemporal Pricing in Search Markets: Customer Markets and Price Rigidity. AA University of California, Los Angeles. SR University of California at Los Angeles Department of Economics Working Paper: 681; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. PG 13. PR \$5.00. JE L16, D83, D40. KW Search. Customer Markets. Price Rigidity.

AB I provide an equilibrium search model, in which consumers search in order to find low price sellers, and sellers set prices in order to maximize the value of the firm. Both sellers and buyers are infinitely lived, and customer relationships evolve. In this way, I provide a microfoundation to the idea of "customer markets". Price rigidity obtains from kinked demand curves. These kinks arise from an asymmetry at the extensive margin: downward adjustments could only attract new customers, while upward adjustments discourage not only newcomers, but also "old" customers. Lower intertemporal correlation of prices increases market power in a market where information is costly. It also induces a less efficient size distribution of sales (high cost firms produce a larger proportion of industry output in more unstable markets).

Toujas-Bernate, Joel

TI Macroeconomic Import Functions with Imperfect Competition. An Application to the EC Trade. AU Oliveira-Martins, Joaquim; Toujas-Bernate, Joel.

Troske, Kenneth R.

TI Gender Segregation in Small Firms. AU Carrington, William J.; Troske, Kenneth R.

Tschernig, Rolf

PD November 1992. TI Illusive Persistence in German Unemployment. AU Tschernig, Rolf; Zimmermann, Klaus F. AA University of Munich. SR CEPR Discussion Paper:

739; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 17. PR Pounds 3.00 or \$5.00. JE C22, E24, J64.

KW Hysteresis. Long Memory. Fractional Integration.

AB Many European unemployment series seem to exhibit a unit root or persistence. This view is questioned in the paper using German data on unemployment. A new class of time-series models, the fractionally integrated ARMA model, that allows the difference parameter to take real values, enables the researcher to separate long memory and short memory in the data. It is shown that using this approach the unit root hypothesis is rejected but unemployment exhibits long memory.

Turtelboom, Bart

TI A Simple Model of Money and Taxes and an Illustration with Brazilian Data. AU Giovannini, Alberto; Turtelboom, Bart.

Urga, Giovanni

PD November 1992. TI The Econometrics of Panel Data: A Selective Introduction. AA University of Oxford. SR Oxford Applied Economics Discussion Paper Series: 151; Institute of Economics and Statistics, St Cross Building, Manor Road, Oxford OX1 3UL. PG 29. PR 2 pounds. JE C23. KW Panel Data. Random Effects.

AB The purpose of this paper is to present a selective introduction of the econometrics of panel data. We discuss first the static random effects, and comparing estimation in levels with the within-groups estimator. Then we present the dynamic models, introducing the Anderson and Hsiao (1981) estimators, and the more efficient generalized method of moments (GMM) recently proposed by Arellano and Bond (1991). We conclude with a useful transformation (orthogonal deviations) and some specification tests.

Uzan, Marc

TI The Marshall Plan: Economic Effects and Implications for Eastern Europe and the Former USSR. AU Eichengreen, Barry; Uzan, Marc.

van der Ploeg, Frederick

TI Exchange Rate Bands and Optimal Monetary Accommodation Under a Dirty Float. AU Beetsma, Roel; van der Ploeg, Frederick.

Van Dijk, Menno

TI Public Policy Towards TV Broadcasting in the Netherlands. AU Neven, Damien; Van Dijk, Menno.

Van Wassenhove, Luk

PD 1992. TI The Two-Stage Assembly Scheduling Problem: Complexity and Approximation. AU Van Wassenhove, Luk; Potts, Christopher N.; Strusevich, V. A.; Zwaneveld, Carin; Sevastjanov, S.V. AA Wassenhove: INSEAD; Potts: University of Southampton; Sevastjanov: Siberian Branch of Russian Academy of Sciences, Russia. Strusevich and Zwaneveld: Erasmus University, Rotterdam. SR INSEAD Working Papers: 92/53/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 22. PR not available. JE C60, C61. KW Assembly Scheduling, Programming Problem.

AB This paper introduces a new two-stage assembly

scheduling problem. There are m machines at the first stage each of which produces a component of a job. When all m components are available, a single assembly machine at the second stage completes the job. The objective is to schedule jobs on the machines so that the makespan is minimized. It is shown that the search for an optimal solution may be restricted to permutation schedules. The problem is proved to be NP-hard in the strong sense even when $m=2$. A schedule associated with an arbitrary permutation of jobs is shown to provide a worst-case ratio bound of 2, and a heuristic with a worst-case ratio bound $2-1/m$ is presented. The compact vector summation technique is applied for finding approximate solutions with worst-case absolute performance guarantees.

van Wijenberg, Sweder

TI Evaluating the Minimum Asset Tax on Corporations: An Option Pricing Approach. AU Estache, Antonio; van Wijenberg, Sweder.

PD November 1992. TI Enterprise Reform in Eastern Europe. AA World Bank. SR CEPR Discussion Paper: 738; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 34. PR Pounds 3.00 or \$5.00. JE L22, L33. KW Enterprise Restructuring. Bank Reform.

AB Eastern Europe is not well served with straightforward textbook advice. The common wisdom on privatization fails to address the problems created by diffuse ownership and control prior to privatization. Cash auctions may not efficiently match managers and capital stock because of wealth constraints. Etc. This paper shows how such problems can be addressed by incorporating incentive problems specific to Eastern Europe into policy design.

Vanhonacker, Wilfried

TI Improper Sampling in Natural Experiments: Limitations on the Use of Meta-Analysis Results in Bayesian Updating. AU Price, Lydia; Vanhonacker, Wilfried.

PD October 1990. TI Testing the Koyck Scheme of Sales Response to Advertising: An Aggregation-Independent Autocorrelation Test. AA INSEAD. SR Unite de Recherche Document de Travail ENSAE/INSEE: 90/77/MKT; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. PG 10. PR not available. JE M37, C22, C32. KW Distributed Lag Models. Autocovariance. Autocorrelation. Sales.

AB The Koyck scheme has been a popular assumption in the dynamic modeling of sales response to advertising. This paper proposes an autocorrelation test to assess whether or not available sales series arise from a Koyck-type distributed lag scheme. The test is based on the peculiar nature of the sales series, the testing procedure is readily applicable to any finite sales series.

TI Data Transferability: Estimating the Response Effect of Future Events: Based on Historical Analogy. AU Price, Lydia; Vanhonacker, Wilfried.

Vegh, Carlos A.

TI Losing Credibility: The Stabilization Blues. AU Guidotti, Pablo E.; Vegh, Carlos A.

Venables, Anthony J.

TI 1992: Trade and Welfare; A General Equilibrium Model. AU Gasiorek, Michael; Smith, Alasdair; Venables, Anthony J.

Venti, Steven F.

TI 401(k) Plans and Tax-Deferred Savings. AU Poterba, James M.; Venti, Steven F.; Wise, David A.

Verdier, Thierry

TI Distributional Conflicts, Power and Multiple Growth Paths. AU Saint-Paul, Gilles; Verdier, Thierry.

Vickers, John

TI Nonlinear Pricing and Price Cap Regulation. AU Armstrong, Mark; Cowan, Simon; Vickers, John.

Vives, Xavier

TI Why Do Market Shares Matter?: An Information-Based Theory. AU Caminal, Ramon; Vives, Xavier.

Voith, Richard P.

TI Property Taxes, Homeownership Capitalization Rates, and Housing Consumption. AU Bogart, William T.; Voith, Richard P.

TI Estimating House Price Appreciation: A Comparison of Methods. AU Crone, Theodore M.; Voith, Richard P.

von Hagen, Jurgen

PD June 1992. TI Real Exchange Rates within and between Currency Areas: How Far Away is EMU? AU von Hagen, Jurgen; Neumann, Manfred J. M. AA von Hagen: Universitat Mannheim. Neumann: Universitat Bonn. SR CEPR Discussion Paper: 660; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 16. PR Pounds 3.00 or \$5.00. JE F31, F33, F36. KW Economic Integration. Currency Union.

AB The renewed quest for a European monetary union raises the question: Is Europe ready for a common currency? We compare the variability and persistence of real exchange rate fluctuations within the German monetary union and between Germany and eight European countries to assess the viability of a monetary union in Europe. The results suggest a "Two-Speed Europe". A core union comprising Germany and her smaller neighbors is currently viable, but further convergence to reduce real exchange rate variability between these core countries and Denmark, France, Italy, and the United Kingdom is necessary. Alternatively, monetary union should be postponed until further adjustment has occurred. This period of waiting would neither require nor benefit much from further tightening of the current EMS.

PD October 1992. TI Monetary Union, Money Demand and Money Supply: A Review of the German Monetary Union. AA Universitat Mannheim. SR CEPR Discussion Paper: 719; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 26. PR Pounds 3.00 or \$5.00. JE F31, F33, F36. KW Monetary Policy. Stability.

AB We present an empirical analysis of German money demand, money supply and monetary policy after German

monetary union in 1990. Empirical models for velocity and forecast models for the money multiplier are estimated. Stability analysis reveals that structural stability of the demand for broad money after monetary union must be rejected; stability of the demand for narrow money can be accepted. East German portfolio adjustment with regard to the structure of monetary portfolios occurred quite rapidly. The increase in monetary control uncertainty caused by these adjustments did not, however, impede monetary targeting with reasonable precision.

Wachtel, Paul

TI Inflation Regimes and the Sources of Inflation Uncertainty. AU Evans, Martin; Wachtel, Paul.

Wadsworth, Jonathan

TI The Eastern German Labour Market in Transition: Gross Flow Estimates from Panel Data. AU Bellmann, Lutz; Estrin, Saul; Lehmann, Hartmut; Wadsworth, Jonathan.

Wallace, Nancy E.

TI Nonparametric Methods to Measure Efficiency: A Comparison of Methods. AU Garbaccio, Richard F.; Hermalin, Benjamin E.; Wallace, Nancy E.

Walter, Ingo

PD 1992. TI A Framework for the Optimum Structure of Financial Systems. AA INSEAD. SR INSEAD Working Papers:92/55/EP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 39. PR not available. JE G11, G20, O40. KW Financial Systems. Economic Growth.

AB Few issues are more important in setting the agenda of economic growth than the structure, conduct and performance of a nation's financial system. This paper outlines the framework parameters of high-performance financial systems and for financial firms operating in them. We begin with an intuitive structural model of financial intermediation and discuss the various stages of its efficiency characteristics. We then consider issues facing the participants in, and users of, financial systems, with an emphasis on strategic positioning alternatives and determinants of competitive performance. Finally, we discuss the role of regulation as a major factor affecting the performance of the financial system itself.

PD November 1992. TI A Framework for the Optimum Structure of Financial Systems. AA New York University and INSEAD. SR New York University Salomon Brothers Working Paper: S-92-47; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. PG 55. PR \$5.00. JE G10, G18, F30. KW Financial Systems. International Financial Markets. Financial Intermediation.

AB Few issues are more important in setting the agenda of economic growth than the structure, conduct and performance of a nation's financial system. Standing at the center of the transactions and resource allocation process, high-performance financial systems are increasingly important as determinants of sustainable economic progress and stability. This paper outlines the framework parameters of high-performance financial systems and for financial firms operating in them. We begin with an intuitive structural model of financial

intermediation and discuss the various stages of its evolution in terms of static and dynamic efficiency characteristics. We then consider issues facing the participants in, and users of the financial system, with an emphasis on strategic positioning alternatives and determinants of competitive performance. Finally, we discuss the role of regulation as a major factor affecting the performance of the financial system itself.

TI Bank Industry Linkages: Models for Eastern European Economic Restructuring. AU Smith, Roy C.; Walter, Ingo.

PD not available. TI The European Macroeconomic Environment Financial Market Implications. AA New York University and INSEAD. SR New York University Salomon Brothers Working Paper: S-92-49; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. PG 27. PR \$5.00. JE G10, G18, G20, G28. KW Financial Markets. Regulation. Macroeconomic Environment. Financial Intermediation.

AB As the basis for any discussion of European financial market developments, a number of environmental issues must be carefully thought through. These include (a) the ultimate macroeconomic forces that drive the volume of financial market transactions, (b) the regulatory environment within which participants in financial markets - - investors, issuers, credit institutions and securities dealers - - must function, (c) the underlying microeconomics affecting alternative channels that compete with one another for financial-intermediation flows on the basis of comparative efficiency, and (d) factors affecting the behavior of investors and issuers, with an emphasis on the choice of underlying and derivative financial instruments, as well as the propensity to trade in secondary markets. The objective here is to lay the foundation for a series of suppositions upon which the more specific aspects of the behavior of market participants - - investors and issuers - - can be examined.

Waterman, David

PD October 1992. TI The Effects of Vertical Integration Between Pay Cable Networks and Cable Television Systems. AU Waterman, David; Weiss, Andrew A. AA Waterman: University of Southern California. Weiss: University of Southern California and Monash University. SR Monash Department of Econometrics Working Paper: 12/92; Department of Econometrics, Faculty of Economics and Politics, Monash University, Clayton, Victoria 3168, Australia. PG 23. PR no charge. JE L82, C35, L22. KW Econometric Modelling. Cable Television. Latent Variable. Ordered Probit.

AB We find that integration between pay networks and cable systems has substantial effects on final market outcomes. Cable systems owned by the two MSO's (Multiple Cable Television System Operators) having majority ownership ties with major pay cable networks tended to carry their affiliated networks more frequently and rival networks less frequently than did the average non-integrated system. Systems of at least one of these MSO's offered fewer pay networks in total than the average non-integrated system. With respect to pricing and other marketing behavior, results suggest that systems in these MSO's favor affiliated networks, but there was less evidence that they discriminate against rival networks.

Weber, Guglielmo

TI Consumption Growth and Excess Sensitivity to Income: Evidence from U.S. Micro Data. AU Attanasio, Orazio P.; Weber, Guglielmo.

Weidner, Matthew L.

TI Game Theory and Multilateral Negotiations: The Single European Act and the Uruguay Round. AU Brams, Steven J.; Doherty, Ann E.; Weidner, Matthew L.

Weiss, Andrew A.

TI The Effects of Vertical Integration Between Pay Cable Networks and Cable Television Systems. AU Waterman, David; Weiss, Andrew A.

Weiss, Yoram

TI Social Status, Culture and Economic Performance. AU Fershtman, Chaim; Weiss, Yoram.

Weller, Paul

TI The Advantage to Hiding One's Hand: Speculation and Central Bank Intervention in the Foreign Exchange Market. AU Bhattacharya, Utpal; Weller, Paul.

West, Michael

PD September 1992. TI Innovation, Cultural Values and the Management of Change in British Hospital Management. AU West, Michael; Anderson, Neil. AA West: University of Sheffield and London School of Economics. Anderson: University of Nottingham. SR London School of Economics Centre for Economic Performance Discussion Paper: 101; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. PG 20. PR no charge. JE III, M12, M14, O31. KW Organizational Culture. Management Teams.

AB In this paper we describe the results of a study of innovation in the management teams of 27 U.K. hospitals. It is argued that the content of innovations provide an accurate representation of the underlying cultural values of the management teams, and the cultural values which they seek to purvey within the wider organizational settings. We propose that values in action (as opposed to espoused values) are manifest in the range of innovations introduced by top management within organizations. Using a typology of organizational culture, we categorize the innovations introduced by the management teams, in order to map their underlying cultural values. The results indicate predominant orientations of hospital management teams towards rational goals and hierarchical values in the current context of health care in Britain. Internal climate and service innovations were relatively infrequent, suggesting that the hospitals were dominated by management concern for control rather than flexibility. The costs of such cultural strategies in health service settings are discussed.

Westney, Eleanor

TI Organising Competitor Analysis Systems. AU Ghoshal, Sumantra; Westney, Eleanor.

Weymark, John A.

TI An Alternative Characterization of Paretian Generalized Median Social Welfare Functions. AU Bossert, Walter;

Weymark, John A.

Wheelock, David C.

PD October 1992. TI Government Policy and Banking Instability: "Overbanking" in the 1920's. AA Federal Reserve Bank of St. Louis and University of Texas. SR Federal Reserve Bank of St. Louis Working Paper: 92-007A; Research and Public Information Division, Federal Reserve Bank of St. Louis, P.O. Box 442, St. Louis, MO 63166. PG 18. PR no charge. JE G21, G28, N22. KW Bank Deposits. Bank Failure. Banking-U. S. History. AB Excess capacity, or "overbanking," was cited by contemporaries as leading cause of bank failure during the 1920's. Many states that had high numbers of banks per capita in 1920 had high bank failure rates subsequently. This article finds that the number of banks per capita was highest in states that provided deposit insurance, set low minimum capital requirements, and restricted branching. Banks per capita declined the most over the 1920's in states where branching expanded, and in those suffering high failure rates because of falling incomes or instability caused by deposit insurance. Deposit insurance and the relative dominance of agriculture also explain the composition of state banking systems between state and federally chartered institutions.

Williams, Mark

TI Sophisticated Bounded Agents Play the Repeated Dilemma. AU Bacharach, Michael; Shin, Hyun Song; Williams, Mark.

Williams, Michael G.

TI Incidence and Allocation Effects of a State Fiscal Policy Shift: The Florio Initiatives in New Jersey. AU Bogart, William T.; Williams, Michael G.; Bradford, David F.

Williamson, Jeffrey G.

PD September 1992. TI International Migration and World Development: A Historical Perspective. AU Williamson, Jeffrey G.; Hatton, Timothy J. AA Williamson: Harvard University and National Bureau of Economic Research. Hatton: University of Essex. SR National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 41; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. PG 54. PR \$2.00. JE N31, R23. KW Immigration. Global Labor Markets.

AB The 1920's marked the end of a century of mass migration from Europe to the New World. This paper examines analytically this pre-quota experience. The discussion is divided into two parts. The first deals with the character and dimensions of overseas emigration from Europe chiefly from the mid 19th century to World War I. The second discusses the effects of these migrations on both sending and receiving countries. The traditional literature has far more to say about the first than the second. Here we deal with evolution of global labor markets, first as they were directly influenced by the migrations, and second as they interacted with the evolution of world commodity and capital markets. The paper argues that the impressive economic convergence which took place between 1870 and World War I can be largely explained by these forces of economic integration, rather than by technological convergence or differential human capital growth.

Williamson, S.

PD June 1991. **TI** Barter and Monetary Exchange Under Private Information. **AU** Williamson, S.; Wright, Randall. **AA** Williamson: University of Western Ontario. Wright: Federal Reserve Bank of Minneapolis and University of Pennsylvania. **SR** Federal Reserve Bank of Minneapolis Staff Report; 141; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55401. **PG** 28. **PR** no charge. **JE** D51, D82, E41, C62. **KW** Monetary Equilibrium. Nonmonetary Equilibrium. Product Quality.

AB We analyze economies with private information concerning the quality of commodities. Without private information there is a nonmonetary equilibrium with only high quality commodities produced, and money cannot improve welfare. With private information there can be equilibria with bad quality commodities produced, and sometimes only the nonmonetary equilibrium is degenerate. The use of money can lead to active (i.e., nondegenerate) equilibria when no active nonmonetary equilibrium exists. Even when active nonmonetary equilibria exist, with private information money can increase welfare via its incentive effects: in monetary equilibrium, agents may adopt trading strategies that discourage production of low quality output.

Williamson, Timothy

TI How Much Common Belief is Necessary for a Convention? **AU** Shin, Hyun Song; Williamson, Timothy.

Wilson, G. Peter

TI Firm's Responses to Anticipated Reductions in Tax Rates: The Tax Reform Act of 1986. **AU** Scholes, Myron S.; Wilson, G. Peter; Wolfson, Mark A.

Winkelmann, Rainer

PD October 1992. **TI** Ageing, Migration and Labour Mobility. **AU** Winkelmann, Rainer; Zimmermann, Klaus F. **AA** Universitat Munchen. **SR** CEPR Discussion Paper: 706; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 18. **PR** Pounds 3.00 or \$5.00. **JE** C25, J10, J62. **KW** Aging. Simulation. Labor Mobility.

AB This paper provides insights into the relationship between the substantial aging of the European labor force, large migration movements, and individual labor mobility. First, qualitative predictions are derived using the theory of production with multiple inputs. Second, quantitative relationships are measured using a large sample of German individual data. We address some methodological issues raised by the use of non-negative integer data in an econometric investigation. The estimates are used to evaluate the interactions in several simulations.

Winkler, Robert

TI Using Survey Data in Inferences About Purchase Behaviour. **AU** Gaba, Anil; Winkler, Robert.

Winter-Ebmer, Rudolf

PD September 1992. **TI** Endogenous Growth, Human Capital, and Industry Wages. **AA** Johannes Kepler Universitat Linz. **SR** CEPR Discussion Paper: 714; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 17.

PR Pounds 3.00 or \$5.00. **JE** J24, J31, O40. **KW** External Effects. Industry Wage Differentials.

AB Lucas' 1988 model of the external effects of human capital formation is used as a starting point for an analysis of the impact of human capital on wages. This paper suggests a microeconomic approach to test Lucas' basic assumption of external effects of human capital. First, the internal effects of education are filtered out using wage functions for individuals. Second, the resulting industry wage premiums are regressed on industry-specific characteristics and on average human capital in the industry. Finally, alternative hypotheses such as self-selection or varying individual human capital productivity in different sectors are examined.

Winters, L. Alan

PD June 1992. **TI** European Trade and Welfare after '1992'. **AA** University of Birmingham. **SR** CEPR Discussion Paper: 678; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 46. **PR** Pounds 3.00 or \$5.00. **JE** F13, F14, F15, F17. **KW** Integration. EC. Single Market.

AB This paper reviews estimates of the effects of "1992" on international trade and welfare, and the policy implications of those estimates. It surveys earlier research starting with the Cecchini Report of 1988 and then summarizes some new results based on general equilibrium modeling with imperfectly competitive industries. These suggest significant gains to integration. Other work surveyed suggests that in some industries, however, integration could be harmful, that taxing EC industry might be beneficial and that current estimates of "1992" might be based on seriously overestimated price elasticities.

PD July 1992. **TI** Integration, Trade Policy and European Footwear Trade. **AA** University of Birmingham. **SR** CEPR Discussion Paper: 679; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. **PG** 30. **PR** Pounds 3.00 or \$5.00. **JE** F13, F14, F15. **KW** European Community. Import Quotas.

AB This paper constructs a simulation of model of the EC footwear market with which to consider the effects of EC trade policies. It examines the Southern enlargement of the EC, the quotas imposed on Korean and Taiwanese sales - initially in France and Italy and subsequently, in line with the "1992" program, EC-wide - and the liberalization of imports from Eastern Europe. Import restrictions are shown to be costly, especially those against Eastern Europe.

TI Estimates of Bilateral Trade Elasticities and Their Implications for the Modelling of '1992'. **AU** Brenton, Paul A.; Winters, L. Alan.

Wise, David A.

TI 401(k) Plans and Tax-Deferred Savings. **AU** Poterba, James M.; Venti, Steven F.; Wise, David A.

Wolfesperger, Alain

TI From Competitive to Democratic Equilibrium: Has the Analogy Been Fruitful? **AU** Salmon, Pierre; Wolfesperger, Alain.

Wolfson, Mark A.

TI Firm's Responses to Anticipated Reductions in Tax Rates: The Tax Reform Act of 1986. **AU** Scholes, Myron S.; Wilson, G. Peter; Wolfson, Mark A.

Wolinsky, Asher

TI Learning About Variable Demand in the Long Run. **AU** Rustichini, Aldo; Wolinsky, Asher.

Won Park, Jae

PD June 1990. **TI** The Information in the Term Structure of Interest Rates: Out-of-Sample Forecasting Performance. **AA** INSEAD. **SR** INSEAD Working Papers: 90/48/EP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 15. **PR** not available. **JE** E43, E47. **KW** Forward Rates. Forecasts.

AB This paper examines the predictive power of forward rates implicit in the term structure of the U.S. Treasury bill interest rates. It compares the out-of-sample forecasting accuracy and the information content of *ex ante* forecasts for future interest rates. The out-of-sample forecast based on forward rates is extracted through a recursive estimation of the regression equation of interest rate changes on forward spreads, the coefficients of which are allowed to change over time in order to allow for the changes in their relationship due to the existence of the time-varying risk premium.

Woo, Wing Thy

PD November 1992. **TI** The Resource Allocation Effects of Indonesia's Financial Repression in the 1974-1983 Period. **AA** University of California, Davis. **SR** University of California at Davis Economics Department Working Paper: 416; Department of Economics, University of California at Davis, Davis, CA 95616. **PG** 22. **PR** \$3.00 U.S. and Canada. \$4.00 international. **JE** D61, E51, G18, O16. **KW** Financial Repression. Dutch Disease.

AB We found that the selective credit policy of the 1974-83 period benefitted the Indonesian economy in a way unanticipated by the protagonists in the financial repression debate. The selective credit policy by favoring the manufacturing and trade sectors reduced their decimation by the overvalued exchange rate created by expansionary macroeconomic policies. The existence of a sizeable tradeable sector when the negative balance of payments shock hit after 1981 enabled Indonesia to earn enough foreign exchange to service its external debts and thus avoid the type of prolonged economic crisis experienced by Latin America. Since the selective credit policy was not undertaken with the expectation of negative balance of payments shocks in 1980's, its beneficial effects on economic development were entirely fortuitous.

Wright, Randall

TI More on Money as a Medium of Exchange. **AU** Kehoe, T.; Kiyotaki, N.; Wright, Randall.

TI Barter and Monetary Exchange Under Private Information. **AU** Williamson, S.; Wright, Randall.

TI Search, Matching, and Unions. **AU** Burdett, Kenneth; Wright, Randall.

Wu, Ho-Mou

TI Financial Innovation and Endogenous Uncertainty in

Incomplete Asset Markets. **AU** Chichilnisky, Graciela; Wu, Ho-Mou.

TI Financial Innovation and Endogenous Uncertainty in Incomplete Asset Markets. **AU** Chichilnisky, Graciela; Wu, Ho-Mou.

Wyplosz, Charles

TI Price and Trade Effects of Exchange Rates Fluctuations and the Design of Policy Coordination. **AU** Cohen, Daniel; Wyplosz, Charles.

PD April 1990. **TI** Monetary Union and Fiscal Policy Discipline. **AA** DELTA, INSEAD, and CEPR. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 90/82/EP; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 41. **PR** not available. **JE** E62, E63, F15. **KW** Monetary Union. Fiscal Federalism.

AB The possible emergence of a monetary union in Europe raises a number of new and difficult questions. A central concern is the implication for fiscal policy making. Fiscal policy assumes an increased importance once the monetary policy instrument is lost. The Delors Report has suggested that there may be a bias towards less discipline. This paper, which focuses on the longer run, is a preliminary attempt at sorting out the issues. It considers how both the incentives and the constraints on fiscal policy may be affected. There is no Delors-type, clear cut conclusion emerging. The most obvious conclusion is that eventually a monetary union requires some degree of fiscal federalism.

TI Gross Labour Market Flows in Europe: Some Stylized Facts. **AU** Burda, Michael C.; Wyplosz, Charles.

PD August 1990. **TI** A Note on the Real Exchange Rate Effect of German Unification. **AA** INSEAD, Centre of Economic Policy Research, and DELTA. **SR** INSEAD Working Papers: 90/65/EP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 16. **PR** not available. **JE** F31, E41. **KW** Germany. Exchange Rates.

AB It is often believed that the German Economic and Monetary Unification will result in an appreciation of the DM. This conclusion is reached when attention is exclusively directed to the demand side. In this note, it is shown that supply side considerations imply a permanent fall in per capita wealth in Germany. This implies a long real depreciation, mirroring partly a worsened net asset position (Germany borrows abroad to finance capital accumulation), and partly increased output of German goods. While the short run effect is ambiguous, a real depreciation is shown to be possible, and the conditions for it to happen are spelled out.

PD September 1992. **TI** After the Honeymoon: On the Economic Politics of Economic Transformation. **AA** INSEAD and CEPR. **SR** INSEAD Working Papers: 92/52/EP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 14. **PR** not available. **JE** D70, D72, D78. **KW** Median Voter Theorem. Pareto Improvement.

AB This paper focuses on the obvious: Pareto-improving programs may fail to improve everyone's lot. Politically, it has been often interpreted as requiring that a majority benefits from the change. Events in Central and Eastern Europe suggest otherwise and cast doubt on the relevance of the median voter theorem. The addition of minority discontents may result in

major political difficulties and this leads governments to avoid actions that generate strong minority objections. As a result the technically best-crafted plans may end up being politically rejected. In addition, reform programs which are ex ante politically acceptable may well become rejected ex post after they are implemented. One solution is to introduce a heavy dose of egalitarian income distribution, even if it runs against labor supply incentives.

PD November 1992. TI After the Honeymoon: On the Economics and the Politics of Economic Transformation. AA INSEAD. SR CEPR Discussion Paper: 734; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, UNITED KINGDOM. PG 13. PR Pounds 3.00 or \$5.00. JE E62, E63, E65, D71. KW Economic Reform. Political Equilibrium.

AB This paper focuses on the obvious: Pareto-improving programs may fail to improve everyone's lot. Politically, it has often been interpreted as a requirement that a majority should benefit from the change. Events in Central and Eastern Europe suggest otherwise and cast doubt on the relevance of the median-voter theorem. The addition of minority discontents may result in major political difficulties that lead governments to avoid actions that generate strong minority objections. As a result, the technically best-crafted plans may be rejected for political reasons.

Young, Robert

PD February 1991. TI Tectonic Policies and Public Choice. AA University of Western Ontario. SR University of Western Ontario Papers in Political Economy: 12; Department of Economics, Political Economy Research Group, University of Western Ontario, London, Ontario, CANADA N6A 5C2. PG 23. PR no charge. JE D70. KW Public Choice. Public Policies. Government. Political Institutions.

AB This paper focuses on a kind of policy which has not been considered systematically in mainstream analysis of state outputs. These policies are called "tectonic", because they alter the socio-economic sub-strata within which economic and other interests are defined and political demands are generated. In short, they alter the factors to which political systems are normally thought to respond. Tectonic policies can also structure the opportunities for existing interests to organize and to participate in government. In fact, all public policies have a tectonic dimension which is more or less pronounced, so it is possible to classify government activities according to the degree and nature of tectonic change they induce (or envisage). This paper outlines four types of tectonic policies and discusses the implications of tectonic policies for current conceptions of public choice.

Yucesan, Enver

PD October 1990. TI Analysis of Markov Chains Using Simulation Graph Models. AA INSEAD. SR Unite de Recherche Document de Travail ENSAE/INSEE: 90/72/TM; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. PG 10. PR not available. JE C15. KW Simulation. Markov Chains. Simulation Graph Models.

AB Markov chain analysis is a valuable tool in studying a wide range of problems. Usefully detailed models, however are usually too cumbersome to be represented as Markov chains. In this paper, we demonstrate the construction of Simulation

Graph Models of Markov chains. This approach enables one to evaluate the chain either numerically through simulation or analytically through path analysis. This method can be used in conjunction with simulation to address such problems as rare event estimation, initialization bias, and determination of initial conditions.

Zalai, Erno

TI Taxes and Subsidies in the Transforming Hungarian Economy. AU Revesz, Tamas; Zalai, Erno.

Zame, W.

TI The Nonatomic Assignment Model. AU Gretsky, N.; Ostroy, Joseph M.; Zame, W.

Zimmermann, Klaus F.

TI Towards a European Migration Policy. AU Straubhaar, Thomas; Zimmermann, Klaus F.

TI Ageing, Migration and Labour Mobility. AU Winkelmann, Rainer; Zimmermann, Klaus F.

TI Mass Migration, Unions, and Fiscal Migration Policy. AU Gehrig, Anette; Schmidt, Christoph M.; Zimmermann, Klaus F.

TI Illusive Persistence in German Unemployment. AU Tschernig, Rolf; Zimmermann, Klaus F.

Zin, Stanley E.

TI Long-Memory Inflation Uncertainty: Evidence from the Term Structure of Interest Rates. AU Backus, David K.; Zin, Stanley E.